

Final Report

Nashi Consumer Research 2020

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Project code:

NA19001

Project:

Nashi Consumer Research 2020 NA19001

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Summary

Purpose of the research

Opportunities need to be identified to increase demand for nashi. Understanding Australian consumers current attitudes, preferences and behaviours as pertaining to the purchase and consumption of nashis will ensure industry alignment can occur to actively address triggers and barriers to purchase and ultimately contribute to increased demand.

With that in mind, this research was designed to meet the following objectives:

- Understand current usage and attitudes towards nashi in Australia
- Gain absolute clarity on the ideal product offerings for Australian consumers
- Provide foundational input into the overall nashi R&D pipeline and ensure ongoing relevancy of the findings & insights from this research project for years to come
- Engage all relevant stakeholders throughout the entire research process, and make sure research outcomes meet their specific needs

Methodology

Our research methodology included four stages:

1. Project Scoping Workshop

2. Stakeholder Engagement

- N=6 x 30-minute Stakeholder Interviews were conducted

3. Qualitative Research

- A three-step approach was adopted for the qualitative research in order to explore current usage & attitudes towards nashi, palate preferences and ideal product features, and the overall purchase experience.

4. Quantitative Research

- An online survey with an N=1000 national sample of nashi shoppers, consumers and considerers

Key Outputs & Findings

The project has improved knowledge and awareness of consumer insights and preferences for the Australian nashi industry. More specifically, by providing consumer insights identifying the behaviours and attitudes towards nashis by Australian consumers; broadly including awareness, purchasing behaviours and considerations, usage and consumption behaviours, competitive set and demographic and locational factors.

Recommendations were provided for actions to target current nashi buyers and consumers as well as non-nashi buyers, and more general recommendations. These covered topics such as promoting the range of nashi uses and their sensory qualities, differentiating nashi from pears, increasing awareness among non-buyers via in-store sampling and signage, and exploring more environmentally friendly protective coverings.

Keywords

Nashi; pears; orchard fruit; consumer research; sensory preferences

Introduction

The Australian nashi industry is a small temperate fruit industry situated predominantly in the Goulburn Valley region in Victoria.

Over the last three years an average of approximately 1,700 tonnes of nashi were produced, a relatively stable volume in recent years, but a significant decrease from the amount grown in the early 2000's.

Supply is available year-round, however peaks during the main harvest window from March through to July.

Opportunities need to be identified to increase demand. Understanding Australian consumers current attitudes, preferences and behaviours as pertaining to the purchase and consumption of nashis will ensure industry alignment can occur to actively address triggers and barriers to purchase across the seasons/year to ultimately contribute to increased demand.

Methodology

In summary, our research methodology included four stages.

1. Project Scoping

- 2-hour kick off meeting to discuss vision for research and outcomes, clarification or refinement of any proposed research methodologies
- Debriefing on any previous research and other learnings, implications or considerations for this study
- Monitoring & Evaluation Plan discussion and requirements

2. Stakeholder Engagement

- N=6 x 30-minute Stakeholder Interviews were conducted
- Telephone interviews with stakeholders were conducted to ensure alignment of research objectives and outcomes. These interviews were conducted with growers, importers, retailers, distributors and exporters, selected by Hort Innovation.
- The stakeholder interviews were intended to ensure the project insights, implications and recommendations best met all stakeholder needs, as well as learning from the expertise and insight of those in the industry.

3. Qualitative Research

A three-step approach was adopted for the qualitative research in order to explore current usage & attitudes towards nashi, palate preferences and ideal product features, and the overall purchase experience.

1. Shopping Mission

- Participants shopped at their usual fresh fruit retailer for one green and one brown nashi
- The shopping experience was self-recorded using both video and photographs
- A series of questions was posed to specifically explore the impact of position in store, appeal of display, quality and range of fruit and POS information

2. In-home Trial

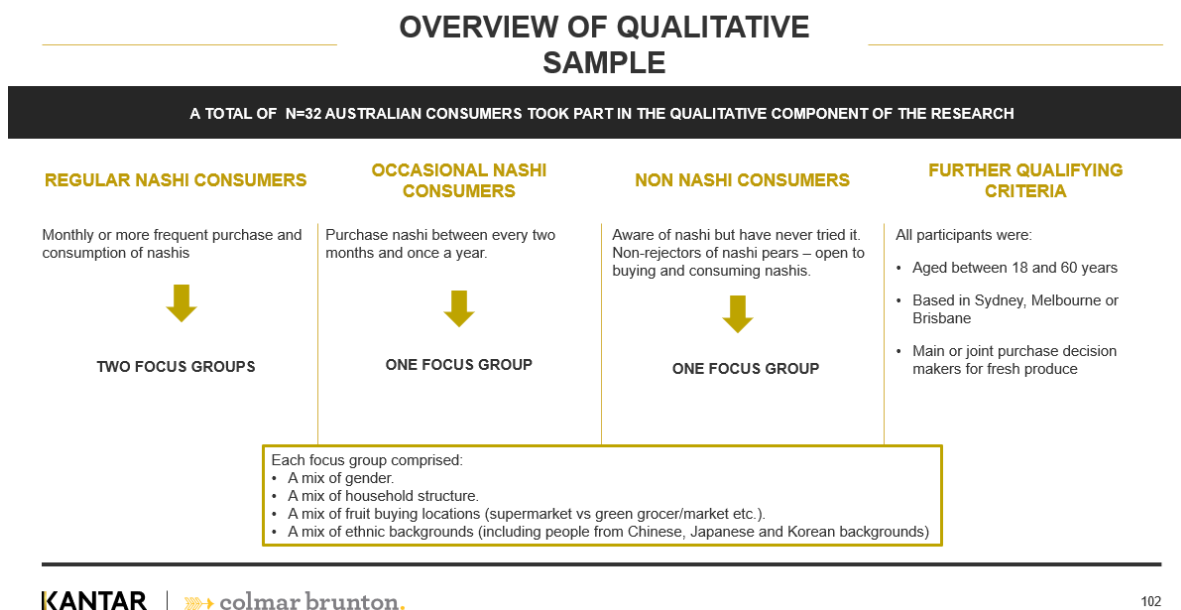
- Individual zoom interviews, each lasting 15 to 20 minutes, were conducted with each participant while they ate their nashi
- During these interviews, the sensory experience of nashi was explored in detail including appeal and perceptions of visual and tactile cues, taste, texture and aroma
- Both green and brown nashi were assessed using the participant's usual/expected method of consumption
- Responses were used to guide follow up questions and frame group discussion.

