

Final Report

Nuts for life- Educating health professionals

Project leader:

HN19000

Delivery partner:

Australian Nut Industry Council (ANIC)

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Nuts for life- Educating health professionals (HN19000)

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Public summary

The Nuts for Life program is a credible and well-recognised scientific program focused on improving the nutritional reputation of nuts amongst key opinion leaders and health care professionals. The program collates, interprets, and disseminates research pertaining to nuts, and builds awareness of the positive role they play in healthy dietary patterns.

Scientific research, spanning more than two decades, links regular nut consumption with a range of cardiometabolic benefits and a reduced risk of chronic disease. Yet despite this, there is a lack of translation into Australian eating habits. A re-analysis of the Australian Bureau of Statistics (ABS) 2011-2013 Australian Health Survey data revealed that only 2% of Australians met the 30g a day target. Therefore, there is clearly a need to find ways of enabling shifts in these consumption patterns to help reduce this gap.

This three-year project (HN19000), which is a continuum of projects since 2003, aimed to reduce the gap between Australian's current daily nut consumption, and the recommended consumption – a target of 5% pa compound growth - to ultimately deliver better health outcomes for Australians.

The project aimed to address this aim via continuing to increase awareness, among key opinion leaders and health professionals, of the role nuts play in a healthy diet, and to position nuts as an integral part of plant-rich dietary patterns. Three visionary objectives were identified:

- Development of a high-level health claim for nuts
- Increased prominence of nuts in the next revision of the Australian Dietary Guidelines
- Reported energy content of nuts to be reduced, in line with research.

The channel used to educate and disseminate scientific information was via a target audience of health professionals – general practitioners (GPs), dietitians and fitness professionals – as well as key opinion leaders and policy makers.

Key activities included:

- Commissioning a research group to systematically review the evidence to support a high-level health claim for nuts and cardiovascular disease, and a subsequent submission (informed by the research findings) to Food Standards Australia and New Zealand,
- Sponsorship of a PhD program investigating the available energy content of nuts,
- Engagement in the review process for the 2013 Australian Dietary Guidelines, and
- Collating, distributing and communicating the findings from these (above) research projects, and other research pertaining to nuts, via both new and existing Nuts for Life communication activities

Whilst communications focused on nuts' role in cardiovascular disease risk reduction, weight management, and healthy dietary patterns, other areas included chronic disease prevention, plant proteins, sustainability, gut health, brain health, and fertility.

The intended end of project outcome was to contribute to an increase in Australian nut consumption, closer to the daily target of 30g per day.

Overall, despite some significant disruptions throughout the project, as a direct result of the COVID pandemic, the growth of the industry in terms of value and volume remained stable – a value worth \$692 million and 66,100 tonnes to the industry (at the end of FY 2022). Industry data suggests that Australians are consuming an average of 7g of tree nuts per day (noting this figure excludes peanuts).

Intermediate outcomes focused on continuing to increase the knowledge and awareness among health professionals of the health benefits of nuts to enhance their nutritional reputation.

Evaluation activities were formative and summative, and included the use of surveys throughout the program. Health professionals surveyed at the conclusion of the project indicated that their knowledge of the role of nuts for chronic disease prevention was maintained or strengthened, with nearly all (95%) stating that they recommend nuts to their clients or patients as part of a healthy diet.

Key insights and learnings from this project will be used and implemented in future iterations of the Nuts for Life program.

Keywords

Nuts; tree nuts; nutrition; health; disease prevention; healthy handful; 30g/day

Introduction

Decades of research links regular nut consumption with a range of cardiometabolic benefits and a reduced risk of chronic disease, including a reduced risk of cardiovascular disease (CVD). In fact, a recent review [1] of more than 145 systematic reviews and meta-analyses, found eating a handful of nuts a day (~28g), compared to eating no nuts at all, was associated with:

- 25% reduced risk of coronary heart disease
- 22% reduced risk of death from CVD
- 22% reduced risk of dying from all causes
- 21% reduced risk of CVD
- 11% reduced risk of dying from cancer,

and a reduced risk of mortality from respiratory disease, infectious diseases and diabetes.

At the onset of the Nuts for Life program in 2003, and despite these well-documented health benefits, the perceived healthiness of nuts for preventing chronic disease was low amongst GPs (18% agreed that nuts could play a role in preventing chronic disease), dietitians (46% agreed), and consumers (15-24% agreed), based on market research conducted at the time.

Subsequent research demonstrates that the Nuts for Life program has strongly influenced these perceptions, which have dramatically improved over time. Findings from market research, conducted in 2023, confirms that health professionals – particularly GPs and dietitians – remain the most trusted source of health and nutrition information. So, it's imperative that nutrition education continues amongst health professional groups.

And it is evident that the nut industry has benefitted from the impact the program has had on nuts' perceived healthiness and awareness, with apparent nut consumption nearly doubling in volume and tripling in value from 2003 to 2021/22. Whilst several factors have led to this growth, it is well accepted worldwide that education of the health attributes of nuts is a key driver of increasing nut consumption.

But there is still a long way to go.

Instead of the suggested target of 30g per day, industry data shows Australians are consuming an average of around 7g of nuts per day, with Australian Bureau of Statistics data revealing only 2% are meeting the 30g a day target [2]. A report from the Australian Institute of Health and Welfare: Australian Burden of Disease Study, indicated nuts (and seeds) are just as, if not more important than other plant foods, such as vegetables, in terms of their potential to reduce the total disease burden [3]. Yet, our current Australian Dietary Guidelines do not prioritise nuts (including as an important plant-based source of protein) meaning they are 'lost' in recommendations.

Nuts for Life's mission, since 2003, has been to facilitate regular nut consumption among Australians.

This phase of the project aimed to continue to reduce the gap between Australian's current consumption and the recommended target of 30g per day. The program aimed to position nuts in the minds of key opinion leaders, influencers, and health professionals (GPs, dietitians and fitness professionals) as an important component of healthy plant-rich eating patterns.

It aimed to do this via a series of novel objectives with industry-wide benefits. The three key objectives of this project were:

- Development of a high-level health claim for nuts
- Increased prominence of nuts in the next revision of the Australian Dietary Guidelines,
- Reported energy content of nuts to be reduced, in line with research.

These game-changing, high-level objectives require a significant time investment – not limited to this three-year project. Nevertheless, the progress made towards achieving these, and the subsequent development of scientifically-substantiated messages, communicated to key opinion leaders and health professionals, continued to build the importance of nuts within healthy diet patterns, and for chronic disease risk reduction.

The project is facilitated by the Australian Nut Industry Council in collaboration with Australian tree nut industry members, and more recently, the peanut industry.

Methodology

To deliver upon the objectives identified by Hort for this project, Nuts for Life operated activities within our three key objectives (previously mentioned) in addition to our foundational objectives.

The following message platforms underpinned all the main communications developed throughout the project:

- Plant-based diets support overall health and well-being
- Regular nut consumption for disease prevention and management
- Eating sustainably for a healthier you and for a healthier world.

The project commenced in June 2020.

KEY OBJECTIVES

1. Gain a high-level health claim (years 2-3)

Determine the feasibility of a high-level health claim for nuts, and submit an application to FSANZ

We commissioned the University of Wollongong to scope the literature to determine the strongest direction for heart health evidence for a food-health relationship – i.e. nuts and blood lipids; nuts and cardiovascular disease; or nuts and coronary heart disease. A subsequent systematic review and meta-analysis was conducted for nuts and cardiovascular disease risk reduction (which was strong for evidence and was deemed the most compelling claim) which then informed a major part of the application to FSANZ for a high-level health claim.

Consumer market research was also conducted by Focus Insights to determine consumer understanding and support of the proposed health claim.

2. Increase prominence of nuts in Australian Dietary Guidelines (years 1-3)

Co-ordinated communications program and collation of the evidence to support nuts' position

We collated evidence and made a submission to the NHMRC stakeholder scoping survey for nuts to be better acknowledged as an integral component of healthy dietary patterns. We developed resources, held an in-person event, liaised with key stakeholders, and communicated – using our established communication channels - our key messages for increasing nuts' prominence.

3. Change labelling policy for energy labelling (years 1-3)

Sponsor a PhD project investigating the energy content in nuts

We sponsored a PhD candidate to investigate the true energy content of nuts. The PhD project consists of three parts: 1. systematic review of metabolisable energy, and energy compensation and expenditure; 2. Dietary modelling of metabolisable energy figures applied to the Australian Health Survey data; 3. Qualitative study exploring perceptions and impacts of labelling changes amongst stakeholders and consumers.

FOUNDATIONAL ACTIVITIES

Science and research

Development of a nut research database to generate and support messages and communications (year 1)

We had planned to sub-contract this activity to an external organisation, but brought this time-critical, ongoing activity in-

house, for cost and time efficiencies. A procedure was developed and implemented in August 2020, with daily monitoring of the scientific literature by the Nuts for Life dietitians.

Review of protein quality of nuts (year 1)

We commissioned Nutrition Research Australia to conduct a literature scope on the effect of plant and nut protein on human and planetary health. We developed a summary report and other supporting resources (webpages, social media graphics, podcast episode) to disseminate the findings.

Market research to evaluate knowledge and perceptions of health professionals (year 3)

We planned to conduct research amongst fitness professionals to gather baseline information of their nut knowledge in year 1, but this didn't proceed. We had collected information on this group in 2018 (less than two years prior to the start of this project), so felt this was sufficient as a baseline.

In October 2021, we commissioned Consumer Insights to conduct research amongst dietitians on sustainability, specifically to determine whether it negatively affected perceptions of nuts.

We conducted research, via Survey Monkey, to evaluate knowledge and perceptions of health professionals at the end of the project (Feb 2023). The survey took on a different form to previous surveys (conducted prior to this project), for cost and time efficiencies. The survey was developed by the Nuts for Life team, with support from Coutts J&R, and disseminated via the Nuts for Life e-newsletter, which comprises around 3,900 health professional recipients, and social media (LinkedIn and Twitter).

Maintain relationships with local and international nut researchers (year 1-3)

Regular contact was maintained with local and international researchers (including through strong links with the International Nut and Dried Fruit Council), to ensure Nuts for Life kept abreast of new research, and to ensure early access to research findings for dissemination through various communication channels, including the media.

Monitoring ongoing and emerging trends (year 1-3)

We monitored the nutrition science, and social media daily. We also subscribed to e-newsletters of relevant organisations, and kept abreast of trends by taking part in health professional conferences and other events, and through regular meetings with Bite Communications. We compiled a weekly summary of 'topical issues' in nutrition and health, which help guide content development, assisted in building key relationships, and ensured we kept abreast of relevant information.

Health professional reach (year 1-3)

Provide direct education and disseminate information on the health and nutrition benefits of nuts to our target health professional audiences – Dietitians, General Practitioners (GPs) and Fitness professionals.

Various communications and channels including conferences and events, webinars, podcasts, traditional and social media, newsletters, website, resources and targeted education channels

Conferences – Nuts for Life team attended and staffed exhibits at 7 conferences, with sponsored presentations (x6) at these conferences. The exhibit and presentation topics were focused on our message platforms, including nuts and heart health, nuts and weight, salt and fat content of nuts, plant protein, and elevating nuts in dietary guidance. A week after each conference, Nuts for Life emailed attendees who visited the exhibit. The email thanked them for attending, provided them with electronic copies of the resources at the conference, and provided answers to their most frequently asked questions. They were added to the database to receive the NutENews newsletter.

Events – One bespoke in-person event was held in November 2022 (year 3) which was attended by 21 key dietitian influencers. Two expert speakers were engaged to present, in addition to the Nuts for Life Program Manager. Take-home information packs, including new resources, were developed, as was a 'highlights' video – housed on the Nuts for Life website. Those unable to attend were sent the take-home kits, and a further 165 health professionals received personal emails with a research summary, fact sheets, and social media graphics.

Webinars – Two webinars were delivered - the first in November 2021 on the topic 'Nutrition for health and fitness', aimed at fitness professionals. This was presented by an Accredited Sports Dietitian, and advertised, hosted and managed

via FILEX/Fitness Australia. The recording was uploaded onto the Nuts for Life website.

The second webinar was delivered in March 2022 (year 2) on the topic of nuts and cardiovascular disease. Two expert speakers were engaged to present. The webinar was advertised, hosted and managed via Dietitian Connection. It was delivered live, and also recorded, with a link to the recording available from the Dietitian Connection website.

Podcasts – 31 podcasts have dropped at the time of preparing this report, with one new episode each month since the launch in November 2020 (year 1). The podcast is hosted by the Nuts for Life Program Manager, with a different expert interviewed each month.

Direct education campaigns – Nuts for Life ran 5 campaigns with Samples Plus. The campaign topics were: Nuts and health in plant-based diets (June and Nov 2020); Energy, fat and salt content of nuts and kilojoule absorption (July 2021); Kilojoule absorption (Feb 2022); Elevating nuts in dietary guidance (Feb 2023). We also ran an ongoing ~12-month campaign with Samples Now (Sep 2021 – Dec 2022), as COVID disrupted usual distribution and requests, and this was offered as an effective way to distribute the excess resources.

Newsletters – Our health professional monthly e-newsletter (NutENews) was sent to a database of nearly 4,000 health professionals, each month, providing timely information on topical areas in nuts and health, new research, resources, events, and recipes. A re-send strategy was implemented from July 2022 (re-sending the newsletter to those yet to open it), and continues to be an effective way of reaching more health professionals.

In March 2022 – Nuts for Life conducted a Survey Monkey evaluation of NutENews. Key improvements (such as different times and days for sending, and new content ideas) were implemented, and the survey findings were communicated to the Management Committee, the wider nut industry and to our NutENews subscribers.

Resources and publications – Based on new research and as a vehicle to communicate key messages, we developed new and/or updated fact sheets (4), health infographics/GIF/reels (12), nut infographics (12), research reports (4), recipe booklet (1), display banners (3), and supported published papers in scientific journals (3).

Media – traditional and social - We commissioned Bite Communications to generate high-impact media coverage for new published research. Eight media releases and pitches were developed and issued to media dietitians, health media, publications and other health professionals who act as spokespeople in the media.

Bite communications also managed and produced 4x 'dark ad' social media posts/month (Instagram and Facebook), based on new research and topics of interest provided by the Nuts for Life team.

In December 2020, we added LinkedIn to our suite of communication channels, and since then, have built a solid base of health professional and industry followers. Twitter and Linked-In engagement were managed in-house, as was content production for these channels (along with organic (unpaid) content for Instagram and Facebook).

Nuts for Life also disseminated relevant newsworthy research and information (x8) via direct email to a database that we maintain, of key dietitian and nutrition influencers.

Website – Nuts for Life website houses all information and assets developed throughout this project.

Nuts for Life continues to manage and update the website, to ensure it remains effective and well-utilised – as a crucial communication 'hub' to support all work.

Approximately 115 new pages were developed and 40 existing pages significantly updated. The locked industry section of the website was also maintained, and expanded with new content.

Health professional ambassadors - It was anticipated that an agreement could be made with the Heart Foundation of Australia to support and assist in promoting the findings from the systematic review for the high-level health claim application. This activity did not proceed, as the Heart Foundation was severely impacted by COVID, resulting in reduced revenue from what would normally be collected from their fund-raising activities.

Food regulation and public health (year 1-3)

Monitor the regulatory environment in Australia and overseas, and provide input and support for the appropriate technical representation of nuts in key government frameworks

As per above, we made a submission to the stakeholder survey for the Australian Dietary Guidelines review.

We advised our nut industry contributors of the outcome of the Plain English Allergen Labelling (PEAL) proposal, following its gazettal. Note: We were active in making submissions to FSANZ on behalf of the industry throughout this proposal.

Maintain relationships and/or partnerships with key organisations and bodies

Public Health Association of Australia – membership held.

Doctors for Nutrition – initiated dialogue and a relationship, with an aim to ensure nuts are appropriately recommended in their resources.

Allergy Anaphylaxis Australia – maintained relationship; CEO interviewed for podcast episode (Sep 2021).

Primary industry – maintained relationships with nutrition and marketing teams in Grains and Legumes Nutrition Council, Cobram Estate, Meat and Livestock Australia, to share findings and communicate on relevant public health issues (e.g. Australian Dietary Guidelines review).

Diabetes Australia – regularly provided recipes for their newsletters.

Glycaemic Index (GI) Foundation – shared low GI recipes for their recipe distribution campaign (Feb 2022), disseminated via newsletter, social media and influencers.

Dietitians Australia – maintained relationship; met with CEO about broadening messaging, including through the media, to support a wide range of core foods, beyond fruit and vegetables; presented at the Food Industry Nutrition Group ‘Sustainability Forum’.

Nut industry communication and support (year 1-3)

Contributor engagement

Developed and implemented an engagement strategy, which included:

2030 Vision – developed to provide clarity for the industry, to work together towards the common goal of elevating the importance of nuts; dissemination activities supported this

Contributor database optimisation – we updated our database to ensure we identified key contacts within each organisation for marketing and communications, and decision-makers, to ensure communications were directed appropriately, and towards the right people

Contributor meetings – despite COVID-related restrictions, we met face-to-face with key contacts at several contributor organisations for reciprocal sharing of work around common goals.

Contributor communications

Quarterly e-newsletters (electronic direct mail, EDM) - sent to all contributors to update them on Nuts for Life priority areas, introduce upcoming activities, and share results and links to relevant content. These EDMs were supported by ad hoc (as needed) alert EDMs (x22), on topical issues – such as major published research, local and international media coverage, or other key nuts and health information.

Marketing and Communications - separate monthly EDMs shared with identified marketing and communication contacts to alert them to upcoming events, research findings and resources.

Industry Publications

Nutgrower (quarterly newsletter) – Nuts for Life wrote and submitted four general updates and research reviews per year and submitted nine additional feature articles (June, Sep, Dec 2020; March, June and Sep 2021; Dec 2022; March and June 2023).

Nutfruit (3 issues per year) – Nuts for Life wrote three general industry updates per year (March, July and Nov) and submitted three additional feature articles (March and July 2021, July 2022).

Nuts statistics

Nuts for Life commissioned Scalzo Foods to collate apparent nut consumption data statistics in September each year, as one part of evaluating nut consumption trends in Australia.

Dissemination of nuts and health messaging and resources

Growcom

Nuts for Life staff invited to sit on Advisory Committee for the campaign ‘Eat yourself to health’ (Sep 2020) – a campaign designed to encourage consumption of fruit, vegetables and nuts. Provided recipes and key messages, and assisted with

development of graphics and recipe booklet to support the campaign.

Australian Nut Conference

March 2020

Nuts for Life staff attended, exhibited and presented.

We co-ordinated and managed three external expert speakers to present on trends, barriers and facilitators to nut consumption and heart health research findings.

March 2022

Nuts for Life staff attended, exhibited and presented.

We hosted and presented at a breakfast event, designed to recruit new contributors to the program and to show the value of the program to current contributors.

We managed and co-ordinated five external expert speakers to present evidence on nuts and risk of cardiovascular disease, the available energy of nuts, sustainability, culinary nutrition and effective communication strategies.

Australian Pecan Association (October 2020)

Belinda Neville was invited to present an update on nuts (and pecans) and health.

INC Congress

Belinda Neville attended and presented at the INC Congress in 2021 (virtual), 2022 in Dubai, and 2023 in London.

The aim of the presentations were to highlight the program's objectives and progress, and to share successes and challenges.

Almond Board of Australia Conference (October 2022)

Belinda Neville was invited to present an update on the high-level health claim progress.

Provide regulatory support

Labelling manuals – updated labelling manual and 'Nutrient content of raw, unsalted nuts' resource, based on update of the Australian Food Composition Database.

General Level Health Claim (GLHC) – updated the User Guide, following the development of a GLHC logo for contributors to use

Claims advice – provide ad-hoc claims advice to contributors.

Maintain relationships and/or partnerships with key organisations and bodies, and seek support and guidance

Maintained strong relationships with the INC Scientific Committee, INC Nutrition Research Education Foundation (NREF), to ensure access to research and results.

Results and discussion

Nuts for Life has continued to increase key opinion leaders and health professionals' awareness of the role nuts play in a healthy diet, and to position nuts as an integral part of plant-rich dietary patterns. This has been achieved partly via the progress we have made towards delivering the three key objectives for this project, and partly via our vital foundation activities.

KEY OBJECTIVES

High-level health claim

Achieving a high-level health claim for nuts was not achievable within the time-frame of this project, as gaps were identified in the evidence supporting the relationship between nuts and cardiovascular disease. However, these gaps were only identified as concerns, following our final submission to FSANZ.

Despite this, the findings of the systematic review and meta-analysis, which supported the application, were shared widely amongst health professionals, key influencers, and industry stakeholders, via various channels. Media outreach, in March 2022, which discussed the research findings had a combined potential reach of more than 5.6 million.

The systematic review and meta-analysis was published in the scientific journal *Advances in Nutrition* in early May 2023,

providing further leverage to support communications in this area.

Our webinar, through Dietitian Connection and presented by researcher Associate Professor Yasmine Probst, titled 'Cardiovascular disease and nuts: What does the science say?' had 497 views, with 96% of survey respondents (primarily dietitians/nutritionists) rating the webinar as 'excellent' or 'very good'.

Our latest tracking survey of health professionals, conducted in 2023, indicates that their awareness and knowledge of the role of nuts for heart health has been maintained and/or increased, compared with results conducted in 2020. From the latest survey, 86% consider nuts as important in a diet that helps manage cholesterol, and the same percentage consider nuts as important in helping to *prevent* cardiovascular disease.

Nuts in the Australian Dietary Guidelines

Our achievements towards increasing the prominence of nuts in the next revision of the Australian Dietary Guidelines (ADG) have been, and continue to be, impacted by the significant delays of the NHMRC.

After consulting with industry, we submitted a response to the NHMRC's scoping survey, and have shared widely, the rationale and support for increased prominence of nuts. We've developed an ADGs dossier, a key message document, a visual model showing how nuts could be represented in an updated Australian Guide to Healthy Eating, and developed an 8-page report 'Elevating nuts in Australian dietary guidance' and other supporting resources, including website content and messaging with podcast episodes.

We also hosted a briefing event, attended by 21 key health professional influencers, on the crucial role of nuts in preventative health, and why they should be elevated in future dietary guidance.

Market research of our health professional audience, shows support for this change in prominence – with just 4% of respondents stating that nuts should remain where they are in the ADGs. Forty per cent agreed that nuts should sit in a new plant protein group, 33% agreed that they sit in a 'healthy fats' group and 15% agreed that they should sit in their own 'nuts' group.

Labelling policy for energy labelling

Our continuing support of the PhD project, investigating the true energy content of nuts, has resulted in the publication of two scientific papers, two podcast episodes, various presentations at conferences and events, new resources (including infographics) and significant media attention, with a potential reach of more than 2.3 million.

Given the concept of reduced kilojoule absorption (which is what this project has confirmed), is new, the results from a recent health professional survey show that our work in this space is having an impact. This survey, of 225 health professionals, found 44% agree that reduced kilojoule absorption is one mechanism by which nuts play a role in managing weight.

FOUNDATIONAL ACTIVITIES

Finally, our foundation activities have made a significant impact in how we connect with and educate health professionals and nutrition policy makers, and support our industry.

Our continued connections with GPs, dietitians, and via our re-engagement with fitness professionals, to share the evidence underpinning the nutrition and health benefits of nuts, remains an integral and successful part of the program. Together, these groups comprise more than 70,000 health professionals, whose advice influences millions of Australians.

Conferences and events remain a key area for engagement with health professionals. Over the three-year program, we've exhibited and presented at seven conferences throughout Australia, reaching more than 4,000 health professionals - sharing key messages and resources on the benefits of regular nut consumption. Other targeted campaigns, such as those specifically targeting fitness professionals (i.e. webinars, fact sheets, journal articles and editorials in fitness professional publications), and GPs (i.e. Samples Plus/Now education campaign) provided an additional reach of ~47,000.

The Nuts for Life **website** – an important communication channel supporting all work – continues to perform well, with

430,469 page views and 284,066 users across the three-year program period.

In response to the disruptions caused by COVID, we launched **The Heathy Handful podcast** in November 2020, with 31 episodes to date. This has gone from strength to strength, and is tracking in the top 50% of all podcasts. For example, the 10 most recent episodes have an average of 147 downloads per episode – an impressive achievement for long-form content.

A change in focus of our **digital media** saw the introduction of dark ads through Instagram and Facebook – tailored ads only visible to health professionals – which significantly increased traffic to our website for health and nutrition content. These dark ads have generated nearly 47,000 link clicks over the course of the current program. We reinvigorated Twitter and introduced LinkedIn to our suite of channels – both key to reaching health professionals and nutrition policy makers. For instance, we now have a community of more than 900 followers on LinkedIn, with an average engagement rate since launching of 6.3% – well above the industry average (0.35%).

The number of health professional subscribers to our EDM, **NutENews** grew by 12%, up to more than 3,900 subscribers, and the open and click-through rates (at 45.6% and 6.4%, respectively, over the last year of the three-year program) remain well above industry benchmarks. A survey of our subscribers found that 93% trust NutENews as a credible source of information, with 91% finding it ‘extremely valuable’ or ‘valuable’.

Tracking research amongst health professionals, conducted in February 2023, shows that these activities are successfully making an impact. Although the wording of survey questions differed slightly over the years, there is clear evidence that health professionals’ understanding around the importance of nuts in managing and/or preventing chronic disease is maintained or improving. And the percentage of health professionals who recommend nuts as part of a healthy diet is also at its highest level (95%).

The program has continued to provide a united voice for the Australian **nut industry**. The support from industry is evident from the voluntary contributions the program receives each year. Findings from an external consultancy review show that, amongst stakeholders, the Nuts for Life program is highly regarded, viewed as filling a unique gap, and in providing a co-ordinated whole-of-industry approach.

Whilst some objectives of the project have not been fully met over the past three years, the program has gone from strength to strength, with objectives becoming bolder, and significant progress being made towards achieving them.

Moving forward, the Nuts for Life program will continue to work on achieving a high-level health claim, and to educate on the need to increase the prominence of nuts in the Australian Dietary Guidelines, which will be crucial for increasing nut consumption. Identifying barriers, and working to address them to increase consumption will remain a key part of the project. The program will expand to combine health messaging with environmental sustainability to create a more powerful message.

The channels of communication currently used, remain effective and will continue into the next program. But as the nutrition landscape continues to evolve, the program will also continue to evolve and adapt. Having a united and collaborative approach, working with trusted professionals, and harnessing international relationships will help to amplify our messages and help to drive nut consumption into 2030.

Outputs

Table 1. Output summary

*indicates available on contributors section of the website only (password protected)

Output	Description	Detail
Database of nut and health research publications	New scientific research papers are added to the database (housed on the Nuts for Life website) each month, based on findings from the program's daily science monitoring process. Where relevant, for major new research findings, a new webpage has been developed to highlight the key findings and to link to supporting Nuts for Life resources. <u>HP reach</u> Relevant papers are also shared with the health professional database via the monthly e-newsletter (NutENews) – with a reach of ~4,000 – either as feature articles or as part of the 'latest research' section of the newsletter. Published papers of major significance are also directly emailed to key dietitian and nutrition influencers, from the database we maintain of more than 220 key opinion leaders. <u>Industry stakeholder reach</u> The papers are shared with the contributor 'marketing and communications' contacts, as part of a monthly direct email. A summary of the most relevant scientific papers also feature in ANIC's Nutgrowing journal each quarter, 'Research update'.	Research summaries on the website: https://www.nutsforlife.com.au/resource/global-experts-endorse-nuts/ https://www.nutsforlife.com.au/resource/childrens-health-research/ https://www.nutsforlife.com.au/resource/weight-management-research/ https://www.nutsforlife.com.au/resource/pregnancy-and-fertility-research/ https://www.nutsforlife.com.au/resource/heart-health-research/ https://www.nutsforlife.com.au/resource/gut-health-research/ https://www.nutsforlife.com.au/resource/general-health-research/ https://www.nutsforlife.com.au/resource/eye-health-research/ https://www.nutsforlife.com.au/resource/diabetes-research/ https://www.nutsforlife.com.au/resource/cancer-research/ https://www.nutsforlife.com.au/resource/brain-health-research/ https://www.nutsforlife.com.au/resource/allergy-research/ Example of new webpages that share major new research findings: https://www.nutsforlife.com.au/new-umbrella-review-nuts-linked-with-major-health-benefits/ https://www.nutsforlife.com.au/new-australian-research-nuts-provide-less-kilojoules-than-previously-thought/ https://www.nutsforlife.com.au/new-review-nuts-cancer-risk-and-mortality/ https://www.nutsforlife.com.au/nut-kilojoule-compensation/ https://www.nutsforlife.com.au/snacking-on-almonds-may-cut-daily-kilojoules/ https://www.nutsforlife.com.au/study-nuts-tryptophan-and-heart-health/ A survey conducted via Survey Monkey in 2022 of 100 NutENews readers, showed that the 'Latest research' section of the e-newsletter was the third most valued section, indicating that readers find the research summaries useful. (Refer appendix 1)

Scientific research dossiers	Research dossier 1 (Plant and nut protein) – key messages and findings were developed into a series of infographics, which were promoted via our social media (dark ad) channels. We also developed a 10-page summary report, which was shared with health professionals at conferences (GPCE Sydney 2021; DA conference 2021; FILEX 2022), and via eDM communications (ESSA, NutENews, contributor quarterly e-news). The findings were also summarised by researcher Flavia Fayet-Moore, as the first The Healthy Handful podcast episode. Combined, these activities had a reach of ~15,000. A media campaign also supported the research findings, with 16 health and lifestyle media stories generated, creating more than 6.7 million opportunities to see. Research dossier 2 (Nuts and risk of CVD) – the findings of the systematic review and meta-analyses were used to inform the application to FSANZ to apply for a new food-health relationship (and subsequent high-level health claim). We developed a 12-page summary report, which was shared with health professionals at conferences and events (GPCE 2022; DA conference 2022; Samples Plus direct education campaigns; Go Nuts health professional briefing event), via direct email outreach to key influencer dietitians, and via eDM communications. Findings were also presented by lead researcher Yasmine Probst, and Belinda Neville (DA conference; Dietitian Connection ‘Nuts and risk of CVD’ webinar (which has been viewed almost 500 times); the Australian Nut Conference; Almond Board of Australia conference; Go Nuts health professional briefing event). The Australian newspaper published an article <i>“You’d be nuts not to eat a handful each day”</i> which generated media interest across print, broadcast and television, including Today’s morning news, syndicated across 37 Nine/WIN/NBN stations, 3AW radio News Talk and 6PR radio, with a total potential reach of 5.6 million.	1. The effect of plant and nut protein on human and planetary health: A literature scope, September 2020. Nutrition Research Australia Pty Ltd. 2. The relationship between nuts and risk of cardiovascular disease: A systematic review of a diet-disease relationship, October 2021. University of Wollongong. Published papers: Tree nut and peanut consumption and risk of cardiovascular disease: A systematic review and meta-analysis of randomised controlled trials https://www.sciencedirect.com/science/article/pii/S2161831323003095?via%3Dihub Summary reports: https://www.nutsforlife.com.au/resource/plant-and-nut-protein-and-health/ https://www.nutsforlife.com.au/resource/nuts-and-cardiovascular-disease-what-does-the-science-say/ Podcast episodes: https://www.nutsforlife.com.au/resource/episode-1-plant-protein/ https://www.nutsforlife.com.au/resource/episode-19-nuts-and-cvd/
Research publications	A scientific paper from the systematic review and meta-analysis of nuts and risk of cardiovascular disease has been published. As outlined above, this research has been disseminated to health professionals through a variety of	Tree nut and peanut consumption and risk of cardiovascular disease: A systematic review and meta-analysis of randomised controlled trials https://www.sciencedirect.com/science/article/pii/S2161831323003095?via%3Dihub

	channels. Two scientific papers published from the PhD sponsored research project have been promoted and shared with health professionals via eDM communications, and via direct email outreach to key influencer dietitians.	b The metabolizable energy and lipid bioaccessibility of tree nuts and peanuts: a systematic review with narrative synthesis of human and in vitro studies https://www.sciencedirect.com/science/article/pii/S2161831323002752?via%3DiHub The Effects of Tree Nut and Peanut Consumption on Energy Compensation and Energy Expenditure: A Systematic Review and Meta-Analysis https://www.sciencedirect.com/science/article/pii/S2161831322013072
Research Reports	Refer above for information on the plant and nut protein, and the nuts and CVD reports. We also produced two other reports: 'An audit of the energy, fat and sodium content of nuts', and 'Elevating nuts in dietary guidance'. Findings from the audit report were shared via social media, The Healthy Handful podcast, and summarised into feature articles in the industry's Nutgrower journal and INC's Nutfruit magazine. Belinda Neville presented the findings at the Dietitians Conference in 2021. The report was also shared with health professionals at conferences (GPCE Sydney 2021, DA 2021), and via Samples Plus direct education campaign. Combined reach of approximately 5,000. Messaging from the dietary guidance report was shared via a direct email to all Dietitian Connection members, social media, The Healthy Handful podcast with CSIRO's Dr Gilly Hendrie, direct email outreach to key influencer dietitians, and summarised into feature articles in the industry's Nutgrower journal and INC's Nutfruit magazine. Belinda Neville presented the findings at the Go Nuts health professional briefing event in 2022.	The effect of plant and nut protein on health: A literature scope (1,359 report page views) https://www.nutsforlife.com.au/resource/plant-and-nut-protein-and-health/ Nuts and cardiovascular disease: What does the science say? (2,466 report page views) https://www.nutsforlife.com.au/resource/nuts-and-cardiovascular-disease-what-does-the-science-say/ The energy, fat, and sodium content of nuts: Findings from an audit of nut products from five major retailers (368 report page views) https://www.nutsforlife.com.au/resource/an-audit-of-the-energy-fat-and-sodium-content-of-nuts/ Elevating nuts in dietary guidance (2,699 report page views; 185 link clicks from the Dietitian Connection direct email) https://www.nutsforlife.com.au/resource/elevating-nuts-in-dietary-guidance/
Industry Publications and reports	To ensure our industry stakeholders and contributors are kept up to date with the program, including the status of current activities, new and relevant scientific research, and the availability of new or updated resources, we regularly publish updates in industry journals and other publications. Apparent nut statistics data is collated annually by Nuts for Life, and made	• ANIC Nutgrower journal articles and updates x 21 https://nutindustry.org.au/shop/online-magazine-subscription/ • INC NutFruit magazine articles x 12 https://inc.nutfruit.org/publications/ • ABA In a Nutshell article – September 2021 • AMS Bulletin article – October 2021

	available to our contributors to help track nut consumption patterns. They are also collated as one component of the monitoring and evaluation of the program. Vision 2030 was developed to provide direction and clarity for the industry. It summarises the program's goals, what we need to be able to achieve the goals and when they will be achieved. The Vision was via presentations at the Australian Nut Conference, articles in industry journals, via PIB board meetings and eDM communications. Annual reports are prepared and developed by Nuts for Life in July of each year, and shared with contributors via eDM, and housed on the website. The Nuts for Life prospectus is sent out to potential new contributors, as required. It was updated in September 2021. Nuts for Life maintains a 'locked' (password-protected) industry section on the website, to house relevant industry reports (alongside other content for contributors)	• Apparent Nut statistics (2020-2022)* https://www.nutsforlife.com.au/contributor/nut-statistics/ • Vision 2030 https://d131k5wuh4trw5.cloudfront.net/uploads/Nuts_2030Vision_SupportDoc_digital_LR.pdf • Annual reports https://www.nutsforlife.com.au/contributor/annual-reports/ • Prospectus
Health Professional Publications - articles	Articles were written and featured in publications targeting our health professional audience. Topics included nuts and weight management, nut FAQs, plant and nut protein, healthy snacking, nuts for disease management, nut kilojoule absorption, and the importance of protein diversity.	• Diabetes Management Journal – article in August 2021 issue • Sports Dietitians Australia, Refuel magazine – articles x7 • Australian Strength and Conditioning Association – article x2 • Exercise and Sports Science Australia – eDM x1 • FILEX/Fitness Australia – eDM x1 (Refer appendix 2)
e-Newsletters	Contributors eDM is sent on a quarterly basis to a database of around 200 industry stakeholders, to advise them of new research, resources, events and an update on the program. Ad hoc 'alerts' are also sent on key updates or issues, in a timely way. NutENews eDM is sent on a monthly basis to a database of nearly 4,000 health professionals. The e-newsletter includes a feature article, summaries of newly-published research, new resources, nut in focus and a recipe. Ad hoc newsletters are sent in addition to monthly newsletters to share specific key information e.g. calls for survey respondents, follow-up with delegates	Contributor quarterly newsletters and ad hoc alerts x33 (to the end of April 2023; open and click through rates over the last year of the three-year program were 37.3% and 6.8%, respectively. NutENews health professional monthly e-newsletters and ad hoc alerts x43 (including to end of April 2023); the number of health professional subscribers to NutENews grew by 12% over the three-year program; open and click through rates (at 45.6% and 6.4%, respectively, over the last year of the three-year program, to end of April 2023) remain well above industry benchmarks.

	post conferences etc.	A survey, in 2022, of 100 NutENews subscribers was used to evaluate the eDM. Results showed: • 91% of respondents find the newsletter valuable • 79% said they would recommend the newsletter to their network, and • 83% were happy with the newsletter as it is (wouldn't change anything).
Presentations	The Nuts for Life staff (and research partners) applied to present or were invited to present at conferences and events, on a variety of topics, with a reach of approx. 5,000 health professional and industry stakeholders.	• Almond Board of Australia conference ○ Nuts and CVD: Can we emerge with a health claim? (October 2022) • Australian Nut Conference (March 2022) ○ Consumption of nuts and reduced CVD risk: nut health claims research outcomes ○ Nuts and energy – PhD research summary ○ Nut health and the consumer ○ Breakfast event for potential contributors • Dietitians Australia conference ○ Is it time to reconsider nuts? (July 2021) ○ Systematic review of the ins and outs of energy balance - PhD supported (July 2022) ○ Extending the knowledge of nuts and CVD – HLHC supported (July 2022) • Food Industry Nutrition Group (FING) ○ Sustainability commitment (June 2022) • INC congress ○ Promoting nut consumption (May 2021) ○ Promoting nut consumption in Australia (May 2022) ○ Initiatives to drive nut consumption in Australia (May 2023) • Go Nuts health professional briefing event ○ Elevating nuts in Australian dietary guidance (November 2022)
Other resources	The Nuts for Life website houses a wealth of information including recipes, summaries of new research, key research papers, nut facts, podcast episodes, and news articles. The website also encompasses an industry-only section.	• Nuts for Life website: 115 new pages and 40 existing pages significantly updated; 430,469 page views and 284,066 users across the three-year program period (to the end of April, 2023) • Reports x4 (as mentioned above)

	It also houses all resources, which are available to download. Some have also been shared (hard-copy) with health professionals at conferences and events. The labelling manual is a tool specifically for Nuts for Life contributors, designed to assist in advising on the types of claims that can be made on products, and the requirements that need to be met in order to make claims. It is updated on a regular basis, as required.	• Fact Sheets x4 • Health infographics, GIFs and reels x12 • Nut infographics x12 (updated Oct 2022) • Nut Day infographics x16 (2021 & 2022) • Nutrient Composition of Nuts brochure (2022 edition) • Podcasts x31 • Recipes booklet x1 and recipes x60 (both developed by Nuts for Life, and shared from contributor or partner organisations) • Images – over 100 new lifestyle images produced • Labelling manual* (updated Nov 2022) www.nutsforlife.com.au
Market research	The Health Professional Survey is conducted every 2-3 years, as one method of evaluating the program. The survey took on a different form compared to previous surveys - conducted in-house (with methodological support from an external consultancy), for cost and time efficiencies. Results of the survey are discussed in the outcomes section of this report. The Health Info study was conducted to help inform the future direction of the Nuts for Life program. It investigated the channels by which consumers obtain their health information, the form they prefer to receive information, who they trust for health information, and more. Among the findings, health professionals, particularly GPs and dietitians, are by far the most trusted sources of health and nutrition information. Results of the study have been shared with the Management Committee and with contributors, via eDM. A summary of the research is housed on the industry section of the website, for contributors to access. The Sustainability Impact Research was conducted amongst dietitians to investigate how much of an impact sustainability has when recommending nuts, and if it is a potential barrier (like the ‘fat-phobic’ era was a barrier to nut consumption in the 1990s). Among the findings, sustainability was identified as a complex area, and dietitians understanding of the environmental impact of nuts is relatively low. The results have been shared with the Management Committee and with contributors, via eDM. A summary of the research is housed on the industry section of the website, for contributors to access. Belinda Neville will also be presenting the results	Health professional tracking survey* https://www.nutsforlife.com.au/contributor/health-professional-survey/ Focus Insights – Health Information Study: Consumers* https://www.nutsforlife.com.au/contributor/health-information-study-consumers/ Focus Insights – FSANZ proposed labelling change: Consumer research Consumer Insights – Sustainability Impact research* https://www.nutsforlife.com.au/contributor/sustainability-impact-research/ (Refer appendix 3)

	of this research at the upcoming DA conference in July 2023. The FSANZ labelling change research was used internally to inform the content of the application to FSANZ for a new food-health relationship for a high-level health claim.	
Conference and event evaluation reports	Evaluation reports are developed following each conference or event that the Nuts for Life staff attend. An action plan is created to implement any improvements or changes identified, as a result of attending.	• Dietitians Australia (DA) conferences x2 • General Practitioner Conferences and Events (GPCE) x3 • FILEX x1 • Webinars ○ Nutrition for Health and fitness ○ Cardiovascular disease and nuts: What does the science say? • Go Nuts health professional briefing event (Refer Appendix 5) • Australian Strength and Conditioning Association x1 (satchel resource) (Refer appendix 4)
Media and social media	Bite Communications manage our Media Bureau program – an initiative to generate high-impact media coverage. Nuts for Life staff identify key research papers, which Bite then review. If deemed ‘newsworthy’, Bite generate and manage media pitches, key messages and evaluate the outcome. In year 1, 14 media clips were generated from scientific research, resulting in 4.3 million opportunities to see (OTS); 7 media clips, resulting in 1.9 million OTS in year 2, and 8 media clips, resulting in 2.4 million OTS in year 3. Our social media strategy evolved in year 1, and continued for the duration of the project, to increase focus on health professionals, and decrease the focus on consumers. Dark ads (paid) were introduced through Facebook and Instagram, with organic posts reduced (though a presence still maintained); Twitter was re-invigorated and LinkedIn was launched in December 2020.	• Media Bureau and campaign evaluation • Media Releases x 8 • Social media posts – LinkedIn, Instagram, Facebook and Twitter (Refer appendix 5) Twitter – 3,380 followers; 200,765 total impressions; 2.96% average engagement rate (to the end of April 2023) – well above industry ‘very high’ engagement rate (0.33-1%) LinkedIn - 918 followers; 48,932 total impressions; 6.3% average engagement rate (to the end of April 2023) - well above the industry average (0.35%).
Submissions	ADGs – Following consults with the industry, Nuts for Life staff developed a response to the NHMRC scoping survey, which was submitted in March 2021, which summarises the industry’s goal and rationale for the changes to the Australian Dietary Guidelines. Delays in the NHMRCs timeline, has meant	• Australian Dietary Guidelines scoping survey (March 2021) • Application for new food-health relationship (August 2022)

	that to date, only one submission has been made. FSANZ – Nuts for Life submitted a draft application in December 2021, and a final submission in August 2022 to apply for a new food-health relationship.	
Monitoring and evaluation (M&E)	Working with our M&E partner, Coutts J&R, a M&E plan, including a project logic was finalised in November 2020. Progress dashboards were completed twice a year, which visually summarise the progress of the program. An end of project evaluation was conducted by Coutts J&R. Interviews were conducted with x stakeholders, and results summarised.	M&E plan and project logic End of project evaluation report Progress Dashboards x5 (Refer appendix 6).

