Final Report

Citrus health and nutrition literature review

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Citrus health and nutrition literature review (CT20004)

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Introduction

The Citrus Health and Nutrition Literature Review project developed assets that can be utilised to communicate the variety of health benefits associated with citrus fruit consumption, with the expectation that heightened awareness of benefits will boost purchase and consumption of Australian citrus fruits. In addition, the reports identified new research and investment opportunities for the Citrus Industry to expand reach and usage.

This project fulfilled the following objectives:

1. built on the previous Citrus Industry Communications Program and research and messages developed as part of the Good Mood Food campaign, that can be used to better inform industry and consumers about the nutritional attributes and health benefits of Australian citrus fruit.
2. supported demand activities to drive consumption, by communicating inspiring and compelling nutrition and health key messages about Australian citrus.
3. helped Hort Innovation and the Australian citrus industry be better informed and confident in talking about the nutrition and health benefits of Australian citrus fruit, and to correct misinformation.

Methodology

The following methodology was undertaken to achieve project deliverables and meet expectations:

1. *Citrus, nutrition and health- a review of the science* - Review citrus nutrition science and Identify research gaps and the impact of post- harvest storage on nutrient composition of citrus compared to pre- storage nutritional values.
2. *Sensational citrus – the nutrition and health benefits of Australian citrus* - Inform and inspire citrus consumption through the collation of evidence-based health information in a consumer-friendly format
3. *Website enhancement recommendations* - Improve website content and usability
4. *Health Influencer Strategy* – top line strategic recommendations to disseminate findings to health professionals

Results and Discussion

The key deliverables for the project are outlined in the table below. This includes relevant stakeholders for dissemination, which is how the industry will leverage the project outputs.

Table 1. Results and Discussion

Document working title	Audience	Purpose	Dissemination	Future opportunities
1.Citrus, nutrition and health- a review of the science	Industry	Review citrus nutrition science Identify research gaps and the impact of post- harvest storage on nutrient composition of citrus compared to pre- storage nutritional values.	Hort Innovation channels to Citrus industry Internal stakeholders Health professionals	Research investment for the Australian citrus industry Opportunities to consider ways to use waste by products for innovation
2.Sensational citrus – the nutrition and health benefits of Australian citrus	Consumer via health professionals, industry and Hort Innovation	Inform and inspire citrus consumption through the collation of evidence-based health information in a consumer-friendly format	CA website Social media Individual farming businesses Hort Innovation including future Marketing campaigns	Disseminate this report to health professionals as part of an extension health professional communication program
3.Website enhancement recommendations	Industry	Improve website content and usability	Hort Innovation channels to Citrus industry CA website	Improve website content and user experience

4.Health Influencer Strategy	Health influencers	Communicate research findings	Webinars, conferences, edms	Increase citrus update via health professional recommendations
5.Key messages for the citrus industry and for orange juice	Media Health professionals Consumers	To be used for future communication programs	Media releases, website content	Defend the placement of orange juice as a core food in the Australian Dietary Guidelines Promote the nutritional benefits of citrus fruit

Outputs

Table 2. Output summary

Output	Listed in M&E Plan: • Yes • No	Description	Evidence and data
Citrus, nutrition and health -a review of the science	Yes	Detailed report outlining all scientific evidence to support health benefits of citrus fruit	Report submitted. Research papers collated on file.
Sensational citrus – the nutrition and health benefits of Australian citrus (consumer report)	Yes	An easy-to-read consumer report highlighting key findings of literature review	Report submitted and images provided to Hort innovation
Website enhancement recommendations	Yes	Website recommendations to communicate project deliverables including wireframes for proposed website design	Report submitted
Nutrition and health claims guidance recommendations	Yes	Approved nutrition and health claims for use by the citrus industry for future marketing campaigns	Report submitted
Key Messages report	Yes	Key messages for all citrus produce for future media campaigns	Report submitted
Orange Juice FAQ report	Yes	To assist with future advocacy work for orange juice (e.g. HSR submissions) and address myths	Report submitted
Health Influencer Strategy report	Yes	High level strategic direction for future projects to communicate citrus benefits to nutrition stakeholders	Report submitted

Outcomes

Table 3. Outcome summary

Outcome as listed in M&E Plan	Progress to achieving outcome	Evidence and data	Progress: • On track • Off track
Citrus, nutrition and health -a review of the science	Completed	N/A	Completed
Sensational citrus – the nutrition and health benefits of Australian citrus (consumer report)	Completed	N/A	Completed
Website enhancement recommendations	Completed	N/A	Completed
Nutrition and health claims guidance recommendations	Completed	N/A	Completed
Key Messages report	Completed	N/A	Completed
Orange Juice FAQ report	Completed	N/A	Completed
Health Influencer Strategy report	Completed	N/A	Completed

Monitoring and evaluation

Table 4. Monitoring and Evaluation

Key Evaluation Question	Project performance	Continuous improvement opportunities
To what extent has the project achieved its expected outcomes?	New resources were developed, that are now available for industry dissemination	Develop new website Create a project to develop a health professional communications plan Investigate research opportunities Investigate opportunities to utilize citrus by-products

Recommendations

1. Future research opportunities

The scientific literature report uncovered the many nutrition and health benefits of citrus fruit. Whilst certain attributes and associated benefits are well established (for example Vitamin C and the link to numerous health benefits), other areas of nutrition science are emerging, yet they present an exciting opportunity for the future role of citrus fruit and its components. The main areas for future research consideration and investment have been summarised in the report and should be investigated further by The Australian Citrus Industry.

2. By-product considerations for citrus fruit

The efficient use of citrus fruit wastes and by-products, which essentially transforms waste materials into value-added products, may be an effective bioeconomy strategy for the Australian citrus industry. The research report outlines existing and future exploitation of citrus components and their waste products as value-add products within the food and other industries. These approaches can be used to design new and innovative by-product supply chains, enhancing the overall value of the citrus industry in Australia.

3. Health professional communication plan

The high level health professional strategy report outlines opportunities to communicate the citrus research findings with health professionals. It is recommended that the Australian citrus industry invests in a project to develop a communications plan for healthcare professionals.

4. Website enhancements

The website wireframe report was developed to show how the project outputs could be effectively communicated via a sub domain, It is recommended that these website enhancements are actioned.

Refereed scientific publications

Journal article

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Books

1. The Flavour thesaurus. Niki Segnit, 2010
2. The Cook's Companion. Stephanie Alexander. 2nd Ed, 2004

Intellectual property

No project IP or commercialisation to report.

Issues and risks

During the project fulfillment period, The new Australian Food Composition Data was released, including updated data for citrus produce. However, all project deliverables and reports were based on the agreed methodology of using the Hort innovation data. This is a very low risk and a risk management report has been attached as part of this milestone report

Other information

No additional information to report

Appendices

N/A