3. Digital Focus Groups

Finally, participants attended one of four online focus groups (each comprising 6-8 participants) to further explore:

- Attitudes and perceptions of nashis
- Category behaviour – usage and purchase experience
- Recap of product satisfaction – eating experience
- Consumer needs in terms of the ideal nashi characteristics
- Strategies to increase consumption of nashis.

Figure 1. The recruitment specifications for the Qualitative Research



4. Quantitative Research

- An N=1000 national sample of nashi consumers and considerers completed a 20-minute customised online survey.
- The survey covered demographics and general fruit purchase and consumption behaviours; non-nashi consumers were asked about their nashi type awareness, triggers and barriers to trial, perceptions and sensory expectations, ideal size and expected price; and current nashi consumers were questioned about their purchase behaviours, pricing, triggers and barriers, consumption and occasions, perceptions and sensory experience and ideal, among other topics.

Figure 2. The recruitment specifications for the Quantitative Research

Specifications	Target	Achieved	Specifications	Target	Achieved
Aware of nashi	100%	100%	18-35 years	NFO	30%
Ever tried nashi	Min 50%	80%	36-50 years	NFO	21%
Bought and eaten nashi in L12Ms	Min 10%	35%	50-65 years	NFO	27%
Males	Natural fallout (NFO)	48%	65+ years	NFO	23%
Females	NFO	51%			
Metro residents	NFO	69%			
Regional residents	NFO	31%			

Figure 6. Purchase Experience and Issues from the Qualitative Research Report

In-store display: Signage and labelling.

Enhanced signage has potential to aid take-up, especially for those less familiar with nashi.

Information provided about nashis differs from store to store. In general, however, 68% information is available, often more wine and beer.

- Only one instance of a descriptive label was found by research participants. This described taste, texture and the inside of the fruit, and was considered extremely helpful.
- There were some instances of mislabelling which impeded recognition and location of the two variants available (wrongly labelled or only one variant labelled).
- Stickers on fruit are welcomed, particularly communication of Australian provenance.

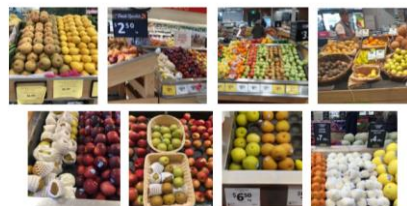
- The taste and texture of nashi – including a description of interior qualities.
- How to choose a ripe nashi.
- How to store nashi.
- The differences between variants.
- Meal or serving suggestions e.g. recipes, what to pair them with.
- Health or other benefits.



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In-store experience of nashi.

Images submitted by research participants illustrate variability in terms of location, display method and use of protective coverings



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3. **Final Report:** a 105-page report combining the learnings from the Qualitative Research stage with those of the Quantitative Research stage to produce an integrated final report and recommendations for the industry.

Figure 7. Summary & Recommendations from the Final Report

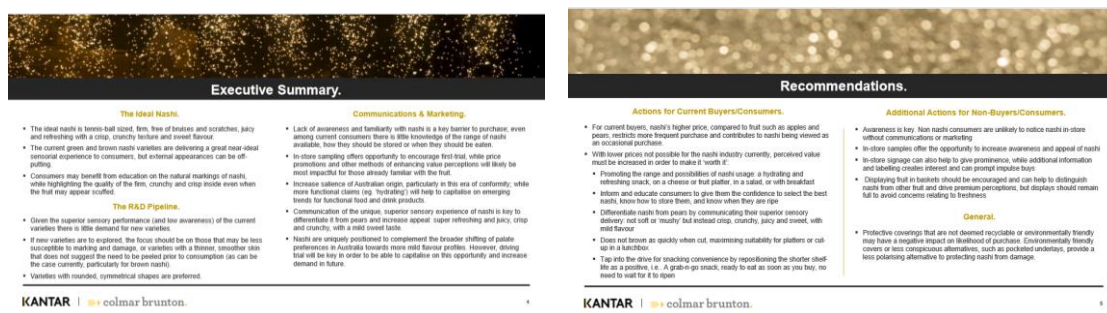
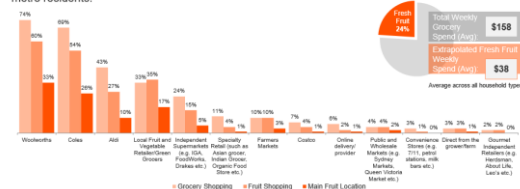


Figure 8. Shopper Profiling & Behaviour from the Final Report

Woolworths is the most common place of purchase for both groceries in general and fresh fruit.

One in three also regularly buy their fresh fruit from local green grocers; with this figure driven by metro residents.