Outcomes

Table 2. Outcome summary

Outcome	Alignment to fund outcome, strategy and KPI	Description and Evidence
End of project outcomes		
An evidence-based case and support to progress the formal positioning of nuts as a healthy and beneficial component of consumer diets is established and submitted to appropriate bodies for consideration of changes to formal classifications	Fund outcome: to influence increased consumption of nuts for health and nutrition benefits. Documentation completed, endorsed by industry, and submitted as required, with positive feedback from relevant decision-making bodies for: • Amendments to FSANZ (new food-health relationship) • Australian Dietary Guidelines (ADGs) amendments – increase prominence of nuts • Nutrition information modifications for energy labelling	Completed and reviewed documentation for submission to the decision-making bodies • FSANZ – Documentation completed. Draft and Final application completed, approved by key stakeholders, and submitted to FSANZ. Based on feedback from FSANZ, and subsequent discussions with key researchers, it was agreed that more research was required to strengthen some of the scientific evidence. As a result, Nuts for Life formally withdrew the application. • ADGs – Documentation completed. Survey responses developed and approved by industry stakeholders, and submitted to NHMRC. Based on evidence, a modified approach was developed and approved by industry stakeholders. NB: Significant delays to NHMRC timeline has resulted in no further opportunities for submissions. • Nutrition information labelling. This project is proceeding slightly behind the expected timeline. It is anticipated that a document will be prepared for submission to FSANZ by end of 2023. NB: It was never intended that a document would be submitted to FSANZ at the end of this project; only that all the relevant information and research would be completed, and collated by the end of this project. Final interview data from key stakeholders stating their assessment of the evidence and strength of submissions Feedback following stakeholder interviews, conducted as part of the end-of-project evaluation, showed agreement and support in Nuts for Life's approach on emphasizing evidence-based information, and in producing solid and robust work. The approach was noted as being essential in gaining the trust of both the industry and consumers, and demonstrates that health claims are grounded in scientific research. Stakeholders praised the program's work in contributing to public health policy work, noting that the work would not be done to such a degree (or at all), without the Nuts for Life program.
Targeted health professionals	Fund outcome: to influence increased	Health professional market research survey – conducted 2023

have a greater understanding about the health benefits of nuts and are therefore more likely to recommend nuts to clients and patients	consumption of nuts for health and nutrition benefits. Targeted health professionals have an increased awareness, understanding and acceptance of the health proposition of nuts and are increasingly advising clients and patients about using nuts for health benefits.	Overall, despite a different method used to collect the data, compared with previous surveys, results are tracking in a positive direction. <i>Heart disease data</i> <u>2023 survey data</u> • 87% agreement that nuts help prevent CVD, • 83% agreement that nuts help manage CVD. • 86% agreement that nuts help manage cholesterol. <u>2020 survey data</u> • 83% agreement that nuts help prevent heart disease • 78% agreement that nuts help manage cholesterol. <u>2018 survey data</u> • 77% agreement that nuts prevent heart disease • 72% agreement that nuts help manage cholesterol. NB. High-level health claim not yet achieved; still work in progress. <i>General health data</i> <u>2023 survey data</u> • 91% agreement that nuts are healthy food that should be consumed regularly • 95% regularly recommend nuts to clients/patients <u>2020 survey data</u> • 90% agreement that there's a role for nuts in a healthy diet • 67% regularly recommend nuts to clients/patients <u>2018 survey data</u> • 79% agreement that there's a role for nuts in a healthy diet. • 52% regularly recommend nuts to clients/patients <i>Weight management data</i> <u>2023 survey data</u> • 79% agreement that nuts are important to help manage weight • 76% via helping to feel fuller for longer • 86% via protein and fibre to promote satiety • 44% via not all kilojoules absorbed (this is • 57% via displacing other meals and snacks <u>2020 survey data</u> • 70% agreement that nuts have positive effect on weight
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	Annual compound growth of 5% pa	<u>2018 survey data</u> 63% agreement that nuts have positive effect on weight. NB. The method and questions differ slightly, meaning results cannot be directly compared. However, results are still tracking favourably. 2018 data included GPs, dietitians, fitness professionals, nurses and pharmacists; 2020 data included GPs and dietitians only; 2023 data primarily included GPs, dietitians, nurses, fitness professionals (and small numbers of other types of health professionals). Apparent nut consumption data Growth in volume - 3.9% per annum, compound since 2003 Growth in value - 5.5% per annum, compound since 2003. Whilst the compound growth remains in line with the KPI, performance for the last five years has been flat. According to the Nuts for Life Management Committee, this is almost certainly related to the economic environment (i.e. COVID and subsequent effects on economy and inflation), with a similar situation internationally - more so than to the Nuts for Life program efforts. Apparent consumption data based on wholesale sales equates to Australians consuming 7g tree nuts per person per day. (Refer appendix 7). Collation of M&E Data Evaluation dashboards, completed throughout the life of the project shows how the program has progressed.
Intermediate outcomes		
Industry stakeholders endorse research outputs and are supportive of submission process	Fund outcome: to influence increased consumption of nuts for health and nutrition benefits. Extent to which stakeholders are aware, engaged and supportive of research outputs, resources and emerging submissions	Feedback from key industry stakeholders about the outputs and process Continual voluntary contributions from the industry demonstrates the value the industry place on the Nuts for Life program. Feedback following stakeholder interviews, conducted as part of the end-of-project evaluation, showed that stakeholders endorse and support the work the program delivers. They acknowledge that the program is the only channel talking specifically about nuts to healthcare professionals, and with the staff's expertise, it is the only way to develop nutrition and health claims. Nuts for Life's

		role in this area was considered a real benefit to the industry, creating valuable knowledge and resources, and helping to avoid disjointed communication efforts.
Positive initial feedback from decision-making bodies to submission discussions	Fund outcome: to influence increased consumption of nuts for health and nutrition benefits. Initial feedback from relevant decision-making bodies in terms of indicative evidence to be included in submissions.	FSANZ Throughout the pre-application process, meetings and discussions were held with FSANZ to provide guidance and to assist with ensuring the application was complete and the process was followed. NHMRC To date, no feedback has been received due to the NHMRC being significantly behind schedule.
Health professionals are interested, interacting, seeking information and positive about key messages and resources being distributed	Fund outcome: to influence increased consumption of nuts for health and nutrition benefits. Extent of interest shown, information being accessed and indicative reactions and use of information available by targeted health professionals	Structured feedback from events, activities and presentations (e.g. surveys) Number of resources distributed at conferences and events (n = approx.1,750), and the number of requests via direct education campaigns (n = 7,128), i.e. Samples Plus, shows a high-level of interest and engagement from health professionals in learning about the health benefits of nuts. NutENews database of health professionals has increased from around 3,000 in 2020 to nearly 4,000 at the end of this three-year program. A survey was conducted via Survey Monkey in 2022 of 100 NutENews subscribers, to evaluate the eDM. Results showed 91% of respondents find the newsletter valuable, 79% said they would recommend the newsletter to their network, and 83% were happy with the newsletter as it is (wouldn't change anything). Downloads of The Healthy Handful podcast episodes, which targets health professionals, have increased year-on-year, since this was launched. The first 10 episodes had an average download of 105, whilst for the most recent 10 episodes, this has grown to an average of 148 downloads/episode (also placing the podcast in the top 50% of podcasts). The growth of our community of LinkedIn followers to more than 900, since this was launched in late 2020, suggests health professionals (our key target on LinkedIn) are interested in and seeking information from Nuts for Life. The webinar 'Cardiovascular disease and nuts: What does the science say?' had 497 views, with 96% of survey respondents (primarily dietitians/nutritionists) rating the webinar as 'excellent' or 'very good'. Another webinar, a Masterclass for fitness professionals, had 80 live participants, with 93% of survey respondents saying that, after taking part in the Masterclass, they would be either 'very likely' (75%) or 'likely' (18%) to recommend nuts to their clients. The Go Nuts health professional briefing event received positive feedback from several attendees on the information presented and the resources received.

Monitoring and evaluation

Table 3. Key Evaluation Questions

Key Evaluation Question	Project performance	Continuous improvement opportunities
EFFECTIVENESS To what extent has the project achieved its expected outcomes -to what extent have the specific outputs and submissions been completed as planned and how strong is the evidence for purpose? -to what extent do targeted health professionals have a greater understanding about the benefits of nuts and are therefore more likely to recommend nuts to their clients and patients?	The research and background information to support the modifications to the Food Standards Code and to the Australian Dietary Guidelines, have either been fully completed, or are ongoing, as per the project's original plan. -a dossier of evidence to substantiate a food-health relationship completed; application to FSANZ completed and submitted. -a dossier of evidence and key messages to support a case for nuts to feature more prominently in the ADGs has been created, and kept up to date. A response has been submitted to NHMRC for the scoping survey, in line with their timeline. -research to confirm the case to reduce the energy (kilojoule) value of nuts on food labels is complete; modelling work is almost complete and stakeholder research investigating perceptions of the proposed change is in field. Progress is being made in line with the PhD timeline. Targeted health professionals have greater understanding about the benefits of nuts, as indicated from specific activity evaluations, and from our health professional survey conducted in February 2023. Despite some changes to the format and questions, results showed understanding was maintained or improved, and a greater percentage are likely to recommend nuts to their clients and patients, compared to in 2020 and 2018. Outputs have been generated in accordance with project plan.	Nuts for Life will continue to build collaborative relationships internationally, including with the International Nut and Dried Fruit Council, to support and extend our work – particularly relating to substantiating a food-health relationship.
RELEVANCE How relevant was the project to the needs of the intended beneficiaries -what have been the benefits for industry in terms of clarifying and promoting the	End of project feedback from stakeholders, showed that the program is highly regarded and is viewed as successfully filling an 'industry gap'. The program is collaborative, trusted and reputable, is deemed essential, and a real benefit to industry. Despite longer-term objectives not being fully met, the program has succeeded in taking significant steps towards achieving them. Achieving a high-level health claim, increasing prominence in dietary guidelines and modifying labelling are seen as essential to elevate the perception of nuts, increase their visibility and change	With planetary health an increasing priority for consumers, health professionals and industry alike, future Nuts for Life programs will combine health messaging with environmental sustainability to create a more powerful and appealing message.

health benefits for nuts and the (potential) impact on sales?	misconceptions. The program has been successful at promoting the benefits of nuts as a food category, with stakeholder comments suggesting there is power in promoting the entire nut category, rather than individual nuts.	
ENGAGEMENT How well have the intended beneficiaries been engaged in the project -to what extent have nut industry stakeholders and targeted health professionals had opportunity to input into the project and been engaged along the way?	Nut Industry Stakeholders The N4L program is guided and serviced by a Management Committee (MC) comprising of seven experienced representatives across the nut industry supply chain. The MC provided input and direction into the overall strategy, prior to the program commencing, and provided assistance and advice throughout the program, formally via participating in four meetings per year, and ad-hoc, as required. A project reference group (PRG) was established at the onset of the program. Meetings have been held on an ad-hoc basis, as required, with select members depending on the particular activity (e.g. regulatory members: Linda Tapsell and Annette Byron, during discussions around the food-health relationship application). Engagement is evident via industry stakeholders' uptake and involvement with key initiatives, such as during industry conferences, campaigns (e.g. Nut Day), the 2030 Vision launch. Newsletters, podcast episodes and conference presentations were identified, via the end of project evaluation, as being highly valuable in keeping stakeholders informed about the program. Health professionals Health professionals have been engaged through Nuts for Life's communication channels, including direct emails to key opinion leaders sharing new research or key campaigns, and the monthly NutENews eDM (of which they also had an opportunity to provide feedback on, specific to the type of information they would most like to receive from Nuts for Life). Health professionals were also encouraged to download and share many Nuts for Life resources, including reports, infographics, social media tiles, fact sheets, and brochures – all developed specifically for this target audience. Meetings, conferences and events also provided an opportunity to engage with the Nuts for Life team. Popularity of website and downloads of resources also suggests high engagement.	Post-COVID lockdowns, Nuts for Life will continue to prioritise face-to-face engagements, including meetings, events, and conferences – for both industry and health professional stakeholders. This will provide opportunities to better engage with these key groups.
PROCESS APPROPRIATENESS	Nuts for Life insights (evaluation surveys) have indicated the types of resources that are	

To what extent were engagement processes appropriate to the target audiences of the project -what was the project reach and responses from engagement and communication activities from stakeholders and targeted health professionals?	most valuable to health professionals. This shaped the outputs of the team over this three-year program. For example, latest research was shared monthly via NutENews, and four evidence-based reports were produced over the program. Nuts for Life's health professional survey found research summaries and reports are the most highly-valued resources for this group.	
EFFICIENCY What efforts did the project make to improve efficiency -to what extent did the project modify activities or outputs based on feedback from the PRG and Management Committee to improve efficiency and effectiveness of the project?	Input and advice from the Management Committee and the Project Reference Group determined the specific food-health relationship to pursue for the high-level health claim work. Podcasts, targeting health professionals, launched in response to COVID disruptions and the subsequent reduced ability to reach health professionals via face-to-face activities, such as events and conferences. Science monitoring strategy created to bring this activity in-house to reduce cost and to ensure timely collation and dissemination of science and research findings. Student placement (Australian Catholic University), for three students over two years, with relevant projects chosen by the Nuts for Life team, added capacity. Management Committee meetings – held remotely (via Zoom) during COVID disruptions, with continued option for members to dial-in remotely. Nuts for Life was successful in obtaining grants from the INC (Promotion and Dissemination) and the Australian government (Business Grant). These grants helped to support additional activities, aimed at amplifying key messages to our target audiences.	

Recommendations

High-level health claim

Achieving a high-level health claim is widely agreed to be a priority as it would be a significant win for the industry. A claim will assist with raising public awareness and trust in the nutrition and health benefits of nuts. Therefore, we are working on re-submitting an application, based on a food-health relationship for nuts and reduced total/LDL cholesterol. Research, being conducted and supported by the INC will help inform the application, which we plan to submit in 2024.

Australian Dietary Guidelines

We will continue to work towards increasing the prominence of nuts in the next revision of the guidelines. We remain committed to collating evidence, as it becomes available to support our work, and developing key messages and sharing these with nutrition and health key opinion leaders and policy makers. Submissions will be made, on behalf of the industry, to the NHMRC, when required as per the NHMRC timelines.

Energy labelling

The PhD project is due for completion by the end of 2023. Based on the findings, we will make a case to FSANZ to consider altering the energy calculations, and/or allowing a claim relating to the absorption of nut kilojoules to be made. Given misconceptions about nuts and weight gain still exist amongst some consumers and health professionals, education and awareness is imperative to give 'permission' for increased nut consumption.

Communication channels and messaging

Based on market research we commissioned in 2023, 44% of consumers stated that they receive their health information from their GP, and 22% obtain it from a dietitian. However, online and social media also make up significant sources, with 35% of consumers obtaining their information from Google. In terms of *trusted* information, health professionals, are by far the most trusted source. Therefore, moving forward, Nuts for Life will need to ensure we continue to evolve, and to ensure our channels remain effective and relevant, to reach our target audiences.

Face-to-face engagement

We will continue to prioritise face-to-face engagements, such as events and conferences. This type of direct engagement is efficient, and allows for personal connections, making it easier to effectively communicate the health benefits of nuts.

International collaboration and research expansion

We will increase our work and links with international partners (such as the International Nut and Dried Fruit Council), tapping into global research to *amplify* our work. Collaborating with external experts will improve the program's impact and expand research capacity.

Health and sustainability focus

The next phase of the program will move more towards the health *and* sustainability space – a key area for the nut industry. By combining health messaging with environmental sustainability, it will create a more powerful and appealing message to attract consumers. Just as we work with external partners in the health and nutrition space, the Nuts for Life team will widen this sphere to establish connections with industry and program contributors locally and internationally.

Increased resourcing

For the program to continue to be effective, to maximise its impact, and to ensure its future, an increase in the commitment and monetary support from industry is required. However, securing voluntary contributions from industry is a challenge, particularly in view of COVID and the economic impact. Working with the Management Committee and the Australian Nut Industry Council, we will develop a model to promote and attract additional industry support, and allow Nuts for Life to become independent of Hort Innovation funding (in its current capacity) in the future.

Increased collaboration and engagement with growers

Improving grower knowledge and awareness of the health benefits of nuts will further empower and 'arm' this important group to increase their own promotional activities, aimed at driving nut consumption.

Project objectives

The objectives of the current program have only partially been met – due to being dependent on external variables, of which Nuts for Life has no control over (e.g. NHMRC timing to review and update the Australian Dietary Guidelines; FSANZ timing to review an application). Therefore, by having more *controllable objectives*, we can better demonstrate the program's effectiveness going forward, which will assist in evaluating the program's success.

Refereed scientific publications

Journal articles

Publications from PhD project

Nikodijevic, C., Probst, Y., Tan, SZ., Neale, E., 2023. The Metabolizable Energy and Lipid Bioaccessibility of Tree Nuts and Peanuts: A Systematic Review with Narrative Synthesis of Human and In Vitro Studies. *Advances in Nutrition*
<https://www.sciencedirect.com/science/article/pii/S2161831323002752>

Nikodijevic, C., Probst, Y., Tan, SZ., Neale, E., 2023. The Effects of Tree Nut and Peanut Consumption on Energy Compensation and Energy Expenditure: A Systematic Review and Meta-Analysis. *Advances in Nutrition* 14(1) Jan 2023, 77-98.
<https://pubmed.ncbi.nlm.nih.gov/36811596/>

Publications from High-Level Health Claim

Houston, L., Probst, Y., Mamatha Chandra Singh, MC., Neale, E. 2023. Tree nut and peanut consumption and risk of cardiovascular disease: A systematic review and meta-analysis of randomised controlled trials. *Advances in Nutrition*
<https://www.sciencedirect.com/science/article/pii/S2161831323003095?via%3Dihub>

Conference presentations

Nikodijevic, C. Nutrition Society of Australia (virtual conference): 29th Nov to 3rd Dec 2021. Presentation: The metabolisable energy of tree nuts and peanuts: a systematic review.
First prize for NSA Best Student Poster Presentations Award.

Nikodijevic, C. Australian Nut Conference (Melbourne): 25 Mar 2022. Presentation: Nuts and Energy PhD Research - Summary.

Probst, Y. Australian Nut Conference (Melbourne): 25 Mar 2022. Presentation: Consumption of nuts and reduced risk of CVD – Nut health claim research outcomes.

Neville, B., Waring, M. Australian Nut Conference (Melbourne): 25 Mar 2022. Presentation: Nut health and the consumer.

Neville, B. Australian Nut Conference (Melbourne): 25 Mar 2022. Breakfast presentation: Activities and achievements.

Probst, Y. Australian Nut Conference (Melbourne): 25 Mar 2022. Presentation: Consumption of nuts and reduced risk of CVD – Nut health claim research outcomes.

Neville, B. INC Congress (Dubai): 11-13 May 2022. Presentation: Promoting nut consumption in Australia.

Nikodijevic, C. Dietitians Australia Conference (Adelaide): 14 - 16 Aug 2022. Presentation: A systematic review of the ins and outs of nut energy balance.

Probst, Y. Dietitians Australia Conference (Adelaide): 14 - 16 Aug 2022. Presentation: Extending the knowledge of nuts and CVD – Can we emerge with a high level health claim.

Neville, B. Almond Board of Australia (Adelaide): 26 Oct 2022. Nuts and CVD – Can we emerge with a high level health claim.

Tapsell, L. Nuts for Life Health Professionals briefing event (North Sydney): 22 Nov 2022. Presentation: Nuts in health dietary patterns.

Nikodijevic, C. Nuts for Life Health Professionals briefing event (North Sydney): 22 Nov 2022. Presentation: Nut consumption patterns in Australia and the relationship between nut intake and body weight.

Neville, B. Nuts for Life Health Professionals briefing event (North Sydney): 22 Nov 2022. Presentation: Elevating nuts in Australian dietary guidance.

Nikodijevic, C. Nutrition Society of Australia (Perth): 29 Nov - 2 Dec 2022. Presentation: The effects of tree nut and peanut consumption on energy compensation and energy expenditure: a systematic review and meta-analysis. First prize for NSA Best Oral Poster Presentation.

Neville, B. INC Congress (London): 22-24 May 2023. Presentation: Initiatives to drive nut consumption in Australia.

References

1. Balakrishna, R., et al., Consumption of Nuts and Seeds and Health Outcomes Including Cardiovascular, Diabetes and Metabolic Disease, Cancer, and Mortality: an Umbrella Review. *Adv Nutr*, 2022.
2. Nikodijevic, C.J., et al., Nut consumption in a representative survey of Australians: a secondary analysis of the 2011-2012 National Nutrition and Physical Activity Survey. *Public Health Nutr*, 2020: p. 1-11.
3. *Australian Institute of Health and Welfare 2021. Australian Burden of Disease Study 2018: Interactive data on risk factor burden. Canberra: AIHW. 2021.*

Intellectual property

No project IP or commercialisation to report.

Acknowledgements

Nuts for Life would like to thank the Management Committee for continuing to share their time, expertise and wisdom. We would also like to thank Hort Innovation and our industry contributors for their ongoing support of the program.

Almond Board of Australia

Australian Macadamia Society

Australian Pioneer Pistachio Company

Australian Walnut Industry Association

Charlesworth Nuts

Chestnuts Australia

Commodity Imports Australia

FTA Food Solutions Pty Ltd

GB Commtrade Pty Ltd

Hazelnut Growers of Australia Inc
JC's Quality Foods
Manassen Foods
MWT Foods
Nocelle Foods
Nut Producers Australia Pty Ltd
The Nut Shop
Olam Orchards Australia Pty Ltd
Prolife Foods Ltd
Rath & Co Trading
Saker Consultants Pty Ltd
Scalzo Food Industries
Select Harvests
Stahmann Webster
Trumps Pty Ltd

We thank Cathy Beaton for her review of this report.

Appendices

1. NutENews evaluation
2. Health professional publications articles
3. Market research
 - Health professional tracking
 - Consumer: Health information survey report
 - Health professional sustainability impact
4. Conference evaluations
5. PR and social media evaluation reports
6. M&E
 - Progress Dashboard
 - End of project evaluation report
7. Apparent nut consumption statistics

Appendix 1 - NutENews Survey – Evaluation

Survey Monkey results March 2022

Compiled by Belinda Neville, March 2022

Question 1: What is your profession? (63 responses; 37 skipped)

ANSWER CHOICES	RESPONSES	
Dietitian/Nutritionist - Research	6.35%	4
Dietitian/Nutritionist - Public health/community health	17.46%	11
Dietitian/Nutritionist - Media	1.59%	1
Dietitian/Nutritionist - Clinical/ Private practice	38.10%	24
Dietitian/Nutritionist - Industry	4.76%	3
General Practitioner (GP)	14.29%	9
Nurse	6.35%	4
Diabetes Educator	6.35%	4
Fitness Professional	4.76%	3
TOTAL		63

Question 2: Why did you sign up to received NutENews? (98 responses; 2 skipped)

ANSWER CHOICES	RESPONSES	
To answer patient/client questions	4.08%	4
To stay generally up to date on nut health and nutrition	73.47%	72
To learn of Nuts for Life activities and resources	3.06%	3
For personal interest	19.39%	19
TOTAL		98

Question 3: How valuable do you find the NutENews monthly e-newsletter, to you professionally? (99 responses; 1 skipped)

ANSWER CHOICES	RESPONSES	
Extremely valuable	23.23%	23
Valuable	67.68%	67
Not particularly valuable	4.04%	4
Not valuable at all	2.02%	2
Unsure/don't know	4.04%	4
Total Respondents: 99		

Question 4: What content do you find the most valuable? Tick all that apply (100 responses, 0 skipped)

ANSWER CHOICES	RESPONSES	
General nuts and health information	68.00%	68
Disease/condition-specific nuts and health information	60.00%	60
Answers to nut FAQs	34.00%	34
New nut research summaries	58.00%	58
Nuts for Life resources (e.g. podcasts, infographics, fact sheets)	45.00%	45
Recipes	49.00%	49
Other (please specify)	6.00%	6
Total Respondents: 100		

Question 5: How likely would you be to recommend NutENews to your networks? (99 responses; 1 skipped)

ANSWER CHOICES	RESPONSES	
Extremely likely	35.35%	35
Likely	43.43%	43
Neither likely nor unlikely	13.13%	13
Unlikely	5.05%	5
Would not recommend	1.01%	1
Unsure/don't know	2.02%	2
TOTAL		99

Question 6: Is there anything you think should be included in NutENews that is not already there? (62 responses; 38 skipped)

Response themes	Number of responses	% of responses
Wouldn't change anything/happy with it as it is	51	83
Latest research	1	1.6
Conferences we are attending/presenting at	1	1.6
Nuts 'hero' section (showcasing one nut at a time) facts, where grown etc.	1	1.6
Fun nut facts	1	1.6
Where nuts are grown	1	1.6
Recipes	1	1.6
Australian grown nuts/Australian brands	2	1.6
Keep it brief and simple	1	1.6
Environmental/sustainability of nuts	1	1.6
Nut allergies	1	1.6
Macadamia nuts	1	1.6
Industry news	1	1.6
Graph showing how nuts compare in terms of nutrients (e.g. antioxidants)	1	1.6
TOTAL	62	100

Q7. What do you usually do with the information once you have read it? (100 responses, 0 skipped)

ANSWER CHOICES	RESPONSES	
Keep it for myself for professional development	30.00%	30
Pass onto a client/patient	19.00%	19
Share with a colleague	17.00%	17
Nothing	15.00%	15
Other (please specify)	19.00%	19
TOTAL		100

Q8. When would you prefer to receive NutENews? Tick a day and time period (95 responses; 5 skipped)

ANSWER CHOICES	RESPONSES	
Monday	36.84%	35
Tuesday	9.47%	9
Wednesday	16.84%	16
Thursday	6.32%	6
Friday	8.42%	8
Weekends	22.11%	21
Morning	50.53%	48
Lunchtime	10.53%	10
Afternoon	14.74%	14
Evening	10.53%	10
Total Respondents: 95		

Q9. How much do you agree with this statement: I trust NutENews as a credible source of information (99 responses; 1 skipped)

ANSWER CHOICES	RESPONSES	
Strongly agree	76.77%	76
Somewhat agree	16.16%	16
Neither agree nor disagree	7.07%	7
Disagree	0.00%	0
Strongly disagree	0.00%	0
Unsure/don't know	0.00%	0
TOTAL		99

Key learnings:

Compiled by Maree Hall, March 2022

To action

Activity	Progress
Trial Monday morning dissemination	Complete

	- March 2022 eDM sent out Monday 4 April; To review outcomes compared with previous issues
Content to keep top of mind: - General nut related - Disease specific - Nut research	Ongoing
Consider 'hero' nut in each issue	Complete - Already profiling a specific nut type each issue through the recipe and an image - Will now also formalise this – eg. 'Nut in Focus: X (nut type)'
Consider 'Australian grown' section of the website	Complete - Updated 'Where are nuts grown?' webpage with this in mind; Promoted via March 2022 eDM

To communicate

Activity	Progress
Brief summary of survey outcomes for: - Management Committee - Industry section of web	Complete - MC: April 2022 Activity Report – verbal report provided 28/4/22 by MH.
Twitter tiles - Share some of the stats from the survey as promotional content to seek new subscribers	Complete - Tweets early April (4/4 and 6/4): see below
Thanks to survey respondents	Complete - Included in March 2022 eDM
Sign-up to NutENews webpage	Complete

- Include stats to encourage new subscribers	- Webpage updated April 2022
QR code sign up promotions (eg. at health professional conferences) - Include stats to encourage new subscribers	Complete

Appendix 2 – Health professional publication articles

Refuel advertorial

NutENews

Subscribe to NutENews for more on nuts - their health benefits, the latest research, new resources, nutrition tips and delicious recipes.



SCAN ME

New fact sheets

YOUR NUT FAQs ANSWERED

NUTS FOR WEIGHT AND FITNESS GOALS



Nuts for Fitness

How are nuts good for sports and fitness? And should you eat them before, during or after exercise? Two NEW fact sheets, from SDA and Nuts for Life, answer all your questions!

www.nutsforlife.com.au



Refuel advertorial – Summer 2022

NUTS: LESS KILOJOULES THAN WE THOUGHT?

New Australian research suggests the actual kilojoules our bodies absorb from nuts is up to 26% less than what's stated on food labels.

A NEW WAY OF LOOKING AT ENERGY IN NUTS

A team from the University of Wollongong recently collated the findings of carefully-controlled feeding trials (21 in total), which had looked at how much of the fat from nuts is metabolised and converted into energy in the body, and how much is excreted.

ENERGY ABSORPTION OF CERTAIN NUTS:

	Older Atwater factor calculation for energy content (kJ) / 30g serve	Average available energy content from feeding trials (kJ) / 30g serve	Overestimation of the energy from nuts
Almonds	760	555	26%
Cashews	730	730	14%
Pistachios	711	678	5%
Walnuts	828	654	22%

Human studies on the digestible kilojoules of other nut types are not yet available. But it's likely that the kilojoule count for these nuts is also an overestimation.

A portion of the fat in nuts remains locked (or 'trapped') within their fibrous cell walls and cannot be absorbed by the body. Instead, nut eaters excrete some of this dietary fat in their stools – without it ever being used by the body as a source of energy.

This helps to explain why, despite their high content of healthy fats, nuts are not linked with weight gain. ^{Re}

AIM TO INCLUDE A HANDFUL (30G) OF NUTS IN YOUR DAY, EVERY DAY.

MORE NUT HEALTH FACTS AT: WWW.NUTSFORLIFE.COM.AU






NUTS MAKE HEALTHY SNACKING EASY

Like other fresh, whole foods, such as fruits and vegetables, nuts are nutritional powerhouses.

They provide energy, plant protein, fibre and 28 different vitamins and minerals, to help enhance sporting performance and recovery. And . . . they're an easy, portable snack when you're on the go, or on the road!

A healthy handful of nuts (or a 30 g serve) each day supports good health.

3 REASONS TO SNACK ON NUTS

PROTEIN: Protein is key for maintaining muscle strength, and nuts are plant protein powerhouses! Most provide 3-6 g of protein/handful (30 g), or around 10-20 g of protein/100 g. That's more than other common sources of plant protein, like grains, legumes, and soy.

HEART HEALTH: Nuts are heart-health heroes, thanks to their unique mix of nutrients - like mono- and poly-unsaturated fats, fibre, vitamin E, folate, potassium, selenium, manganese,

copper, plant sterols and arginine. A recent review of the evidence by Australian-based researchers found that, as part of a healthy diet, regularly eating nuts reduces the risk of cardiovascular disease (CVD).

SATIETY: Nuts can help keep us fuller for longer and may prevent overeating at later meals. That's due to their heart-healthy fats, dietary fibre and protein, and the satiety hormones that we release after eating nuts. And did you know that, despite nuts being naturally rich in healthy fats, regularly eating them is not linked with weight gain? This is because we may not absorb up to 30% of the kilojoules in nuts. It's been suggested that this is due to the naturally-occurring fat in nuts is held (or trapped) within the cell walls of the nut, making it hard for the body to digest and absorb. ¹⁰

More nut facts at: www.nutsforlife.com.au

SUBSCRIBE HERE Autumn 2022 Refuel Magazine 15

MAKING PLANT PROTEINS A PRIORITY

New Australian research has highlighted just how important protein variety is within healthy and sustainable dietary patterns. It found that, for diets with higher diet quality and lower environmental impact, the likelihood of meeting nutritional needs significantly increased as variety of food choices within the 'meat and alternatives', or 'protein' food group expanded. But another recent study suggests Australians have a way to go in diversifying our 'protein' choices. In the average Australian diet, for adults aged 19-50 years, red meat and animal-based alternatives (poultry, fish/seafood, and eggs) contributed 87% to the total servings consumed within the 'meat and alternatives' food group. On the other hand, plant-based alternatives (nuts and legumes) contributed just 13%. The take home message? Many Australians need to eat a more diverse range of foods from within the 'protein' food group. A good place to start is swap some animal protein sources with plant proteins, given foods like nuts, seeds and legumes are vastly under-consumed in Australia. In other words, let's aim to reframe plant-based protein foods as 'priority choices', rather than 'meat alternatives'!

12g, chickpeas at 6g, and oats with 2-3g. The protein digestibility (or 'protein quality') of tree nuts is similar to many other plant protein sources.

TIPS TO DIVERSIFY YOUR DIET, WITH PLANT PROTEINS:

- Enjoy a healthy handful (30g) of nuts every day
- Incorporate legumes, like lentils and beans, into meals 2-3 times per week
- Swap one or more meat meals a week for a plant-protein source, like tofu or beans

Given their high level of plant protein, including a daily handful of nuts (30g) may be an effective and yet easy way for Australians to embrace plant-based eating patterns - a win for our health (and that of our planet).

- Choose wholegrain foods like rolled oats, brown rice, wholegrain breads and quinoa
- Add seeds such as sunflower, pumpkin or chia to salads and trail mixes

This advertorial was written by Nuts for Life. More nut health facts at: www.nutsforlife.com.au

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 EAT Lancet Commission Summary Report 2019. Available at: <https://eaterscience.org/health-and-nutrition/lancet-commission/summary-report/>
 Food Standards Australia and New Zealand (FSANZ). Australian Food Composition Database - Release 1.0 (2016). 2016. Available at: <https://www.foodstandards.gov.au/>

WHAT'S SO SPECIAL ABOUT NUT PROTEIN?

Traditionally, the benefits of nuts have been attributed to their healthy mono- and poly-unsaturated fatty acids, dietary fibre, and other nutrients and bioactives, such as vitamin E, magnesium and phytochemicals. But nuts also provide significant amounts of protein, and it is this protein that plays at least some part in many of the health benefits linked with eating nuts. Of the common sources of plant protein that Australians eat - grains, legumes, nuts and soy - nuts generally have the highest plant protein content per 100g. For instance, almonds and pistachios have 20g plant protein per 100g, compared to soybeans at around 14g, tofu at

DID YOU KNOW?
 The Planetary Health Reference Diet, developed by the EAT Lancet Commission, recommends plant-based options, such as nuts and legumes, make up 30% of the total amount of the 'protein' food group.

THE NUTS FOR LIFE
 Nuts for Life inspires people to enjoy a healthy handful of nuts every day by educating them on the health benefits of regular nut consumption. Follow them on Instagram @nuts_for_life or Facebook @nutsforlife.

WHY NUTS ARE NATURE'S HEART HEALTH HEROES

A recent major review of the evidence has shown just how important nuts are for heart health. A University of Wollongong team analysed the findings of more than 180 studies, from 25 countries and found that, as part of a healthy diet, eating 30g (or a handful) of nuts daily reduces the risk of CVD by improving multiple 'biomarkers' of CVD.

CVD is an umbrella term that includes heart, stroke and blood vessel diseases. It accounts for one in four deaths in Australia, and claims the life of one person every 12 minutes.

The research team concluded that nut consumption was linked with a significant decrease in:

- Total cholesterol
- LDL-cholesterol
- Triglycerides
- Total cholesterol to HDL-cholesterol ratio
- LDL-cholesterol to HDL-cholesterol ratio
- Apolipoprotein B

Nuts also tended to benefit other CVD biomarkers, including apolipoprotein A1, systolic and diastolic blood pressures, and heart rate, although these findings were not statistically significant.

DID YOU KNOW?
 Despite their heart health benefits, the latest National Nutrition and Physical Activity Survey found just 21% of Australians ate the target handful (30g) of nuts a day.

WHAT MAKES NUTS SO HEART HEALTHY?
 Nuts may be tiny, but they're packed with goodness! Their heart health benefits are thanks to their unique nutrients all working together.

THE CARDIOPROTECTIVE NUTRIENTS IN NUTS INCLUDE:
Healthy fats: Mono- and poly-unsaturated fats can help lower total cholesterol and LDL (bad) cholesterol levels. Omega-3s, found in some nuts, have been linked to a lower risk of heart disease by reducing blood triglyceride levels.
Plant protein: Nuts are plant protein powerhouses! Most provide 3-6g of protein/handful (30g). Research suggests replacing animal protein with plant protein improves biomarkers of CVD.

DID YOU KNOW?
 In a recent review, the American Heart Association emphasised that dietary protein should come mostly from plant foods, with nuts and legumes as heart healthy options.

Fibre: All nuts contain fibre (5-15g fibre/100g, depending on the type), which helps to stop cholesterol absorption in the small intestine.

Vitamins and minerals: Nuts contain more than 28 nutrients! Among them are magnesium, potassium and calcium, which can help lower blood pressure.

Antioxidants: The antioxidants vitamin E, riboflavin, selenium, manganese, copper, zinc and polyphenols are all found in nuts. They protect the body's cells from damage caused by oxidation - a process linked with the risk of developing heart disease.

Phytochemicals: Nuts naturally contain plant sterols, which help lower blood cholesterol by reducing the amount that the body absorbs.

Arginine: Of all plant protein sources, nuts are the highest in arginine. This amino acid helps blood vessels remain flexible and less prone to blood clots.

FIVE WAYS TO A HEALTHIER HEART WITH NUTS

Aim to include a handful (30g) of nuts each day:

- Keep a container of nuts in your car, bag or drawer for quick snack
- Blend nuts into fruit smoothies
- Add nuts to muesli or cereal, or sprinkle over toast toppings
- Include nuts in salads, stir-fries, curries, pastas and rice bowls
- Make your own nut butters and pastes

More nut and heart health facts at: www.nutsforlife.com.au
 Click here to download references. ¹⁰

NUTS FOR LIFE
 Nuts for Life inspires people to enjoy a healthy handful of nuts every day by educating them on the health benefits of regular nut consumption. Follow them on Instagram @nuts_for_life or Facebook @nutsforlife.

Q: TRUE OR FALSE? We may not absorb 30% of the kilojoules in nuts.

A: True! Studies suggest the fat in nuts is held within the plant cell walls of whole nuts, meaning it's not all absorbed by the body. This provides clues as to why research shows that regularly eating nuts is not linked with weight gain.

In fact, research shows the opposite. Regular nut consumption is linked with a reduced body weight, BMI and waist circumference.

Nuts also keep us fuller for longer and may prevent overeating later meals. That's due to their heart-healthy fats, dietary fibre and plant protein (3-6g of protein/30g handful), and the satiety hormones that we release after eating nuts.

Have you had your healthy handful today?



Learn More About the Value of Nuts

SDA Factsheets

NUTS FOR WEIGHT AND FITNESS GOALS

Whether you are a recreational athlete, a weekend warrior, social player or an ultra-endurance athlete, your body needs adequate fuel to perform at its best. And it's also crucial to consider the long-term health effects of the foods you consume.