Cultural heritage plays a key role in nashi awareness and familiarity.

Consumers from Asian backgrounds had often grown up eating nashi and tended to be familiar with the fruit's qualities and uses.

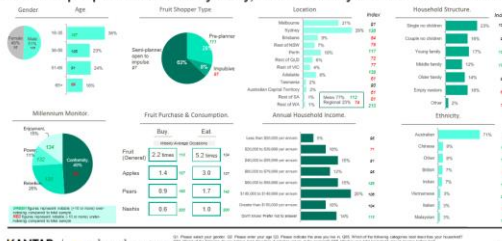
- 66** It was a staple food, more so than apples. We would get really soft and bushy apples growing up in Asia, although the pears were succulent and juicy. — *Regular restaurant consumer*
- 66** I've had cashu pears throughout my life as I have an Asian background and we have quite a lot of those fruits in our local supermarkets in China. — *Regular consumer*
- 66** I've been having them since I was a child. I have an Asian background and I use usually the pear of choice in the house. — *Regular restaurant consumer*

Consumers from other backgrounds were generally less familiar with nashi and had become aware of them from a range of sources.

- Seen on a cooking show
- On the menu in a restaurant
- Seen at market or supermarket
- Taste samples in supermarket
- Working in fruit shop or supermarket
- Seen when travelling in Asia
- Word of mouth
- No advertising or other information (e.g. POS) recalled

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Nashi consumers are most likely to be younger city-dwellers, more likely than others to pre-plan what fruit they'll buy, and more likely to be of Asian descent.

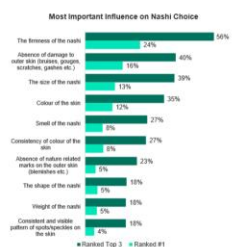


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Firmness is the single most important factor influencing nashi choice.

The firmness of the nashi is considered significantly more important than any other factor when deciding which particular nashi to choose in-store.

This is followed in importance by an absence of skin damage, such as bruises and scratches, and the size and the colour of the nashi.



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Figure 9. Nashi Usage & Preferences from the Final Report

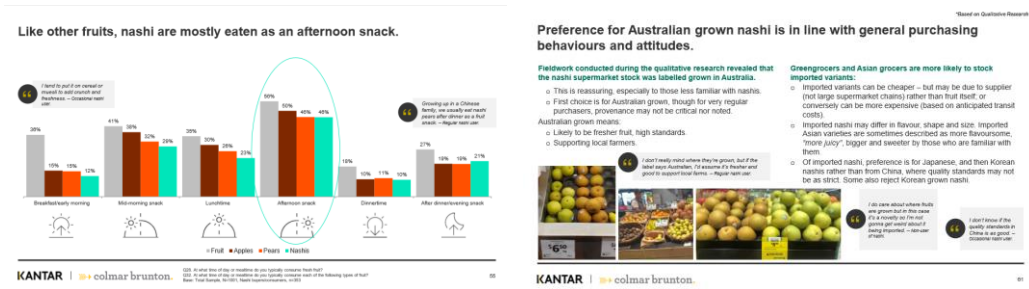
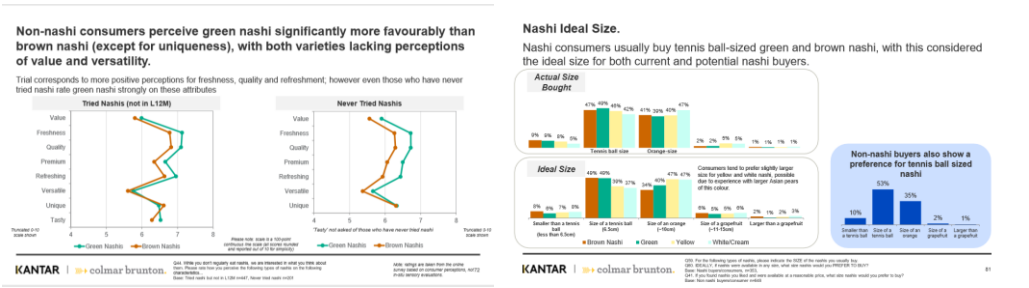


Figure 10. Nashi Sensory Perceptions & Preferences from the Final Report



Outcomes

The project has improved knowledge and awareness of consumer insights and preferences for the Australian nashi industry. More specifically, by providing consumer insights identifying the behaviours and attitudes towards nashis by Australian consumers and ensuring these are acknowledged and understood by nashi industry participants.

These insights broadly include awareness, purchasing behaviours and considerations, usage and consumption behaviours, competitive set and demographic and locational factors; as outlined in detail below.

- Most nashi buyers purchase just one type/colour of nashi, with little awareness of other types; while non-nashi buyers rarely see nashi for sale in their usual grocery stores.
- Most nashi purchase comes from Woolworths or Coles, when the fruit are on promotion, with few shoppers having taken up buying nashi within the last five years.
- Nashi buyers seek fruit that is firm, free of damage and of appropriate size (tennis ball size preferred for green and brown nashi).
- Nashi buyers are typically younger than average and more likely to be of Asian background and live in metropolitan areas. Those of Asian descent also tend to have greater awareness and knowledge of nashi but may be unaware they can be purchased from mainstream supermarkets, and grown in Australia.
- While many consumers are indifferent to protective covers, which can help prevent damage and therefore increase visual appeal, excessive plastic/packaging can deter purchase. Therefore, environmentally friendly protective options should be explored.
- As for fruit more broadly, nashi are mostly eaten for taste, health and ease of eating; with refreshment and hydration a differentiating driver of consumption for nashi.
- Greater communication of potential uses and benefits of nashi is required, with consumption mostly restricted to eating by itself. Increased versatility has the opportunity to increase value perceptions.
- Education on how to store nashi and when they are ripe and ready for eating will also give confidence to consumers; while nashi currently lack Australian grown credentials, which require greater prominence.
- Nashi's sensory qualities lend themselves to summer suitability and there is some discrepancy between peak season (Autumn-Winter) and greatest demand (Summer). However, for nashi that may be available during the warmer months focus should be as positioning it as juicy, hydrating and refreshing, eaten cool out of the fridge. While for the cooler months alternative uses (eg. Cheese and fruit platters, on porridge) may be communicated, as well as hydrating refreshment for after physical activity.
- Overall green nashi tend to be perceived more favourably than brown nashi (eg. Freshness, quality, premium), despite nashi consumers rating the sensory experience similarly for both. Those unfamiliar with nashi view the fruit positively, however they lack perceptions of a value and versatility, with a lack of understanding of the level of juicy and crunchiness a nashi delivers.
- Nashi are most commonly substituted with pears and expected to taste more similar to a pear than an apple. They are considered more unique and interesting than pears, but also more expensive and less associated with being Australian.
- There appears to be little demand for new nashi varieties; however, consumers prefer nashi with round shape, symmetrical appearance and smooth even skin.

The project has also established recommendations to inform ongoing R&D priorities for the nashi industry to align with consumers and ultimately increase demand. These recommendations come from gaining clarity on the ideal nashi offering for Australian consumers, and therefore input into the R&D pipeline, as well as identifying key communication messages and marketing needs.

The Ideal Nashi.

The ideal nashi is tennis-ball sized, firm, free of bruises and scratches, juicy and refreshing with a crisp, crunchy

texture and sweet flavour.

The current green and brown nashi varieties are delivering a great near-ideal sensorial experience to consumers, but external appearances can be off-putting.

Consumers may benefit from education on the natural markings of nashi, while highlighting the quality of the firm, crunchy and crisp inside even when the fruit may appear scuffed.

The R&D Pipeline.

Given the superior sensory performance (and low awareness) of the current varieties there is little demand for new varieties.

If new varieties are to be explored, the focus should be on those that may be less susceptible to marking and damage, or varieties with a thinner, smoother skin that does not suggest the need to be peeled prior to consumption (as can be the case currently, particularly for brown nashi).

Varieties with rounded, symmetrical shapes are preferred.

Communications & Marketing.

Lack of awareness and familiarity with nashi is a key barrier to purchase; even among current consumers there is little knowledge of the range of nashi available, how they should be stored or when they should be eaten.

In-store sampling offers opportunity to encourage first trial, while price promotions and other methods of enhancing value perceptions will likely be most impactful for those already familiar with the fruit.

Increase salience of Australian origin, particularly in this era of conformity; while more functional claims (eg. 'hydrating') will help to capitalise on emerging trends for functional food and drink products.

Communication of the unique, superior sensory experience of nashi is key to differentiate it from pears and increase appeal: super refreshing and juicy, crisp and crunchy, with a mild sweet taste.

Nashi are uniquely positioned to complement the broader shifting of palate preferences in Australia towards more mild flavour profiles. However, driving trial will be key in order to be able to capitalise on this opportunity and increase demand in future.

Monitoring and evaluation

Effectiveness.

To what extent has the project improved knowledge and awareness of consumer insights and preferences for the Australian nashi industry?

This project has created a comprehensive profile of the market for Australian nashis in Australia, including consumer needs, perceptions, behaviour, expectations, preferences, consideration sets, and future purchase intent. This should greatly improve the nashi industry's knowledge and understanding of their current and potential consumers, and how they can best meet their needs in the future.

Relevance.

To what extent has this project delivered intended outcomes and benefits to stakeholders?

To what extent has this project delivered intended outcomes and benefits to levy payers?

The core intended outcome of this study was to provide Hort Innovation and the nashi industry with actionable insights and recommendations that underpin R&D and Marketing efforts made to maximise sales potential.

The project has achieved this by delivering recommendations on how to increase nashi awareness and sales among both current nashi consumers and non-nashi consumers. Insights have also been provided into consumer interest, demand and preferences for new nashi varieties, as well as current varieties, to assist with R&D planning; with insight into nashi's key point of difference, triggers and barriers to purchase and potential uses will help guide marketing efforts.

Process Appropriateness.

To what extent were the target engagement levels of project stakeholders achieved?

Stakeholders were engaged from the outset of the project as a foundational stage in helping to inform the direction and content of the subsequent research, via the stakeholder interviews. This included speaking to growers, importers, wholesalers and retailers to understand what knowledge and insights they required, industry issues to be aware of, and hypotheses to be explored.

Stakeholder questions and hypotheses that were within scope of the project have been explored and addressed; such as exploring purchase behaviour of nashi buyers and the role of ethnic background on nashi awareness and usage; among many others.

Have regular project updates been provided through linkage with the project team?

Throughout the life of the project the Colmar Brunton team worked closely with Hort Innovation to keep the relevant project team updated on each stage of the research, as well as to share relevant documents and stimuli for feedback and approval prior to their use.

Efficiency.

Did the project engage with industry levy payers through their preferred learning style?

In addition to the engagement of levy payers in the initial stakeholder consultations, the final report (in PowerPoint format) is designed to be easy to read, understand and share as required, with a single-page infographic summary of key findings for broader dissemination.

This is in addition to the final report in Word format as per standard requirements.

Recommendations

Actions for Current Buyers/Consumers.