Nuts and weight

Nuts sometimes get a bad rap when it comes to body weight, due to their high fat and energy content. But the body of evidence tells us that regular consumption of nuts is not only integral to health, but also assists with weight management - with regular nut intake linked with reduced body weight, lower BMI and lower waist circumference. (i, ii, iii, iv)

Nuts specifically assist with weight management and body composition goals by:

- Satisfying hunger and reducing appetite, due to their healthy unsaturated fat content (omega-3 and omega-6), dietary fibre and plant protein content. (v)
- Releasing satiety hormones after consumption, to keep us fuller for longer.
- Trapping some of the naturally-occurring fats in their fibrous walls - meaning our bodies don't absorb or digest up to 30% of the energy from some nut varieties. (vi)
- Slowing digestion when eaten with carbohydrate-rich foods (vii) - helping to reduce insulin levels and giving us sustained energy for longer. (viii)

Nuts support active people, everyday

Nuts contain a range of nutrients important for daily health. Many of these same nutrients also enhance sporting performance and recovery, including:

- Vitamin E, vitamin B6, niacin, folate, magnesium, zinc, non-haem iron, calcium, copper, selenium, phosphorus and potassium (ix, x)
- Phytochemicals and omega-3 fats that act as anti-inflammatories that help:
 - Boost the body's function, immunity and recovery from exercise (xi)
 - Relieve joint pain
 - Promote muscle damage recovery from exercise
 - Protect heart health
 - Boost mood and cognition, helping with skill and decision making (xii, xiii)

Despite this, 98% of Australians are not meeting the recommended serve of 30g of nuts daily. The average intake is just 1.6g daily, so many people need to increase their consumption six-fold to meet the recommendations essential for good health. (xiv)

How to eat nuts before exercise:

Most people can tolerate a meal 2-4 hours before exercise and/or a small snack 1-2 hours before exercise, without experiencing any unwanted stomach distress. Depending on the intensity of the exercise and you, as an individual, it may be better to avoid nuts too close to exercise, as they are slow to digest.



YOUR NUT FAQs ANSWERED

Can eating nuts help with weight maintenance or weight loss goals?

Yes! In fact, regular nut consumption is linked with a reduced body weight, body mass index (BMI) and waist circumference. (i) Replacing less-healthy foods (like processed meats, crisps or a chocolate bar) with a handful (30g) of nuts daily significantly improves diet quality, and supports brain and heart health, without weight gain. (ii, iii, iv)

Nuts help by:

- Satisfying and reducing hunger, as they are rich in healthy unsaturated fats (including omega-3 and omega-6), dietary fibre and plant protein, and also contain fibre.
- Releasing satiety hormones after consumption, signalling to our brain that we are full.
- Trapping some of the naturally-occurring fats in their fibrous cell walls - meaning our bodies don't absorb or digest up to 30% of the energy from nuts. (v)
- Slowing digestion when eaten with carbohydrate-rich foods, giving us sustained energy for longer. (vi)
- Reducing overall daily energy intake by reducing dietary compensation at other meals or snacks.

Are nuts a suitable food option during ultra-endurance sport?

During prolonged exercise (such as ultra-endurance running, swimming or cycling), when exercise intensity is relatively low (15-40% of VO2 max), training your body to use fat as fuel can be beneficial.

Consumption of foods rich in healthy fats, such as nuts, may be useful before and during a race, in combination with carbohydrates, electrolytes and fluid. (vii) This can help spare glycogen during steady-state exercise, for times when the intensity is higher, and ultimately enhance ultra-endurance performance. (viii)

Trial this during training, rather than racing, and work with an Accredited Sports Dietitian for specific advice.

Can I get enough protein if I eat predominantly plant-based foods, including nuts?

Yes. The key is to include a variety of foods, in adequate amounts, over the day to ensure you get all the essential amino acids (EAAs), especially if you rely solely on plant-based foods. (ix)

This is because most plant-based proteins are usually missing one of the 20 amino acids that make up the proteins found in muscles, bones, skin and blood. Our body can't make nine of these amino acids, called essential amino acids so they must be obtained through our diet.



Nuts typically have the highest plant protein content, at 15-20g per 100g compared with other plant-based food sources, including soybeans (11g), tofu (12g), chickpeas (16g) and oats (2.5g). (x, xi, xii)

To maximise recovery, aim to pair nuts with another protein-rich food (such as dairy, cereals, beans or rice). This can be beneficial when you have another hard exercise session within eight hours or a high training volume, or if you're trying to maximise lean muscle mass gains.

Appendix 3 – Market Research

a) Health professional tracking

Compiled by Maree Hall, March 2023

Nuts for Life conducted an online survey of health professionals to help evaluate the 2020-2023 program, and to understand perceptions, attitudes and knowledge of nuts and their health and nutrition benefits amongst this key group.

The survey was in-field from 1-12 February, 2023. It was promoted via the NutENews database, and social media (Twitter and LinkedIn). Five \$50 grocery vouchers were offered as an incentive.

In total, 225 respondents completed the survey.

Although a different type of survey to those conducted in the past, this survey builds on previous health professional research studies conducted by Nuts for Life. For example, some of the questions asked in this and previous surveys are similar (as indicated below), which allows for some comparison. Unlike previous studies, which reported results by health professional type (eg. dietitians, GPs etc), the results presented below refer simply to 'health professionals' as a category.

Of the 225 respondents, 114 indicated that they would be willing to take part in further (paid) market research on the nutrition and health benefits of nuts (such as qualitative research).

Question 1: What is your profession?

(225 responses; 0 skipped)

ANSWER CHOICES	RESPONSES	
Dietitian/nutritionist	39.11%	88
GP/doctor	16.00%	36
Fitness professional	7.11%	16
Nurse	9.78%	22
Diabetes educator	4.89%	11
Other (please specify)	23.11%	52
TOTAL		225

- Most respondents were dietitians/nutritionists (39%), followed by GPs/doctors (16%), with a smaller proportion of nurses (10%), fitness professions (7%) and diabetes educators (5%).
- 'Other' professionals listed included retired health professional, support worker, chiropractor, naturopath, food scientist, occupational therapist, podiatrist, physiotherapist.

Question 2: To what extent do you agree/disagree with the following statements?

(225 responses; 0 skipped)

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE	UNSURE	TOTAL
a. Nuts are healthy foods that should be consumed regularly	3.35% 7	0.00% 0	4.78% 10	26.79% 56	64.11% 134	0.96% 2	209
b. Nuts are an important food in a diet that helps manage cholesterol	1.98% 4	0.99% 2	8.42% 17	35.64% 72	50.50% 102	2.48% 5	202
c. Nuts are an important food in a diet that helps prevent cardiovascular disease	1.99% 4	1.00% 2	6.97% 14	35.82% 72	50.75% 102	3.48% 7	201
d. Nuts are an important food in a diet that helps manage cardiovascular disease	1.48% 3	1.48% 3	10.34% 21	38.42% 78	44.83% 91	3.45% 7	203
d. Nuts are an important food in a diet that helps prevent type 2 diabetes	1.50% 3	2.00% 4	18.00% 36	32.50% 65	39.00% 78	7.00% 14	200
e. Nuts are an important food in a diet that helps manage type 2 diabetes	1.46% 3	3.88% 8	11.17% 23	37.38% 77	42.23% 87	3.88% 8	206
f. The cost (price) of nuts is reasonable to encourage them to be consumed regularly	2.86% 6	13.33% 28	17.14% 36	40.00% 84	24.29% 51	2.38% 5	210
g. Nuts are an important food within a diet that helps to manage weight	1.40% 3	3.26% 7	14.42% 31	33.49% 72	45.58% 98	1.86% 4	215

Most health professionals have a positive sentiment towards the overall health benefits of regular nut consumption.

Specifically:

- Nine in 10 health professionals (91%) consider nuts as healthy foods that should be consumed regularly (agreed/strongly agreed)
- The heart health benefits of nuts appear to be well recognised.
 - 86% consider nuts as important in a diet that helps manage cholesterol (agreed/strongly agreed)
 - 86% consider nuts as important in helping to *prevent* cardiovascular disease (CVD). and 83% say nuts are important in helping to *manage* CVD (agreed/strongly agreed).

Comparison with previous health professional tracking surveys:

- 2020 survey: 67% of GPs and 89% of (experienced) dietitians said they viewed nuts as either 'very important' or 'somewhat important' in a diet that helps manage cholesterol.
- 2018 survey: 73% of GPs and 90% of (experienced) dietitians said they viewed nuts as either 'very important' or 'somewhat important' in a diet that helps manage cholesterol.

Note: The wording of this question differed slightly compared with previous surveys.

- More health professionals see nuts as important in helping to manage type 2 diabetes, than they do in helping to prevent it.
 - 80% say nuts are important in helping to *manage* type 2 diabetes and 72% consider nuts as important in helping to *prevent* type 2 diabetes (agreed/strongly agreed).

Compared with previous health professional tracking surveys, it appears that less health professionals consider nuts 'important' in helping to prevent type 2 diabetes.

- 2020 survey: 82% of GPs and 90% of (experienced) dietitians said nuts were either 'very important' or 'somewhat important' in a diet that helps prevent type 2 diabetes.
- 2018 survey: 85% of GPs and 88% of (experienced) dietitians said nuts were either 'very important' or 'somewhat important' in a diet that helps prevent type 2 diabetes.

Note: The wording of this question differed slightly compared with previous surveys.

- The cost of nuts appears to be somewhat of a barrier to encouraging regular consumption.
 - While around two thirds (64%) consider the cost of nuts reasonable to support regular consumption (agreed/strongly agreed), less 'strongly agreed' (24%) and more 'disagreed'/'strongly disagreed' (16%) than they did for the other statements in this survey question.
- Four in five health professionals (79%) consider nuts important foods within a diet that helps manage body weight.

Comparison with previous health professional tracking surveys:

- *2020 survey: 55% of GPs and 85% of (experienced) dietitians said nuts were either 'very important' or 'somewhat important' in a diet that helps manage weight.*
- *2018 survey: 62% of GPs and 86% of (experienced) dietitians said nuts were either 'very important' or 'somewhat important' in a diet that helps manage weight.*

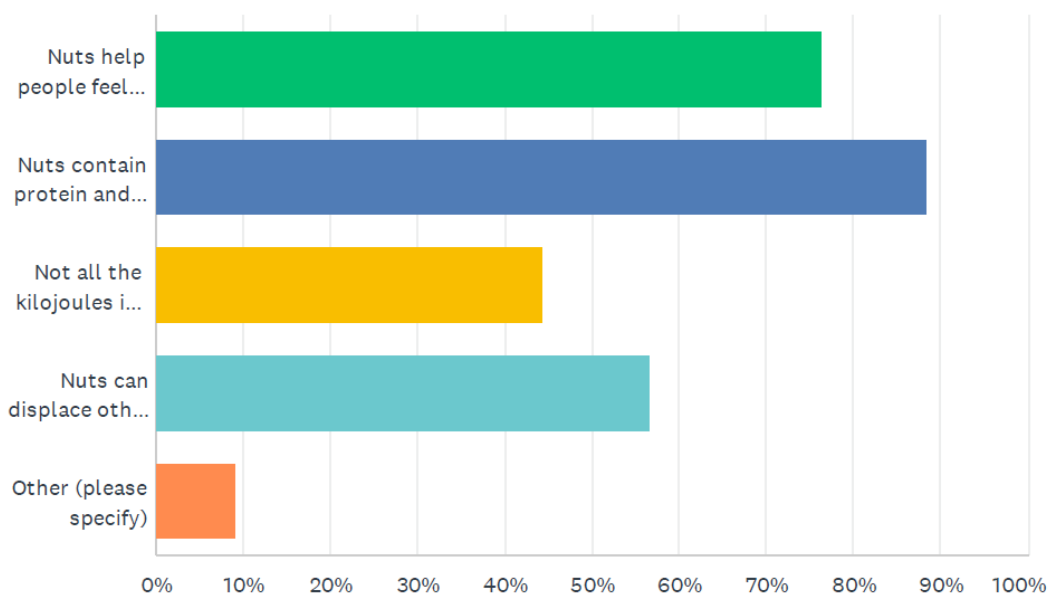
Note: The wording of this question differed slightly compared with previous surveys.

Question 3: If you agree that nuts have a role to play in helping to manage weight, what are your reasons for this?

(219 responses; 6 skipped)

(Note: Multiple responses were possible)

ANSWER CHOICES	RESPONSES	
Nuts help people feel fuller for longer	76.26%	167
Nuts contain protein and fibre, which can increase satiety	88.58%	194
Not all the kilojoules in nuts are absorbed by the body	44.29%	97
Nuts can displace other meals and snacks	56.62%	124
Other (please specify)	9.13%	20
Total Respondents: 219		



- Most health professionals (89%) acknowledge that the protein and fibre in nuts, which can increase satiety, is a reason why nuts help to manage body weight.

- Around three quarters (76%) say nuts help people feel fuller for longer, and just over half (57%) say nuts can displace other meals and snacks, thereby helping to manage body weight.
- A considerable number of health professionals (44%) recognise that not all the kilojoules in nuts are absorbed by the body.

(Note: This is a complex area of science, which has been communicated by Nuts for Life over the past three years, that a not insignificant number of health professionals now appear to understand).

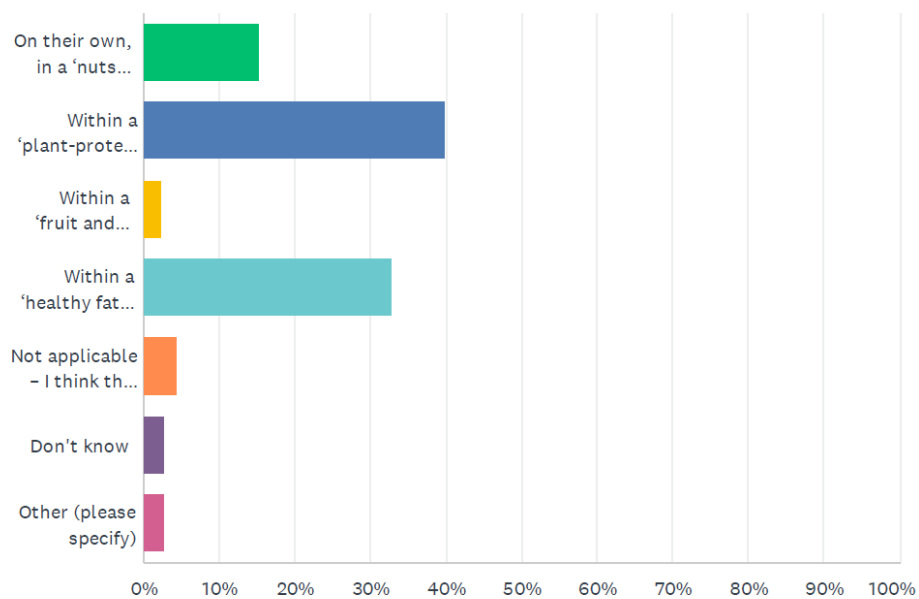
Comments at 'Other' option:

- Easy, convenient, fast snack (x 5 comments)
- Nuts promote gut bacteria that produce postbiotics that reduce appetite and improve glucose tolerance
- Slow digestion
- Nuts replace refined white flour in cooking which is beneficial
- The contain healthy fats
- Though incomplete proteins, mixed nuts are often a better option than meat that contain a range of fat dependent on the meat quality. Perfect for vegetarians, and incorporate other benefits
- Convenience as a portable food to avoid purchasing less healthy things
- Delicious and can be eaten daily
- Nuts should be eaten with meat and vegetables, not just nuts to maintain the energy your body needs
- Nuts are usually low GI
- Can be used in keto recipes
- Add texture to low kJ foods like salads
- Great savoury option as a snack, added interest to a stir fry or salad or crunch to yoghurt or breakfast cereals/porridge
- Nuts are highly nutritious foods, but unfortunately people believe in myths related to weight gain with nuts and miss out on the high nutritional value of these foods, and the great impact on the health of the population
- Satisfying

Q4. If nuts were to sit in a different (or new) group within the Australian Dietary Guidelines, where do you think they should sit?

(223 responses; 2 skipped)

ANSWER CHOICES	RESPONSES	
On their own, in a 'nuts only' food group	15.25%	34
Within a 'plant-protein' food group (together with foods like legumes and seeds)	39.91%	89
Within a 'fruit and vegetables' food group	2.24%	5
Within a 'healthy fats' food group	32.74%	73
Not applicable – I think they should stay where they are within the 'protein' food group	4.48%	10
Don't know	2.69%	6
Other (please specify)	2.69%	6
TOTAL		223



Health professionals appear to think the positioning of nuts within the Australian Dietary Guidelines needs to be reconsidered. But where nuts should sit instead remains unclear (divided) among those surveyed.

Specifically:

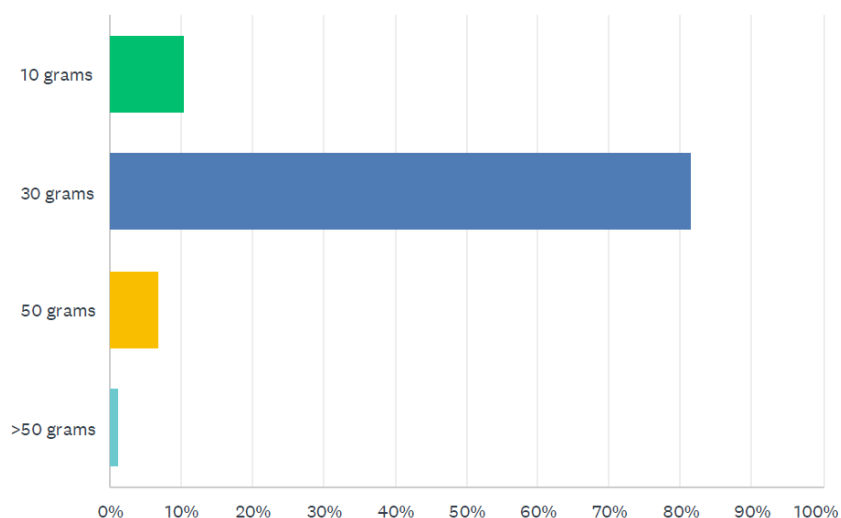
- Only 5% of health professionals think nuts should remain where they currently sit, within the 'protein' (or 'meat and alternatives') food group.
- More health professionals think nuts should sit within a 'plant protein' food group (40%), or a 'healthy fats' food group (33%), than any other alternatives.
- Only 15% think nuts should have their own 'nuts only' food group within the Australian Dietary Guidelines.

Comments at 'Other' option:

- May be bundled with other plant proteins - but may require a specific statement to further support consumption and provide confidence
- Healthy snack option
- Due to allergy issues some people have, they should stay on their own for eliminating any accidental mishaps
- Stay within protein food group but classify as healthy fats also and within the plant protein food group
- They could be across 3 groups both protein and plant protein if there was a plant protein group, and a healthy fat and use on bread/toast/crackers instead of other spreadable fats
- Seeds and nuts

Q5. What is your recollection of the Australian Dietary Guidelines suggested serve size for nuts?
(222 responses; 3 skipped)

ANSWER CHOICES	RESPONSES	
10 grams	10.36%	23
30 grams	81.53%	181
50 grams	6.76%	15
>50 grams	1.35%	3
TOTAL		222



- Most health professionals (82%) correctly recalled the Australian Dietary Guidelines recommended serve size for nuts as 30g.
- Of those who incorrectly recalled the serve size for nuts, 10% thought this was 10g (less than the recommended serve size), and 8% thought it was ≥50g (more than the recommended serve size).

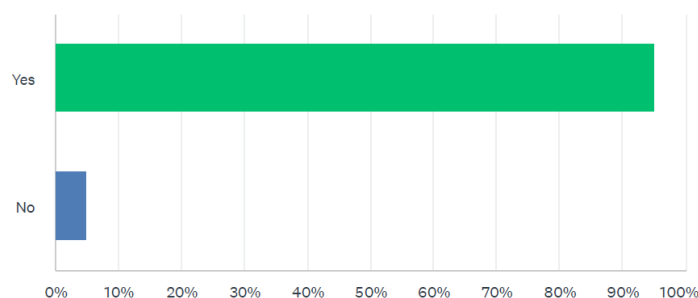
Comparison with previous health professional tracking surveys:

- 2020 survey: 68% of GPs and 78% of (experienced) dietitians selected 30g as the recommended standard serve size for nuts.
- 2018 survey: 74% of GPs and 82% of (experienced) dietitians selected 30g as the recommended standard serve size for nuts.

Note: The wording of this question differed slightly compared with previous surveys. And previous surveys included an equal number of GPs and dietitians (100 of each), whereas this survey included more dietitians (88) than GPs (36).

Q6. Do you recommend nuts to your patients/clients as part of a healthy diet?

(220 responses; 5 skipped)



ANSWER CHOICES	RESPONSES	
Yes	95.00%	209
No	5.00%	11
TOTAL		220

- Almost all health professionals (95%) said they recommend nuts to their patients/clients, as part of a healthy diet. Only 5% said they do not recommend nuts.

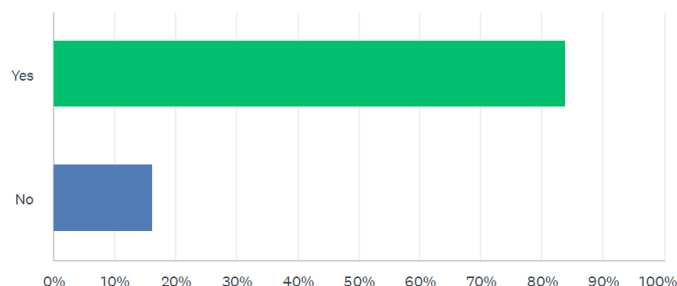
Compared with previous health professional tracking surveys, it appears that more health professionals are now recommending nuts. Specifically:

- 2020 survey: 21% of GPs and 2% of (experienced) dietitians said they 'never' recommended nuts to their patients.
- 2018 survey: 18% of GPs and 1% of (experienced) dietitians said they 'never' recommended nuts to their patients.

Note: The wording of this question differed slightly compared with previous surveys. And previous surveys included an equal number of GPs and dietitians (100 of each), whereas this survey included more dietitians (88) than GPs (36).

Q7. Do you feel you understand enough about the health implications of including nuts in diets?

(222 responses; 3 skipped)



ANSWER CHOICES	RESPONSES	
Yes	83.78%	186
No	16.22%	36
TOTAL		222

- Most health professionals (84%) said they understand enough about the health implications of including nuts in diets.

(Note: Nuts for Life continues to communicate the nutrition and health benefits of regular nut consumption. Tracking market research of health professional knowledge and attitudes shows that when Nuts for Life ceases to educate a health professional segment, their nut knowledge declines slowly with time. This demonstrates that repeated exposure, and repetition of key messages in novel ways, are essential for education to be effective and

to support health professionals to recommend nuts).

Q8. Where/how do you usually seek health and dietary information?

(224 responses; 1 skipped)

(Note: Up to 4 sources could be selected)

ANSWER CHOICES	RESPONSES	
Online (e.g. internet, social media)	49.55%	111
Professional bodies (e.g. Dietitians Australia, RACGP)	53.57%	120
Professional health organisations (e.g. Heart Foundation, Cancer Council)	50.89%	114
Government resources and publications (e.g. Australian Dietary Guidelines)	48.66%	109
Industry organisations (e.g. Nuts for Life, Dairy Australia)	42.86%	96
Food company website	7.59%	17
Professional development (e.g. participation in webinars/courses/conferences/events)	50.45%	113
Podcasts focused on health	21.88%	49
Direct mail (e.g. Samples Plus)	7.14%	16
Direct email (e.g. e-newsletters like NutENews)	21.43%	48
Not applicable – I don't actively seek health and dietary information	2.23%	5
Other (please specify)	5.80%	13
Total Respondents: 224		

Health professionals gain information from a variety of sources, with no one 'stand-out' main source of information.

Specifically:

- The main sources of information, roughly equally used by health professionals were:
 - Professional bodies (eg. Dietitians Australia) (54%)
 - Professional health organisations (eg. Heart Foundation) (51%)
 - Professional development (eg. webinars, courses, conferences, events) (50%)
 - Online (eg. internet, social media) (50%)
 - Government resources and publications (eg. Australian Dietary Guidelines) (49%)
- Around 43% reported seeking health information from industry organisations (eg. Nuts for Life).
- Around one in five said they seek health and dietary information from health-focused podcasts (22%) and direct email (eg. NutENews) (21%).
- The least common sources of health and dietary information were food company websites (8%) and direct mail (eg. Samples Plus) (7%).

Comments at 'Other' option:

- Research literature/scientific journals (directly) (x 5 comments)
- Sanitarian Wellness Centre
- Dietitian within our team
- Ingredient list on food package
- You Tube

Q9. What type of information would you like to see more of to assist you in understanding the health benefits of nuts?

(223 responses; 2 skipped)

(Note: Multiple responses were possible)

ANSWER CHOICES	RESPONSES	
Claims on food labels	47.98%	107
Health and research reports	65.47%	146
Published scientific papers	50.22%	112
Resources (e.g. fact sheets, infographics, brochures)	61.43%	137
Expert presentations (e.g. at conferences, webinars)	45.29%	101
Other (please specify)	1.79%	4
Total Respondents: 223		

- Health professionals say that more health and research reports (66%), and resources (eg. fact sheets, infographics, brochures) (61%), in particular, would help them to understand the health benefits of nuts.
- More published scientific papers (50%), claims on food labels (47%) and expert presentations (eg. at conferences, webinars) (45%) were also thought to be helpful to assist understanding.
(Note: The information health professionals say they want is consistent with what Nuts for Life is delivering, particularly in the last three years. This suggests that the communication channels of the program remain relevant for their needs).

Comments at 'Other' option:

- Resources that specify the difference between 100% nut butter vs. nut butter with added ingredients (additional salt, sugar, fats) + distinguishing the differences - really tried to not use fear mongering infographics from social media when I was working in clinical practice
- A booklet for professionals comparing nutritional and health values of each type of nut regularly available in Australia
- Brief accurate statements on food labels

b) Consumer: Health information survey report



	CONTENTS 03 About Focus Insights 04 Methodology, Purpose & Portal Access 05 Summary 06 Audience 08 Nut Consumption 14 Health 26 Contact
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The logo for the Nuts for Life Health Info Study. It features a stylized orange nut icon inside a circular frame. The words "NUTS FOR LIFE" are written in a circular path around the nut. Below the circle, the words "HEALTH INFO STUDY" are written in a rectangular box.

HEALTH INFO STUDY

METHODOLOGY

An online study of **1003 nut consumers** across Australia. The study was **conducted** between the **23rd and 27th of Feb 2023**.

Access the Online Portal [here](#).

STUDY PURPOSE

This research study aims to explore the channels that people are sourcing / receiving their dietary recommendations for the consumption of nuts.

The study also covers the level of knowledge nut consumers currently have about health benefits and their individual motivations around consuming nuts.



SUMMARY

70% of respondents say they more concerned with their health from 1 - 2 years ago and we see over 90% of households say that health and nutrition goals are important to them.

When looking at where consumers are receiving their health and nutrition information we see it vary across all channels, though when we compare against those that consumers say they trust we see significant declines for most channels apart from GP's and Dietitians.

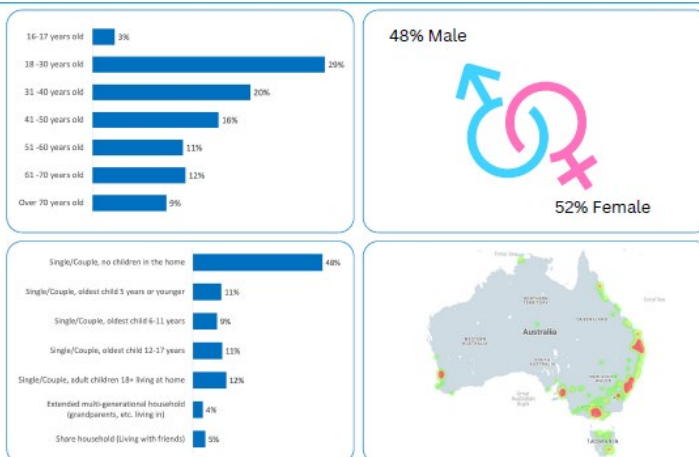
As we would expect, online and social media channels are trusted more by the younger audience groups with the 50+ yo's putting their trust in GP's. Females appear to be more trusting of Dietitian's/nutritionist than their male counterparts.

Information regarding the health benefits of eating nuts has a broad recall with almost 3 in 4 saying they have seen it and importantly the majority (85%) of this group not only found the information to be believable but 2 in 3 say it changed their thinking around consuming nuts to meet health goals.

FEB 2023 05



DEMOGRAPHICS



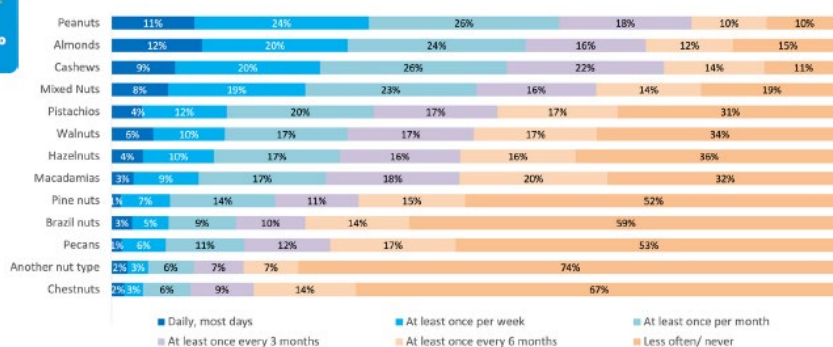
Q1. Which age group do you belong to? (SR) | n=1003
Q3. Where do you live? (LOG) | n=1003

Q2. Please record your gender? (SR) | n=1003
Q4. Which of the following best describes your household makeup? (SR) | n=1003

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FREQUENCY



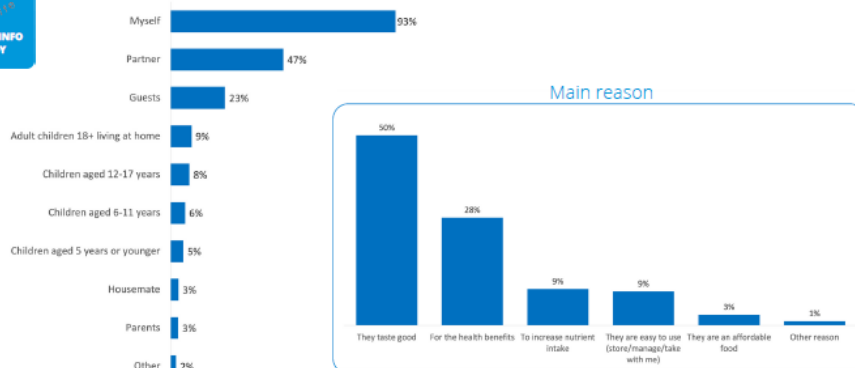
Of the 83% of Australians who have consumed nuts in the last quarter, Peanuts and Almonds are the most frequently consumed nuts with 1 in 3 consuming these on a weekly basis. Cashews and Mixed Nuts are also consumed frequently.

Q6. How often do you or your family consume the following types of nuts? (SR) | n=1003

FEB 2023 09



WHO CONSUMES NUTS AND WHY



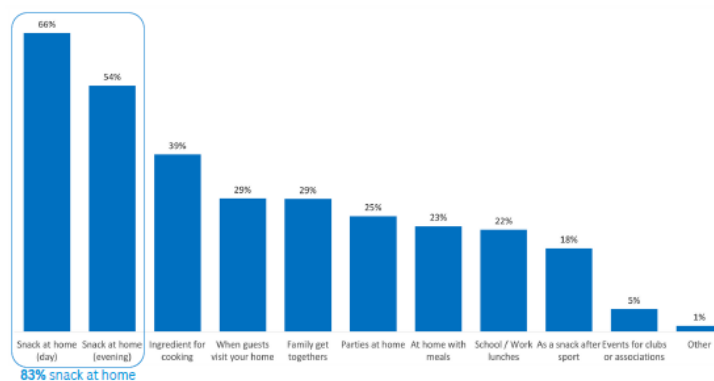
Almost a quarter of households buy nuts for consuming with guests. Taste is the most common driver for nut consumption with 50% citing this as their main reason though almost 1 in 3 say they consume nuts for the health benefits.

Q8. Who in your household consumes nuts? (MR) | n=1003
Q9. What is the main reason you and your family consume nuts? (MR) | n=1003

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CONSUMPTION OCCASIONS



Snacking at home is the main occasion for for 83% of those who consume nuts. 2 in 5 consumers use them as ingredients in cooking and for a quarter of consumers entertaining at home or with family is when they consume nuts.

Q10. For which occasions do you consume nuts? (MR) | n=1003

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CHANGES IN CONSUMPTION

Eating more

48%

No change - 36%

15%

Eating less

Cause of change

The most common reasons for eating more nuts are related to **health benefits** and **dietary changes**, such as a desire/focus on eating healthier, dietary needs/planning, health concerns, being more health conscious, eating as a healthy snack, increase iron intake.

Other reasons include **taste**, convenience, quick and easy snack, and discovering new flavours and recipes.

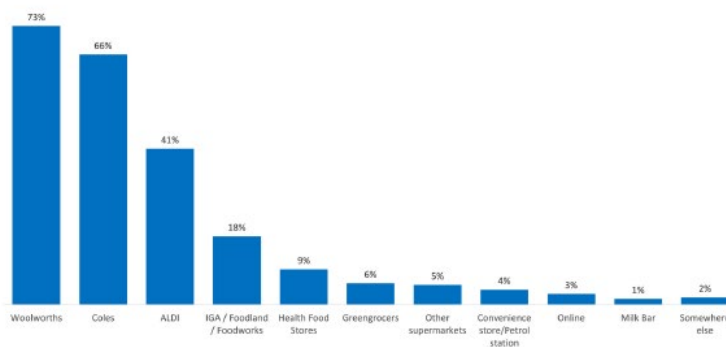
The main reason for reducing or cutting down on nut consumption is the **increasing cost of living**, which has led to tighter budgets and less disposable income for many people.

Other factors include changes in **dietary preferences**, **health concerns**, **dental issues**, **allergies**, and a **preference for other snacks**.

Q12. How has the amount of nuts you consume changed over the past 1-2 years? (SR) | n=1003
Q13. What has caused this change? (Text) | n=642

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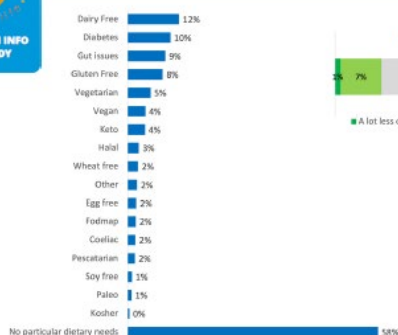
WHERE PURCHASED



Q11. Where do you ever purchase nuts? (MR) | n=1003

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DIETARY NEEDS & HEALTH CONCERNS



Are you more concerned about your health than 1-2 years ago?



42%
Have dietary needs

69%
Important/
Very Important

How important to your overall health is incorporating a handful of nuts in your regular diet?

70% of nut consumers say they are more concerned about their health today than they were 12-24 months ago. More than 1 in 3 households follow a diet or have specific dietary needs and around 1 in 10 consumers are following a Dairy Free, Diabetes, Gut Issues or Gluten Free diet.

Q5. Does anyone in your household follow any dietary patterns or have specific dietary needs? (MR) | n=1003 Q15. Are you more concerned about your health than 1-2 years ago? (SR) | n=1003

Q14. How important to your overall health is incorporating a handful of nuts in your regular diet? (SR) | n=1003

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DIETARY NEEDS BY AGE

Does anyone in your household follow any dietary patterns or have specific dietary needs?

	No dietary needs	Dairy Free	Diabetes	Gut Issues	Gluten Free	Vegetarian	Vegan	Keto	Halal	Wheat free	Egg free	Fodmap	Celiac	Pescatarian	Soy free	Paleo	Kosher	Base (n)
Total	57.3%	11.9%	9.9%	6.7%	8.3%	5.3%	4.1%	4.0%	2.6%	2.4%	2.9%	3.9%	1.8%	3.7%	1.8%	0.9%	0.4%	1093
Under 30 years	48.0%	15.0%	7.5%	5.7%	9.0%	8.7%	5.7%	4.0%	4.4%	2.8%	3.1%	1.9%	1.9%	2.5%	1.4%	1.1%	0.3%	323
31-50 years	54.5%	14.5%	10.6%	11.2%	9.5%	6.1%	5.4%	4.7%	2.0%	2.8%	2.5%	2.5%	2.8%	3.7%	0.8%	0.8%	0.6%	358
Over 50 years	70.1%	5.0%	11.4%	4.9%	5.0%	0.9%	1.2%	3.2%	1.5%	1.5%	0.3%	1.2%	0.6%	0.9%	0.8%	0.1%	0.2%	324

When the dietary needs of nut consumers are broken down by age group it shows that those aged over 50 years are less likely to have a specific dietary need than those aged under 50 years. Those over 50 years are less likely to follow a dairy or gluten free diet or be vegetarian or vegan. However, they are more likely to suffer from diabetes than those aged under 30 years.

Q5. Does anyone in your household follow any dietary patterns or have specific dietary needs? (MR) | n=1003

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HEALTH & NUTRITION GOALS



Q16. Which of the following health and nutrition goals are the most important to you and your household? (MR) | n=1003
Q17. How are you trying to meet your health and nutrition goals? (MR) | n=959

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HEALTH & NUTRITION GOALS BY AGE GROUP

Which of the following health and nutrition goals are the most important to you and your household?

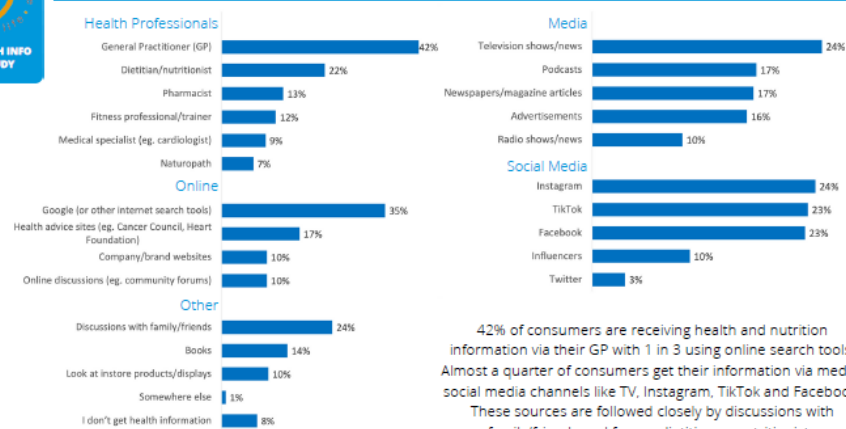
	Total	Under 30 years	35-50 years	Over 50 years
Achieve and/or maintain a healthy weight	51.5%	51.1%	52.0%	51.5%
Achieve and/or maintain a healthy, balanced diet	47.7%	46.4%	41.6%	53.4%
Achieve and/or maintain health into older age (ie. healthy ageing)	48.9%	27.7%	35.5%	59.9%
Improve gut health	40.2%	40.3%	39.7%	40.4%
Achieve and/or maintain physical activity and fitness	37.0%	43.7%	34.4%	37.7%
Prevent heart disease e.g., lowering cholesterol, lowering blood pressure	37.5%	22.4%	33.0%	51.9%
Improve immune health	36.4%	37.7%	34.5%	36.7%
Improve cognitive (brain) health	28.9%	22.1%	28.5%	33.1%
Prevent type 2 diabetes	15.3%	13.7%	15.4%	26.7%
Manage existing (already-diagnosed) type 2 diabetes	5.5%	5.6%	7.5%	15.4%
Manage existing (already-diagnosed) heart disease	7.3%	6.5%	4.7%	10.5%
Base (n)	1003	323	358	324

Whilst most nut consumers are looking to maintain health diets and weight as well as improve their gut health, those over 50 years are looking more closely at age related health goals such as preventing heart disease, improving cognitive health and managing type 2 diabetes and heart disease

Q16. Which of the following health and nutrition goals are the most important to you and your household? (MR) | n=1003

FEB 2023 18

FREQUENT INFORMATION SOURCES



42% of consumers are receiving health and nutrition information via their GP with 1 in 3 using online search tools. Almost a quarter of consumers get their information via media/ social media channels like TV, Instagram, TikTok and Facebook. These sources are followed closely by discussions with family/friends and from a dietitian or nutritionist.

Q18. Where do you most frequently get health and nutrition information? (MR) | n=1003

FEB 2023 19



FREQUENT INFO SOURCES BY AGE GROUP

Top 3 Sources

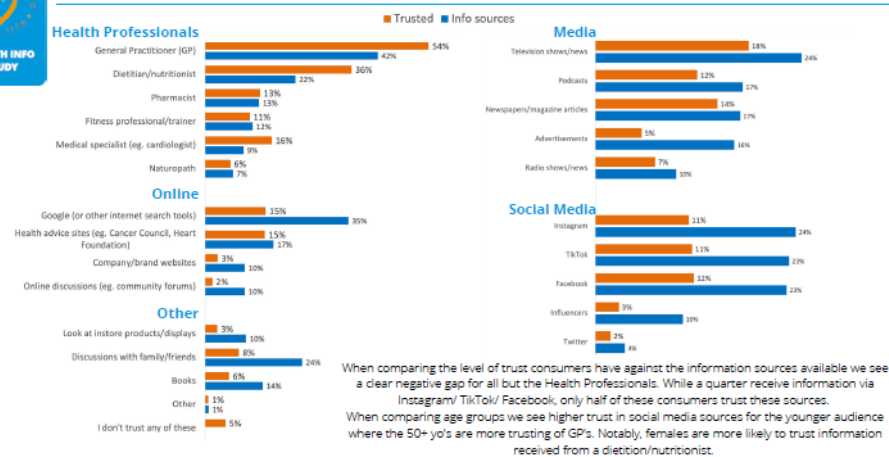
Under 30 years	30-50 years	Over 50 years
TikTok (42.5%)	Google (or other internet search tools) (44.4%)	General Practitioner (GP) (55.6%)
Instagram (38.6%)	General Practitioner (GP) (40.5%)	Television Shows / news (29.6%)
Google (or other internet search tools) (33.3%)	Facebook (31.6%)	Discussions with family / friends (27.2%)

Q18. Where do you most frequently get health and nutrition information? (MR) | n=1003

FEB 2023 20



TRUSTED vs FREQUENT INFO SOURCES

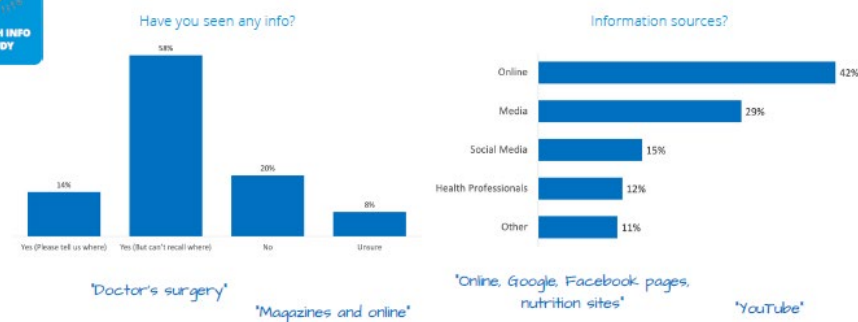


Q18. Where do you most frequently get health and nutrition information? (MR) | n=1003
Q19. What are your most trusted sources for health and nutrition information? (MR) | n=1003

FEB 2023 21



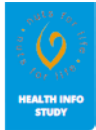
HEALTH BENEFITS OF EATING NUTS



Almost 3 in 4 consumers have seen information about the health benefits of eating nuts though only 14% can recall where. Of this group almost half saw the information online and almost a third via a media channel.