For current buyers, the higher price of nashi, compared to fruit such as apples and pears, restricts more frequent purchase and contributes to nashi being viewed as an occasional purchase.

With lower prices not possible for the nashi industry currently, perceived value must be increased in order to make it 'worth it':

- Promoting the range and possibilities of nashi usage: a hydrating and refreshing snack, on a cheese or fruit platter, in a salad, or with breakfast
- Inform and educate consumers to give them the confidence to select the best nashi, know how to store them, and know when they are ripe
- Differentiate nashi from pears by communicating their superior sensory delivery: not soft or 'mushy' but instead crisp, crunchy, juicy and sweet, with mild flavour
- Does not brown as quickly when cut, maximising suitability for platters or cut-up in a lunchbox
- Tap into the drive for snacking convenience by highlighting nashi's suitability as a grab-n-go snack, ready to eat as soon as you buy, with no need to wait for it to ripen; as well as increasing awareness of how best to store nashi to maintain their quality.

Additional Actions for Non-Buyers/Consumers.

- Awareness is key. Non nashi consumers are unlikely to notice nashi in-store without communications or marketing
- In-store samples offer the opportunity to increase awareness and appeal of nashi
- In-store signage can also help to give prominence, while additional information and labelling creates interest and can prompt impulse buys
- Displaying fruit in baskets should be encouraged and can help to distinguish nashi from other fruit and drive premium perceptions, but displays should remain full to avoid concerns relating to freshness

General.

Protective coverings that are not deemed recyclable or environmentally friendly may have a negative impact on likelihood of purchase. Environmentally friendly covers or less conspicuous alternatives, such as pocketed underlays, provide a less polarising alternative to protecting nashi from damage

Refereed scientific publications

None to report

Intellectual property, commercialisation and confidentiality

No project IP, project outputs, commercialisation or confidentiality issues to report

Appendices

NA19001 Nashi Consumer Research Final Report, October 30, 2020

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October 30, 2020

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1 Executive Summary & Recommendations.

Executive Summary.

The Ideal Nashi.

- The ideal nashi is tennis-ball sized, firm, free of bruises and scratches, juicy and refreshing with a crisp, crunchy texture and sweet flavour.
- The current green and brown nashi varieties are delivering a great near-ideal sensorial experience to consumers, but external appearances can be off-putting.
- Consumers may benefit from education on the natural markings of nashi, while highlighting the quality of the firm, crunchy and crisp inside even when the fruit may appear scuffed.

The R&D Pipeline.

- Given the superior sensory performance (and low awareness) of the current varieties there is little demand for new varieties.
- If new varieties are to be explored, the focus should be on those that may be less susceptible to marking and damage, or varieties with a thinner, smoother skin that does not suggest the need to be peeled prior to consumption (as can be the case currently, particularly for brown nashi).
- Varieties with rounded, symmetrical shapes are preferred.

Communications & Marketing.

- Lack of awareness and familiarity with nashi is a key barrier to purchase; even among current consumers there is little knowledge of the range of nashi available, how they should be stored or when they should be eaten.
- In-store sampling offers opportunity to encourage first-trial, while price promotions and other methods of enhancing value perceptions will likely be most impactful for those already familiar with the fruit.
- Increase salience of Australian origin, particularly in this era of conformity; while more functional claims (eg. 'hydrating') will help to capitalise on emerging trends for functional food and drink products.
- Communication of the unique, superior sensory experience of nashi is key to differentiate it from pears and increase appeal: super refreshing and juicy, crisp and crunchy, with a mild sweet taste.
- Nashi are uniquely positioned to complement the broader shifting of palate preferences in Australia towards more mild flavour profiles. However, driving trial will be key in order to be able to capitalise on this opportunity and increase demand in future.

Recommendations.

Actions for Current Buyers/Consumers.

- For current buyers, the higher price of nashi, compared to fruit such as apples and pears, restricts more frequent purchase and contributes to nashi being viewed as an occasional purchase.
- With lower prices not possible for the nashi industry currently, perceived value must be increased in order to make it 'worth it':
 - Promoting the range and possibilities of nashi usage: a hydrating and refreshing snack, on a cheese or fruit platter, in a salad, or with breakfast
 - Inform and educate consumers to give them the confidence to select the best nashi, know how to store them, and know when they are ripe
 - Differentiate nashi from pears by communicating their superior sensory delivery: not soft or 'mushy' but instead crisp, crunchy, juicy and sweet, with mild flavour
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- Displaying fruit in baskets should be encouraged and can help to distinguish nashi from other fruit and drive premium perceptions, but displays should remain full to avoid concerns relating to freshness

General.

- Protective coverings that are not deemed recyclable or environmentally friendly may have a negative impact on likelihood of purchase. Environmentally friendly covers or less conspicuous alternatives, such as pocketed underlays, provide a less polarising alternative to protecting nashi from damage.

2 Background & Methodology





OVERVIEW OF PROJECT BACKGROUND AND CONTEXT

A SMALL FRUIT INDUSTRY CONSIDERING GROWTH

DECLINING PRODUCTION IN NASHI OVER TIME

The Australian nashi industry is a small temperate fruit industry situated predominantly in the Goulburn Valley region in Victoria.

Over the last three years an average of approximately 1,700 tonnes of nashi were produced, a relatively stable volume in recent years, but a significant decrease from the amount grown in the early 2000's.

Supply is available year-round, however peaks during the main harvest window from March through to July.

OPPORTUNITIES NEED TO BE IDENTIFIED TO INCREASE DEMAND

Understanding Australian consumers current attitudes, preferences and behaviours as pertaining to the purchase and consumption of nashis will ensure industry alignment can occur to actively address triggers and barriers to purchase across the seasons/year to ultimately contribute to increased demand.



The overarching objective is to inform the Australian nashi industry of consumer attitudes and behaviours towards Australian nashis that will impact on future sales, and provide foundational input into the overall nashi R&D pipeline.

Research Methodology

1. Hort Innovation – Colmar Brunton Workshop



Project scoping meeting with key Hort Innovation stakeholders and the research team to align on study background, objectives, methodology, timing, outputs and monitoring and evaluation plan.

1 x 2 hour meeting.

2. Stakeholder interviews



Discussions with a range of stakeholders representing growers, importers and retailers to obtain perspectives on current issues for the nashi industry and expectations of the research program.

N=6 x 30 minute telephone interviews.

3. Qualitative Investigation



Three stage qualitative approach:

1. Individual shopping exercise including video and image capture.
2. Individual product tasting interviews via zoom.
3. 4 x 90 minute online focus groups.

N=32 consumers.

4. Quantitative Survey



Quantification of attitudes, preferences and behaviour on a national scale to size opportunities and provide prioritisation of future actions for the industry. National sample of nashi shoppers, consumers and considerers.

N=1000 online survey



OVERVIEW OF QUALITATIVE METHODOLOGY

A THREE STEP APPROACH WAS ADOPTED FOR THE QUALITATIVE RESEARCH IN ORDER TO EXPLORE CURRENT USAGE & ATTITUDES TOWARDS NASHI, PALATE PREFERENCES AND IDEAL PRODUCT FEATURES, AND THE OVERALL PURCHASE EXPERIENCE.

1

SHOPPING MISSION

Participants shopped at their usual fresh fruit retailer for one green and one brown nashi.

The shopping experience was self-recorded using both video and photographs.

A series of questions was posed to specifically explore the impact of position in store, appeal of display, quality and range of fruit and POS information

2

IN-HOME TRIAL

Individual zoom interviews, each lasting 15 to 20 minutes, were conducted with each participant.

During these interviews, the sensory experience of nashi was explored in detail including appeal and perceptions of visual and tactile cues, taste, texture and aroma.

Both green and brown nashi were assessed using the participant's usual/expected method of consumption.

Responses were used to guide follow up questions and frame group discussion.

3

DIGITAL FOCUS GROUP

Finally, participants attended one of four online focus groups to further explore:

- Attitudes and perceptions of nashis
- Category behaviour – usage and purchase experience
- Recap of product satisfaction – eating experience
- Consumer needs in terms of the ideal nashi characteristics
- Strategies to increase consumption of nashis.

OVERVIEW OF QUANTITATIVE METHODOLOGY

A NATION-WIDE ONLINE SURVEY WAS CONDUCTED WITH N=1000 SHOPPERS

The quantitative component was designed to determine consumer attitudes towards, and engagement with the Australian nashi market and recommend areas to focus on and specific actions to be undertaken to increase purchase and consumption uplift.

This was achieved via a nation-wide 20-minute online survey with those aware of nashi.

The survey covered:

- Demographics and general fruit purchase and consumption behaviours
- Non-nashi consumers: nashi type awareness, triggers and barriers to trial, perceptions and sensory expectations, ideal size and expected price
- Nashi consumers: nashi purchase behaviours, pricing, triggers and barriers, consumption and occasions, perceptions and sensory experience and ideal, plus more.

Specifications	Target	Achieved
Aware of nashi	100%	100%
Ever tried nashi	Min 50%	80%
Bought and eaten nashi in L12Ms	Min 10%	35%
Males	Natural fallout (NFO)	48%
Females	NFO	51%
Metro residents	NFO	69%
Regional residents	NFO	31%

Specifications	Target	Achieved
18-35 years	NFO	30%
36-50 years	NFO	21%
50-65 years	NFO	27%
65+ years	NFO	23%

Note: a detailed breakdown of the sample is available on p.104 in the appendix.

3 Summary of Findings.



Snapshot of Results

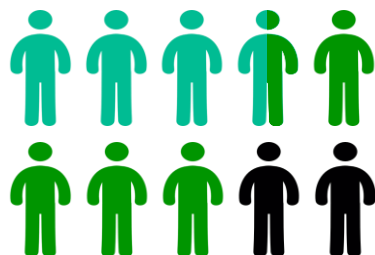
The ideal nashi is:

- 6.5cm (for green & brown fruit)
- Round, symmetrical shape
- Smooth evenly coloured skin
- Firm to the touch
- Juicy and refreshing
- Crisp, crunchy texture
- Sweet and tasty



Current nashi are delivering a great near-ideal sensory experience...

35% have never seen nashi for sale



45% have seen nashi once or twice

...however most shoppers never or rarely see them for sale.

	Green Nashi	Brown Nashi
Value (out of 10)	6.0	5.7
Versatility (out of 10)	5.7	5.5

Those who don't buy nashi perceive them as lacking versatility and value

Reason you buy/consume nashi



The refreshment/hydration nashi provide is a key reason for purchase, but not expected by non-buyers

Importance of Nashis being Grown in Australia:

7.9/10

Consumers place value on buying Aussie fruit, but 1 in 3 are unsure where the nashi they buy are grown

Shoppers also associate nashi more with being imported, compared to apples and pears



Those who do buy nashi limit purchase due to:

1. Price
2. Availability



Those who have never tried nashi may be influenced by:

1. In-store tastings
2. Price promotions



Enhanced signage, a visually distinctive and full looking display help attract positive attention in store

Summary of Findings.