Q20. Have you ever seen information about the health benefits of eating nuts? (SR) | n=1003

FEB 2023 22

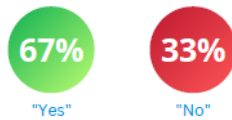


INFORMATION CUT THROUGH

How much did you believe the information?



Did the information change your thinking around consumption of nuts to meet your health or nutrition goals?



For those consumers that remember seeing information, most (85%) say they believed it and of this group 67% said it changed their thinking around the consumption of nuts to meet their health/nutrition goals.

Q21. How much did you believe the information? (SR) | n=727

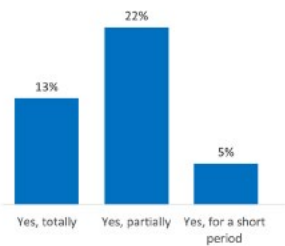
Q22. Did the information change your thinking around consumption of nuts to meet your health or nutrition goals? (SR) | n=717

FEB 2023 23

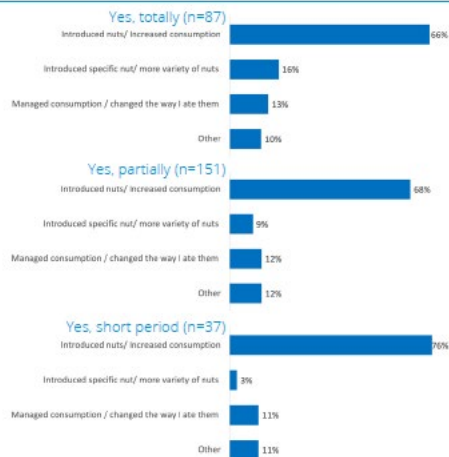


FOLLOWING ADVICE

Did you follow any advice?



40% of consumers who recall seeing information on the health benefits of eating nuts say they followed advice contained within it.



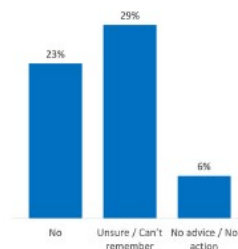
Q23. Did you follow any advice contained in the information? (SR) | n=717

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FOLLOWING ADVICE

Did you follow any advice?



What changes could they have made to make it easier for you to follow the information?

"Be clear about it"

"Using vids"

"Giving me health benefit information"

"Provide a booklet that describes how Nuts can be added to a meal as a supplement to the meal and the health benefit using them. This should be located in the same section as the nuts is located in Supermarkets."

Q23. Did you follow any advice contained in the information? (SR) | n=717

Q24. What changes could they have made to make it easier for you to follow the information? (Text) | n=10

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c) Health professional – Sustainability impact



Nuts For Life Program
Sustainability Impact Research

January 2022

1

Introduction



Food production, supply chains and consumption chains represent a major cause of ecological pressure on the natural environment. Consequently, food policy and dietary guidelines need to evolve to ensure consideration is given to their environmental, socio-economic and cultural impacts.

It has recently been observed that dietary patterns rich in plant-based foods and low in animal foods are not only healthier but can also exert a lower impact on the environment .

However, some sectors of the nut industry have been openly criticised for not being environmentally sustainable i.e., due to excess water use, pesticide run off etc. Therefore, whilst plant foods are noted as being healthier to both human and the planetary health, there is a possibility these perceptions (whether true or not) may negatively impact whether a health professional will or will not, promote and recommend nuts to their clients and patients.

2

Introduction



Summary of the Sustainability Impact Research project:

This research activity is a new element within the Nuts for Life program and seeks to identify and address significant issues that negatively impact the nutritional reputation of nuts.

Similar to the effect the 'low fat' movement had on the perception of nuts in the 1990's, this research will help to identify whether sustainability issues are negatively impacting their reputation.

A research-scan to look for 'red lights' and 'warning bells'



Assisting N4L navigate its path forward in relation to the complex issues of sustainable health eating



3

The Research Participants



Demographic breakdown of total participant group:

Demographics	Age bracket	Share
Age	21-30	18%
	31-40	34%
	41-50	26%
	51-60	21%
	Over 60	1%

Gender	Share
Female	78%
Male	22%

Numerical break down by category of work for quantitative and qualitative sections

Major categories of work	Quant	Qual
Clinical patient care	16	4
Community nutrition or public health	18	3
Food service	8	1
Consultancy/private practice	22	6
Food industry	27	4
Research & teaching	9	2
Other	0	
Total	100	20

4

Knowledge



Q1

When thinking about food, select the elements of sustainability that matter to you			Responses
1	Product: the nutritional characteristics of the product		97%
2	People: the impact on the people who grow and produce the product		100%
3	Planet: the environmental impact of growing and producing the product		100%
4	Less Waste: Reducing waste through the whole supply chain		96%

Based on the responses to Question 2 below, it would seem the respondents interpreted the Q2 'Product' question through the lens of nutritional knowledge.

Q2

When thinking about the elements of sustainability mentioned in the question above, rate your depth of knowledge in each area:					
From 1 to 10 where 1 is very weak and 10 is very strong					
			1 to 3	4 to 6	7 to 10
1	Product:		3%	6%	91%
2	People		56%	28%	16%
3	Planet		42%	39%	19%
4	Less Waste		43%	34%	23%

The respondents rated their knowledge of issues relating to people, plant and waste less than product.

5

Context for knowledge questions:



The tables below provide some context around the key framework topics of sustainability programs and also the complexity of understanding 'people' related issues for product categories grown and produces around the world.

Sustainability framework review of targeted industry bodies, retailers and manufacturers

Framework	Aust Wine	Aust Cotton	Aust Beef	Aust Dairy	Coles	Woolworths	Nesle	Kellogg	Unilever	Mars	Mondele	Hart Innov	Aust Almonds
People	People	People	People	People	People	People	People	People	People	People	People	People (Ind Profit)	People (Ind Profit)
Planet	Planet	Planet	Planet	Planet	Planet	Planet	Planet	Planet	Planet	Planet	Planet	Planet	Planet
Profit	Profit	Profit	Profit	Profit	Profit	Profit	Profit	Profit	Profit	Profit	Profit	Profit	Profit
Product			Animal Welfare	Animal Welfare	Reducing hunger	Product	Product	Product	Product	Product	Product	Product	Product

Production statistics for the global nut category: INC Statistics 2020

Almonds	Brazil	Cashew	Hazelnut	Macadamia	Pecans	Pine Nuts	Pistachio	Walnuts	Peanuts
USA 80%	Bolivia 77%	West Africa 48%	Turkey 62%	Australia 25%	Mexico 49%	Russia 31%	USA 47%	China 47%	China 37%
Aust 7%	Peru 15%	India 20%	Italy 15%	South Africa 25%	USA 41%	China 28%	Turkey 30%	USA 31%	India 14%
Spain 7%	Brazil 8%	Vietnam 12%	USA 4%	China 34%	South Africa 6%	Korea 23%	Iran 19%	Chile 7%	Nigeria 8%
		East Africa 7%		Kenya 12%	Brazil 1%	Afghanistan 8%			
		Cambodia 5%		USA 5%	Australia 1%	Pakistan 7%			
		Brazil 3%							
		Indonesia 3%							

6

Context for knowledge questions:



Q3

Open-ended question:

What are the key difficulties you face in achieving a strong level of knowledge in these areas of sustainability

Key themes:

Sheer complexity to gain knowledge and understanding across a vast number of foods

While product-nutrition knowledge is my professional work, understanding the other issues are not my area of expertise

I am not an environmental scientist, I specialise in health and nutrition

The issues are too diverse and I don't have the time to chase them all down

Hard to reconcile many different opinions and ideas

7

Environmental Impact



Thinking of the sustainability of important 'core foods', please indicate your perception of their environmental impact where Low Impact is a positive for the environment and High Impact is a negative for the environment

	High Impact	Medium Impact	Low Impact	Don't Know
Vegetables	4%	22%	65%	9%
Fruit	6%	24%	59%	11%
Dairy	36%	31%	17%	16%
Red meat	38%	28%	19%	15%
White meat	26%	41%	16%	17%
Seafood	31%	32%	21%	16%
Eggs	17%	56%	16%	11%
Grains	8%	24%	56%	12%
Nuts	22%	23%	29%	26%
Legumes	7%	21%	58%	14%

8

Environmental Impact



In relation to nuts, what are the key issues that have the most significant environmental impact:

Water-related comments were the most frequent response:

Sub-themes of water comments included:

- Fairness: water should be available for many farmers not just the ones that can afford the high price of water
- Water scarcity and water stress: concern that the water needed to grow nuts (read almonds) in dry areas of Australia is contributing to water scarcity and water stress
- The growth in nut exports is exporting our water
- Corporations taking too much control of the nut industries and away from family farming

Note: almond milk is the most frequently cited individual example of 'water concerns and nuts'

Less frequently cited themes:

- Nutrient and pesticide run-off into the Barrier Reef
- Nuts are expensive and not affordable for many (some of whom are most in need of the health benefits of nuts)
- Concerns around the treatment of bees in pollinating nut trees
- Imported nuts involve significant 'food miles'
- Preference for nuts to be eaten natural or raw rather than processed and salted: less processing mean less resources/emissions

9

Environmental Impact



Thinking of the sustainability of different types of nuts, please indicate your perception of their environmental impact where Low Impact is a positive for the environment and High Impact is a negative for the environment

Nuts	11%	29%	28%	32%
	High Impact	Medium Impact	Low Impact	Don't Know
Almonds	14%	32%	23%	31%
Brazil nuts	6%	21%	26%	41%
Cashews	8%	27%	28%	37%
Chestnuts	4%	14%	48%	34%
Hazelnuts	8%	26%	27%	39%
Macadamias	7%	19%	38%	36%
Pecans	6%	14%	32%	48%
Pinenuts	6%	13%	22%	59%
Pistachios	8%	27%	31%	34%
Walnuts	9%	21%	34%	36%

10

Food Choice Recommendations



To what extent does sustainability effect your food choice recommendations

Always	4%		
Frequently	11%		
Sometimes	47%		
Rarely	24%		
Never	8%		
Don't know	6%		

To what extent does sustainability effect your willingness to recommend nuts

Always	2%		
Frequently	6%		
Sometimes	24%		
Rarely	36%		
Never	28%		
Don't know	4%		

11

Key issues:



Open question:

When thinking about recommending a sustainable and healthy food choice, what are the key issues you consider?

Affordability: is it affordable for my clients to buy

Ease of use: is it easy to prepare/cook; is it versatile; what is it's risk of waste

Core food or discretionary food

Natural and unprocessed food v processed food: look to move the balance of a client's diet towards more natural/raw foods and less highly processed foods

Not over-eating or over-consuming any food

Local produce and in-season v imported food: look to reduce 'food miles'

Culturally appropriate food: look for foods that align with a client's culture/religion

Organic

12

Key Statements: To what extent do you agree with the following statements



	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly Disagree	Unsure
I view nutrition-related scientific research, appropriately published or qualified, as credible even if funded by industry	43%	31%	9%	11%	2%	4%
I view sustainability-related scientific research, appropriately published or qualified, as credible even if funded by industry	28%	34%	12%	13%	7%	6%
When a food industry is silent about an issue I care about (like environmental impact or climate change), I assume it means there's no problem	7%	14%	24%	28%	21%	6%
When a food industry is silent about an issue I care about (like environmental impact or climate change), I assume they've got something to hide	13%	29%	26%	14%	11%	7%
When a food industry admits there are issues for which they don't have all the answers but are in the process of researching, I will understand	18%	36%	24%	7%	9%	6%

The comparison of the first two statements indicate a slightly lower level of acceptance around industry-funded sustainability related scientific research than nutrition-related research.

13

Spotlight Issues: Increasing proportion of plant food in a sustainable healthy diet



The Association of UK Dietitians – BDA – were referenced in the Interviews as leaders in the 'sustainable healthy eating' space



Figure 4.4: Mean GHG emissions, land use and water use values of different foods providing 100g of protein

These are average values based on a combination of data sets from around the world, therefore there will be significant variability depending on country of origin and production used. See table below.

	GHG emissions (kg CO ₂ e per 100g of protein)	Land use (m ² per 100g of protein)	Water use (litres per 100g of protein)
Nuts	0.5	19	101.9
Peanut	0.5	14	12.6
Other pulses	0.6	13	10.5
Prosecco	1.2	16	154
Tofu	2	14	1.4
Eggs	4.2	17	10.7
Poultry meat	5.7	19	14.2
Cook (beef)	6	17	10.2
Pork meat	14	16	11.5
Chicken	11	10	10.7
Quail (beef)	11	20	10.7
Sheep (beef)	16	2	10.2
Sheep (beef)	16	2	10.2
Sheep (beef)	16	2	10.2
Sheep (beef)	16	2	10.2

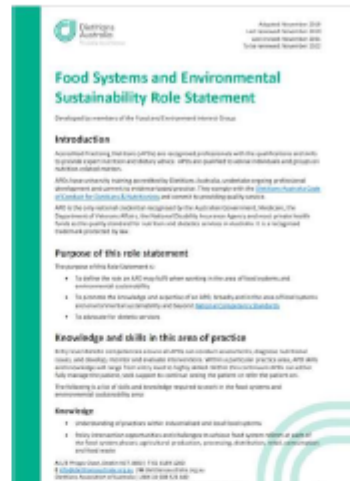
This table by the BDA highlight the complexity in trying to measure multiple variables and the trade-offs required when evaluating their relative importance to a sustainable healthy diet

14

Spotlight Issues: Increasing proportion of plant food in a sustainable healthy diet



The Sustainability Role Statement by Dietitians Australia was reference in several interviews

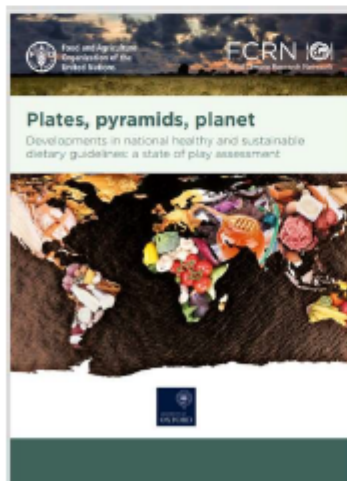


15

Spotlight Issues: Increasing proportion of plant food in a sustainable healthy diet



Food & Agriculture Organisation of the UN
Food Climate Research Network: Oxford
University



Food & Agriculture Organisation of the UN
World Health Organisation



16

Key issues:



EAT – Lancet Commission Report



Summary Report



17

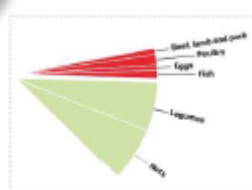
Key issues:



“Transformation to healthy diets by 2050 will require substantial dietary shifts. Global consumption of fruits, vegetables, nuts and legumes will have to double, and consumption of foods such as red meat and sugar will have to be reduced by more than 50%. A diet rich in plant-based foods and with fewer animal source foods confers both improved health and environmental benefits.”

18

Key issues:



19

Key issues:



N4L Sustainable Healthy Diet 2022

The recommendation to increase plant food and decrease animal food, notwithstanding the trade-offs required, is supported by the BDA and DA (British Dietitians Assoc and Dietitians Aust)



20

Spotlight Issue: Industry Transparency



Several Interviews raised the importance of 'industry transparency'



No mention of welfare of Bobby Calves

RSPCA: wellbeing of Bobby Calves
<https://kb.rspca.org.au/knowledge-base/what-happens-to-bobby-calves/>

Some calves will be reared for veal and about three quarters of the heifers will become replacements for adult milk-producing cows. Heifer calves may also be reared and then exported to dairy farms overseas. Bobby calves may also be killed on farm. This may be done using a captive bolt device or blunt force trauma. Blunt force trauma is not acceptable for killing young calves due to the calf's skull being too hard to achieve immediate unconsciousness through destruction of brain tissue.

21

Spotlight Issue: Industry Transparency



No mention of methane emissions

Rice production is estimated to be responsible for 12% of total methane global emissions.
 "Rice grows mostly in flooded fields called rice paddies. The water blocks oxygen from penetrating the soil, creating ideal conditions for bacteria that emit methane."

22

Spotlight Issue: Industry Transparency



Sustainability, Transparency and the nut industry:

12.03.22 • 10:00AM AEST

Birds shot at Angle Vale: Almond grower under investigation for killing protected species

294 almond growers who killed protected birds without a permit in order investigations by the Environment department and fined up to six months jail or \$2500 or more.

2022 Freestyle

Environment and Nature 1,000+ views • The Morning Star

20 comments



As part of the investigation, the Department of Environment and Water has issued a permit to the grower to investigate the killing of protected birds in the orchard.

• [Read the full story on the site](#)

All almond growers who killed protected birds without a permit in order investigations by the Environment department and fined up to six months jail or \$2500 or more.

The Vegan Review
Issue 100 • 1.1.22

HOME FOOD LIFESTYLE CULTURE BUSINESS & POLITICS UNUSUAL EDITOR

Cashews: Inside the industry's unethical practices and labour conditions
By Sophie Jones • January 10, 2022

Latest News

Climate Change: The impact of climate change on the food system
By Sophie Jones • January 10, 2022

The Climate Crisis: The impact of climate change on the food system
By Sophie Jones • January 10, 2022

With cashew nuts becoming a popular snack, the industry has a role to play in ensuring ethical practices, including labour rights.

For the past few years, we have been looking at the impact of climate change on the food system and the impact of the food system on the environment. In this article, we will look at the impact of climate change on the food system and the impact of the food system on the environment.

23

Spotlight Issues: Organic and Food Politics



Organically grown food was mentioned several times in the survey and during the interviews.

Within the interview component of the project, a preference for 'organic' correlated with a preference for small scale family farming and a preference against industrialised, corporate farming

A Long Food Movement: Transforming Food Systems by 2045

We Are What We Eat: How The Industrial Food System Is Harming Us



Megy Karydas, Founder, Contributor @ Lifestyle

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AUSTRALIAN FOOD SOVEREIGNTY ALLIANCE

FOOD POLICY FIRST ABOUT FOODS LOCAL DEFENCE FUND PROPER FOOD PLAN

JOIN US BUY THE BOOK

Fair Food Farmers United
Feeding Australia, Fairly

Farmers across the country are working hard to feed Australia fairly, but they are not being given a fair go.

24

Spotlight Issues: Food Security and Food Sovereignty



Global Food Security

Food security, as defined by the United Nations' Committee on World Food Security, means that all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their food preferences and dietary needs for an active and healthy life.

Local Food Sovereignty

Food sovereignty is a food system in which the people who produce, distribute, and consume food also control the mechanisms and policies of food production and distribution. This stands in contrast to the present corporate food regime, in which corporations and market institutions control the global food system.

...how we might reclaim a food system that has effectively been corporatised, to the great detriment of our health, our planet and our democracy.

25

Spotlight Issue: Nut Milks, Water Use Efficiency and Water Scarcity



Almond Milk is the almond product that attracts most criticism around water and growing almonds. It is also the most frequently cited nut milk.

Frequently, critics will 'heap-on' further negativity around other sustainability issues:

- Bees are harmed during pollination due to chemical sprays
- Almond orchards are mono-cultures having a detrimental impact on biodiversity
- Almonds are farmed by foreign corporates who take their profits overseas
- Most of Australian almonds are exported which is simply exporting our fresh water

Key issues:

Water use efficiency: water used per tonne of nut grown

Water scarcity and water stress: reference to the aggregate volume of water required by a particular nut industry and its impact on available irrigated freshwater

26

Conclusions



INC Sustainability Manifesto:

To help the nut and dried fruit sector to accelerate its sustainability journey, the INC has identified three objectives:

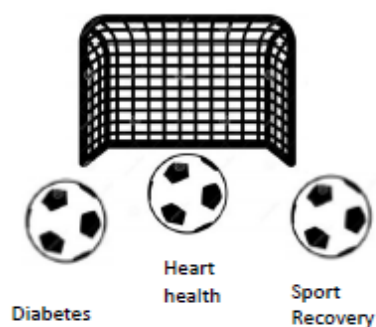
1. **SAFETY-NET:** monitoring sustainability policies to ensure regulations are achievable and commercially feasible,
2. **KNOWLEDGE-SHARE:** increasing the understanding of sustainability challenges and opportunities through communication, awareness and partnerships,
3. **POSITIVE-MESSAGING:** disseminating the improvements the sector is implementing, including the health benefits of nuts and dried fruits

27

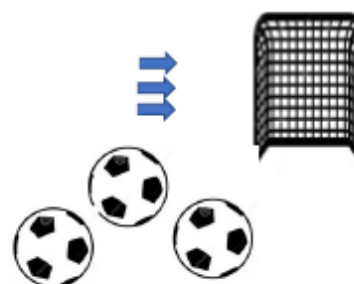
Conclusions: Dynamic Environment



Nutrition-health benefits equation
"adding benefits to kick goals"



Nutrition-Sustainability equation
may face 'moving goalposts'



Example:
Acceptable Sustainable water-use practices in times of water-sufficiency may become unacceptable in times of drought or high water scarcity

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Conclusion: Key Elements



Complexity:
Sustainability & Health in
our global food production
system



Trade-offs:
A journey of trade-offs in
identifying a sustainably
healthy diet



Sustainable Healthy Diet:
Increasing plant food - including
nuts – is part of the complex set of
trade-offs



29

Conclusion: Complexity and Modelling



Complex world of global food
production
Multiple inter-related variables



Scientific research and modelling

Some of the data inclusions in the
models and some of the conclusions
are simply 'nonsense'



Food for thought leading to
further questioning and
research

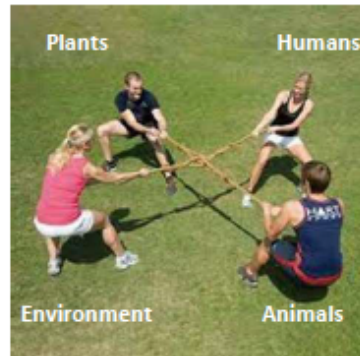


Insights driving continuous
improvement



30

Conclusion: Complexity and Multi-Variable Trade-Offs



One respondent in an interview said:
"managing the many trade-offs is more difficult
than a four-way tug of war"

31

Conclusion: Possibilities for sustainable healthy food education



N4L : Supporting responsible stewardship of our planet's finite resources



Reducing the resources used to produce
foods with little nutritional value

**EMPTY
CALORIES**

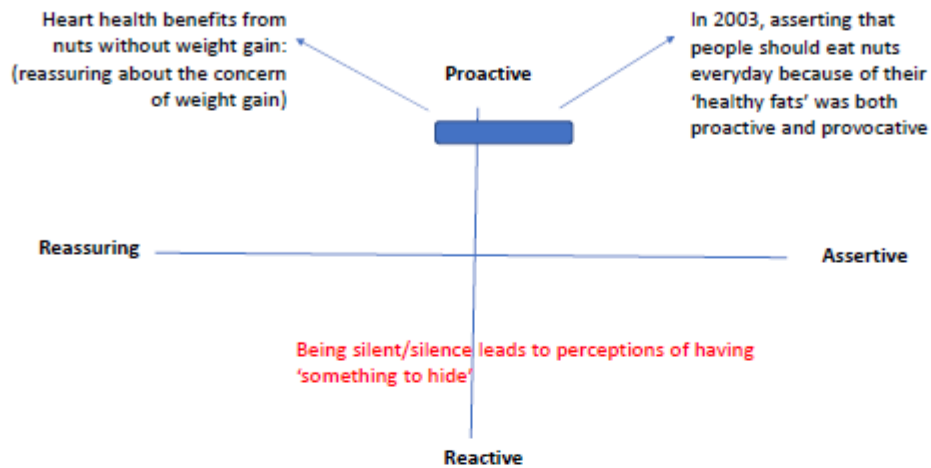
Optimising the resources used to produce foods
with a high level of nutritional and health value

**NUTRIENT
DENSE
FOODS**



32

Conclusions: Strategy Formulation



33



N4L Sustainability Impact Research and Future Hort Innovation Collaboration



N4L's "Nuts: Diet, Health & Environment" Research and Health Professional Education Program



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Next Steps – N4L, Sustainability and Transformational Change

The foundation document for sustainability and Australian horticulture is the 'Australian-Grown Horticulture Sustainability Framework'.

This is the framework that Hort Innovation developed and will be a primary reference for future R&D funding.

One of the Four Pillars in the Horticulture Sustainability Framework is 'Nourish & Nurture'. (Note the 'nurture' component refers to the positive contribution of the nursery industry). The key topic within this pillar that relates to N4L is 'Food to nourish people'.



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Next Steps – N4L, Sustainability and Transformational Change

The R&D component of the N4L program is co-funded through Hort Innovation's "Hort Frontiers" Fund.

This Fund's positioning statement is:

"Better equipping Australian horticulture for the future ahead".

The key attributes for funding are stated as:

"future-focused, higher-risk and transformational R&D that has the potential to make a significant impact".

The Hort Frontiers fund has been 'refreshed' in line with the Horticulture Sustainability Framework.

The key fund for N4L is the 'Health & Nutrition Fund' within the over-arching pillar of 'Nourish & Nurture'.



- **Nourish & Nurture**
 - Food Safety, Traceability & Quality Fund
 - Green Cities Fund
 - Health & Nutrition Fund
- **People & Enterprise**
 - Advanced Production Systems Fund
 - International Markets Fund
 - Leadership Fund
- **Planet & Resources**
 - Biosecurity Fund
 - Climate Fund
 - Energy Fund
 - Pollination Fund
 - Water & Landscapes Fund
- **Less waste**
 - Farm Waste Fund
 - Food Waste Fund
 - Packaging/Waste Fund.



36

Next Steps – N4L, Sustainability and Transformational Change

One of Australia's leading influencers in healthy food choices are Australia's dietitians. They contribute to public health policies at all levels of government and lead the public conversations in relation to food choices in all types of media.

Ensuring that the majority of Australia's dietitians understand the health benefits of regularly eating nuts is a core objective of the N4L program and remains crucial to the health reputation of nuts within the broader Australian community.

While there is no evidence of sustainability issues significantly eroding the positive health reputation of nuts at the present, this position is certainly at risk.

Australia's dietitians, led by its professional peak body, is becoming more aware of the environmental implications when recommending food choices.



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Next Steps – N4L, Sustainability and Transformational Change

Leading medical bodies in Australia such as the AMA and the Royal Australian College of General Practitioners (RACGP) are also becoming more active advocates in the connection between environmental sustainability and health care.

The AMA position on 'Environmental Sustainability in Health Care' highlights the importance of preventive health campaigns to reduce the incidence of chronic. The contribution of nuts in reducing the risk of heart disease is directly relevant to this issue.



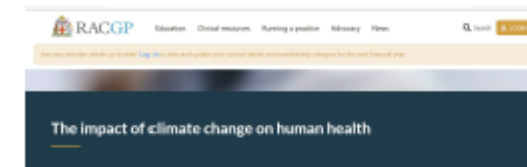
6.4 Preventive Health Care

Prioritising preventive health care is a foundational element of reducing health care's environmental footprint. By encouraging and facilitating healthy behaviour and choices, preventive health campaigns and supporting policies can minimise the incidence and severity of chronic and infectious diseases. Keeping populations healthy may alleviate pressure on the acute care system, by reducing the need for complex procedures, more intensive processes and longer hospital stays. The AMA outlines the central role of doctors, especially General Practitioners, in providing preventive health care to patients in the 2010 Position Statement, *Doctors and Preventative Care*.^[20]

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Next Steps – Unique role of N4L for the Australian Nut Industry

General Practice doctors remain a key health professional audience for the communication of nutrition research. Their peak body, RACGP, have released a Position Statement on Climate Change & Human Health, which includes diet and eating patterns.



- 4. Professional and ethical role**
- Taking personal action to mitigate climate change and improve health and equity. Examples of actions with both health and climate benefits include using active transport, minimising air travel, reducing highly processed food consumption, reducing meat consumption, and encouraging use of smaller cars driven less often²
 - Supporting community action - for example, community gardens for local food production, public open space for outdoor recreation and physical activity, safe walking and cycle ways, high quality public transport systems²
 - Working with other professionals to strengthen individual, community and social action, through government, business and community organisations
 - Using general practice expertise and GPs' professional position as trusted community leaders to advocate on behalf of patients for effective climate change policy and action²

Key points relating to reducing highly processed foods and reducing meat consumption, implying increasing reliance upon plant food

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Next Steps – N4L, Sustainability and Transformational Change



From the Dilemma of balancing Diet with Health outcomes...



...To the Trilemma of ensuring food security with access to healthy foods to achieve best health outcomes for all people. At the same time, protecting our environment to ensure a healthy food supply in the future.

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Reducing: Food waste and highly processed nutrient poor discretionary foods



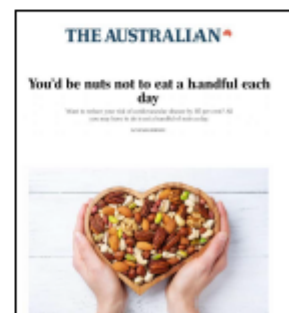
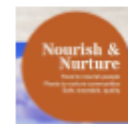
Reducing the resources required to grow and produce food that is wasted and discretionary foods that are over-consumed

Environmental resources and impacts more focused on core food production

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The opportunity for Australian nut industries is to communicate and educate key community leaders as to the crucial health benefits of eating nuts such as reducing the risk of heart disease. These health benefits put the investment in water and other environmental impacts into perspective.



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Next Steps – N4L, Sustainability and Transformational Change

Nuts For Life's next stage of transformative research:

Building on the nutrition research which identified nut consumption and the likely reduced risk of heart disease, N4L will commission research to extend this connection to the sustainable farming practices involved in growing nuts.

"A handful of nuts delivers heart healthy outcomes:

- With a low level of water use"
- With managed environmental impacts such as Reef-Care and Bee-Protection
- With reducing carbon emissions and increasing soil carbon
- With reducing use of active chemical resources for crop quality protection



Connecting diet and eating patterns in relation to nuts with their health outcomes and their environmental impacts

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Next Steps – N4L, Sustainability and Transformational Change

Nuts For Life's next stage of transformative research:

The next stage of N4L research will look at modelling the reduced health costs relating to decreasing heart disease and the incidence of other lifestyle-related illnesses such as Type 2 Diabetes due to increased population-wide consumption of nuts with the investment in agricultural inputs such as water, nutrients, pollination and crop protection sprays.



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Next Steps – N4L, Sustainability and Transformational Change

Nuts For Life's next stage of transformative research:

N4L will bring together nutrition scientists, public health researchers and environmental sustainability researchers to provide the Australian nut industry's first integrated 'Nuts: Diet, Health & the Environment' Research Study.

This new research program will apply the knowledge gained through the past N4L program relating to a High Level Heart Health claim, the research into the place of nuts in the Australian Dietary Guidelines and the PhD research into recommendations for more accurate on-pack Nutrition Information Panels.

By connecting recommended dietary patterns that include nuts with key health outcomes and with sustainable farming practices, the N4L research will 'transform' the question of sustainability from a negative impact on the Australian nut industry's social licence to a positive driver.

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Next Steps – N4L, Sustainability and Transformational Change

Nuts For Life's next stage of transformative research:

Opportunity to educate health professionals to the 'Nuts: Diet, Health and Environment' Research prior to the next drought that will seriously impact the Australian nut industries that rely on irrigation from the Murray-Darling Basin:

- Almonds
- Walnuts
- Pistachios
- Hazelnuts



Opportunity to educate highly influential health professionals as the Australian nut industries sustainable farming practices around biodiversity, reef care, pollinator protection and responsible pesticide use.

Opportunity to imbed in the minds of health professionals the connection between nuts as a healthy food delivering high level health benefits and its positive carbon story: ie very low emissions and growing soil carbon initiatives.

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Next Steps – N4L, Sustainability and Transformational Change

N4L's First transformational change

2000-2020: from 'fat is bad' to 'healthy fats are essential'



N4L's Next transformational change

2020+: from 'water-thirsty nut trees negatively impacting our environment' to 'heart healthy nut trees grown by responsible stewards of our environment'

The key health professional cohorts of General Practice doctors and nurses, Dietitians and fitness trainers will be as critical to the dissemination of the 'Nuts: Diet, Health & Environment' research as they were over the past twenty years in communicating the healthy fat and nutrient messaging.

As before, the risk to the Australian nut industry of losing the support of these critical audiences is very significant. The risk to the social licence of the Australian nut growers if the key health professions advocated against nut consumption on the grounds of their perceptions around sustainability issues would be devastating.

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Next Steps – Unique role of N4L for the Australian Nut Industry

The Nuts For Life program is the only health professional run nutrition program within the Australian nut industry. It has a unique role of engaging, communicating and educating key public health bodies such as the Royal Australian College of General Practitioners, the AMA, Dietitians Australia and Fitness Australia. The N4L program's health professionals can also engage and educate the increasingly important social media Influencer cohort that speak across a broad range of issues including the environment.



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Next Steps – Unique role of N4L for the Australian Nut Industry

Nuts For Life is the Australian nut industry's health professional run program that can speak on a peer-to-peer basis with Australia's key health professional audiences.

Recent research with dietitians highlighted comments around the growing volume of Australian nuts being exported. The inference was that the Australian nut industry is exporting scarce water.

N4L's role is to research and communicate the nutritional benefits of nuts as part of a healthy diet for all people of the world. Food security is an issue for every person, in every country.



Domestic
Perspective



Global
Perspective



The growing Australian nut industries aim to 'Nourish People, at home and around the world'

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N4L's Transformational R&D & Hort Frontiers

N4L's "Nuts: Diet, Health & Environment" Research & Health Professional Education Program meets the criteria of Hort Frontiers:

- Representative, cross-industry funded program
- Directly equips Australian nut industries for the sustainability-related challenges ahead
- Future-focused
- Relates to very high risk issues: the social licence of Australian nut growers to continue
- Transformational R&D: transforming a negative issue into a positive driver where the health benefits of eating nuts within a healthy diet outweighs the managed environmental impacts.



The new N4L program will form part of the monitoring and reporting process for the 'Australian Grown Horticulture Sustainability Framework':
Pillar One: Nourish & Nurture

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Appendix 4 – Conference Evaluations

1. GP Samples Now - Campaign evaluation 2021-23

Prepared by Belinda Neville, June 2022, updated March 2023

Background

Nuts for Life has participated in several *Samples Plus* promotions during 2013 and 2015, running six campaigns in each of these years, as well as three campaigns during 2020, one in 2021 and one in 2023.

- The 2013 campaign focused on Nuts and weight: Nuts and the Big Fat Myth
- The 2015 campaign focused on Nuts and heart health: Nuts and heart health – A summary of the SLR evidence.
- The 2020 campaign focused on Nuts and plant-based eating.

2021 Samples Plus Campaign

Resources

The theme “Is it time to reconsider nuts” included the following resources:

- Cover letter
- Report – The energy, fat and sodium content of nuts
- Fact sheet – Are all the kilojoules in nuts absorbed?
- Magnet (10cm x 10cm) – what does a 30g handful of nuts look like?

All resources were collated into a Nuts for Life display folder.

The total distribution number was capped at 1,900, yet due to this campaign running at the height of the Delta COVID-19 outbreak, the uptake in NSW and Victoria in particular, was lower than anticipated and lower than that of previous campaigns, which reached 1,432.

Samples Now Campaign

Given we had excess resources (~480 units), we decided to commit to a six-month *Samples Now* campaign – a 24/7 online platform for GPs. The campaign went live in September 2021.

In March 2022, we extended the campaign to continue to use the surplus resources, as *Samples Now* advised that they would waive the inclusion fee, and only charge for the number of requests.

Results

Month	No. requested
October 2021	18
November 2021	38
December 2021	19
January 2022	43
February 2022	25
March 2022	41
April 2022	21
May 2022	46
June 2022	22
July 2022	27
August 2022	44
September 2022	39
October 2022	53
November 2022	37
December 2022	6
January 2023	43
February	16
TOTALS	522

Campaign expenditure

The total budget allocated to the 2021 *Samples Plus* campaign was \$20,000 ex GST. The actual cost was \$15,761.65. Therefore, the remaining budget for the *Samples Now* campaign was approximately \$4,200.

Activity	Details	Expenditure (excl GST)
Samples Now	6 month contract Oct 2021 - March 2022 (includes set up and inclusion fees)	\$ 2,326.80
Samples Now	Rolling contract April 2022 – December 2022 (monthly fee varies dependent on number of requests)	\$ 1,406.20
Total		\$ 3,733.00

Recommendations

General

- The *Samples Now* online platform, available 24/7 for GPs to request information, is a cost-effective way to disseminate surplus resources from the *Samples Plus* campaign.

2. GP Samples Plus - Campaign evaluations 2020

Prepared by Belinda Neville, updated November 2020

Background

Nuts for Life ran successful *Samples Plus* promotions during 2013 and 2015, running six campaigns in each of these years.

- The 2013 campaign focused on Nuts and weight: Nuts and the Big Fat Myth
- The 2015 campaign focused on Nuts and heart health: Nuts and heart health – A summary of the SLR evidence.

It was anticipated that Nuts for Life would run two campaigns in 2020, depending on the interest generated.

Activities

Resources

The resources included in the campaign included:

- Cover letter
- Plant food 100 x page tear off pad
- Nutrient Ready Reckoner (updated 2020)
- Nuts and Health handbook (updated 2020)
- Summary of the health effects of Nuts fact sheet (2019 version)

All resources were collated into a Nuts for Life display folder.

For campaign 1 (February 2020), Cloudprint printers assembled the folders and added 3 of the resources, with Market Reach adding the final 2 items, once they were sent onto the Melbourne warehouse. This was due to a delay by Cloudprint in getting the resources printed by the due date. This was done free of charge.

For campaign 2 (June 2020), the folders were assembled, and 3 of the resources were added at the Nuts for Life office. This was extremely time consuming.

Note: We received correspondence from *Samples Plus* in September 2020, that due to limited space issues in the warehouse, we could either arrange to have our excess stock returned, or to arrange another campaign. As the Nuts and Health Handbook was a 2020 edition, we decided to run another campaign in November 2020 (Campaign 3).

The November 2020 campaign falls into the new 2020-2023 budget.

Results

Campaign 1: February 2020 (total distribution capped at 1,900)

Campaign 2: June 2020 (total distribution capped at 2,100)

Campaign 3: November 2020 (total distribution capped at 2,000)

Requested number by State	Campaign 1 – Feb	Campaign 2 – June	Campaign 3 - Nov
NSW (%)	741 (39)	656 (39)	715 (40)
Victoria (%)	471 (25)	389 (23)	414 (23)
ACT (%)	23 (1.2)	23 (1.3)	26 (1.4)
Queensland (%)	375 (20)	352 (21)	336 (19)
WA (%)	164 (9)	161 (9.5)	175 (10)
SA (%)	98 (5)	83 (5)	97 (5.4)
Tasmania (%)	19 (1)	25 (1.5)	19 (1.1)
NT (%)	9 (0.5)	13 (0.7)	12 (0.7)
TOTALS	1900	1702	1,794

Note: whilst the June campaign was capped at 2,100, the numbers requested were still good, and amongst the highest requested of the Info Packs with no samples.

The results may also have been impacted by COVID-19.

Campaign expenditure

The budget available for campaign 2019/2020 was \$20,000 ex GST.

2019/2020		
Activity	Details	Expenditure (excl GST)
Samples Plus – campaign 1	Administration fee Inclusion fee Pack assembly fee	\$ 6,865
Samples Plus – campaign 2	Administration fee	\$ 7,850
Nuts and health handbook	Design and print (50%, as will be used in other campaigns)	\$ 1,361.25
Plant based tear pad	Design and print (50%, as will be used in other campaigns)	\$ 5,947
Cover letter	Print (campaign 1) Print (campaign 2)	\$ 143 \$ 421
Summary Health effects FS	Print (50%)	\$ 352.50
Presentation folder	Print (campaign 1) Print (campaign 2)	\$ 2,576 \$ 3,487
Ready Reckoner	Update and print (50%, as will be used in other campaigns)	\$ 796
Freight	Campaign 1 Campaign 2	\$ 200.00 \$ 704.54
Total		\$ 30,703.29

The budget available for 2020/2021 was \$8,750 ex GST.