- Most nashi buyers purchase just one type/colour of nashi, with little awareness of other types; while non-nashi buyers rarely see nashi for sale in their usual grocery stores.
 - Most nashi purchase comes from Woolworths or Coles, when the fruit are on promotion, with few shoppers having taken up buying nashi within the last five years.
 - Nashi buyers seek fruit that is firm, free of damage and of appropriate size (tennis ball size preferred for green and brown nashi).
 - Nashi buyers are typically younger than average and more likely to be of Asian background and live in metropolitan areas. Those of Asian descent also tend to have greater awareness and knowledge of nashi, but may be unaware they can be purchased from mainstream supermarkets, and grown in Australia.
 - While many consumers are indifferent to protective covers, which can help prevent damage and therefore increase visual appeal, excessive plastic/packaging can deter purchase. Therefore, environmentally friendly protective options should be explored.
 - As for fruit more broadly, nashi are mostly eaten for taste, health and ease of eating; with refreshment and hydration a differentiating driver of consumption for nashi.
 - Greater communication of potential uses and benefits of nashi is required, with consumption mostly restricted to eating by itself. Increased versatility has the opportunity to increase value perceptions.
 - Education on how to store nashi and when they are ripe and ready for eating will also give confidence to consumers; while nashi currently lack Australian grown credentials, which require greater prominence.
 - Nashi's sensory qualities lend themselves to summer suitability and there is some discrepancy between peak season (Autumn-Winter) and greatest demand (Summer). However, for nashi that may be available during the warmer months focus should be as positioning it as juicy, hydrating and refreshing, eaten cool out of the fridge. While for the cooler months alternative uses (eg. Cheese and fruit platters, on porridge) may be communicated, as well as hydrating refreshment for after physical activity.
 - Overall green nashi tend to be perceived more favourably than brown nashi (eg. Freshness, quality, premium), despite nashi consumers rating the sensory experience similarly for both. Those unfamiliar with nashi view the fruit positively, however they lack perceptions of a value and versatility, with a lack of understanding of the level of juicy and crunchiness a nashi delivers.
 - Nashi are most commonly substituted with pears, and expected to taste more similar to a pear than an apple. They are considered more unique and interesting than pears, but also more expensive and less associated with being Australian.
 - There appears to be little demand for new nashi varieties; however, consumers prefer nashi with round shape, symmetrical appearance and smooth even skin.
-



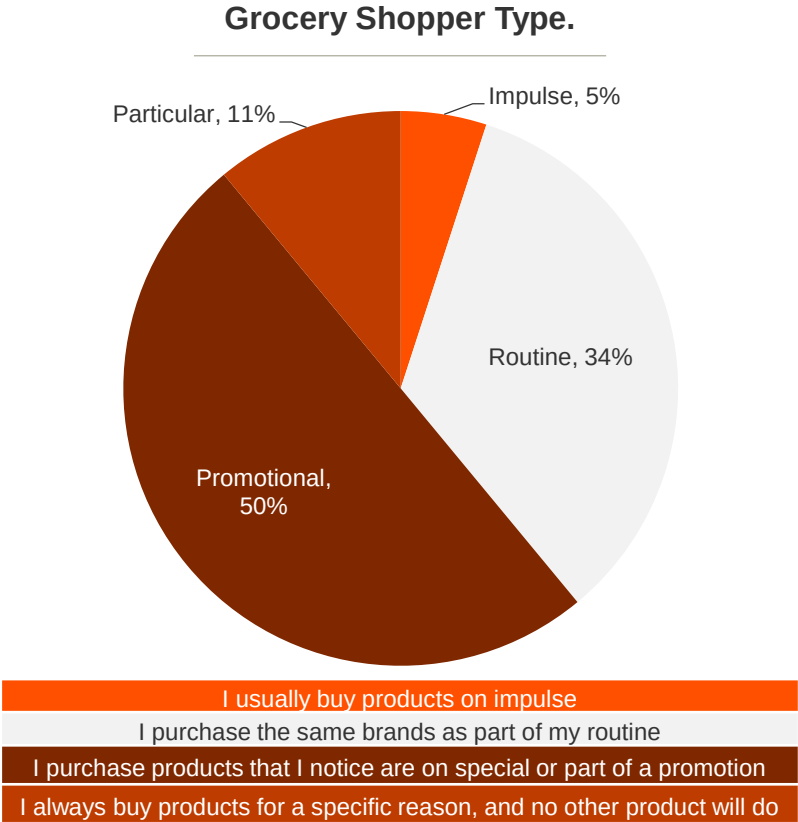
4

Detailed findings.