2020/2021		
Activity	Details	Expenditure (ex GST)
Samples Plus – Campaign 3	Administration, inclusion and packaging fee	\$6,779
Printing	Cover letter and display folders	\$ 4,095
Freight	From N4L office	\$ 540.90
	From Pegasus warehouse	\$ 230.00
Total		\$11,644.90

Recommendations

General

- Cap distribution at around 1,800 per campaign.
- Simplify pack contents, as it was extremely timely to collate.
- Tear-off pads to be 25-50 pages (maximum). This would also significantly reduce the price of printing.



3. GP Samples Plus - Campaign evaluation 2021

Prepared by Belinda Neville, August 2021

Background

Nuts for Life ran successful Samples Plus promotions during 2013 and 2015, running six campaigns in each of these years, as well as three campaigns during 2020.

- The 2013 campaign focused on Nuts and weight: Nuts and the Big Fat Myth
- The 2015 campaign focused on Nuts and heart health: Nuts and heart health – A summary of the SLR evidence.
- The 2020 campaign focused on Nuts and plant-based eating.

Activities

Resources

The theme “Is it time to reconsider nuts” included the following resources:

- Cover letter
- Report – The energy, fat and sodium content of nuts
- Fact sheet – Are all the kilojoules in nuts absorbed?

- Magnet (10cm x 10cm) – what does a 30g handful of nuts look like?

All resources were collated into a Nuts for Life display folder.

The total distribution number was capped at 1,900.

Results

Number requested by State	Campaign July 2021
NSW (%)	551 (38)
Victoria (%)	352 (25)
ACT (%)	12 (0.8)
Queensland (%)	291 (20)
WA (%)	122 (8.5)
SA (%)	78 (5.4)
Tasmania (%)	19 (1.3)
NT (%)	7 (0.5)
TOTALS	1432

NB. This campaign ran at the height of the Delta COVID-19 outbreak, which particularly affected NSW and Victoria. This may have contributed to the lesser number of requests, compared to those of previous campaigns.

Campaign expenditure

The budget available for the campaign was \$20,000 ex GST.

2021		
Activity	Details	Expenditure (excl GST)
Samples Plus	Administration, inclusion and pack fee	\$ 6,700.56
Printing	Cover letter, display folders, reports, fact sheets and magnets	\$ 5,500 (Cloudprint) \$ 3,202 (Bite)
Freight	From N4L office	\$ 359.09
Total		\$ 15,761.65

Recommendations

General

- Continue to cap distribution at around 1,800 per campaign.
- A more simplified resource pack (compared to the 2020 campaigns) meant it was less timely to collate.
- Consideration is being given to participating in *Samples Now* – an online platform, available 24/7 for GPs to request information. This is due to the lower uptake of requests, meaning we have a surplus of resources as well as budget.



4. GP Samples Plus - Campaign evaluation 2023

Prepared by Belinda Neville, March 2023

Background

Nuts for Life has run previous successful Samples Plus campaigns during 2013, 2015 (running six campaigns during each of these years) three campaigns in 2020 and one in 2021. The focus of these were:

- 2013 campaign: Nuts and weight - Nuts and the Big Fat Myth
- 2015 campaign: Nuts and heart health - Nuts and heart health – A summary of the SLR evidence.
- 2020 campaign: Nuts and plant-based eating
- 2021 campaign: Is it time to reconsider nuts – Audit report and kilojoule absorption fact sheet.

Campaign theme

Australian dietary guidance - What's the evidence for prioritising plant protein?

Plant protein, from foods like nuts, uniquely benefits human and planetary health. Yet, most Australians fall short of the daily target. Elevating plant protein foods in Australian dietary guidance would help.

The campaign was capped at 1,800.

Resources

The following resources were included:

- Cover letter
- Report – Elevating nuts in Australian Dietary Guidance
- Brochure – Nutrient composition of nuts
- Magnet (10cm x 10cm) – what does a 30g handful of nuts look like?

All resources were collated into a Nuts for Life display folder, which was done in-house.

Results

Requested number by State	Total number and %
New South Wales	660 (39)
Victoria	413 (25)
ACT	19 (1.1)
Queensland	340 (20)
Western Australia	147 (8)
South Australia	72 (4)
Tasmania	16 (1)
Northern Territory	11 (0.6)
TOTALS	1,678

Campaign expenditure

The budget available for this campaign was \$15,000 ex GST.

2020/2021	
Activity and details	Expenditure (ex GST)
Samples Plus – Market Reach	\$7,210.30
- Administration fee	
- Kitting/packaging fee	
Printing - Cloudprint	\$7,606
- Cover letter	
- Reports	
- Nutrient composition	
- Magnets	
- Display folder	

Collating resources	\$280
Freight – Pack and Send - N4L office to Melbourne	\$487.27
Total	\$15,583

Recommendations

General

- Cap distribution at around 1,800 per campaign.
- Simplify pack contents, as it was extremely timely to collate.



5. DA Conference 2022 - 14-16 August 2022 (Hybrid event)

Background

Nuts for Life continues to be part of the Dietitians Australia (DA) conference, given dietitians remain our number one priority health professional audience, and also because companies seem to be 'noticed' when they are not present.

The conference was the first face-to-face DA conference since 2019, and was delivered as a hybrid event, for those unwilling or unable to travel to Adelaide. It was anticipated that the conference would attract around 650 -1,000 delegates (in person and virtual), from a range of areas including: Clinical dietitians, Dietitians in private practices, health workers, Scientific researchers, Health promotion practitioners, Community nutrition dietitians, Policy makers, Student dietitians, Nutritionists, Hospital food service dietitians, Indigenous health workers, Nutritionists, Diabetes educators and Dietitians working in public health.

Activities

Exhibition stand

The Nuts for Life exhibit was a 3m x 3m stand, manned by Belinda Neville and Maree Hall throughout the entire conference.

Resources included:

Infographics (easel display only)

- Nuts and CVD (based on systematic review from UOW 2021)
- Nut eaters weigh less

Reports

- Nuts and CVD: What does the science say?

Factsheets etc.

- FS - Are all the kJ in nuts absorbed?

- FS - Nuts and heart health
- Ready reckoner – Nutrient composition of nuts (2022 edition)
- Magnet - What does a 30g handful look like

QR Code Promotion:

Sign up to NutENews

Sign up to LinkedIn

Company Profile (50-word limit)

Nuts for Life is Australia's voice for the vital role tree nuts play in good health and nutrition.

We help busy health professionals stay up-to-date on evidence-based news and research on nuts, sharing why eating a handful (30g) of nuts every day is essential to the health of all Australians.

Event key messages

- Raising awareness of the new evidence supporting nuts' reducing CVD risk
- Raising awareness of research showing not all kilojoules in nuts are absorbed.

Oral Presentations

Nuts for Life supported two abstracts for inclusion into the conference program:

- Extending the knowledge of nuts and CVD: can we emerge with a high-level health claim?
- A systematic review of the ins and outs of nut energy balance.

Both abstracts were accepted as oral presentations, to be presented by Yasmine Probst and Cassandra Nikodijevic, respectively.

Nut sampling

Approximately 15kg of pre-mixed tree nuts and peanuts were taken to be sampled in 30g cups.

Results

Attendance

620 registrations (face-to-face)

60 virtual attendees.

Nuts for Life exhibit

The Nuts for Life exhibit was a 3m² corner stand right at the entry to the exhibit hall (refer appendix for map).

There were 26 exhibitors, far less than in previous years making the hall very spread out.

However, the stand was engaging and looked enticing (with nuts to sample), with delegates very receptive and interested in the messages and resources offered.

The QR Code Promotion (sign up to NutENews; sign up to LinkedIn) resulted in (approximately):

- 17 new subscribers to NutENews
- 18 new followers on LinkedIn

Many delegates mentioned that they already receive NutENews.

Delegate engagement

Participation in the passport competition enticed delegates to seek us out and visit our stand. Having nuts to offer also enticed delegates, which further enabled conversations and engagement.

The most commonly asked questions asked were:

- Is one nut better than the rest?
- Which is the best nut for CVD reduction?

Social media engagement

Two LinkedIn posts by Nuts for Life, relating to the research oral presentations, resulted in:

- 2,142 total impressions
- 58 total link clicks
- 8.3% (CVD research) and 9.2% (kilojoule research) engagement rates. Note: These represent extremely high engagement rates (benchmarks: Nuts for Life average LinkedIn engagement rate across 2021/22 = 3.4%; LinkedIn industry average engagement rate = 0.35%)

Five tweets by Nuts for Life, resulted in:

- 3,053 total impressions
- 47 likes, 13 retweets, 3 link clicks
- 5.6% average engagement rate. Note: This represents high engagement rates (benchmarks: Nuts for Life average Twitter engagement rate across 2021/22 = 3.4%; Twitter industry average engagement rate = 0.33 - 1%)

Campaign expenditure

The original budget allocated for this event was approx. \$10,000 ex GST.

Activity	Details	Expenditure (excl GST)
Trade exhibition	3m x 3m exhibit	\$5,500
Furniture hire	Adelaide Expo	\$ 910
Nuts for sampling	Purchased approx. 15kg (used across FILEX and DA conference)	\$ 220
Couriers	To and from conference – Pack and Send	\$ 585
Travel and accommodation	Flights (2 person)	\$ 800
	Accommodation (2 person)	\$ 1,042
	Taxis	\$ 300
Expenses	Incidental supplies e.g., Conference dinner, meals etc.	\$ 339
Total		\$9,696.00



Maree Hall, Cass Nikodijevic, Belinda Neville, with permission

6. DA conference 2021 - 11-13 July 2021 (virtual)

Background

Nuts for Life continues to be part of the Dietitians Australia (DA) conference, given dietitians remain our number one priority health professional audience, and also because companies seem to be 'noticed' when they are not present.

The conference was originally planned as a hybrid conference – with the live event taking place in Melbourne, and a virtual platform for those unable or unwilling to travel. It was anticipated that the conference would attract around 1,000 delegates, from a range of areas including: Clinical dietitians, Dietitians in private practices, health workers, Scientific researchers, Health promotion practitioners, Community nutrition dietitians, Policy makers, Student dietitians, Nutritionists, Hospital food service dietitians, Indigenous health workers, Nutritionists, Diabetes educators and Dietitians working in public health.

However, due to COVID, the conference format was changed to 100% virtual.

Activities

Trade exhibition

The Nuts for Life exhibit was virtual and ran on a platform called Cvent. It was 'manned' by Belinda Neville and Maree Hall during break times only on 12th and 13th July.

As an exhibitor, we were entitled to an unlimited number of downloadable resources on our exhibit, as well as one virtual satchel insert and one promotional flyer which was sent to all DA members via their e-newsletter.

Downloadable resources included:

Infographics

- Consumption low, benefits high
- Plant protein content

Reports

- Energy, fat and sodium content of nuts
- Nuts and plant protein

Factsheet

- Nuts and kJ absorption

Virtual satchel insert:

Infographic

- Consumption low, benefits high

Promotional flyer:

Australian Dietary Guidelines – one-page summary of why nuts deserve greater prominence in the next revision of the ADGs, with a link to our website.

Company Profile (no word limit)

Nuts for Life is Australia's independent authority on the nutrition and health benefits of tree nuts. Our mission is to promote regular nut consumption by collating the latest evidence-based information, and informing Australians about the positive impact regular nut consumption can have on their health.

Scientific research has consistently shown that nuts are a key food in healthy eating patterns. Eating nuts is not associated with weight gain, and is associated with:

- *29% reduced risk of coronary heart disease*
- *22% reduced all-cause mortality*
- *21% reduced risk of cardiovascular disease*
- *15% reduced risk of total cancer*
- *13% reduced risk of type 2 diabetes.*

Yet consumption is chronically low with only 2% of the population meeting the 30g daily target. In other words, 98% of Australians are missing out on these health benefits. There is clearly a need to encourage shifts in consumption patterns to reduce this gap.

Learn more about the health benefits of nuts and pick up some of our latest resources including our fact sheet on kilojoule absorption in nuts, as well as the results of an audit comparing the energy, fat and salt content of raw, roasted, salted and unsalted nuts.

Event key messages

- Raising awareness of Nuts for Life's position for nuts in the next re-iteration of the Australian dietary guidelines
- Addressing barriers to increased nut consumption via
 - Energy, fat and sodium content of nuts report and presentation
 - kJ absorption fact sheet -

Rapid Fire Presentation

Nuts for Life submitted two abstracts for inclusion into the conference program:

- Plant and nut protein, and
- Energy, fat and salt audit.

The Energy, fat and salt audit abstract was accepted as a rapid-fire presentation (6 slides in 5 minutes), subsequently titled '**Salted vs unsalted, Roasted vs raw – is it time to reconsider nuts?**'

Belinda Neville pre-recorded the presentation which was uploaded onto the conference platform as an 'on demand' session, meaning delegates could download and watch the presentation at any time.

Sampling Nuts

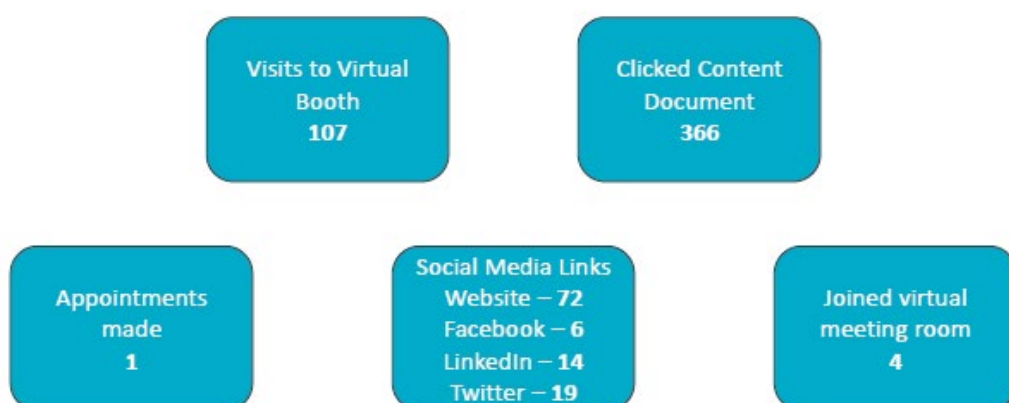
Nuts were ordered in anticipation of the event being held face-to-face (ordered as part of the order for GPCE Sydney). Given the event was virtual, no nuts were sampled.

Results

Attendance

620 registrations for the virtual conference.

Nuts for Life trade exhibit



For comparative purposes:

- Highest virtual booth views – 234
- Lowest virtual booth views – 75

- Average virtual booth views – 125

Number of downloads per resource	
Consumption low, benefits high - Infographic	50
Energy, fat and sodium audit - Report	51
Nuts and kJ absorption - Factsheet	96
Nuts and plant protein - Report	71
Plant protein content - Infographic	104

Virtual meeting room:

Belinda Neville spoke with one delegate who asked about allergies and whether Nuts for Life have any resources on the degree of allergenicity of the different nuts i.e., which nuts are most likely to cause an allergen, and which nuts are least likely. Belinda suggested contacting Allergy & Anaphylaxis Australia for information.

Rapid-Fire presentation

At the time of preparing the report, this information was not available.

Campaign expenditure

The original budget allocated for this event was approx. \$10,000 ex GST.

Activity	Details	Expenditure (excl GST)
Trade exhibition	Cost reduced due to virtual	\$3,250
Furniture hire		nil
Nuts for sampling	Purchased for GPCE Sydney, with the intention of using over several conferences	\$ 230
Couriers	To and from conference	nil
Travel and accommodation	Flights (2 person) Accommodation (2 person) Taxis	nil
Expenses	Incidental supplies	nil
Total		\$3,480

Recommendations

General

- As per previous experience with virtual conferences, having a trade exhibit is not worth the investment. However, given Nuts for Life had already committed to trade exhibit, we decided to proceed.

7. DC Webinar



dietitianconnection®
The Chosen Link for *Nutrition Leaders*

"Cardiovascular disease and nuts: what does the science say?"
Webinar report
16th March 2022 | Supported by Nuts for Life

 Building 6 (Corporate House), 2404 Logan Road, Eight Mile Plains QLD 4113	 P: (07) 3118 1794 ABN: 70 155 488 565	 E: info@dietitianconnection.com W: dietitianconnection.com
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Summary

Thank you for supporting the recent webinar, titled "*Cardiovascular disease and nuts: what does the science say?*" with Prof Catherine Itsiopoulos and A/Prof Yasmine Probst on 16th March 2022.

Results

- 438 people registered for the webinar & 78 attended live.
- Webinar recording has been viewed 243 times, equalling 321 views.



Evaluation survey

25 survey respondents

- 96% rated the webinar as 'excellent' or 'very good'
- 100% rated the speakers as 'excellent' or 'very good'
- 96% said that the information presented in the webinar was 'extremely useful' or 'very useful'

General feedback

- Thank you to all involved in the organising and presenting of this webinar
- Very informative, and interesting. Thank you so much for sharing!
- Thank you again DC. Your CPD webinars are excellent and so beneficial especially for us solo practitioners.
- Thank you for always providing relevant and interesting topics in nutrition and dietetics.

What they liked

- Engaging and knowledgeable presenters who gave succinct, easy-to-follow information
 - The speakers were extremely knowledgeable in the area and experienced in translating the science into language practitioners can understand
 - Style of presenter; content; clear message; evidence, practical information
 - Presenters' knowledge & enthusiasm
 - The rapport between the speakers, their upbeat attitude and the ease of relaying the information
 - The speakers spoke well and information was clear and simple on slides

- Evidence-based
 - Evidence behind the claim that nuts can reduce CVD risks
 - High quality research and informative.
 - Reviewed a lot of research
 - Summary of evidence and translation to practice
- Practical and relevant
 - Ideas on how to implement Mediterranean diet
 - I liked Catherine's practical tips "5 Things to tell your patients", and good to hear that irrespective of weight changes, Mediterranean style foods reduce inflammation
 - I enjoyed each speaker presenting relevant evidence and relevant ways of implying the findings in practice

Suggestions for the future

- More time for questions (x2)
- Practical resources
 - Would love more information on resources and ways dietitians are using Mediterranean diets in practice
 - Med Diet client handout
 - More information on translating the information into practice eg where to find resources to use with clients
 - More practical ways for Dietitians to incorporate into practice
 - Interesting to hear of the work being done to implement the Med diet across cultures, I could use this in my practice.

Most valuable learning that can be implemented in practice

- Recommend nuts daily for health benefits
 - Add EVOO to everything and include nuts daily!
 - How much Australians aren't consuming nuts (only 2% of the population are consuming 30g per day) - this is where being creative and versatile with nuts come into play and I will continue to implement with my clients
 - Consuming 30g of nuts daily reduces CVD risk
 - Encouraging the use of nuts, more inclusion of Med diet in dietary education
 - Confirming nut consumption in preventing heart disease independent of weight
 - Can't believe Mediterranean Diet is not being suggested to people when they ask for the best diet they can follow. Shocked at such low nut intake in Australia. Need myths around weight gain and cost dispelled. Also address other barriers such as allergies (nut free schools can't be helping the cause) and choking hazards. People still seem stuck in the low-fat era thinking nuts, olives, all oils and avocados are to be avoided for weight loss and health.

- Nuts are an important part of Mediterranean dietary pattern
 - Continue supporting clients in applying principles of the Mediterranean diet.
 - That nuts are a valuable and important part of the Mediterranean diet
 - The combination of having Mediterranean diet and nuts.
 - 10 take aways to implement diet
 - I am familiar with the Mediterranean diet studies, and I support the use of the diet. I especially liked the depth of the literature review regarding nuts.
 - Strengthened my understanding of nuts, med-diet and the cardiovascular protection.
 - Irrespective of weight changes the Mediterranean diet reduces inflammation in many body systems.
 - Encourage clients to consume a Mediterranean diet, but also modify other lifestyle factors like increasing physical activity.
 - The health benefit of a med diet for chronic disease biomarkers.

Social media

- Instagram feed post reach >2000
- Instagram stories reach ~850

8. FILEX – Trainers Summit Conference Evaluation

(a component of the Bronze Partner package)

30-31 July 2022

Prepared by Belinda Neville, August 2022

Background

FILEX's purpose is to connect the broader industry and create a professional workforce by delivering world class education, information and experiences. Their aim is to promote trust and credibility in the broader fitness industry. For over 30 years FILEX has been widely recognised as the pinnacle live event for the Australian fitness industry. Traditionally FILEX has been a three-day education convention where more than 2000 people come together to learn from the world's leading health and fitness experts.

In 2021, FILEX's approach changed to offer separate smaller summits designed to target specific audiences:

- Leadership summit
- Business summit
- Trainer summit

In May 2021, Nuts for Life committed to a Bronze Partnership package for a total cost of \$5,000.

The package included:

- Standard expo booth to the Trainer Summit
- FILEX online Masterclass (refer separate evaluation)
- e-News (x1) to full database and social media post (x1)

Trainer Summit

Originally scheduled for 13-14 August 2021 at The Hilton, Sydney, the event was postponed due to COVID to 29-30 July 2022.

On 5 July 2022, FILEX advised of a change to the venue and the dates of the event. It was decided to move the venue to Fitness First, Bond St Sydney which is a fit for purpose venue for a trainer event. It was moved to 30-31 July (weekend), so as not to disrupt gym members who have access to the gym during weekdays.

The event was expected to attract ~400 delegates.

Exhibition Stand

Originally, the Nuts for Life exhibit was a 2m² stand, but with the change of venue, we were provided with a 4m x 2m stand. The stand was located just next to the entrance to one of the four session rooms, and next to Australian Avocados. Nuts for Life was one of only about 7 exhibitors.

We sampled 30g serves of nuts to delegates, which provided a way to also educate on what a 30g handful of nuts looks like, which was supported by the 30g magnet.

It was manned by Belinda Neville and Maree Hall on both days.

Resources

Fact sheet – Are all the kilojoules in nuts absorbed
 Report – The effect of plant and nut protein on health
 Nutrient Ready Reckoner (updated 2022)
 Magnet – What a 30g handful of nuts looks like
 Recipe Booklet – Foods that do Good

Event key messages

- Nut consumption is not linked with weight gain, as not all kJ absorbed
- Nuts are a good source of plant protein
- 30g handful of nuts everyday

Nuts sampled

Approximately thirteen (13) kg of mixed nuts were taken to the conference. Stahmann Webster kindly donated 3kg of pecans and 5kg of walnuts (some of which were being used for the upcoming DA conference).

Nuts	Quantity
Almonds, dry roasted, unsalted Australian	1.5 kg
Brazil kernels	1 kg
Cashews, roasted, unsalted	1.5 kg
Hazelnuts, roasted, unsalted Australian	1.5 kg
Macadamia, raw unsalted Australian	1.5 kg
Peanuts, roasted	1.5 kg

Pistachio kernels, unsalted Australian	1.5 kg
Pecans, Australian	1.5 kg
Walnuts, Australian	1.5 kg
Total	13 kg

Exhibitor profile

Nuts for Life is Australia's voice for the vital role nuts play in good health and nutrition.

They help busy health professionals stay up-to-date on evidence-based news and research on nuts, sharing why eating a handful (or 30g) of nuts every day is essential to the health of all Australians.

Regular nut consumption offers major health benefits, being linked with reduced all-cause mortality, and a lower risk of dying from heart disease and cancer – which claim the lives of too many Australians. And decades of research shows eating nuts is not linked with weight gain.

Nuts for Life is funded by the Australian nut industry and the Australian Government, through Hort Innovation Australia's 'Hort Frontiers Healthy Food Fund'.

Results

Attendance

Total attendees: 280

Exhibition

The stand was engaging and enticing (with nuts to sample), with delegates very receptive and interested in the messages and resources offered.

However, as there was no catering provided to delegates or to exhibitors, the exhibition space was relatively quiet, as they left to purchase food and drinks from cafes etc outside the venue.

Delegate engagement

Delegates were engaged and interested in our messages and our resources. Having nuts to offer also enticed delegates, which further enabled conversations and engagement.

The most commonly asked questions asked were:

- Which nuts are best for sports performance?
- How many nuts are you supposed to eat?

A lead scanner was supposed to be provided as part of the exhibition package. However, this was not available. However, at our request, we received a full delegate list from the organisers. This list was used to send an alert, thanking delegates for attending and visiting our stand, answering the most commonly asked questions, and sharing additional resources.

The alert was sent to 274 delegates on 11 August, and had a 58.36% open rate; 2.97% click through.

Campaign expenditure

Activity	Details	Expenditure (excl GST)
Bronze package	Included booth, Masterclass and newsletters	\$5,000*
Registration x 1	25% reduced registration fee	\$522
Furniture hire	2x stools, curved counter, lockable storage cupboard	\$1,168
Nuts for sampling	The Nut Shop	\$ 217
Couriers (Pack and Send)	Freight to conference only	\$ 60
Travel and accommodation	Flight and accommodation x 2 nights, ex Brisbane	\$ 970
Expenses (other)	Taxis, meals etc.	\$ 130
Total		\$8,067

*note: this expense was for a full package.

Recommendations

The Trainer summit as a stand-alone activity was not worth the return on investment. However, it was good value as part of the Bronze package.



L-R Penny Eustace (Australian Avocados), Maree Hall, Belinda Neville and Kristen Beck (nutritionist), with permission

9. FILEX Webinar



FILEX Masterclass – Evaluation summary

Nuts for health and fitness: presented by Emilie Burgess 25th November 2021

Belinda Neville, January 2022

Question 1: What is your main profession in the industry

Response	Number of responses	% of responses
Personal trainer or coach	36	56
Group fitness instructor	12	19
Business owner	5	7
Group training	3	5
Allied health professional (e.g. Exercise Physio, OT, Nutritionist, Chiro etc.)	3	5
Manager/team leader	1	1.5
Educator/teacher	1	1.5
other	3	5
TOTAL	64	100

Question 2: Rate the quality of the content

Response	Number of responses	% of responses
Outstanding	9	14
Excellent	32	52
Very good	12	19
Good	6	10
Above average	1	2
Average	2	3
TOTAL	62	100

Question 3: Rate the quality of the presenter (Emilie Burgess)

Response	Number of responses	% of responses
10	15	24
9	26	42
8	14	23
7	5	8
6	2	3
TOTAL	62	100



Question 4: After taking part in today's masterclass, how likely would you be to recommend nuts to your clients, as part of a healthy diet?

Response	Number of responses	% of responses
Very likely	46	75
Likely	11	18
Neutral	3	5
Unsure	1	2
TOTAL	61	100

Question 5: Which of the below statements best reflects your position on nuts?

Response	Number of responses	% of responses
Nuts are an essential part of a healthy diet for good health, and should be consumed every day	43	70
Nuts are an essential part of a healthy diet for good health, and should be consumed several times a week	16	26
Nuts are desirable, but not essential for good health	1	2
Nuts are not essential for good health	1	2
TOTAL	61	100

Question 6: The Australian Dietary Guidelines recommend 30g (around a handful) as an appropriate daily intake of nuts for the general population and for active Australians.
True or false

Response	Number of responses	% of responses
True	58	95
False	1	2
Unsure	2	3
TOTAL	61	100

Other miscellaneous comments (open-ended)

- I think the masterclasses are an excellent way for fitness instructors to keep up with changes and advances in the industry.
- Really enjoyed the masterclass, some very helpful information on nutrition.
- Emilie was one of the best speakers for some time so well prepared & full of good information.
- Good nutty facts, loved it! Thank you.
- Was a great presentation, have already gone and had some nuts myself... dispelled some myths for me too.
- Useful information given in an easily absorbed format.
- Something that we don't often think about day to day so it was good to highlight this.
- Presenter kept the information simple and interesting.

10. GPCE Melbourne 2022



GPCE Melbourne – Conference Evaluation

11-13 November 2022

Prepared by Belinda Neville, November 2022

Background

Nuts for Life participated at the three-day General Practice Conference & Exhibition, held at Melbourne Conference and Exhibition Centre (MCEC) South Wharf, Melbourne.

GPCE brings together frontline healthcare professionals to share best practice, network, learn and engage with colleagues. It attracts the largest concentration of Australian GPs annually, with four events over 2022 in four cities across Australia (Sydney, Perth, Brisbane and Melbourne).

GPCE Melbourne, was expected to attract ~1,000 delegates.

Activities

Exhibition Stand

The Nuts for Life exhibit was a 4m² stand on the side wall of the exhibit hall, next to Medigreen Dispensary and Clinic, and Medical IT Services (refer appendix for map).

Nuts for Life was one of 10 exhibitors participating in the 'passport competition' – an incentive to encourage engagement and connection with delegates. For a chance to win \$5,000, delegates were required to visit all 10 participating exhibitors, and correctly answer a specific question to receive a stamp to be entered into the draw. The question we asked was:

What is the daily target of nuts to recommend to patients/clients each day?

The key messages were:

- Nuts reduce CVD risk (based on Uni Wollongong review to support the HLHC application)
- Nut consumption is not linked with weight gain

We sampled 30g serves of nuts to delegates, which provided a way to also educate on what a 30g handful of nuts looks like, which was supported by the 30g magnet.

It was manned by Belinda Neville and Maree Hall on all three days.

Resources

Fact sheet – Are all the kilojoules in nuts absorbed (updated)

Fact sheet – Nuts and heart health (updated)

Report – Nuts reduce the risk of cardiovascular disease

Nutrient Ready Reckoner

Magnet – What a 30g handful of nuts looks like

Event key messages

- Nuts reduce the risk of CVD
- Only 2% of Australians are meeting the 30g daily target
- Nuts are not associated with weight gain as not all kJ are absorbed.



Nuts sampled

Approximately 15kg of mixed nuts were sampled to delegates over the duration of the conference.

The nuts were made up partly from those that were left over from the DA conference, which was held in August, and partly by a kind donation from Royal Nut Company, which we collected on the day prior to the conference. The left-over nuts were stored in a deep freeze between events.

Nuts	Quantity
dry roasted almonds kernels, unsalted Australian	2 kg
dry roasted peanuts, unsalted (Australian if available)	2 kg
roasted cashews kernels, unsalted	2 kg
dry roasted macadamias kernels, unsalted Australian	1.5 kg
dry roasted hazelnuts kernels, unsalted (Australian if available)	1.5 kg
raw Brazil nuts kernels	1.5 kg
raw pistachio kernels, unsalted Australian	1.5 kg
raw pecan kernels (Australian if available)	1.5 kg
raw walnut kernels (Australian if available)	1.5 kg
Total	15 kg

Exhibitor profile (online portal)

Nuts for Life helps busy health professionals stay up-to-date on evidence-based news and research on nuts, sharing why eating a handful (30g) of nuts every day is essential to the health of all Australians. We are facilitated by the Australian Nut Industry Council, in partnership with Australian nut industry members. We are funded by the Hort Frontiers Health, Nutrition and Food Safety Fund, part of the Hort Frontiers strategic partnership initiative developed by Hort Innovation, with co-investment from the Australian nut industry and contributions from the Australian Government.

Results

Attendance

Total attendees: approx. 900

We sampled around 900 serves of nuts throughout the conference.

Exhibition stand

The exhibit hall was 'always open', which meant delegates were always around to engage with. Other food and nutrition-based exhibitors included Lite n Easy and Doctors for Nutrition.

The stand was engaging and enticing (with nuts to sample), with delegates very receptive and interested in the messages and resources offered.

Delegate engagement

Participation in the passport competition enticed delegates to seek us out and visit our stand. Having nuts to offer also enticed delegates, which further enabled conversations and engagement.

By far, the most commonly-asked question was:

- Is one nut better than the rest/which is the best nut?



Overall, delegates were very receptive to the information and genuinely very interested. They were also appreciative that our 'preventative health' exhibit was part of the conference.

A lead scanner was provided as part of the exhibition package, which we used to invite delegates to receive our monthly e-DM newsletter. We collected 121 contacts, which were followed up with an alert thanking them for visiting our stand, answering the most asked questions, and sharing additional resources.

The alert was sent on 15 November 2022, and had a 66.7% open rate; and a 6.8% click through rate. All contacts were also added to the broader NutENews database of health professionals.

Social media engagement

One LinkedIn post by Nuts for Life, relating to our presence at the conference, resulted in:

- 550 total impressions
- 7 link clicks
- 4.2% engagement rate. Note: This represents a high engagement rates (benchmarks: Nuts for Life average LinkedIn engagement rate across 2021/22 = 3.4%; LinkedIn industry average engagement rate = 0.35%)

Four tweets by Nuts for Life, resulted in:

- 825 total impressions
- 25 likes, 3 retweets, 5 link clicks
- 7.6% average engagement rate. Note: This represents high engagement rates (benchmarks: Nuts for Life average Twitter engagement rate across 2021/22 = 3.4%; Twitter industry average engagement rate = 0.33 - 1%)

Campaign expenditure

Activity	Details	Expenditure (excl GST)
Trade exhibition	4m ² exhibitor package Passport competition	\$4,765 \$1,000
Furniture hire	2x stools, curved counter, lockable storage cupboard	\$1,411.75
Resources	Revised Ready Reckoner Revised Heart Health FS Nuts and CVD report	\$ nil
Nuts for sampling	15kg in total	\$ nil
Couriers (Gel events)	Freight to and from conference	\$ 584.00
Accommodation	3x nights for 2 people	\$ 1,552.53
Flights	ex Sydney and ex Brisbane	\$ 982.43
Expenses (other)	Taxis Meals	\$ 400.00 \$ 150.00
Total		\$ 10,844.00

Recommendations

General



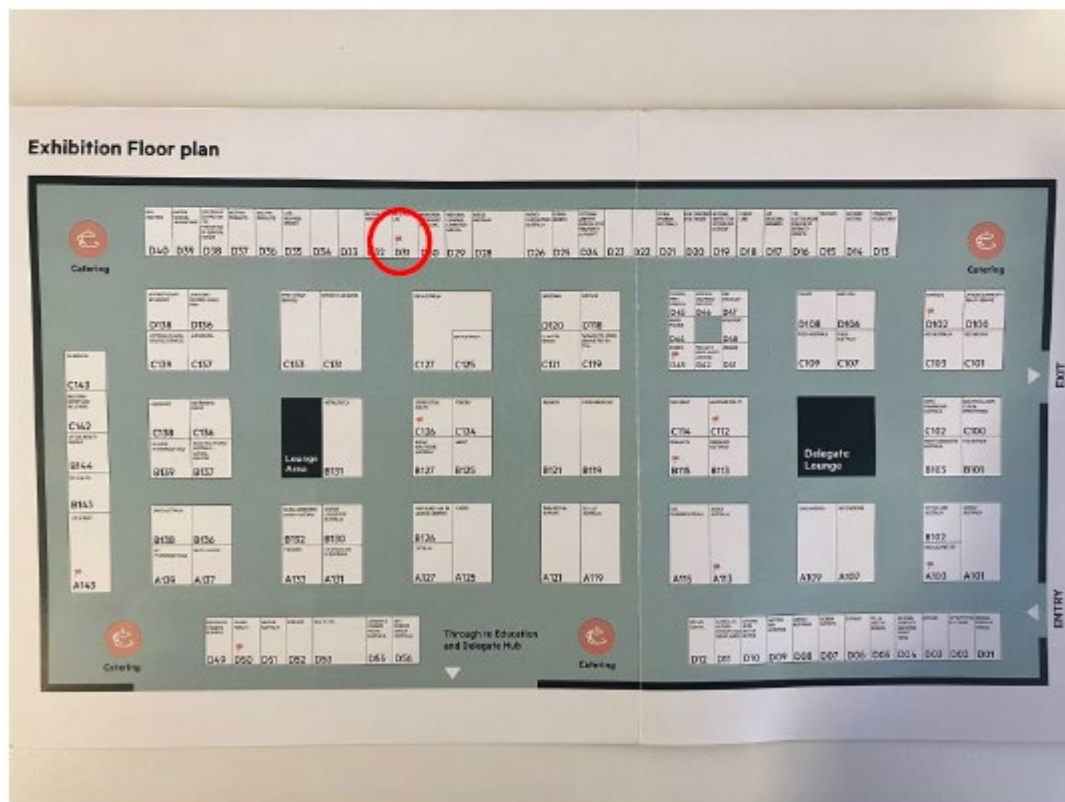
Continue with current approach

Participating in the passport competition is an effective way of engaging with delegates, and encouraging them to visit the stand.

Ensure consistent key messages are communicated with delegates.

Appendices

Appendix 1: Exhibition floorplan





Belinda Neville and Maree Hall, with permission

11. GPCE Sydney 2021



GPCE Sydney – Conference Evaluation 14-16 May 2021

Prepared by Belinda Neville, May 2021

Background

Nuts for Life participated at the three-day General Practice Conference & Exhibition, held at Sydney Showground, Sydney Olympic Park. This is the first time Nuts for Life has participated in this event.

GPCE brings together frontline healthcare professionals to share best practice, network, learn and engage with colleagues. It attracts the largest concentration of Australian GPs annually, with four events over 2021 in four cities across Australia.

GPCE Sydney, was expected to attract 1,000 delegates.

Activities

Exhibition Stand

The Nuts for Life exhibit was a 4m² stand towards the side of the exhibition hall, next to Mirror and Australian Natural Therapeutics Group (ANTG) and close to the ThinkGP delegate hub.

The stand was also right next to the entrance to conference room A and B, where delegates entered and exited education sessions (refer appendix for map).

Nuts for Life was one of five exhibitors participating in the 'passport competition' – an incentive to encourage engagement and connection with delegates. For a chance to win \$5,000, delegates were required to visit all five participating exhibitors, and correctly answer a specific question to receive a stamp to be entered into the draw. The question we asked was:

What percentage of Australians meet the daily target of 30g?

The main themes for our exhibit were to educate GPs on the myth of nuts causing weight gain due to the kilojoule absorption theory, as well as to highlight the results of our recent audit looking at the salt and fat content of raw, roasted and salted nuts.

We sampled 30g serves of nuts to delegates, which provided a way to also educate on what a 30g handful of nuts looks like, which was supported by the 30g magnet.

It was manned by Belinda Neville and Maree Hall on all three days.

Resources

Fact sheet – Are all the kilojoules in nuts absorbed (new)

Reports -

The energy, fat and sodium content of nuts

The effect of plant and nut protein on health

Nutrient Ready Reckoner (updated 2018)

Magnets – what a 30g handful of nuts looks like

Event key messages

- Only 2% of Australians are meeting the 30g daily target
- Nuts are not associated with weight gain as not all kJ are absorbed



- Nuts are essential with significant health benefits

Nuts sampled

Approximately 15kg of mixed nuts were taken to the conference. Given the COVID restrictions, we were conscious that some delegates may be wary of sampling nuts. However, all the nuts were gone by morning tea on the third day of the conference.

Nuts	Quantity
dry roasted almonds kernels, unsalted Australian	3 kg
roasted cashews kernels, unsalted	3 kg
raw macadamias kernels, unsalted Australian	1.5 kg
dry roasted hazelnuts kernels, unsalted (Australian if available)	1.5 kg
raw Brazil nuts kernels	1.5 kg
raw pistachio kernels, unsalted Australian	1.5 kg
raw pecan kernels (Australian if available)	1.5 kg
raw walnut kernels (Australian if available)	1.5 kg
Total	15 kg

Exhibitor profile

Nuts for Life is Australia's voice for the vital role tree nuts play in good health and nutrition. We help busy health professionals stay up-to-date on evidence-based news & research on nuts, sharing why eating a handful (30g) of nuts every day is essential to the health of all Australians. We are facilitated by the Australian Nut Industry Council (ANIC) in partnership with Australian tree nut industry members. We are funded by voluntary contributions from industry & supported by Australian Government funding for research and development activities via Horticulture Innovation Australia.

Results

Attendance

Total attendees: 838

We sampled over 500 serves of nuts throughout the conference.

Exhibition stand and delegate engagement

The exhibit hall was 'always open', which meant delegates were always around to engage with.

Nuts for Life was the only food-based stand at the entire conference which was very well received by delegates. Our stand was engaging and enticing (with nuts to sample), with delegates very receptive and interested in the messages and resources we offered.

Having two seminar rooms very close as well as the keynote room directly behind our stand meant that traffic was continual.

Delegate engagement

Participation in the passport competition enticed delegates to seek us out and visit our stand. Having nuts to offer also enticed delegates, which further enabled conversations and engagement.

The most commonly asked questions asked were:

- Is one nut better than the rest/ which is the best nut?
- What about the link of nuts to weight/fat content of nuts?



- How many nuts should I be eating/recommend?

A lead scanner was provided as part of the exhibition package, which we used to invite delegates to receive our monthly e-DM newsletter. We collected 40 contacts, which were followed up with an alert thanking them for visiting our stand, answering the most commonly asked questions, and sharing additional resources. The alert was sent on 24th May 2021, and had a 53% open rate; 5% click through and to date, no unsubscribed/ marked as spam.

Campaign expenditure

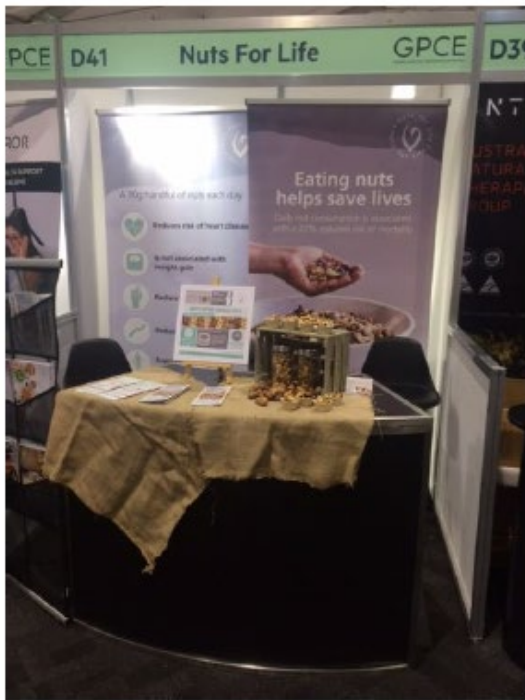
Activity	Details	Expenditure (excl GST)
Trade exhibition	4m ² exhibitor package, including registrations x 2	\$ 4,612
Furniture hire	2x stools, curved counter, lockable storage cupboard	\$ 886.88
Passport competition	Passport competition exhibitors	\$ 1,000
Resources	Banners – design and create	\$ 1,440
	Magnets	\$ 390
	kJ fact sheets	\$ 408
	Audit report (50% only; 50% Samples Plus)	\$ 2,355.75
	Protein report (50% only; 50% Samples Plus)	\$ 1,362.50
Nuts for sampling	30kg ordered in total (only 15kg used at GPCE; remainder for DA conference)	\$ 338.65
Couriers (Agility)	Freight to and from conference	\$ 492.75
Travel and accommodation	Maree x 3 nights	\$ 1,018.24
	Flights return (ex. Brisbane)	
	Meals	
Expenses (other)	Meals, parking, taxi, exhibit supplies	\$ 171.66
Total		\$ 14,476.43

Recommendations

General

Continue with current set-up

Ensure consistent key messages are communicated with delegates.





12. GPCE Sydney 2022



GPCE Sydney – Conference Evaluation

27-29 May 2022

Prepared by Belinda Neville, May 2022

Background

Nuts for Life participated at the three-day General Practice Conference & Exhibition, held at International Convention Centre, Darling Harbour Sydney.

GPCE brings together frontline healthcare professionals to share best practice, network, learn and engage with colleagues. It attracts the largest concentration of Australian GPs annually, with four events over 2022 in four cities across Australia (Sydney, Perth, Brisbane and Melbourne).

GPCE Sydney, was expected to attract ~900 delegates.

Activities

Exhibition Stand

The Nuts for Life exhibit was a 4m² stand near the entry to the exhibit hall, next to Nestle and Emerge Australia (refer appendix for map).

Nuts for Life was one of ten exhibitors participating in the 'passport competition' – an incentive to encourage engagement and connection with delegates. For a chance to win \$5,000, delegates were required to visit all ten participating exhibitors, and correctly answer a specific question to receive a stamp to be entered into the draw. The question we asked was:

What percentage of Australians meet the daily target of 30g?

The key messages were:

- Nuts reduce CVD risk (based on Uni Wollongong review to support the HLHC application)
- Nut consumption is not linked with weight gain

We sampled 30g serves of nuts to delegates, which provided a way to also educate on what a 30g handful of nuts looks like, which was supported by the 30g magnet.

It was manned by Belinda Neville on all three days. Due to Maree Hall being unavailable after contracting COVID, Nastassja Ullrich, our ACU Nutrition Student assisted on two days.

Resources

Fact sheet – Are all the kilojoules in nuts absorbed

Fact sheet – Nuts and heart health (Revised)

Report – Nuts reduce the risk of cardiovascular disease (new)

Nutrient Ready Reckoner (updated 2022)

Magnet – What a 30g handful of nuts looks like

Event key messages

- Nuts reduce the risk of CVD
- Only 2% of Australians are meeting the 30g daily target
- Nuts are not associated with weight gain as not all kJ are absorbed.



Nuts sampled

Fifteen (15) kg of mixed nuts were taken to the conference. Given the COVID restrictions, we were conscious that some delegates may be wary of sampling nuts. However, all the nuts were given out by the end of the conference.

Nuts	Quantity
dry roasted almonds kernels, unsalted Australian	2 kg
dry roasted peanuts, unsalted (Australian if available)	2 kg
roasted cashews kernels, unsalted	2 kg
raw macadamias kernels, unsalted Australian	1.5 kg
dry roasted hazelnuts kernels, unsalted (Australian if available)	1.5 kg
raw Brazil nuts kernels	1.5 kg
raw pistachio kernels, unsalted Australian	1.5 kg
raw pecan kernels (Australian if available)	1.5 kg
raw walnut kernels (Australian if available)	1.5 kg
Total	15 kg

Exhibitor profile

Nuts for Life helps busy health professionals stay up-to-date on evidence-based news and research on nuts, sharing why eating a handful (30g) of nuts every day is essential to the health of all Australians. We are facilitated by the Australian Nut Industry Council, in partnership with Australian tree nut industry members. We are funded by the Hort. Frontiers Health, Nutrition and Food Safely fund part of the Hort. Frontiers strategic partnership initiative developed by Hort. Innovation, with co-investment from the Australian tree nut industry and contributions from the Australian Government.

Results

Attendance

Total attendees: 970

We sampled over 500 serves of nuts throughout the conference.

Exhibition stand

The exhibit hall was 'always open', which meant delegates were always around to engage with. Unlike the 2021 conference, Nuts for Life was no longer the only food-based stand/nutrition focussed exhibitor. Lite n Easy and Doctors for Nutrition were also exhibitors.

The stand was engaging and enticing (with nuts to sample), with delegates very receptive and interested in the messages and resources offered.

Delegate engagement

Participation in the passport competition enticed delegates to seek us out and visit our stand. Having nuts to offer also enticed delegates, which further enabled conversations and engagement.

The most commonly asked questions asked were:

- Is one nut better than the rest/ which is the best nut?
- Ratio of omega 3 and omega 6
- How is Nuts for Life funded



A lead scanner was provided as part of the exhibition package, which we used to invite delegates to receive our monthly e-DM newsletter. We collected 146 contacts, which were followed up with an alert thanking them for visiting our stand, answering the most commonly asked questions, and sharing additional resources.

The alert was sent on 6 June 2022, and had a 61.87% open rate; 6.47% click through and a 0.7% unsubscribe rate.

Campaign expenditure

Activity	Details	Expenditure (excl GST)
Trade exhibition	4m ² exhibitor package, including registrations x 2	\$4,612
Furniture hire	2x stools, curved counter, lockable storage cupboard	\$1,191.70
Passport competition	Passport competition exhibitors	\$1,000
Resources (total cost of design and print split across 3 conferences)	Revised Ready Reckoner Revised Heart Health FS Nuts and CVD report	\$2,619
Nuts for sampling	15kg ordered in total	\$ 327.68
Couriers (Agility)	Freight to and from conference	\$ 525
Travel and accommodation	NA	\$ -
Expenses (other)	Taxis, exhibit supplies Payment to Nastassja Ullrich	\$ 82.01 \$ 500
Total		\$ 10,857.39

Recommendations

General

Continue with current set-up

Ensure consistent key messages are communicated with delegates.



Appendix 5 – PR and Social media evaluation reports

FY 2021



NUTS FOR LIFE
MEDIA BUREAU PROGRAM FY21
EVALUATION
Prepared 31 May 2021

1.0 Overview

This document has been prepared by Bite Communications to provide an evaluation for the Nuts for Life Media Bureau program which ran from September 2020 to June 2021.

The program used new tree nut nutrition research, published in peer reviewed journals, to outreach to media. This provided a highly as a cost-effective way to generate media coverage that:

- Raised awareness of the health and nutrition benefits of tree nuts,
- Delivered Nuts for Life key messages,
- Encouraged nut consumption,
- Kept nuts front of mind among target markets (health professionals, healthy overhaulers 50+ and health-conscious mums), and
- Continued to reinforce Nuts for Life's position as the leading nutrition authority on nut nutrition.

This year's media bureau program operated in a reduced capacity to enable budget to be allocated to leveraging Nutrition Research Australia's plant protein research that was commissioned by Nuts for Life.

2.0 Activity

More than 10 research papers were reviewed by Bite Communications - papers identified via regular research reviews by Nuts for Life's Belinda Neville and Maree Hall, or seen by Bite in Google alerts and media monitoring.

In total, three papers were recognised as having potential to generate media coverage. These included:

- **Sept 2020** - A US pilot study, [published in Cureus Journal of Medical Science](#), found eating half a handful of nuts a day could start to improve risk factors for heart disease, such as high cholesterol, in just two weeks with participants reporting big changes by six weeks. It was the first study to show the impact of eating just a few nuts a day on inflammation, which is associated with heart disease and many chronic diseases.
- **November 2020** - A global study including Australian data, published in [Nutrition and Cancer](#), found eating more nuts and seeds was associated with reduced incidence, prevalence and mortality rate of prostate cancer. It showed each 1g increase in nut and seed intake was associated with a 2.0% lower incidence, 3.2% lower prevalence, and 0.8% lower mortality in prostate cancer. The protective association with nuts and seeds was not seen for any other food groups, including fruits, vegetables or wholegrains. In creating the pitch, Bite was able to localise the importance of the finding with new AIHW data that showed prostate cancer was the most commonly diagnosed cancer among Australian men.
- **March 2021** - A US study, published in the [Journal of the American Heart Association](#), linked eating more protein from plant sources, like nuts and beans, instead of animal proteins, like red meat and dairy, to a lower risk of death from dementia and heart disease among women. Researchers found women who ate the highest amount of plant-based protein had a 9% lower risk of all-cause mortality, a 12% lower risk of death from cardiovascular disease and a 21% lower risk of dementia-related mortality compared to women who ate the least plant-based protein. Bite was also able to tap into interest in another [paper](#) on processed meats and increased dementia risk.



For each of these published papers a pitch email (summarising the research, including link to the paper and Nuts for Life messaging) was created and shared to key news media targets, as well as key media dietitians as agreed with Nuts for Life.

Bite also liaised with media providing additional information, sourcing case studies and arranging photo opportunities as required.

7.0 Results

The activity resulted in 14 media clips generating 4.3 million opportunities to see, at a cost per opportunity to see of less than half a cent (0.002 cents). Well above the KPIs of 2 million opportunities to see at a cost per OTS of \$0.005 (half a cent), which were in-line with the results from FY20.

Coverage included:

- 3 x print newspaper stories in the Daily Telegraph, Herald Sun and Courier Mail
- 10 x online coverage including Daily Telegraph, Herald Sun, Courier Mail, The Advertiser, Mercury, NT News.
- 1 x TV segment on Weekend Sunrise.

The prostate cancer story generated the online and print coverage, because of syndication from the Daily Telegraph article. Weekend Sunrise ran a segment on plant vs animal protein, generated by pitching the dementia research.

These two studies worked well because of their local relevance and clear benefit with results showing percentage reductions in risk. Case studies also play a key role in elevating the stories.

Media bureau remains a highly cost-effective way to keep the health benefits of tree nuts in mainstream news.





1.0 Overview

This document has been prepared by Bite Communications to provide an evaluation of the nuts and protein public relations campaign.

The objective of the public relations campaign was to leverage Nutrition Research Australia's (NRAUS) literature summary on nuts and plant protein, as commissioned by Nuts for Life, and help amplify its findings to health care professionals and consumers.

Specifically, the brief required Bite to:

1. design and layout a six-page **summary report** (copy provided);
2. create a series of supporting **infographics** to communicate the key report findings;
3. amplify the key findings of the review via **health and lifestyle media**; and
4. promote the Healthy Handful **podcasts** in social media posts.

2.0 Activities Undertaken

2.1 Summary Report

As part of the brief Nuts for Life requested Bite's support to design a summary report based on Nutrition Research Australia's literature summary. Bite created a look and feel for the summary report, in line with the Nuts for Life brand style guide, and laid out the downloadable [10 page report](#).

2.2 Infographics

To communicate key findings from the NRAUS summary review, Bite was asked by Nuts for Life to create a series of infographics for use across Nuts for Life social channels, as well as by contributors and third parties.

In total five graphics were created and were designed to be used as a single graphic, or be compiled together to build the story as a news-style carousel, so people swipe right for a more summary findings. The graphics were provided in Facebook, Instagram and Twitter formats. Additional budget was allocated to social media advertising to support awareness and engagement in the new assets.

Overall, the infographics reached **32,756 people** and received **3,189 engagements** across Facebook and Instagram. They generated 666 clicks through to the summary report and Nuts for Life website, and had an average **engagement rate of 10%**.

In particular the practical "Plant protein: how much in 100g" proved very popular on the Nuts for Life social channels. With the January Instagram post (right) receiving 837 likes and 125 saves - a strong indication of interest and intent.



The graphics have been used on Nuts for Life social channels in **8 dark ads**, Instagram posts, Instagram stories and Facebook Posts since October.

2.3 Health & Lifestyle Media

To tap into media interest in protein, a media release was created summarising the findings of the NRAUS summary and answering commonly Googled questions about plant protein.

As the NRAUS summary was unpublished, the media targets were lifestyle media and key media dietitians (new media requires published research). Unfortunately the strength of the pitch and story was weakened as we were unable to quote NRAUS's Flavia Fayet-Moore in the media materials, or to use her as a key spokesperson as originally planned.

Initial pitching prompted little interest in the lead up to Christmas, and leveraging the typical interest peak in plant-based eating at the start of the New Year was overshadowed by COVID and border restrictions. Bite re-pitched the story in mid-January, as Veganuary gained momentum and COVID restrictions eased, this resulted in a range of media opportunities on both plant protein and the general health benefits of nuts.

To date, 16 articles have been generated, creating more than 6.7 million opportunities to see (OTS), at a cost per OTS of \$0.002 (based on the budget for the full program, including the report and graphics design).

While the story angles vary, all coverage mentions the health benefits of nuts and specifically nuts as a source of protein. It included multiple stories on SBS and Body + Soul with strong Nuts for Life branding and links.

Coverage highlight includes:

- 3x articles on SBS Eat Well - [The best nuts to help you sleep](#); [can eating nuts help you live longer](#); and [so you don't eat meat, here's how to adapt recipes when fasting](#)
- 3x articles on Body & Soul - [What's the difference between animal and plant protein and what's better?](#); [The 10 best supermarket foods you should be eating for plant-based protein](#); and [Macadamia and cauliflower schnitzel](#). With two stories shared on Facebook, as well as one in the EDM.
- 1x story in mealprep.com.au - [Why a plant-based diet could be key to healthy weight loss](#)
- 1x story in The Senior - [Plant protein to keep you full](#)
- 2x stories in the Sanitarium EDM Wholicious Living which goes to a database of +35,000 - [no bull guide to plant protein](#); [5 high protein summer salads that are plant powered](#). Also shared on the Sanitarium website, Facebook and The Record (Adventist newspaper)

Still to come:

- Nourish Magazine (Sept)
-





2.4. Podcast Promotion

As part of the brief, Bite was asked to support the launch of Nut's for Life's Healthy Handful podcast and the first episode featuring NRAUS's Flavia Fayet-Moore. A series of dark ads targeting health professionals on Facebook and Instagram were created using the new infographics, quote cards highlighting key comments from the interview, as well as plant protein imagery.

In total there were three dark ads and two Instagram stories (one Instagram story and one dark ad were covered within existing social media budget). This social activity resulted in 28,584 impressions and reached **20,799 people**, with **687 click throughs** generated to Nut's for Life's Healthy Handful podcast page. Interestingly, the top performing post also featured the "Plant protein: how much in 100g" infographic. With the Facebook dark ad (right) receiving 261 link clicks, a strong indication that health professionals are interested in this type of practical content.



Key Learnings

- While the program has delivered very good results, more could have been achieved by engaging Bite earlier in the program. Establishing a communications strategy upfront can help to refine and strengthen the research brief; provide clear direction for all parties; identify and resolve any limitations early; ensure agreements are in place for necessary spokespeople; consider investments in elements such as photography so that it can be leveraged through all aspects of the program; and ultimately deliver stronger results.
- There is a genuine appetite among media for new information about protein /plant protein, as well as the nutritional benefits of nuts. Regular media outreach with valuable information helps to keep nuts front of mind, creates additional media opportunities and establishes Nuts for Life as a go-to resource for nutrition information e.g. outreach to SBS Eat Well and Body + Soul created three story opportunities with both outlets.
- Without the strength of published research, it's important to consider additional assets that can help deliver key messages. Recommendations for influencer recipe creation were not pursued, but would have been valuable in amplifying nut protein messaging and increasing the range of media targets to approach. This was demonstrated by the reuse of 2019 recipe content to generate a Body + Soul online article.
- Tight timing on graphic development resulted in ongoing edits, even once they graphics were approved and shared on social media. Earlier briefing would also have enabled the graphics, or elements of the graphics, to be incorporated into the HCP report.

While the activity has wrapped up, more coverage is expected, and the graphics and key messages will continue to be used in Nuts for Life social media to help establish tree nuts as a good source of plant protein.

NUTS FOR LIFE

SOCIAL MEDIA FINAL EVALUATION

Prepared by Bite Communications
27 July 2021



BITE COMMUNICATIONS | SUITE 7/22 DARLEY ROAD | MANLY | NSW | 2095
02 9977 8195 | BITECOM.COM.AU

Nuts for Life SOCIAL FY21

INTRODUCTION

The Nuts for Life social program for F21 commenced in mid-September 2020 and finished on 30 June 2021. This report provides a summary of the program's performance.

The Nuts for Life social program had the primary focus of driving awareness of the nutritional benefits of eating more nuts. From July 2018, the social strategy delivered content under pillars spanning health and nutrition, and foodie inspiration, in order to appeal to a wider audience (health overhaulers 45+, health-conscious mums, and health professionals) and earn the opportunity to deliver health messages as part of the content mix.

In August 2020, Bite was given a direction to increase the content's focus on health and nutrition, away from eating inspiration. This decision has had an impact on the pages' performance, with a fall in reach and engagement rate (ER) across both Instagram and Facebook (see graphs on slide 7).

BITE COMMUNICATIONS

3

Nuts for Life SOCIAL MEDIA PLAN

F21 SOCIAL STRATEGY ON A PAGE

BUSINESS OBJECTIVES	Increase the nutritional reputation of tree nuts + contribute to consumer demand		
SOCIAL OBJECTIVES	Use Instagram & Facebook to drive engagement around tree nuts and increase awareness amongst our three key target audiences		
ROLE OF SOCIAL	INSPIRE & MOTIVATE AUSSIES TO EAT TREE NUTS		
AUDIENCES	HEALTHY MUMS (WOMEN 21-45, PARENTS)	HEALTH OVERHAULERS (WOMEN & MEN 55+)	HEALTH PROFESSIONALS
ROLE OF CONTENT	Educate and motivate audiences to improve their health and wellbeing with nuts and inspire them in the kitchen with delightful recipes and snack ideas		Provide valuable expert knowledge on health & nutrition to health professionals
PILLARS	INSPIRED TABLE 10%	HEALTHY INDULGENCE 40%	HEALTH & WELLBEING 50%
CHANNELS	INSTAGRAM (70%)		FACEBOOK (30%)
FREQUENCY	WALL 6 posts per month	SPONSORED STORIES 2 stories per month	WALL 4 posts per month Repurpose Instagram stories (organic only)
	DARK ADS (across both Facebook & Instagram) Two dark ads per month targeting health professionals specifically with thought leadership content and expert knowledge on health and nutrition. Use traffic driver formats to drive them to the website including (where possible) carousels, image, and stories		

BITE COMMUNICATIONS ©

4

F21 CHANNEL
BREAKDOWN

HERO CHANNEL & ENGAGEMENT HUB

Feed: Inspiration and education ideally featuring a mix of created and curated content

Stories: Interactive and real-time storytelling to encourage participation

New - Highlights: Create a mini health hub with icons highlighting key health benefits and stories on the topic e.g. heart, weight.

Feed: 6 x posts optimised for engagement
Stories: 1 x engagement, 1 x traffic to website



SUPPORTING CHANNEL

Feed: Education and awareness about tree nuts and encouraging users to visit the website

Stories: Repurpose Instagram stories organically

Feed: 3 x posts optimised for engagement
1 x posts optimised for traffic to website
Stories: repurpose Instagram stories



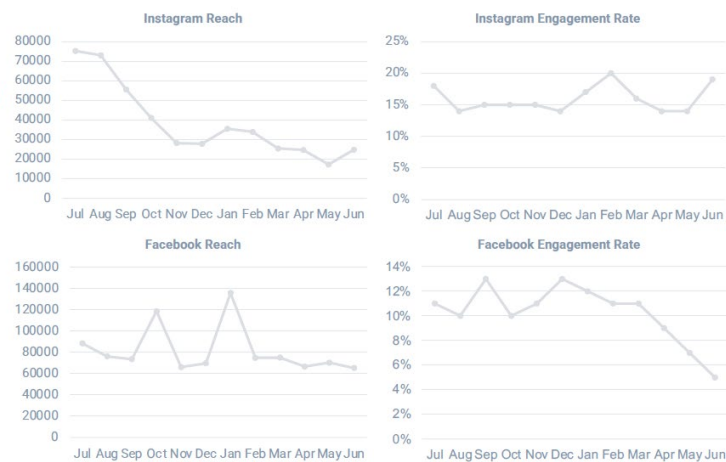
HCP ACTIVITY - DARK ADS

Feed + Stories: Utilise dark ads across Facebook and Instagram to target healthcare professionals (HCPs) to visit the website

Feed + stories: 2 x posts optimised for traffic to website

PERFORMANCE

PLATFORM	METRIC	CAMPAIGN KPI	ACHIEVED TO DATE	% ACHIEVED
CAMPAIGN ELAPSED				100%
Combined social	Impressions	1,671,000	1,593,995	95%
	Engagements	68,000	74,102	109%
Facebook	Impressions	1,006,000	918,044	91%
	Engagements	16,000	21,079	132%
	Engagement rate	8%	10%	Exceeded
Instagram	Impressions	665,000	675,951	102%
	Engagements	52,000	53,023	102%
	Engagement rate	13%	16%	Exceeded
Dark Ads	Impressions	100,000	258,535	259%
	Link Clicks	850	9,334	1,098%

PERFORMANCE BY
MONTH

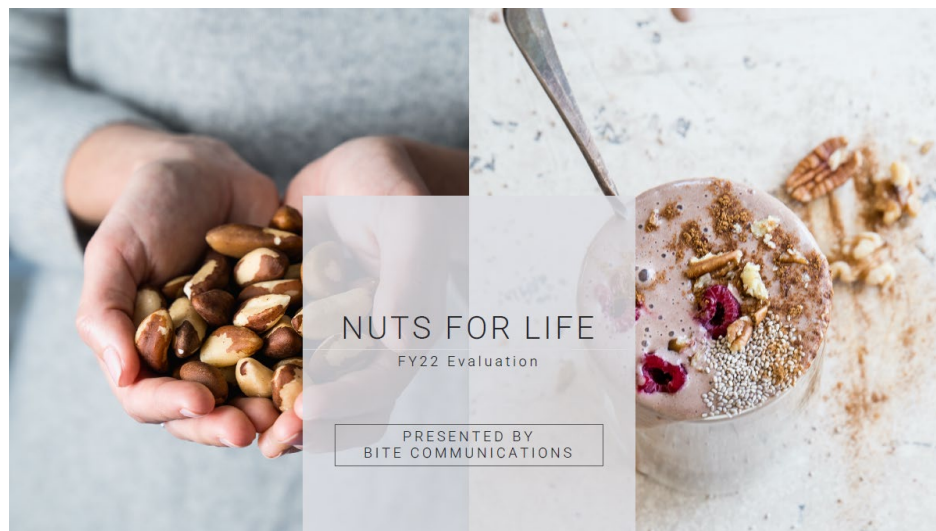
CONSIDERATIONS

Moving forward we'd recommend an overhaul of the Nuts for Life social channels to ensure they support Nuts For Life's three core program objectives.

To deliver maximum impact for the budget, we'd recommend:

- Focusing social activity on dark ads targeting health professionals, policy makers, key opinion leaders and influencers.
- Working with the Nuts for Life team on calendar of assets (e.g., short research summary papers) that Bite can use as lead magnets to build database and drive website traffic.
- Rather than shut down Facebook and Instagram, Bite preparing wall posts for Nuts for Life to schedule and manage – one post/month per channel, prepared in advance for Nuts for Life to post without amplification in order to maintain currency of content on page.

FY 2022



Media Bureau



As part of the F22 program, budget Bite provided media bureau support for Nuts for Life.

- Five papers were reviewed for newsworthiness
- A media release was created to support an SLR of 20 years of research on nuts and weight. This was issued to media (news and lifestyle), media dietitians and the dietitian database.
- Media requests were managed

It resulted in seven pieces of coverage across, online, print, broadcast and social media, achieving over 1,889,075 OTS (opportunities to see).

Highlights included two stories on Weekend Sunrise

Media Bureau – Results



It resulted in seven pieces of coverage across, online, print, broadcast and social media, achieving more than 1.8 million opportunities to see.

Highlights in included Body+Soul and two segments in Weekend Sunrise.

BODY+SOUL

Nuts don't cause weight gain – and might help keep it off – so crack out the pistachios



weekend sunrise





The FY22 Nuts for Life dark ads program supported Nuts for Life's three objectives for 2020-23:

1. Development of a high-level health claim,
2. Increased prominence in the Australian Dietary Guidelines, and
3. Reported energy content on packs reduced.



To do this, the dark ads activity targetted health professionals with content focused on:

- Amplifying the science about the nutritional benefits of tree nuts,
- Consistently reinforcing the role tree nuts play in preventative health, and
- Justifying more prominence for nuts in the Australian Dietary Guidelines.

The content and advertising strategy drove health professionals to the Nuts for Life website, to reinforce Nuts for Life as the leading nut nutrition authority.



Social Media – Results vs KPIs

PLATFORM	METRIC	CAMPAIGN KPI	ACHIEVED TO DATE	% ACHIEVED
Combined social	Link clicks	19,180	19,793	Achieved
	Cost per link click	\$0.25	\$0.23	Achieved
	Impressions	406,000	528,523	Achieved
	Cost per 1,000 impressions	\$11.82	\$8.68	Achieved
Campaign elapsed				100%
Facebook	Link clicks	16,690	17,752	Achieved
	Cost per link click	\$0.20	\$0.21	On track
	Impressions	277,800	439,659	Achieved
	Cost per 1,000 impressions	\$12.10	\$8.34	On track
Instagram	Link clicks	2,490	2,041	82%
	Cost per link click	\$0.60	\$0.45	On track
	Impressions	128,200	88,864	69%
	Cost per 1,000 impressions	\$11.25	\$10.34	On track

*CPC and CPM are based on raw media spend



Dark Ads – APRIL

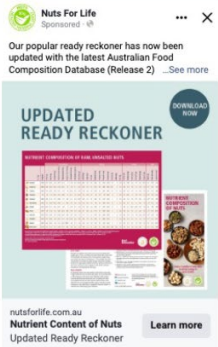
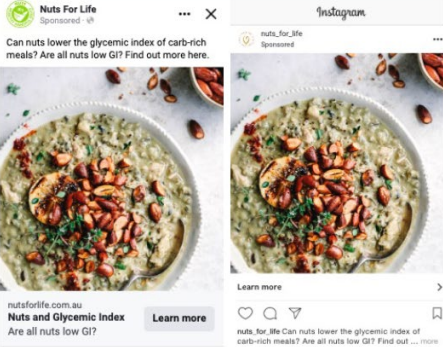


FACEBOOK & INSTAGRAM	FACEBOOK & INSTAGRAM
588 link clicks \$0.34 cost per link click 23,749 impressions \$8.42 cost per 1,000 impressions	1,590 link clicks \$0.13 cost per link click 22,073 impressions \$9.06 cost per 1,000 impressions
nutsforlife.com.au Nuts and brain health Eating nuts regularly is go... Learn more	https://www.nutsforlife.com.au Phytosterols and Nuts Check out the latest resea... Learn more



Dark Ads – MAY

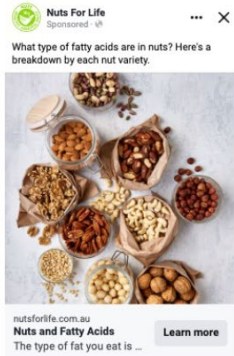
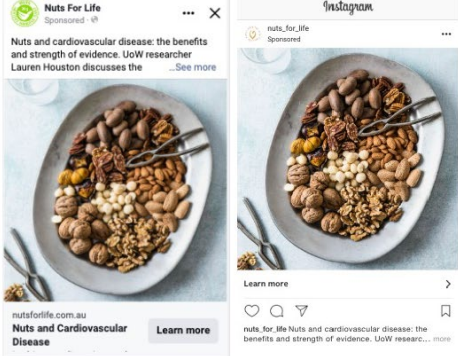


FACEBOOK & INSTAGRAM	FACEBOOK & INSTAGRAM
762 link clicks \$0.26 cost per link click 22,850 impressions \$8.75 cost per 1,000 impressions	905 link clicks \$0.22 cost per link click 24,407 impressions \$8.19 cost per 1,000 impressions
 Updated Ready Reckoner Our popular ready reckoner has now been updated with the latest Australian Food Composition Database (Release 2) ...See more Learn more	 Can nuts lower the glycemic index of carb-rich meals? Are all nuts low GI? Find out more here. Learn more



Dark Ads – JUNE



FACEBOOK & INSTAGRAM	FACEBOOK & INSTAGRAM
512 link clicks \$0.46 cost per link click 19,061 impressions \$10.49 cost per 1,000 impressions	825 link clicks \$0.24 cost per link click 23,679 impressions \$8.45 cost per 1,000 impressions
 What type of fatty acids are in nuts? Here's a breakdown by each nut variety. Learn more	 Nuts and cardiovascular disease: the benefits and strength of evidence. UoW researcher Lauren Houston discusses the ...See more Learn more



Insights & Recommendations



Insight: Overall we achieved and surpassed our KPIs for the campaign. It is worth noting that Facebook was the much stronger performing platform and surpassed the set KPIs for the platform. Instagram did not perform as well, largely due to our change in strategy to implement a campaign level budget, designed to achieve greater CPC efficiency.

Recommendation: Depending on campaign priority consider placing more budget behind Instagram to drive impression and link clicks. Alternatively adjust KPIs for each platform to place greater weighting towards better performing channel.

Insight: The phytosterols dark ad with the strongest performing ad in Q4. It achieved an incredibly low CPC (\$0.13) and had the highest number of link clicks (1,590). This post highlighted that phytosterols found in nuts can help lower LDL cholesterol.

Recommendation: Health messaging, especially around heart health and cholesterol. Continue to share health messaging and research when possible / relevant.

Insight: Overall for Q4 Facebook performed much stronger than Instagram for the quarter. Following the recommendation in January that budget be implemented at a campaign level to ensure spending effectiveness, (Meta allocating budget according to the better performing platform/ audience)

Recommendation: Continue setting a campaign level budget to ensure the most effective and efficient results for each campaign.



KPIs

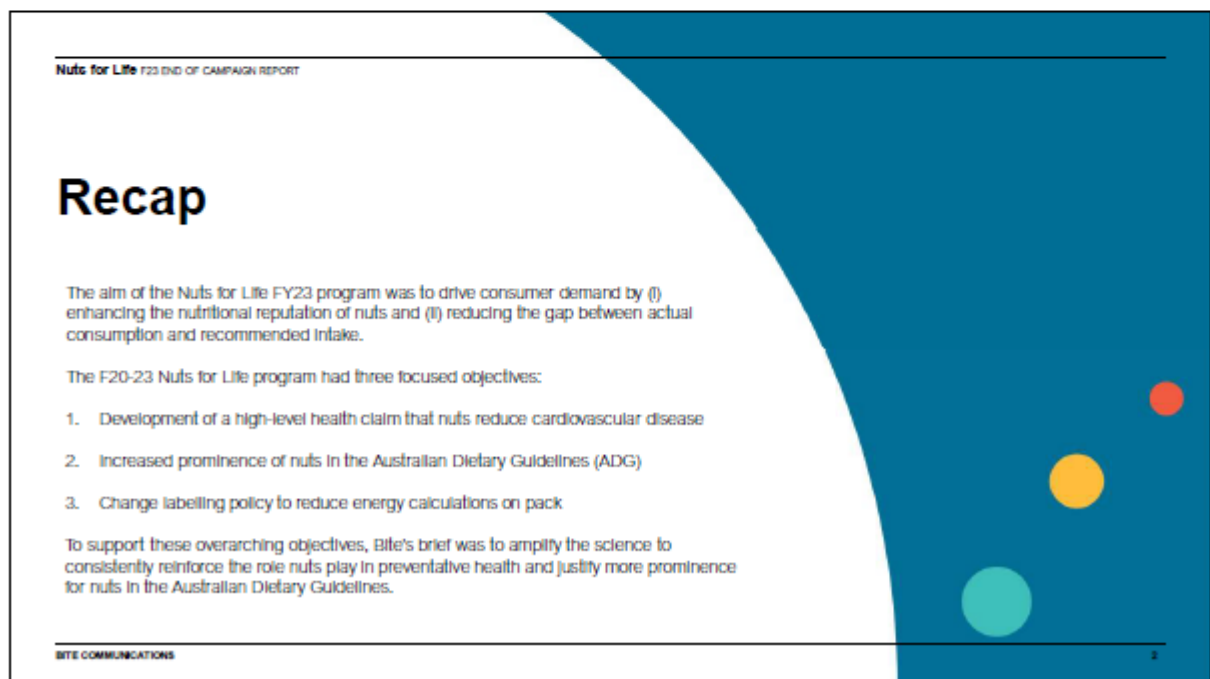
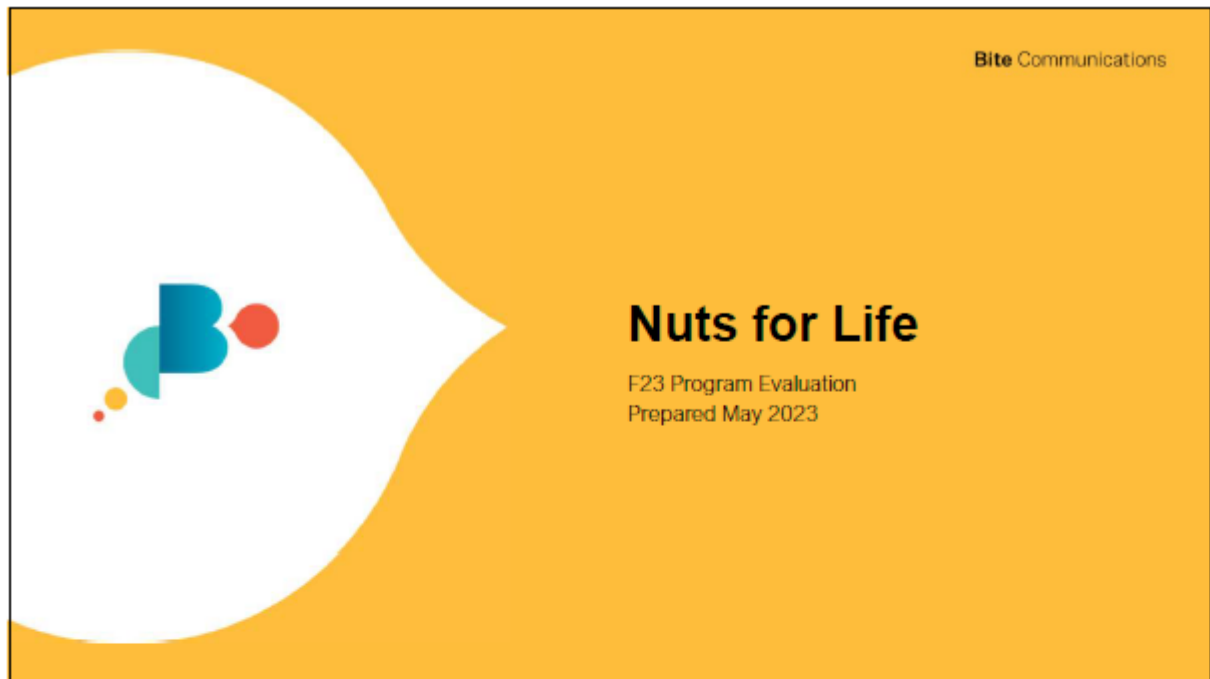


METRIC	KPI
TOTAL SOCIAL	
Link Clicks	19,180
Cost Per Link Click	\$0.25
Impressions	406,000
Cost Per 1,000 Impressions	\$11.82
FACEBOOK	
Link Clicks	16,690
Cost Per Link Click	\$0.20
Impressions	277,800
Cost Per 1,000 Impressions	\$12.10
INSTAGRAM	
Link Clicks	2,490
Cost Per Link Click	\$0.60
Impressions	128,200
Cost Per 1,000 Impressions	\$11.25

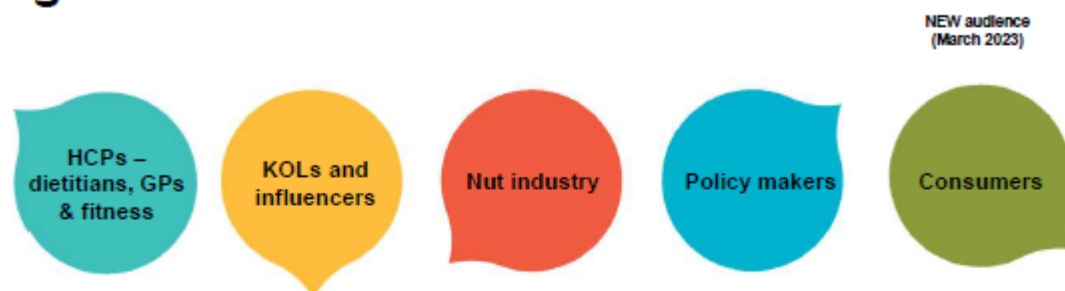
*KPIs benchmarked on FY21 Nuts For Life Dark Ad performance with a small buffer included to allow for increased competition. Recommend reviewing results after three months of activity to benchmark on real time results.

NB – the recent Apple iOS rollout means targeting, tracking and optimising Facebook campaigns to iPhone users has become more difficult (and more expensive). If Nuts For Life website visitors and social media users are majority iPhone users, there will be a higher cost per action and CPM due to the changes.

FY 2023 (interim)



Target audiences



Plan on a page

BUSINESS OBJECTIVE	Drive nut consumption and reduce key barriers to consumption			
COMMUNICATIONS OBJECTIVE	Enhance the nutritional reputation of nuts to drive awareness, consideration and advocacy of the benefits of a handful of nuts a day			
POSITIONING	Nuts: A handful a day keeps the doctor away			
AUDIENCE	Policy makers	KOLs & influencers	Health professionals	Nut industry
STRATEGIC APPROACH	Amplify the science, consistently reinforcing the role nuts play in preventative health and justifying more prominence for nuts in the Australian Dietary Guidelines			
CHANNEL ACTIVITY	CONNECT	AMPLIFY	ADVOCATE	REINFORCE
	Event to engage HCPs and influencers, including presentation to hear the latest scientific research on nuts	Media bureau and supporting engaging content	Create tools to support N4L team in one-on-one advocacy	Dark ads

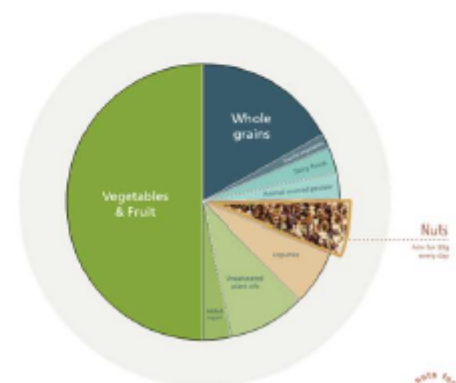


Advocate

Australian Dietary Guidelines

To support advocating for an increased prominence of nuts in dietary advice and in the ADG, as part of the current review, Bite:

- Developed clear messages for articulating Nuts for Life's vision and establishes a strong rationale for greater prominence.
- Created a presentation deck including the plate graphic (right) to deliver these messages in a compelling and visual manner for use at the HCP breakfast and as a basis for guiding discussions with key players.
- Provided strategic counsel and ongoing monitoring of the ADG review process.



Reference: adapted from Food to the Antipodes: the Australian Commission on healthy diets from sustainable food systems, LANCET, 2019; DOI: 10.1016/S2468-2667(19)30047-4. DOI: 10.1016/S2468-2667(19)30047-4





Connect

HCP Event

To support Nuts for Life's program objectives and deepen the impact of HCP communications, a face-to-face event was held in November 2022.

The aim of the breakfast was to share the latest scientific findings on the important role nuts play in preventative health, with a key focus on academic research Nuts for Life has invested in, as well as the rationale for increased prominence of nuts in the Australian Dietary Guidelines.



Expert insights

The event featured three speakers:

- Emeritus Professor Linda Tapsell from the University of Wollongong who spoke about the essential role of nuts in healthy dietary patterns – an excerpt from her Nuts2022 Conference presentation in Spain.
- Cassandra Nikodijevic, APD and PhD Candidate, University of Wollongong, who presented her research on nuts and weight, including metabolised kilojoule intake and energy compensation.
- Belinda Neville, APD and Program Director, Nuts for Life, presented the latest research on the heart health benefits of nuts and the importance of increased prominence of nuts in dietary, including the Australian Dietary Guidelines.

The presentations were filmed and made available as a resource on the Nuts for Life website.

Breakfast briefing

The breakfast at The Green Moustache, in North Sydney, was attended by 21 leading HCPs including dietitians, doctors, nutritionists, and industry KOLs.

A bespoke nut menu was served and guests received a jar of nuts, a printed research summary, fact sheets and infographics.



In the room



1. Rebecca Gawthorne, Dietitian + Nutritionist
2. Tatiana Bedkian, APD
3. Rachel Scouler, Dietitian
4. Dr Sue Radd, Adv APD
5. Kristen Back, Nutritionist + Naturopath
6. Zoe Bingley Pullin, Nutritionist
7. Nicole Dynan, APD
8. Catherine Saxelby, Accredited Nutritionist
9. Nicole Senior, APD + Nutritionist
10. Caitlin Reid, APD
11. Jamie Rose Chambers, Clinical Dietitian + Nutritionist
12. Stefanie Valakas, APD
13. Dr Alan Barclay, Dietitian
14. Kaylee Slater, APD + Nutritionist
15. Courtney Bates, Dietitian + Nutritionist
16. Milena Katz, APD
17. Karen Kingham, APD
18. Sara Grafenauer, Associate Professor + Adv APD
19. Rebecca Warren, Naturopath
20. Michelle McCracken, Brand Nutritionist
21. Angela Emmerton, Clinical Nutritionist

Take-home packs

- NEW summary of UoW research
- Heart health and kilojoule fact sheets
- Heart healthy and kilojoule infographics
- NEW six custom social media graphics

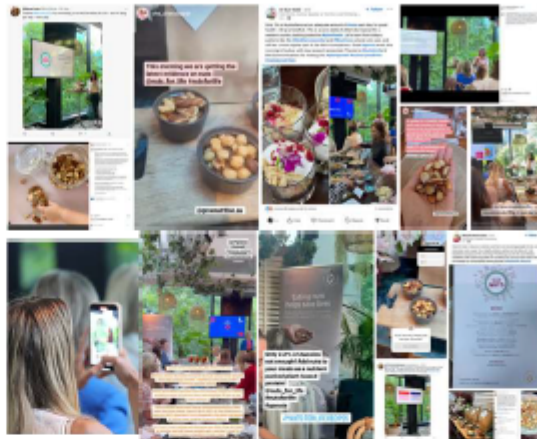
Take-away gift packs were shared with guests and sent to those unable to attend.

To amplify the messages beyond the event, a further 165 health professionals were emailed the research summary, fact sheets and social media graphics.



Social activity

Social media posts by dietitians at the event reached a potential audience of 244,384 with key messages from the event presentations.



Feedback

The event was an effective way to connect with key healthcare professionals attending and created a timely opportunity to share resources broadly to an extensive database of HCPs and stakeholders.

"It was such a great event! The resources are fantastic!"
— Rebecca Gawthorne, Nourish Naturally

"It was a fantastic event and I really enjoyed it. The venue was beautiful, delicious food... The speakers were great – it was good to get an update on the scientific evidence and all three speakers offered new and interesting information," - Michelle McCracken, Nestle Professional

"A great morning and great presentations," - Caitlin Reid, APD

"Fantastic to be back and having our educational updates again. It was a lovely venue and very fitting food. Such excellent speakers and wonderful to reconnect," - Nicole Senior APD

"Fabulous event!" – Milena Katz APD

Amplify

Media bureau

The media bureau program was continued as part of the FY23 campaign to support overarching program objectives by amplifying the latest scientific nut research, particularly in relation to heart health and weight.

This included reviewing papers and pitching newsworthy research via media releases, email alerts, tailored pitches to key media targets and direct distribution to media dietitians.

Bite conducted media outreach supporting three key pieces of research, including research funded by Nuts for Life:

- University of Wollongong's nut and energy metabolism research when presented at the DA conference,
- University of Wollongong's nuts and energy compensation research, and
- University of Bergen umbrella review on the health outcomes of eating nuts and seeds, including CVD, diabetes and cancer.

Results

The media outreach generated 8 piece of coverage achieving more than **2.4 million OTS** (opportunities to see).

The media bureau remains a cost-effective way to generate media coverage that:

- Raises awareness of the health and nutrition benefits of tree nuts,
- Delivers Nuts for Life key messages highlighting the role nuts play in preventative health and justifying more prominence for nuts in the Australian Dietary Guidelines, and
- Encourage consumption and address consumption barriers.



Reinforce

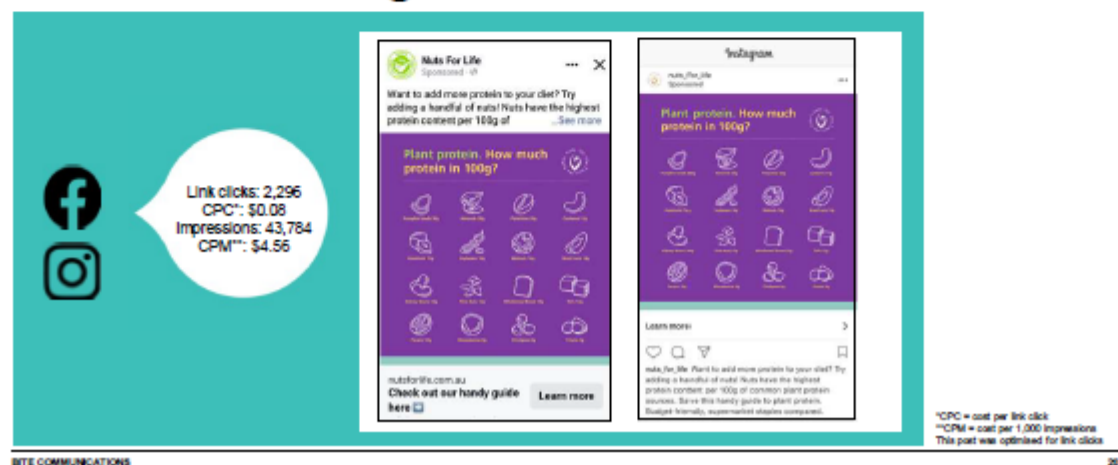
Social media dark ads

To support Nuts for Life 'always on' organic social posting and reinforce messaging to HCPs, Bite continued a strategy of boosted dark ads.

A total of 25 dark ads were created and boosted on both Facebook and Instagram with the objective of encouraging HCPs to click through to the Nuts for Life website.

Content, including graphics and videos from the HCP breakfast, reinforced messaging around nut consumption, heart health, dietary guidelines, energy absorption and plant protein.

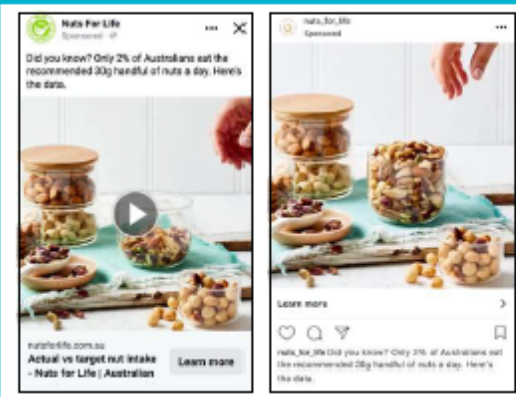
Best Performing Ad – Link Clicks



Best Performing Ad – Impressions



Link clicks: 44
CPC*: \$4.55
Impressions: 86,540
CPM**\$: \$2.31



*CPC = cost per link click
**CPM = cost per 1,000 impressions
This post was optimised for reach

BITE COMMUNICATIONS 21

Results

Reinforce

Dark ads continue to provide an effective way to target HCPs and drive website traffic, exceeding all program KPIs.

Key topics of weight, serving size, activated nuts and protein continue to resonate strongly with the audience.

Moving forward, we recommend setting overarching KPIs for Meta (not channel specific) and boosting the ads at a campaign level to get the best and most cost-effective results.

METRIC	KPI	ACHIEVED	RESULT
TOTAL META			
Link Clicks	16,486	19,393	118%
Cost Per Link Click	\$0.29	\$0.26	Achieved
Impressions	462,790	943,223	204%
Cost Per 1,000 Impressions	\$10.37	\$5.41	Achieved

Cost Campaign

Nuts: An affordable snack

In March 2023, Bite was briefed to reallocate funds earmarked for supporting a high-level health claim activity, to a consumer campaign addressing the nut consumption barrier of price, especially in light of cost of living pressures.

Bite developed a suite of four social media assets (graphics and video) positioning nuts as a healthy, affordable snack. Dietitian Rebecca Gawthorne was also commissioned to create a budget-friendly snack Reel for her social channels (@nourish_naturally 179K followers)

The assets will be delivered as a series of dark ads from April to June and have been shared with Nuts for Life members for their use.

Assets



Results to date

The campaign is underway with Rebecca Gawthorpe's post shared to her Instagram channel (197K followers) as well as Nuts for Life dark ads underway. Data to date:

METRIC	ACHIEVED TO DATE*
TOTAL META	
Impressions	65,825
Cost Per 1,000 Impressions	\$2.54
Engagements	112
Video Views (3 sec)	20,897
ThruPlays	7,270

Note: As we haven't conducted paid consumer activity on Nuts for Life social channels for two years, we have no benchmarks from which to set KPIs.

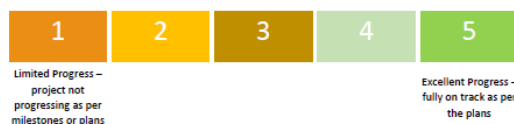
Normally we would monitor for three months and then set KPIs from the benchmark of activity, but given the short timeframe of this unique project, we propose to instead monitor and report impressions, ThruPlays, video views and engagements, as well as the cost per action of each.

**Data until 2 May 2023*

Appendix 6 – M&E

a) M&E Progress Dashboards

M&E Progress Dashboard – May 2023



KRA 1	Progress made to date					Aim (end 2023)
End of project objective An evidence-based case and support to progress the formal positioning of nuts as a healthy and beneficial component of consumer diets is established and submitted to appropriate bodies for consideration for changes to formal classifications	1	2	3	4	5	Documentation completed, endorsed by key industry people and submitted as required with positive feedback from relevant decision making bodies for: • Amendments to the Food Standards Code • Increased prominence of nuts in Australian Dietary Guidelines • Modifying nut packaging nutrition information
	• HLHC – Uni Wollongong contracted and scope research commenced March 2021. SLR commenced for nuts and CVD July 2021 and completed Nov 2021; FSANZ discussions for directional advice Aug, Dec 2020, March, April, Nov 2021. Draft application submitted to FSANZ Dec 2021. Written and verbal feedback on draft completed April 2022; Additional info and research conducted with the aim to submit FINAL application June/July 2022. FINAL application submitted Aug 2022. Preliminary assessment feedback received from FSANZ October, which resulted in withdrawing application. Currently reviewing the evidence to determine gaps to then re-submit the application. New claim direction: Nuts reduce cholesterol presented and agreed at MC meeting April 2023. Will work with INC research to substantiate claim and re-submit. • ADG Review – Direction agreed with MC March 2021; NHMRC scoping survey submitted March 2021. Key message document produced; Activities to communicate our position ongoing (e.g., webpages, e-newsletters, plate visual, Go Nuts event, Nov 2022). Report: Elevating nuts in dietary guidance produced and shared with industry and HP					

	stakeholders via eDM and direct email. - [NHMRC timelines delayed]. Energy Labelling PhD – initial discussions with FSANZ April 2021; project approved and commenced April 2021; with Final PhD proposal presented Nov 2021. Study 1a and 1b complete; and two papers published in Advances in Nutrition. Study 2 well almost complete; Study 3 ethics approved, survey in field April-May 2023.					
Intermediate Outcomes Industry stakeholders endorse research outputs and are supportive of submission process. Positive initial meetings and feedback from decision-making bodies to submission discussions	1	2	3	4	5	- Stakeholders are aware, engaged and supportive of research outputs, resources and emerging submissions. - Initial feedback from relevant decision-making bodies in terms of indicative evidence to be included in submissions.
Communication activities - Provision of technical representation of nuts in key government frameworks – providing technical input to government agencies and relevant organisations (e.g., FSANZ; Diabetes Australia); attending meetings of technical committees - Maintain and develop relationships with key individuals, organisations and peak health bodies	1	2	3	4	5	Strong engagement in technical relationships with key individuals, organisations and peak health bodies and undertaken planned support and information sharing.
	- FSANZ PEAL submissions; gazetted Feb 2021 - NHMRC Scoping survey for ADG review submitted; liaison with contributors re approach for ADG, and sharing of outcomes of events to promote increasing prominence of nuts (i.e., Go Nuts). Report 'Elevating nuts in dietary guidance' developed and shared via eDM. - Engagement with FSANZ re HLHC; and with FSANZ, INC and KIND					

• Maintain sponsorships at relevant events and memberships to key organisations • Continue to affiliate with and maintain exposure to and seek support and guidance from key organisations. • Provide support for nutrition-based activities (e.g., Labelling assistance; food standards code advice) • Share relevant and timely research data	manufacturer re Energy labelling. Engaged with INC regarding research to support re-submission of HLHC application; research identified to assist in achieving claim. • Sponsorships and memberships: AA&A activities included recipe card project and guest blog on nut allergy; Heart Foundation approached for HLHC partnership, but due to COVID which has impacted fundraising, unlikely to proceed. • Research sharing: Monthly research eDM updates; ad hoc and quarterly contributor eDM updates; monthly update for contributor marketing and communications contacts (commenced March 2021); podcasts (monthly); 'New nut research' webpages (monthly); and webinars (March 2022); and via conferences (March and May 2022). • Media and influencer outreach: Nuts and prostate cancer (Nov 2020); Plant and animal protein (March 2021); Almonds and reduced energy absorption (April 2021); Nuts and weight (Sept 2021); Nut Day (Oct 2021); Nuts and CVD risk (March 2022); ADGs (March 2023); Nuts and IJ absorption and published research (March 2023). • Contributor engagement event (March 2022) as part of ANC, was well received and gained an additional 3 contributors to the program.						
Outputs • Dossier of evidence substantiating a high-level health claim that nuts reduce risk of heart disease and/or reduce cholesterol. • Collated research and science dossier to support nuts having a more prominent share in next revision of ADGs • Market Research for Health Professionals and Consumers • PhD Research ○ A systematic review of the literature, exploring the evidence base on the available energy from nuts ○ A dietary modelling study examining the	<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table> • ADGs Review - collation of studies and themes for strategic approach (ongoing) - scoping survey responses submitted to NHMRC - plate visual model completed - key messages document created - Summary report created "Elevating nuts in dietary guidance" - Event: Go Nuts for key HP influencers (Nov 2022) • HLHC	1	2	3	4	5	Complete research outputs as planned – to a high quality and suitability for purpose.
1	2	3	4	5			

impact of metabolisable energy available from nuts on total energy intakes and weight loss, compared to the traditional Atwater factor calculations. ○ Qualitative research results exploring perceptions of the energy value of nuts, their impact on body weight, and the potential for including metabolisable energy on nutrition information panels	- Research dossier – complete Nov 2021 - DRAFT submission Dec 2021 - FINAL submission Aug 2022 - Summary report for HP produced March 2022 - Manuscript submitted for publication Dec 2022 - New dossier currently being collated for new claim direction: Nuts reduce cholesterol (with support from INC funded research) ● Market research – Nuts and sustainability Dec 2021, HP Tracking research March 2023; Health info consumer research March 2023. ● PhD research - SLR Study 1a and 1b complete (Metabolisable energy and Energy compensation); manuscripts submitted with two papers published. Study 2 Dietary modelling well-underway. Study 3 survey currently in field. - Podcast episodes (Jan 2022 and Jan 2023); and presentations at conferences (NSA Nov 2021; ANC March 2022, NSA Nov 2022, upcoming DA July 2023).						
Research and Foundational activities	<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table>	1	2	3	4	5	Scientific research undertaken as planned and achieved with rigour the desired research outcome.
1	2	3	4	5			

• Nuts Nutrition Research Review - to generate content for resources and communication • Scoping of protein quality of nuts and comparison – (NRA) • HLHC scope and review (NRA/UOW) • Project on available energy in nuts – PhD research (UOW) • Health Professionals and Consumer market research – (Consumer Insights)	• Nuts Nutrition research review – project being completed in-house to develop content for resources and communications (ongoing). Successful strategy which captures approx. 20 papers per month, used in monthly eDMs, webpage development, media etc. • Protein quality – research complete; report produced and shared with HCPs via eDM and upcoming conferences (GPCE, DA); media release and influencer outreach • HLHC – Scope completed June 2021, and informed direction for SLR. SLR complete Nov 2021. • Energy labelling – commenced April 2021; two scientific papers published; presentations and media, influencer outreach; will be finalised September 2023. • HP Market research – sustainability Dec 2021; tracking research March 2023.	
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KRA 2	Progress made to date					Aim (end 2023)
End of project objective Targeted Health Professionals (Dietitians; General Practitioners; and Fitness Professionals) have a greater understanding about the health benefits of nuts and are therefore more likely to recommend nuts to clients and patients.	1	2	3	4	5	Targeted Health Professionals have an increased awareness, understanding and acceptance of the health proposition of nuts and are increasing their advice to clients and patients about using nuts for health and environmental benefits.
Intermediate Outcomes Health professionals are interested, interacting, seeking information and positive about key messages and resources being distributed.	1	2	3	4	5	High level of interest shown, information being accessed and indicative reactions and use of information available by targeted health professionals.

	• Fitness professionals' webinar evaluation: 93% likely to recommend nuts after participating; 96% agree nuts are essential to be consumed at least several times/week; 95% said they understood that 30g is the recommended daily target of nuts. • Dietitian connection webinar: 497 views, with 96% of survey respondents rating the webinar as 'excellent' or 'very good'. • Podcasts: continues to perform strongly. 31 episodes produced to date, 3,625 unique downloads through Libsyn (hosting site), with an average of nearly 150 downloads per episode (for the 10 most recent; was 105/episode for the first 10) - an impressive result for 'long-form' content, involving a time commitment from listeners (in this case, targeted to health professionals). • Conferences: reflective evaluation shows high level of interest in research and resources • Media influencers sharing key papers and research throughout their own channels and platforms (e.g., Plant protein CVD and Dementia, March 2021; Weight, Oct 2021; Nuts and kJ absorption, May 2022; Nuts and CVD, June 2022; Increasing prominence of nuts in dietary guidance, Nov 2022); Nuts and kJ absorption: published paper (March 2023); New research, event and ADGs (March 2023).						
Communication activities Dissemination of nuts and health messages through: • Conferences and events – exhibitions; presentations • Webinars and podcasts • Traditional media – media releases • Medical Journal media (GPs) – on-line educational channels (e.g., AusDoc. Plus) • Social media; electronic newsletters; website • Samples Plus (GPs – 4,000/campaign)	<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table> • Conferences and events GPCE Sydney, May 2021 (exhibit on weight and kilojoules; audit report; protein report) Dietitians Aust, July 2021 (virtual conference; exhibit and presented on Nut audit results) FILEX, August 2021 (cancelled and rescheduled July 2022) GPCE Melbourne, Nov 2021 (cancelled) GPCE Sydney, May 2022 (exhibit on Nuts and CVD; Nuts and kJ absorption)	1	2	3	4	5	Communication and engagement activities have been undertaken as planned and a good number of targeted health professionals have responded, accessed or requested information and assistance.
1	2	3	4	5			
• [Potential activities with Gym chains; registered bodies etc] • [Potential - Health Professionals ambassadors' Program]	FILEX, July 2022 (exhibit on Nuts and kJ absorption; plant protein) Dietitians Aust, Adelaide, Aug 2022 (exhibit and oral presentations on Nuts and CVD; Nuts and kJ absorption) GPCE Melbourne, Nov 2022 (Nuts and CVD; Nuts and kJ absorption) Australian Strength and Conditioning Association, Nov 22 (Satchel insert- Factsheets: Nuts for weight and fitness, Nut FAQs) Go Nuts health professional briefing event, Sydney, Nov 2022 (Nuts and dietary patterns; Nuts and kJ absorption; Nuts and CVD and dietary guidelines). • Podcasts: Activation, weight, heart, protein, sustainability, med diet, allergy, barriers and perceptions, cognition, Best of 2021, Metabolisable energy of nuts (PhD), Peanut allergy, Farmgate, FAQs, Nuts and CVD, Nuts and fitness, Food and mood; Skin health; Nuts, seeds and heart health; Fertility; Gut health; Best of 2022; Energy compensation, Almonds and appetite, Diet quality and environment, Blood lipids, Men's health. • Media releases: Nuts and prostate (Nov 2020); plant protein and dementia (March 2021); Nuts and weight (Sept 2021); Nuts and CVD (March 2022); Nuts and kJ absorption (Jan 2023). • GP: Targeted education campaign via Samples Plus (July and Sep 2021, Feb 2023), and Samples Now (Nov 2021- Dec 2022) • Medical journals: Diabetes management journal article (Aug 2021) • Social media: dark ads, FB, Instagram, Twitter and LinkedIn • Fitness professionals: ESSA ads; SDA editorial x 6 & fact sheets x 2; Fitness Australia/FILEX bronze partnership, including Masterclass (Nov 2021); ASCA conference satchel insert and journal articles x 2						
Outputs • Education resources to support information dissemination – including factsheets; reports; handbooks; graphics • Key educational messages developed around health & well-being; disease prevention and management; healthier world	<table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td></tr></table> • 9 x Factsheets (Mortality, Kilojoules, FAQs; Nuts and fitness, Nuts and fitness FAQs; What you need to know; Nutrient Composition [updated]; Nuts and kJ absorption [updated]; Nuts and heart health [updated])	1	2	3	4	5	Educational resources developed as planned - useful for purpose and user-friendly
1	2	3	4	5			

- Media articles, podcasts - Medical Journal articles	4 x Reports (Plant protein, Audit, Nuts and CVD, Dietary guidance) 31 x Infographics (30g serve, Consumption low/Benefits high, Weight, Why Important, Protein per 100g, Protein Nuts, Salt, Rethinking kj, Nuts and CVD, Nut Day x 9, Nuts x 12), Affordable snack - Approx. 7 new webpages per month which include health days, new nut research, and topical articles on nuts and health 31 x podcasts (plant protein, creative cooking, heart health, nut activation, history of Nuts for Life, weight, nut audit, sustainability x 2, Med diet pattern, allergy, cognition, perceptions of nuts, best of 2021, metabolisable energy of nuts, peanut allergy, farmgate nut, FAQs, nuts and CVD, nuts and fitness, food and mood; skin health; nuts, seeds and heart health; fertility; gut health; best of 2022; energy compensation, almonds and appetite, diet quality and environment, nuts and blood lipids, men's health. 7 media releases and associated activities (prostate cancer; protein and dementia, nuts and weight; nuts and longevity; nuts and sleep; Nuts and CVD; Nuts and kj absorption).	
Research and Foundational activities Develop communication and engagement strategy for contributors and stakeholders including retailers	1 2 3 4 5 - Communications plans created and implemented – plant protein, fitness professionals, audit results, Vision 2030 - Contributor engagement plan created and implemented - Breakfast event held as part of ANC (March 2022) successful in recruiting an additional three contributors - Evaluation of contributor (marketing and comms) newsletters (June 2022), and an action plan created.	Engagement is completed and seen as providing what is needed for the project and modified based on context and feedback.

Project Management	Progress made to date					Aim (end 2023)
- Nuts for Life Management Committee (MC) - Project Reference Group (PRG) – with Terms of Reference - Staff	1	2	3	4	5	- MC and PRG has desired representation from industry stakeholders - Members of MC and PRG have full opportunity for input into and feedback on project. - Project is on track and on-budget
	- MC Meetings – October 2020, March and June 2021, September 2021, Feb 2022, April 2022, Aug 2022, Oct 2022, Feb 2023, April 2023; with minutes - MC coffee catch ups (ad hoc) – October, November 2020, April 2021 - PRG – Terms of Reference finalised Nov, and first meeting held Dec 2020; ad hoc meetings with members, as required (i.e., fitness for FILEX work; and regulatory for HLHC work). PRG meetings not held regularly, as it wasn't deemed necessary.					

b) End of project evaluation



M&E REPORT

Nuts for Life Program 2020-2023

May 2023

ACKNOWLEDGEMENTS

This report would not have been possible without the willingness of the Nuts for Life stakeholders interviewed to share their experiences, perspectives and ideas. The detailed reporting and monitoring and evaluation data collected by the program team was also highly valuable.

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April 2023

Coutts J&R acknowledges the Traditional Custodians and Elders of Country throughout Australia, and their connection to land, sea and community. We particularly acknowledge the Traditional Custodians of the land where our offices are and pay our respects to Aboriginal and Torres Strait Islander Elders past, present and emerging. We recognise the continuation of cultural, spiritual and educational practices of Aboriginal and Torres Strait Islander peoples.

Disclaimer: This report has been prepared for the exclusive use and benefit of Nuts for Life and solely for the purpose for which it is provided. Coutts J&R Pty Ltd should be given due attribution if any part of this report is reproduced, distributed or communicated to any third party. We do not accept any liability if this report is used for an alternative purpose from which it is intended, nor to any third party in respect of this report.

SUMMARY

Program outcomes: Overall, stakeholders felt the Nuts for Life program had made significant progress towards achieving long-term change and had been effective in raising awareness of the health benefits of eating nuts among health professionals. The program was highly regarded in the industry and seen to be filling a unique gap by providing a coordinated whole-of-industry program, creating valuable knowledge and resources, and helping to avoid disjointed communication efforts. The program's focus on providing evidence-based research and dispelling myths and misconceptions around nuts was considered particularly important, with the communication and engagement activities seen to have been effective in engaging and informing those targeted.

KRA 1: Despite delays with the High Level Health Claim (withdrawn to strengthen) and Australian Dietary Guidelines review (timeline delays at NHMRC) – the energy labelling PhD is still on track (study 1 and 2 complete and 3 underway) – the work undertaken to date has been significant and critical in providing evidence-based information to support the engagement and communication activities. This evidence-based approach was seen by stakeholders to be essential in gaining the trust of both the nut industry and consumers – demonstrating health claims are not *merely anecdotal* but grounded in scientific research. The program's work in contributing to public health policy work was acknowledged.

KRA 2: Stakeholders reiterated the importance of Nuts for Life's role in educating and empowering health professionals and overall felt the program had made a positive impact in this area and helped raise awareness about the importance of including nuts in a healthy diet. The program reported a wide range of activities undertaken to engage and communicate with health professionals, with highlights including the Healthy Handfuls podcasts, NutENews monthly e-newsletter, presentations and exhibits at conferences, and the Go Nuts breakfast event. Positive feedback on some of these activities was received, with 91% of those surveyed finding the newsletter valuable or extremely valuable and 93% of those surveyed after attending the fitness professionals' webinar likely to recommend nuts after participating. The Health Professionals Surveys undertaken also provided evidence that health professionals' understanding around the importance of nuts in managing cholesterol is improving; and understanding of the importance of nuts in helping prevent type 2 diabetes and in managing weight remained high. While the survey did not specifically ask the direct influence of Nuts for Life in improving respondents' knowledge and understanding around these topics, as the primary source of information and education in the industry, it's likely the program has had an impact on the increasingly positive perception of nuts as demonstrated in the surveys.

Going forward: Suggestions by stakeholders on what the program should focus on going forward included: continuing to push for more high level health claims; expand its reach to a wider range of influencers; engage an external communication consultant to provide new perspectives to enhance the effectiveness of the program's communication activities; prioritise face-to-face engagements such as events and conferences; increased links with international partners; combine health messaging with environmental sustainability to create a more powerful and appealing message to attract consumers; and secure more monetary support from industry to ensure its future and maximise impact.

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1. INTRODUCTION

1.1 Purpose of this Report

This report provides a succinct summary of the Nuts for Life program's progress and impact during its 2020-2023 phase. The report is structured around the KRAs as detailed in the program logic (Appendix 4.1). Key stakeholders were interviewed to gain their perspective on the program's achievements and impacts; and the M&E dashboard reports and latest M&E milestone report produced by the program were used to provide summaries of overall activity progress. Stakeholders also provided suggestions on what they would like to see from the program going forward.

1.2 Project Background

Nuts for Life is a health education initiative from the Australian tree nut industry – representing across the supply chain including growers, importers, packers, distributors, retailers and industry associations. It is Australia's leading authority on the nutrition and health benefits of tree nuts, with a mission to educate people on the health benefits and empower them to eat more nuts. For the last 17 years, the Nuts for Life program and operation has been guided and serviced by a Management Committee comprising of experienced representatives across the nut industry supply chain. The Australian Nut Industry Council continues financial and legal responsibility of the Nuts for Life program.

Since its establishment in 2003, Nuts for Life has received in excess of \$3 million in voluntary funding contributions from over thirty members of the Australian tree nut industry supply chain, as well as nearly \$1.8 million from the Australian Government through Hort Innovation Australia and its predecessors, as matched funds. In addition, there has been legacy contributions from the Australian macadamia industry's marketing levy (~\$60,000 per annum, non-matchable). Nuts for Life has also successfully received several other investments via grants from the International Nuts and Dried Fruit Foundation (INC). The reputation of the Nuts for Life program has enabled us to leverage across other bodies and industry participants and will continue to facilitate investment into the future.

This phase of the Nuts for Life program focused on the plant-based eating movement, to ensure that nuts are at the forefront of plant-based healthy eating messages and guidelines, and in the minds of key health influencers.

1.3 Project Objectives

The Hort Innovation RFP stated the key objectives of the program as:

- Position nuts as the number one plant-based protein and showcase their unique value proposition in contributing to diets across the globe by supporting health and wellness, particularly as consumers move towards plant-based eating patterns.
- Educate health professionals on the latest scientific evidence underpinning nut consumption and the wealth of nutritional benefits.
- Increase health professional knowledge about the role of tree nuts in disease prevention and management.
- Educate health professionals on the environmental benefits of increasing nut consumption.

The 2020-2023 Nuts for Life program is meeting these objectives under the following Key Result Areas:

Key Result Area 1

An evidence-based case to progress the formal positioning of nuts as a healthy and beneficial component of consumer diets is established and submitted to appropriate bodies for consideration for changes to formal classifications.

- **Work towards amending the Food Standards Code:** Prepare a dossier of evidence substantiating a high level health claim that nuts reduce risk of heart disease and/or reduce cholesterol and hold meetings with FSANZ to submit the evidence for consideration for amending the Code.
- **Work towards revision of nut recommendations in Australian Dietary Guidelines:** Develop the evidence and submit the case for nuts to feature more prominently in the next revision of the Australian Dietary Guidelines – i.e. eat daily serve recommendation similar to fruits and vegetables.
- **Work towards modifying nut packaging nutrition information:** Confirm the case to reduce the energy (kilojoule) value of nuts on nutrition information panels (and food composition databases).

It's important to note that the work towards target modifications are ongoing and cannot necessarily be completely achieved at the end of the three year program - however, the research and background information would be completed to support these modifications.

Key Result Area 2

Targeted Health Professionals (Dietitians; General Practitioners; and Fitness Professionals) have a greater understanding about the health benefits of nuts and are therefore more likely to recommend nuts to clients and patients.

- Educate health professionals on the latest scientific evidence underpinning nut consumption and the wealth of nutritional benefits.
- Increase health professional knowledge about the role of tree nuts in disease prevention and management.
- Educate health professionals on the environmental benefits of increasing nut consumption.

Intended Longer Term Outcomes

Achieving the Key Result Areas is expected to achieve the following outcomes:

- Solidify and amplify the General Level Health Claim.
- Create a public opportunity for industry stakeholders to amplify nuts' high-level heart health claims.
- Increased awareness of, and change in knowledge and attitude of the role of nuts in heart disease prevention.
- Raise the profile of nuts as an essential component of a healthy diet.
- Improve the nutrition reputation of nuts to become recognised as an essential food similar to fruits and vegetables.
- Retail packs of nuts would feature reduced energy content.
- Strengthen the position of nuts as a key plant food with aspirational health benefits.
- Break down the barriers and perceptions of nuts and weight management.
- Improve the perceptions of nuts and enhance nuts nutrition reputation.
- Give 'permission' for health professionals (particularly GPs and Fitness trainers) to: promote nuts for health and disease risk reduction; for health and weight management.
- Increase consumption and demand (to meet increasing supply).

1.4 Information Sources

Table 1: Key information sources used in this report

Information Source	Details
Stakeholder interviews	Eleven Nuts for Life stakeholders were interviewed in April 2023 to gain their insights on the program.
M&E progress dashboard and Milestone report	• The latest M&E progress dashboard (January 2023) was the primary used in providing details of project progress against KRAs. • The latest project milestone report (106 – January 2023) was also used to provided additional data not included in the progress dashboard.
Nuts for Life – Health Professional Survey	Data from the summary report of the Health Professional survey (March 2023, compiled by Maree Hall) was included where relevant.
Nuts for Life – Monitoring and Evaluation Plan	• The project M&E plan was used to structure the report – the project logic is included in Appendix 4.1.

1.4.1 Stakeholder Interviews

Stakeholders interviewed included: 1 funding partner; 2 Nuts for Life project staff; 4 management committee members (also business owners and representatives of industry); 2 other industry representatives; 1 service provider; and 1 researcher.

- Involvement in the program included: undertaking project research (including supervision of a PhD student researching nuts and energy labelling); overseeing project implementation; sitting on the Nuts for Life Technical Review Group; and via project emails.
- Those not directly involved in the program (companies and industry representatives) indicated having a good understanding of the project and its activities.
- Some stakeholders had gained information about the program through involvement with industry boards/councils (e.g. Almond Board of Australia and the Australian Nut Industry Council) as well as through industry publications (e.g. *In a Nutshell* and *Nut Grower Flash*).

2. FINDINGS

2.1 Program Outcomes

KRA 1 (End of program) An evidence-based case and support to progress the formal positioning of nuts as a healthy and beneficial component of consumer diets is established and submitted to appropriate bodies for consideration for changes to formal classifications.	KRA 2 (End of program) Targeted Health Professionals (Dietitians; General Practitioners; and Fitness Professionals) have a greater understanding about the health benefits of nuts and are therefore more likely to recommend nuts to clients and patients.
KRA 1.1 (Intermediate) - Industry stakeholders endorse research outputs and are supportive of submission process. - Positive initial meetings and feedback from decision-making bodies to submission discussions.	KRA 2.1 (Intermediate) Health professionals are interested, interacting, seeking information and positive about key messages and resources being distributed.

2.1.1 Overall

Nuts for Life was recognised as having ambitious goals that challenge the status quo in the industry – including seeking high level health claims; increasing the prominence of nuts within Australian dietary guidelines; and changes to energy calculations for the nutritional profile of nuts on product labels.

- Overall objectives:** While some objectives were seen by stakeholders to have not been fully met over the past three years, it was felt the program has *gone from strength to strength*, with objectives becoming *bolder* and steps taken towards achieving significant long-term change. External factors were recognised as impacting the project's ambitious objectives, for example, delays to the National Health and Medical Research Council (NHMRC) Australian Dietary Guidelines Review (ADG) timeline. Despite this, the program was commended on effectively raising awareness of the nutritional benefits of eating nuts among key influencer groups particularly health professionals.
- Filling industry gap:** The program was highly regarded in the industry and seen to be filling a unique gap by providing a coordinated whole-of-industry program. Stakeholders believed that without Nuts for Life, there would be no collaborative approach, as no individual companies or peak industry bodies talk specifically about nuts to healthcare professionals. As the only group with the expertise to work on nutrition and health claims, Nuts for Life's role in this area was considered a real benefit to the industry, creating valuable knowledge and resources, and helping to avoid disjointed communication efforts.
- Trusted and reputable:** The program's focus on promoting the health benefits of nuts through evidence-based research and education was praised; with the focus on energy metabolism and dispelling myths and misconceptions (e.g. fat content and weight gain) considered particularly important, with the potential to have a *transformative impact* on nut consumption and overall perception of nuts in the market. Healthcare professionals were

seen to more likely to take information seriously when it comes from a trusted and reputable source such as Nuts for Life.

- **Effective communication:** Stakeholders felt the program's communication activities have been generally well-received in terms of disseminating research findings and new knowledge across a range of topics to a wide range of audiences. Specific communication activities highlighted included The Health Handful podcasts, presentations and exhibits at conferences, the Go Nuts breakfast event, and the program website.

Challenges

- **COVID-19:** Industry engagement and the program's ability to educate health professionals was seen to have been impacted as a result of the pandemic, with face-to-face activities and conferences only recently resuming. It was anticipated though, that once these activities regain full momentum, there will be a positive flow-on effect within the next 12 months.
- **Retailer resistance:** Overcoming retailer resistance was highlighted as an ongoing challenge. For example, a barrier to promoting heart health is getting retailers to adopt the message without feeling a sense of risk, and it was noted that many retailers selling private label products are hesitant and slow to change – working specifically with these types of retailers was suggested.
- **Economic climate:** The consumption of nuts was felt to be related to the economic environment more so than to promotional efforts. Due to the discretionary nature of nut consumption, the importance of pushing the health benefit perspective to maintain front-of-mind awareness was discussed, especially during current inflationary period.
- **Misinformation:** The challenge in reaching a wider audience beyond healthcare professionals and educating the public about the differences between good and bad fats was identified. It was acknowledged that tackling the myths around nuts takes time, and translating complex research findings into a consumer-friendly format was challenging. There were also seen to be other influential voices in the industry – many who are not health professionals – potentially having a significant impact on consumers.

The following table provides a summary of stakeholder comments relating to their overall project impressions.

Table 2: Stakeholder comments on overall project impressions

Key Points	Comments
Objectives	• Seeking high level health claims; increasing the prominence of nuts within the Australian dietary guidelines; and changing the energy calculations for the nutritional profile of nuts on product labels [MC & Industry] • Progress has been made towards impacting health claims, the Australian dietary guidelines, and package labelling, but these outcomes have not been fully met in this project. [Funding Partner] • There has been a reduction in nut consumption in recent years and the project has not seen a significant increase. [Funding Partner] • Objectives are getting bolder. [Project Team] • While some objectives have not been achieved, progress has been made towards achieving real and significant long-term change. [Project Team] • ambitious goals and has been challenging the status quo in the industry by striving for high objectives. [Project Team]

	- Project's objectives were ambitious and may not be achieved within the project's three-year lifespan due to factors beyond the program's control. [Service Provider] - Objectives were not entirely under the program's control and were not specific enough to be considered "smart" objectives (e.g. could not control timelines relating to the ADS). [Service Provider]
Filling an industry gap	- Brilliant and fills a gap that is not currently filled by any individual industry. [MC & Industry] - Without such a program, it would be challenging to get the message out to consumers. [MC & Industry] - Without them, there would be no one promoting or disseminating new research and studies. [MC & Industry] - The fact that no other organizations are talking about nuts collectively is an achievement for the industry. [Project Team] - Without nuts for life, the communications impact of the industry would become disjointed. [Project Team]
Promotion of Health Benefits	- Impressed with the evidence-based work of Nuts for Life and their efforts in promoting the health benefits. [MC & Industry] - Well-regarded by healthcare professionals in Australia. [Project Team] - The pitch and the work being done to communicate with health professionals (including the nut breakfast): efforts have covered a range of areas and have been beneficial. [Research] - Been effective in raising awareness of the nutritional benefits of eating nuts and among key influencer groups like health professionals. [Service Provider]
Communication Efforts	- Message about the health benefits of nuts is getting through, even to young people. [Companies/Industry] - While a lot of work goes into educating health professionals, there are other influential voices in the industry that are not health professionals and have a significant impact on consumers. [Companies/Industry] - Good reach and credibility. [Funding Partner] - Successful and long-running program in the nut industry, well-known both in Australia and internationally. [Project Team] - Found the podcast to be a valuable resource and appreciate the thoroughness of the research underlying the high-level health claim. [Research]
Challenges	- Consumers still make decisions based on the total amount of fat in a product rather than understanding the difference between good and bad fats, indicating that more work needs to be done in educating the public. [MC & Industry] - Recognizes the challenges they faced during the pandemic. The team has still found ways to educate and provide information to professionals and consumers. However, due to the lack of conferences and face-to-face interactions, it has been difficult to achieve their goal of educating health professionals. [MC & Industry]
Project Team	Program managers are knowledgeable, credible, and receptive to guidance from the management committee. [MC & Industry]

2.1.2 KRA 1

As reported in the M&E progress dashboards and the latest milestone report (January 2023), there have been some delays around KRA 1 activities: the high level health claim application was withdrawn based on preliminary feedback, with work underway to review the gaps and resubmit; and with NHMRC tracking behind on their project timeline there have been delays with work relating to the Australian Dietary Guidelines review – though activities to communicate the program's position are still ongoing. Energy Labelling PhD work is on track with studies 1a and 1b complete, Study 2 well underway, and Study 3 ethics approved and ready to begin in April-May 2023. A full summary of activity progress is in Table 3 below.

Stakeholder comments

Evidence-based research: Stakeholders believed Nuts for Life's emphasis on evidence-based research to support the promotion of the health benefits of nuts was important; and by presenting solid, robust, and scientifically backed research, the program ensures the information they provide is credible and reliable. One stakeholder commented they were *impressed by the solid and robust nature of the work*. This evidence-based approach was noted to be essential in gaining the trust of both the nut industry and consumers, as it demonstrates health claims are not *merely anecdotal* but grounded in scientific research.

Advocacy and policy: Nuts for Life was seen to be actively engaging in collaboration and advocacy efforts, working closely with government departments and other agencies to continuously feed information into the dietary guidelines currently under review. The program's work in contributing to public health policy work was acknowledged, particularly in filling a unique gap in the Australian nut industry by promoting the health benefits of nuts to health professionals and nutrition policymakers. It was hoped the program's efforts throughout the current Australian Dietary Guidelines review process will improve the prominence of nuts in the guidelines.

Potential benefits of the KRA 1 objectives identified by stakeholders included:

- **Securing a high-level health claim:** would elevate the perception of nuts from food to medicine; would drive awareness of the health benefits of nuts in the community; potential to transform the industry; would drive consumption of nuts; and has the potential for the most impact from a regulatory perspective as it may change actual regulation.
- **Changing the Australian dietary guidelines:** increase the prominence of nuts as a significant product on its own; increase the visibility of nuts and promote consumption and changing misconceptions about weight gain; and potential to inform future changes in regulations.
- **Changing the energy calculations and nutritional profile of nuts on product labels:** would help nutritionists, dietitians, and consumers make more informed decisions about weight control and overall health.

Reported progress

Table 3: KRA 1 progress as reported by the program

Activity/output	Reported progress
New food-health relationship Application (HLHC – High level health claim) Australia New Zealand Food Standards Code (FSANZ)	• FSANZ discussions for directional advice Aug, Dec 2020, March, April, Nov 2021. • Uni Wollongong contracted and scope research commenced March 2021. • SLR commenced for nuts and CVD July 2021 and completed Nov 2021. • Draft application submitted to FSANZ Dec 2021. • Written and verbal feedback on draft completed April 2022; • Additional info and research conducted with the aim to submit FINAL application June/July 2022. • FINAL application submitted Aug 2022. Preliminary assessment feedback received from FSANZ October, which resulted in withdrawing application. • Currently reviewing the evidence to determine gaps to then re-submit the application. • As a result of the withdrawal, the total budget allocated for the FSANZ application fee is unlikely to be spent prior to the end of this current project. • Results of HLHC shared with industry.

Australian Dietary Guidelines Review (ADG) National Health and Medical Research Council (NHMRC)	• Direction agreed with IMC March 2021 • NHMRC scoping survey submitted March 2021. Key message document produced. • NHMRC tracking behind on their projected timeline, meaning that our communication plans have subsequently been delayed. • Activities to communicate program's position ongoing and discussions continue with stakeholders (e.g., webpages, newsletters, plate visual, Go Nuts event, Nov 2022).
Energy Labelling PhD	• Initial discussions with FSANZ April 2021 • Project approved and commenced April 2021 • Final PhD proposal presented Nov 2021. • Timeline impacted slightly as a result of COVID and consequent staffing issues – budget still remains on target though. • Study 1a and 1b complete; manuscripts submitted for publication, with 1b accepted. • Study 2 well underway • Study 3 ethics approved, to be in-field April-May 2023. • Results of energy labelling shared with industry.

2.1.3 KRA 2

The program reported the following progress and highlights around KRA 2 (more details are included in Table 5):

- Education and engagement with Health Professionals ongoing, sharing the latest scientific evidence for nuts and health and the role of nuts in disease prevention— science monitoring process established, with monthly dissemination (eDMs); podcasts since Nov 2020; LinkedIn, Twitter and Dark ads posts; website; conferences etc.
- Educating Health Professionals on environmental benefits of increasing nut consumption – Sustainability podcasts x 2 (June and July 2021); Market research amongst dietitians (Dec 2021); Presentation to FING group (June 2022); key messages dossier and webpages (ongoing) to help inform further communications, and future direction of program.
- Research findings from KRA 1 projects (new food-health relationships and PhD sponsored energy research) shared with target audiences – GPs, dietitians and fitness professionals – which together comprise more than 70,000 health professionals.
- 31 podcast episodes produced to date, 3,625 downloads with an average of nearly 150 downloads per episode for the 10 most-recent episodes (was 105/episode for the first 10 episodes after launch) - an impressive result for 'long-form' content, involving a time commitment from listeners (in this case, targeted to health professionals).
- Media influencers sharing key papers and research throughout their own channels and platforms (e.g., Plant protein CVD and Dementia, March 2021; Weight, Oct 2021; Nuts and kJ absorption, May 2022; Nuts and CVD, June 2022; Increasing prominence of nuts in dietary guidance, Nov 2022).

Positive feedback was also reported:

- A March 2022 evaluation survey of the program's e-newsletter NutENews (100 responses) indicated 91% found the newsletter valuable or extremely valuable and 78% likely or extremely likely to recommend it. The newsletter's open rate also increased from 26 to 46%.

- Feedback from the webinar, to the Dietitian Connection audience, titled 'Cardiovascular disease and nuts: What does the science say?' had 497 views, with 96% of survey respondents (primarily dietitians/nutritionists) rating the webinar as 'excellent' or 'very good'.
- Feedback from the fitness professionals' webinar found 93% likely to recommend nuts after participating; 96% agreeing nuts are essential to be consumed at least several times/week; and 95% indicating they understood that 30g is the recommended daily target of nuts.
- Reflective evaluation of conferences showed high level of interest in Nuts for Life research and resources.

Stakeholder comments

Stakeholders reiterated the importance of Nuts for Life's role in educating and empowering health professionals – who they considered the most trusted source of nutrition and health information by consumers – and overall, it was felt the program had made a positive impact in this area and helped raise awareness about the importance of including nuts in a healthy diet. Valuable connections with health professionals were seen to have been established – a key objective of the project – and continuing to build on these relationships was considered critical (e.g. engaging new GPs entering the profession).

Market research undertaken by the program – the Health Professional Survey – was identified by stakeholders as providing good evidence that Nut for Life had increased health professionals' understanding of the health benefits of nuts.

Health Professionals Survey (February 2023)

The Health Professionals Survey was undertaken by the program at regular intervals to understand perceptions, attitudes and knowledge of nuts and their health and nutrition benefits amongst this key group. The latest survey was undertaken in February 2023 to help evaluate the 2020-2023 Nuts for Life program and was promoted via the NutENews database, and social media (Twitter and LinkedIn).

The table below shows questions from the current survey compared to results from previous years (2020 and 2018). Although the wording of questions differed slightly over the years, there is clear evidence that health professionals' understanding around the importance of nuts in managing cholesterol is improving. While understanding of the importance of nuts in helping prevent type 2 diabetes and in managing weight remained high, these were areas that could benefit from more education. The percentage of health professionals who recommend nuts as a part of a healthy diet it also at its highest level (95%).

While the survey did not specifically ask the direct influence of Nuts for Life in improving respondents' knowledge and understanding around these topics, as the primary source of information and education in the industry, it's likely the program has had an impact on the increasingly positive perception of nuts as demonstrated in the surveys.

Table 4: Health Professionals Survey comparisons

Questions	2018	2020	2023
Nuts are an important food in a diet that helps manage cholesterol	73% GPs/90% dietitians (somewhat/very important)	67% GPs/89% dietitians (somewhat/very important)	86% health professionals (agreed/strongly agreed)
Nuts are an important food in a diet that helps prevent type 2 diabetes	85% GPs/88% dietitians (somewhat/very important)	82% GPs/90% dietitians (somewhat/very important)	72% health professionals (agreed/strongly agreed)
Nuts are an important food within a diet that helps to manage weight	62% GPs/86% dietitians (somewhat/very important)	55% GPs/85% dietitians (somewhat/very important)	79% health professionals (agreed/strongly agreed)
Correctly recalled the Australian Dietary Guidelines recommended serve size for nuts as 30g	74% GPs/82% dietitians	68% GPs/78% dietitians	82% health professionals
Don't/newer recommend nuts to patients/clients	18% GPs/1% dietitians	21% GPs/2% dietitians	5% health professionals (95% recommend as part of a healthy diet)

Note: wording of questions differed slightly in 2023 compared to the 2018 and 2020 surveys

A summary of the 2023 survey results is included below:

- 225 respondents – 88 dietitians/nutritionists (39%), 36 GPs/doctors (16%), 22 nurses (10%), 16 fitness professions (7%), 11 diabetes educators (5%), and 52 Other (23% - e.g. retired health professional, support worker, chiropractor, naturopath, food scientist, occupational therapist, podiatrist, physiotherapist)
- 91% consider nuts as healthy foods that should be consumed regularly.
- Considerable number of health professionals (44%) recognise that not all the kilojoules in nuts are absorbed by the body – a complex area of science, which has been communicated by Nuts for Life over the past three years, that a not insignificant number of health professionals now appear to understand.
- Almost all health professionals (95%) recommend nuts to their patients/clients as part of a healthy diet.
- Most health professionals (84%) said they understand enough about the health implications of including nuts in diets. *Nuts for Life continues to communicate the nutrition and health benefits of regular nut consumption. Tracking market research of health professional knowledge and attitudes shows that when Nuts for Life ceases to educate a health professional segment, their nut knowledge declines slowly with time. This demonstrates that repeated exposure, and repetition of key messages in novel ways, are essential for education to be effective and to support health professionals to recommend nuts.*
- Health professionals gain health and dietary information from a variety of sources – e.g. professional bodies (54%), professional health organisations (51%), professional development such as courses/webinars/conferences (50%), online (50%), and government resources and publications (49%). Around 43% reported seeking health information from industry organisations (e.g. Nuts for Life).

- The types of resources that health professionals would like to see more of to help them understand the health benefits of nuts included: reports (66%), resources (eg. fact sheets, infographics, brochures) (61%), published scientific papers (50%), claims on food labels (47%) and expert presentations (e.g. at conferences, webinars) (45%). *The information health professionals say they want is consistent with what Nuts for Life is delivering, particularly in the last three years. This suggests that the communication channels of the program remain relevant for their needs.*

2.3 Program Activities

2.3.1 Engagement and Communications

KRA 1.2

- Provision of technical representation of nuts in key government frameworks – providing technical input to government agencies and relevant organisations (e.g. FSANZ; Diabetes Australia); attending meetings of technical committees.
- Maintain and develop relationships with key individuals, organisations and peak health bodies.
- Maintain sponsorships at relevant events and memberships to key organisations.
- Continue to affiliate with and maintain exposure to and seek support and guidance from key organisations (including NREFF; NUCIS; INC; Australian and international research institutions and universities and other relevant programs).
- Provide support for Nutrition-based activities (e.g. labelling assistance; Food standards code advice).
- Share relevant and timely research data.

KRA 2.2 Reaching Health Professionals

- Dissemination of nuts and health messages through:
- Conferences and events – exhibitions; presentations
 - Webinars and podcasts
 - Traditional media – media releases
 - Medical Journal media (GPs) – on-line educational channels (e.g. AusDoc.Plus)
 - Social media; electronic newsletters; website
 - Samples Plus (GPs – 4,000/campaign)
 - (Potential activities with Gym chains; registered bodies etc)
 - (Potential - Health Professionals ambassadors' Program)

The program reported extensive engagement and communication activities related to KRA 1.2 and KRA 2.2. Highlights included: The Healthy Handfuls podcasts (31 episodes and 3,625 downloads); NutEnews monthly e-newsletter (almost 4,000 subscribers and 91% surveyed finding it a valuable resource); presentations and exhibits at conferences (8 conferences since 2021 reaching well over 1,500 delegates); Go Nuts health professional briefing event (Nov 2022 attended by 21 key opinion leaders, with outreach to a further 165 health professionals); targeted campaigns to fitness professionals (ads, factsheets, editorials) and GPs (education via Samples Plus and Samples Now); media releases; and social media posts supporting and promoting activities (LinkedIn, Twitter, Instagram, Facebook).

A full summary of these activities is located in Tables 6 & 7 below.

Stakeholder comments

The project was commended by stakeholders on its efforts to engage with health professionals and to have achieved as much as it has, particularly considering the recent impact of the pandemic on face-to-face engagement activities, which were seen as one of the best methods of generating awareness and providing education on the health benefits of nuts.

The program's messaging around the nutrition and health benefits of nuts was seen to have been effective and constantly evolving, with the website a well-established source of information. The newsletters, social media, reporting, and advertising were noted to have significantly improved over time, with the program successfully being able to leverage stakeholders with large social media followings to amplify messages and reach more consumers.

The monthly newsletter was specifically highlighted as valuable in keeping stakeholders informed about the program. The podcasts and conference presentations were also praised for their effectiveness.

The table below summarizes stakeholder comments in relation to the program's communication activities and successes.

Table 5: Stakeholder comments on communication activities

Theme	Comments
Engagement Health Professionals	- Nuts for Life has effectively reached out to the health professionals' cohort, such as dietitians and nutritionists, and formed close connections with them. - The program has established relationships with key industry players, enabling knowledge sharing and collaboration. - Maintaining awareness and knowledge in this area is critical as new people enter the field.
Face-to-Face engagement	- The program has successfully engaged with audiences through seminars, conferences, and face-to-face events, which create conversations about nutrition and health and reach a broader audience. - Seminars are a successful way to engage with people because the audience is typically engaged and receptive. - Small face-to-face forums, such as breakfast events for industry and specific events for dietitians, have been effective in getting information to the right people.
Consumer education	- Creating an environment where nuts are perceived as healthy by all stakeholder groups can help submissions (Australian dietary guidelines) "land more powerfully." - Running a consumer education program alongside educating health professionals can create a stronger demand driver. - Health professionals care about what their patients care about, and driving consumer awareness and interest in the category can equip them to answer questions and ultimately create a stronger demand driver.
Whole category promotion	There is power in promoting the benefits of the entire nut category, rather than individual nuts, which can help achieve program objectives more effectively.
Management Committee	Support of key industry players on the management committee enables a high degree of sharing and use of the knowledge created by the program.
International collaboration and trade promotion	- Used the program's credibility to tell a great story in trade forums. [MC] - Leveraged the health benefits of nuts to collaborate with other countries, (culturally appropriate health fact sheets have been created for markets including Korea and Japan). This has helped promote the nut industry in trade forums.
Nuts for Life Website	- The project is research and science-based, producing communication materials such as scientific reports, research summaries, and evidence-based fact sheets (This is not being done by anyone else in the industry in Australia). - These materials are important in supporting the program's nutrition and health goals, and the website underpins this work.

KRA 1.2 Reported progress

Table 6: KRA 1.2 progress as reported by the program

Activity/output	Reported progress
Representation in government frameworks	FSANZ PEAL submissions; gazetted Feb 2021
Maintain/develop relationships	Contributor engagement event (March 2022) as part of ANC, was well received and gained an additional 3 contributors to the program.
Sponsorships/memberships	- AA&A activities included recipe card project and guest blog on nut allergy. - Heart Foundation approached for HLHC partnership, but due to COVID which has impacted fundraising, unlikely to proceed.
Affiliations/exposure with key organisations	NHMRC Scoping survey for ADG review submitted; liaison with contributors re approach for ADG, and to share outcomes of events to promote increasing prominence of nuts (i.e., Go Nuts).
Support for nutrition-based activities	Engagement with FSANZ re HLHC; and with FSANZ, INC and KIND manufacturer re Energy labelling. Will engage further with INC regarding research to support re-submission of HLHC application.
Research sharing	- Monthly research eDM updates - Ad hoc and quarterly contributor eDM updates - Monthly update for contributor marketing and communications contacts (commenced March 2021) - Podcasts (monthly) 'New nut research' webpages (monthly); and webinars (March 2022); and via conferences (March and May 2022). - Media and influencer outreach: - Nuts and prostate cancer (Nov 2020) - Plant and animal protein (March 2021) - Almonds and reduced energy absorption (April 2021) - Nuts and weight (Sept 2021) - Nut Day (Oct 2021) - Nuts and CVD risk (March 2022). - Dissemination activities complete and/or planned for Study 1: - Poster presentation at Nutrition Society of Australia Conference, December 2021 (reported in MS104) - Podcast episode, January 2022 (reported in MS104) - Presentation at Australian Nut Conference, March 2022 (reported in MS105) - Oral presentation at Dietitians Australian Conference, August 2022 - Oral presentation and summary fact sheet - 'Go Nuts' breakfast event, November 2022 - Oral presentation at Nutrition Society of Australia Conference, November 2022 - Podcast episode – recorded 18 January 2023, and scheduled to go live at the end of this month.

KRA 2.2 Reported progress

Table 7: KRA 2.2 progress as reported by the program

Activity/output	Reported progress
Conferences and events	- GPCE Sydney, May 2021 (exhibit on weight and kilojoules; audit report; protein report) - Dietitians Aust, July 2021 (virtual conference; exhibit and presented on Nut audit results) - GPCE Melbourne, Nov 2021 (cancelled) - GPCE Sydney, May 2022 (exhibit on Nuts and CVD; Nuts and IJ absorption) - FILEX, July 2022 (exhibit on Nuts and IJ absorption; plant protein) – ~200 delegates (followed up with email and gained additional subscribers to newsletter) - Australian Strength and Conditioning Association, November 2022 (satchel insert) - Dietitians Aust, Adelaide, Aug 2022 (exhibit and oral presentations on Nuts and CVD; Nuts and IJ absorption) – ~600 delegates - Two LinkedIn posts by Nuts for Life, relating to the research oral presentations, resulted in: 2,142 total impressions 56 total link clicks. - Five tweets by Nuts for Life, resulted in: 3,053 total impressions 47 likes, 13 retweets, 3 link clicks. - Australian Almond conference, Adelaide, 10-12 October, 2022 (presented research findings and FSANZ application process) – ~550 delegates - GPCE Melbourne, Nov 2022 (Nuts and CVD; Nuts and IJ absorption) – ~900 delegates - Go Nuts health professional briefing event, Sydney, Nov 2022 (Nuts and dietary patterns; Nuts and IJ absorption; Nuts and CVD and dietary guidelines) - Attended by 21 health professionals, and those unable to attend on the day were sent take-home kits. - A further 165 health professionals around Australia, received personal emails with the research summary, fact sheets and social media graphics. - Event was recorded, and links to these presentation recordings shared with database of contacts, and the wider nut industry via targeted social media advertising and via eDMs in January 2023.
The Healthy Handful Podcasts	31 episodes https://www.nutsforlife.com.au/the-healthy-handful-podcast/ 3,625 downloads with an average of nearly 150 downloads per episode for the latest 10 episodes - Topics include: plant protein; creative cooking; heart health; nut activation; history of Nuts for Life; weight; nut audit; sustainability x 2; Med diet pattern; allergy; cognition; perceptions of nuts; best of 2021; metabolizable energy of nuts; peanut allergy; farmgate; nut FAQs; nuts and CVD; nuts and fitness; food and mood; skin health; nuts, seeds and heart health; fertility; gut health; best of 2022; dietary quality and the environment; satiety; nuts and blood lipids
NutNews (e-newsletter)	- Monthly program e-newsletter (around 4,000 subscribers as of April 2023) - Open and click-through rates remain well above industry benchmarks. - Survey of subscribers undertaken in March 2022: 100 respondents 73% signing up to stay up to date on nut health and nutrition. 91% find it valuable/extremely valuable to them professionally. - All content seen as valuable – e.g. general nuts and health info (60%), disease/condition specific info (60%), research summaries (58%), recipes (49%), Nuts for Life resources (45%) – e.g. podcasts, infographics, fact sheets, nut FAQs (34%). 78% likely/extremely likely to recommend to their networks. 30% keep the info to themselves for PD, 19% pass on to clients/patients, 17% share with colleagues. 93% somewhat/strongly agree NutNews is a credible source of information.
Media releases	4 media releases and associated activities - Nuts and prostate (Nov 2020) - Plant protein and dementia (March 2021) - Nuts and weight (Sept 2021) - Nuts and CVD (March 2022)

	4 x media pitches (nuts and longevity; nuts and sleep; nuts and CVD; nuts and kj absorption)
Social media	All outputs (eg. summary reports, infographics, fact sheets and podcasts etc) have all been supported through Nuts for Life's social media channels (LinkedIn, Twitter, Instagram and Facebook).
Targeted campaigns	- Fitness professionals: - ESSA ads - SDA editorial x 7 & fact sheets x 2 - Fitness Australia/FILEX bronze partnership, including Masterclass (Nov 2021) - ASCA conference (4-5 November 2022) satchel insert and journal articles x 2 – attended by approx. 450 delegates, and the journal has a reach of ~5,700. - General Practitioners (GPs): - Targeted education campaign via Samples Plus (July and Sep 2021), and Samples Now (Nov 2021- Dec 2022) - Resource packs includes: Audit report – Energy, fat and sodium content of nuts; Nuts and kilojoule absorption fact sheet; Magnet – what does a 30g handful of nuts look like? - Extended campaign to continue to use the surplus resources in March 2022 – as of December 2022, 479 requests received.

2.3.2 Outputs

KRA 1.3 Research outputs - Dossier of evidence substantiating a high-level health claim that nuts reduce risk of heart disease and/or reduce cholesterol. - Collated research and science dossier to support nuts having a more prominent share in next revision of ADGs. - Market Research for Health Professionals and Consumers. - PhD Research: - A systematic review of the literature, exploring the evidence base on the available energy from nuts. - A dietary modelling study examining the impact of metabolisable energy available from nuts on total energy intakes and weight loss, compared to the traditional Atwater factor calculations. - Qualitative research results exploring perceptions of the energy value of nuts, their impact on body weight, and the potential for including metabolisable energy on nutrition information panels.	KRA 2.3 Educational outputs - Education resources to support information dissemination – including factsheets; reports; handbooks; graphics etc. - Key educational messages developed around health & well-being; disease prevention and management; healthier world. - Media articles, podcasts - Medical Journal articles
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All planned outputs were reported to be completed or on-track. Outputs supported the program's communication and engagement efforts, with further details and stakeholder feedback included in previous sections of this report. A summary of outputs is included in Tables 8 & 9 below.

Table 8: KRA 1.3 progress as reported by the program

Activity/output	Reported progress
High-level health claim	- Research dossier – complete Nov 2021 - DRAFT submission Dec 2021 - FINAL submission Aug 2022 - Summary report for HP produced March 2022

ADGs review	• Collation of studies and themes for strategic approach (ongoing) • Scoping survey responses submitted to NHMRC • Plate visual model completed • Key messages document created • Summary report created
Market research	• Nuts and sustainability, Dec 2021 • NutENews survey, March 2022 • Consumer research: FSANZ proposed labelling change, May 2022 • HCP Tracking research, Feb 2023 • Consumer Health Information study, Feb 2023
PhD energy research	• SLR Study 1a and 1b complete (Metabolisable energy and Energy compensation); manuscripts submitted to journal for publication, with 1b manuscript accepted. • Abstract (part 1) submitted for publication in <i>Advances in Nutrition</i> in April 2022. Currently under review. • Abstract (part 2) submitted for publication in <i>Advances in Nutrition</i> in July; accepted for publication in September, and published online on 17 December. A coordinated media outreach program is currently under development.

Table 9: KRA 2.3 progress as reported by the program

Activity/output	Reported progress
Educational resources	• 9 x Factsheets (Mortality, Kilojoules, FAQs; Nuts and fitness, Nuts and fitness FAQs; What you need to know; Nutrient Composition [updated]; Nuts and IJ absorption [updated]; Nuts and heart health [updated]) • 30 x Infographics (30g serve, Consumption low/Benefits high, Weight, Why Important, Protein per 100g, Protein Nuts, Salt, Rethinking IJ, Nuts and CVD, Nut Day x 9, Nuts x 12) • 4 x Reports (The effect of plant and nut protein on health; Nuts and risk of cardiovascular disease; The energy fat and sodium content of nuts; Elevating nuts in Australian dietary guidance) • Go Nuts presentation recordings
Website	• Website (115 new pages developed and 40 existing pages significantly updated, since project commenced) • Approx. 5 new/updated webpages per month which include health days, new nut research, and topical articles on nuts and health.
Articles/reports	• 4 x Reports (Plant protein, Audit, Nuts and CVD, Dietary guidance) • Diabetes management journal article (Aug 2021) • Abstract submitted to <i>Advances in Nutrition</i> journal and under review – 'Tree nut and peanut consumption and risk of cardiovascular disease: a systematic review and meta-analysis of randomised controlled trials' (Dec 2022) • ASCA journal articles (x 2) • Nutfruit and Nutgrower articles: - o ANC Nutgrower – e.g. September 2022 (update on project progress), December 2022 (update on FSANZ application, Go Nuts event, new infographics, and a research update), May 2023 (market research insights) - o INC Nutfruit – e.g. July 2022, November 2022 (update on PhD energy research)

2.3.3 Research and Foundational

KRA 1.4 Scientific Research

- Nuts Nutrition Research Review - to generate content for resources and communication
- Scoping of protein quality of nuts and comparison – (NRA)
- HLHC scope and review (NRA/UOW)
- Project on available energy in nuts – PhD research (UOW)
- Health Professionals and Consumers market research – (Consumer Insights)

KRA 2.4 Communication and engagement

- Develop communication and engagement strategy for contributors and stakeholders including retailers.

All research and foundational activities were reported as being completed or on-track. These activities underpinned the other KRAs, with more details included in previous sections of this report. Tables 10 & 11 below included a brief summary of progress.

Table 10: KRA 1.4 progress as reported by the program

Activity/output	Reported progress
Nuts Nutrition Research Review	• Project being completed in-house to develop content for resources and communications (ongoing)
Protein quality	• Research complete • Report produced and shared with HCPs via eDM and upcoming conferences (GPCE, DA); • Media release and influencer outreach
HLHC scope and review	• Scope completed June 2021, and informed direction for SLR
Energy labelling	• Commenced April 2021, ongoing
HP market research	• Sustainability Dec 2021 • HP Tracking market research, Feb 2023 • Consumer Health information study, Feb 2023

Table 11: KRA 2.4 progress as reported by the program

Activity/output	Reported progress
Comms and engagement strategy	• Communications plans created and implemented – plant protein, fitness professionals, audit results, Vision 2030 • Contributor engagement plan created and implemented. • Breakfast event held as part of ANC (March 2022) successful, recruiting an additional three contributors. • Evaluation of contributor (marketing and comms) newsletters (June 2022), and an action plan created.

2.6 Program Management and Governance

The Nuts for Life team was praised by stakeholders for demonstrating dedication and resilience, especially during challenging times (e.g. COVID-19). Their efforts were seen to have contributed significantly to the program's achievements and a reflection of their determination and commitment. They were commended on their effectiveness and willingness in explaining complex topics and providing guidance in areas such as labelling and promotions – saving the industry additional resources and effort. Activities included:

- MC Meetings – October 2020, March and June 2021, September 2021, Feb 2022, April 2022, Aug 2022, Oct 2022; with minutes
- MC coffee catch ups (ad hoc) – October, November 2020, April 2021
- PRG – Terms of Reference finalised Nov, and first meeting held Dec 2020; ad hoc meetings with members, as required (i.e., fitness for FILEX work; and regulatory for HLHC work).

3. GOING FORWARD

Stakeholders were asked what they would like to see the program do more of, as well as what they would like it to achieve in the next three years.

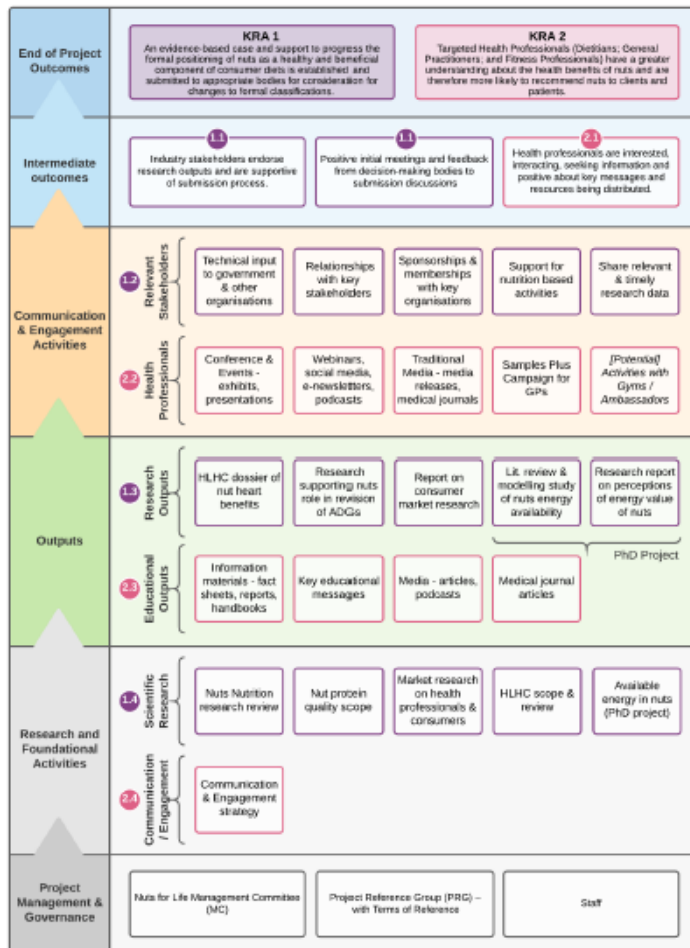
- **High level health claims:** Achieving the high level health claim and having it included in the Food Standards Code was widely agreed to be crucial and would be a *significant win for the industry*. Stakeholders believed this would allow companies to make more specific health related claims on packaging, which could boost consumer confidence and promote consumption by raising public awareness and trust in the nutritional value of nuts. The value of the program continuing to push for more high level health claims was also discussed – for example, the impact of nuts on diabetes and cholesterol management. The program's role in this area was seen as particularly important, as individual industries do not have the resources or time to achieve this.
- **Targeting a broader range of influencers:** It was considered important the program continue to engage with the program's core demographic of health professionals, though it was noted that increasingly people are getting their health advice from other sources – for example fitness and wellbeing personalities and social media influencers. It was suggested that targeting these alternative sources of information could help the program reach a wider range of consumers.
- **Communication and messaging:** While it was acknowledged the program's communication strategies had been generally successful, it was suggested an external consultant with communication experience could provide new perspectives to make the program's communication activities even more effective. For example, re-evaluating the *healthy handful* messaging was highlighted an area that could be reworked, focusing instead on encouraging people to consume nuts regularly and emphasising their health benefits without restricting the quantity consumed.
- **Face-to-face engagement:** It was agreed Nuts for Life prioritise face-to-face engagements, such as events and conferences. This type of direct engagement was seen to allow for better communication and personal connections, making it easier to effectively communicate the benefits of nuts.
- **International collaboration and research expansion:** It was suggested Nuts for Life would benefit from increased links with international partners, tapping into global research to *amplify* their work. Collaborating with external experts – including those with communication skills – was seen as a way to improve the program's impact and expand its research capacity. The program's evidence-based work was praised as impressive but could be improved by more visibility and a *louder voice* to reach a wider and global audience – to help establish nuts as a standalone healthy food in dietary guidelines.
- **Health and sustainability focus:** Nuts for Life was noted to be moving more towards the health and sustainability space – a key area for the nut industry – and by combining health messaging with environmental sustainability can create a more powerful and appealing message to attract consumers. The potential for the program to do more in this area was highlighted, including establishing better connections with industry and program contributors locally and internationally. While it was acknowledged progress had already

been made in this area, stakeholders felt it could be taken to the next level with more time and resources.

- **Increased resourcing:** Despite being *modestly resourced* with limited staff and budget, the program was recognised as an excellent example of industry collaboration working towards a common goal and its continuation essential in fostering further cooperation and progress within the nut industry. It was felt though, the program required more monetary support from industry to ensure its future and maximise impact. Securing voluntary contributions from industry was considered a challenge and distraction from focusing on program activities. If industry further increased its support, stakeholders believed the expanded resources would help scale up program activities and enable the team to achieve more in the nutrition and health space.
- **Industry collaboration:** There was seen to be potential for industry to share more of what they are doing with Nuts for Life, with opportunities to collaborate or help alleviate any issues. Communication was described as often one-way, with the program sharing what they are doing, but not always receiving feedback from industry.
- **Engaging growers:** The value of communicating information to growers was suggested. Improving their knowledge around the health benefits and empowering them with educational resources was seen as a potential way to help them promote their products *based on solid science*.
- **Addressing nut consumption barriers:** It was suggested that exploring the barriers to nut consumption and understanding the perspectives of non-nutrition health professionals could help refine the program's approach – ensuring the resources and information produced are accessible and useful to a wider range of professionals.
- **Project objectives:** Having more *controllable objectives* to better demonstrate the program's effectiveness was suggested – specifically acknowledging the influence of external variables and focusing on attainable goals that showcase the program's success.

4. APPENDICIES

4.1 Program Logic



Logic Level	Program Details - What to monitor	Performance Measures	Data Collection method
End-of-project outcomes	Key Result Area (KRA) 1: An evidence-based case and support to progress the formal positioning of nuts as a healthy and beneficial component of consumer diets is established and submitted to appropriate bodies for consideration for changes to formal classifications. Key Result Area 2: Targeted Health Professionals (Dietitians; General Practitioners; and Fitness Professionals) have a greater understanding about the health benefits of nuts and are therefore more likely to recommend nuts to clients and patients.	Key Performance Indicator (KPI) 1: Documentation completed, endorsed by key industry people and submitted as required with positive feedback from relevant decision-making bodies for: - Amendments to the Food Standards Code - Increased prominence of nuts in Australian Dietary Guidelines - Modifying nut packaging nutrition information Key Performance Indicator 2: Targeted Health Professionals have an increased awareness, understanding and acceptance of the health proposition of nuts and are increasing their advice to clients and patients about using nuts for health and environmental benefits. <i>Barriers and issues arising in working to achieve desired outcomes.</i>	- Project activity and output data and completed and reviewed documentation for submission to the decision-making bodies. - Final interview data from key stakeholders about their assessment of the evidence and the strength of the submissions. - Repeat of Health Professionals Market research surveys near end of project with relevant questions about awareness, understanding, acceptance and recommendations given and a comparison to 2020 survey. - Tracking the Nut Industry collections of 'apparent nut consumption' each year - Collation of M&E Data during the life of the project to report against Objectives and KEOs.
Intermediate outcomes	KRA 1.1 - Industry stakeholders endorse research outputs and are supportive of submission process. - Positive initial meetings and feedback from decision-making bodies to submission discussions KRA 2.1 - Health professionals are interested, interacting, seeking information and positive about key messages and resources being distributed.	KPI 1.1 - Extent to which stakeholders are aware, engaged and supportive of research outputs, resources and emerging submissions. - Initial feedback from relevant decision-making bodies in terms of indicative evidence to be included in submissions. KPI 2.1 - Extent of interest shown, information being accessed and indicative reactions and use of information available by targeted health professionals.	- On-going systematic documentation of level of feedback from key industry stakeholders about the outputs and process. - Minutes and structured feedback from the Management Committee and Project Reference Group in relation to outputs and emerging submission. - Structured feedback from events and activities and presentations undertaken (e.g. web surveys; feedback sheets). - Mid-term web survey of newsletter recipients. - On-going systematic feedback from individual and small group interactions with health professionals.
Communication and Engagement Activities	KRA 1.2 - Provision of technical representation of nuts in key government frameworks – providing technical input to government agencies and relevant organisations (e.g. FSANZ; Diabetes Australia); attending meetings of technical committees - Maintain and develop relationships with key individuals, organisations and peak health bodies - Maintain sponsorships at	KPI 1.2 Extent to which the project has engaged in technical relationships with key individuals, organisations and peak health bodies and undertaken planned support and information sharing.	- On-going systematic documentation of type and level of engagement with key industry stakeholders about the outputs and process. - Minutes and structured feedback from the Management Committee and Project Reference Group in relation engagement and communication activities.

Logic Level	Program Details - What to monitor	Performance Measures	Data Collection method
	relevant events and memberships to key organisations - Continue to affiliate with and maintain exposure to and seek support and guidance from key organisations (including NREFF; NUCIS; INC; Australian and international research institutions and universities and other relevant programs). - Provide support for Nutrition-based activities (e.g. labelling assistance; Food standards code advice) - Share relevant and timely research data KRA 2.2 Reaching Health Professionals Dissemination of nuts and health messages through: - Conferences and events – exhibitions; presentations - Webinars and podcasts - Traditional media – media releases - Medical Journal media (GPs) – on-line educational channels (e.g. AusDoc Plus) - Social media; electronic newsletters; website - Samples Plus (GPs – 4,000/campaign) (Potential activities with Gym chains; registered bodies etc) (Potential - Health Professionals ambassadors' Program)	KPI 2.2 Extent to which planned communication and engagement activities have been undertaken as planned and the extent to which targeted health professionals have responded, accessed or requested information and assistance.	- On-going systematic documentation, collation and presentation of communication and engagement outreach activities and potential reach. - Social media, podcast and web statistics of meaningful views, access and downloads - Questions in stakeholder interviews, market research, activities and web survey. - Questions in regular structured feedback from the Management Committee and Project Reference Group members.
Outputs	KRA 1.3 Research outputs - Dossier of evidence substantiating a high-level health claim that nuts reduce risk of heart disease and/or reduce cholesterol. - Collated research and science dossier to support nuts having a more prominent share in next revision of ADGs - Market Research for Health Professionals and Consumers - PhD Research - A systematic review of the literature, exploring the evidence base on the available energy from nuts - A dietary modelling study examining the impact of metabolisable energy available from nuts on total	KPI 1.3 Extent to which research outputs are completed as planned, their quality and suitability for purpose.	- Sub-contractor and PhD Milestone Reports and provision of draft and completed outputs - Reviews by relevant technical stakeholders, MC and PRG members - On-going systematic documentation of level of feedback from key industry stakeholders and targeted Health professionals about the outputs and process.

Logic Level	Program Details - What to monitor	Performance Measures	Data Collection method
	energy intakes and weight loss, compared to the traditional Atwater factor calculations. - Qualitative research results exploring perceptions of the energy value of nuts, their impact on body weight, and the potential for including metabolisable energy on nutrition information panels KRA 2.3 Educational outputs - Education resources to support information dissemination – including factsheets; reports; handbooks; graphics etc. - Key educational messages developed around health & well-being; disease prevention and management; healthier world - Media articles, podcasts - Medical Journal articles	KPI 2.3 Extent to which educational resources developed as planned, their usefulness for purpose and user-friendliness.	- Project reporting on education outputs produced - Questions in stakeholder interviews, market research, activities and web survey. - Questions in regular structured feedback from Management Committee and Project Reference Group members.
Research and Foundational activities	KRA 1.4 Scientific Research - Nuts Nutrition Research Review - to generate content for resources and communication - Scoping of protein quality of nuts and comparison – (NRA) - HILHC scope and review (NRA/UOW) - Project on available energy in nuts – PhD research (UOW) - Health Professionals and Consumers market research – (Consumer Insights) KRA 2.4 Communication and engagement - Develop communication and engagement strategy for contributors and stakeholders including retailers	KPI 1.4 - Extent to which scientific research undertaken as planned, the rigour of the methods employed and the extent to which it achieved the desired research outcome. KPI 2.4 - Extent to which engagement is completed and seen as providing what is needed for the project and modified based on context and feedback.	- Milestone reports from sub-contractors and PhD supervisors - On-going systematic documentation of level of feedback from key industry stakeholders about the outputs and process. - Minutes and structured feedback from the Management Committee and Project Reference Group in relation to outputs and emerging submission. - Acceptance of Communication and Engagement Strategy by MC and PRG and endorsement of changes – captured in Minutes.
Project Management and Governance	- Nuts for Life Management Committee (MC) - Project Reference Group (PRG) – With Terms of Reference - Staff	- MC and PRG has desired representation from industry stakeholders - Members of MC and PRG have full opportunity for input into and feedback on project. - Project is on track and on-budget	- Minutes of MC and PRG. - Short-structured feedback immediately post-meetings - Project Milestone Reports

Appendix 7 – Apparent nut consumption statistics



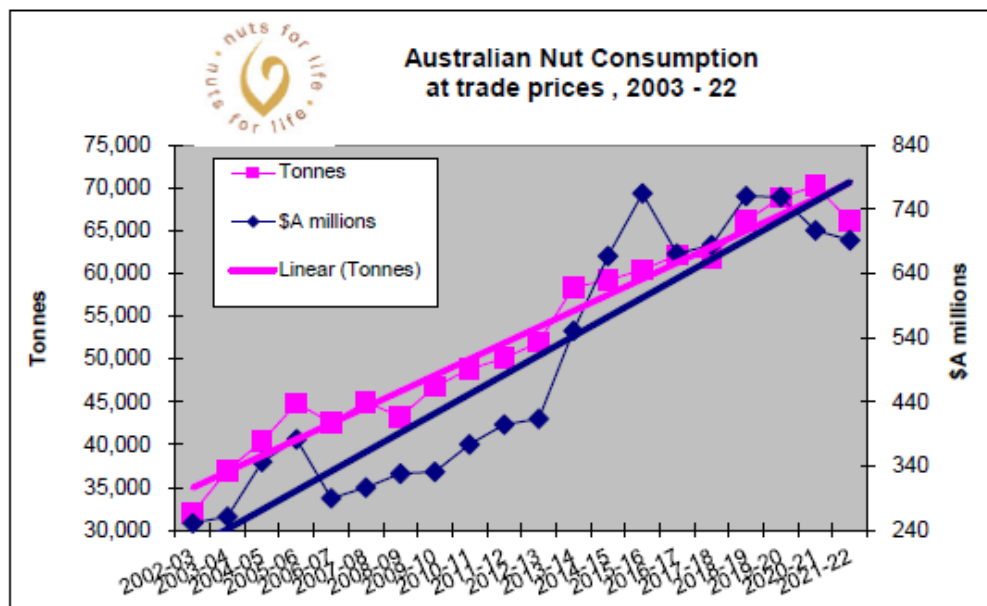
Nuts For Life

Trade statistics, Financial Year 2022

There was a 6% decline in nut volumes from FY2021 to FY2022. The value of nuts declined for the second year, leaving values at those of FY2018. Generally, nut prices remain weak. The decline in value and volume of Almonds, with about a 30% share of the total tree nut market, has had a significant impact on the total.

Whilst the compound growth since N4L commenced in 2003, still remains in line with the KPI of achieving growth of 5% per annum, performance for the last five years has been flat, i.e., well below the desired KPI.

Growth in volume 3.9% per annum, compound since 2003
Growth in value 5.5% per annum, compound since 2003



Volumes are taken from ABS import statistics and dispatches to the trade by the primary packers of Australian grown nuts. Values are taken from ABS import statistics and from estimates by Australian industry. The value is the trade price into the wholesale market.

These statistics could only be prepared with the cooperation of members of the Australian nut industry who supply the raw data on a confidential basis. The statistics are compiled by Scalzo Food Industries.