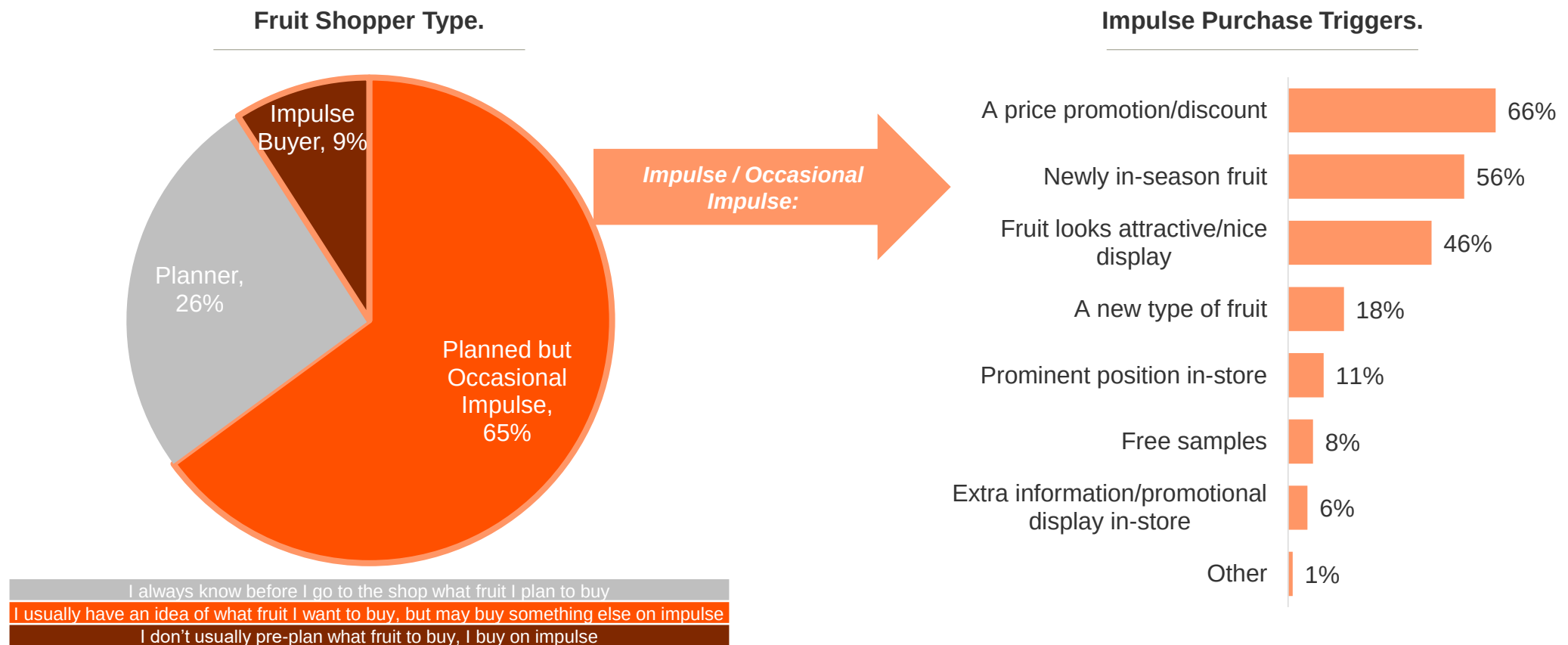
5

How and where do consumers shop
for fruit?

Respondents most commonly identify themselves as promotional grocery shoppers, who always or often buy fresh fruit.

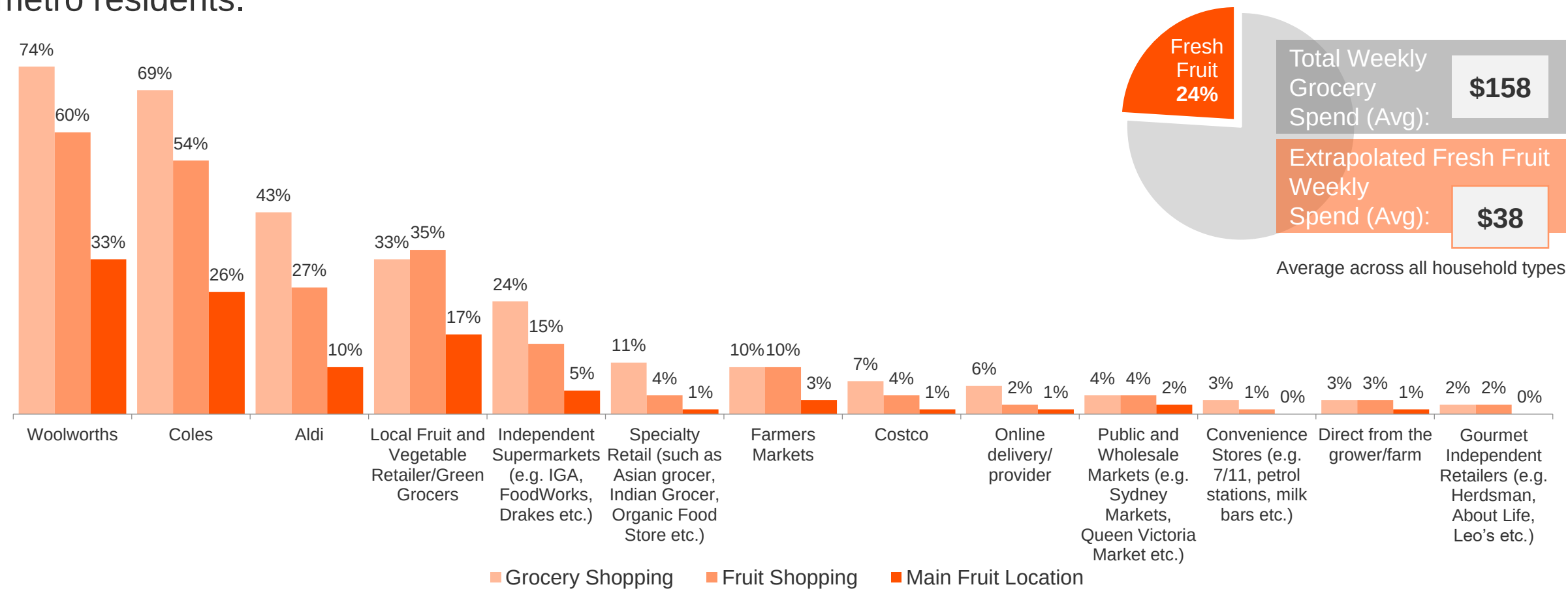


Most shoppers have an idea of what fruit they'll buy before they go in-store, however they may be swayed by price promotions, newly available fruit or attractive displays.

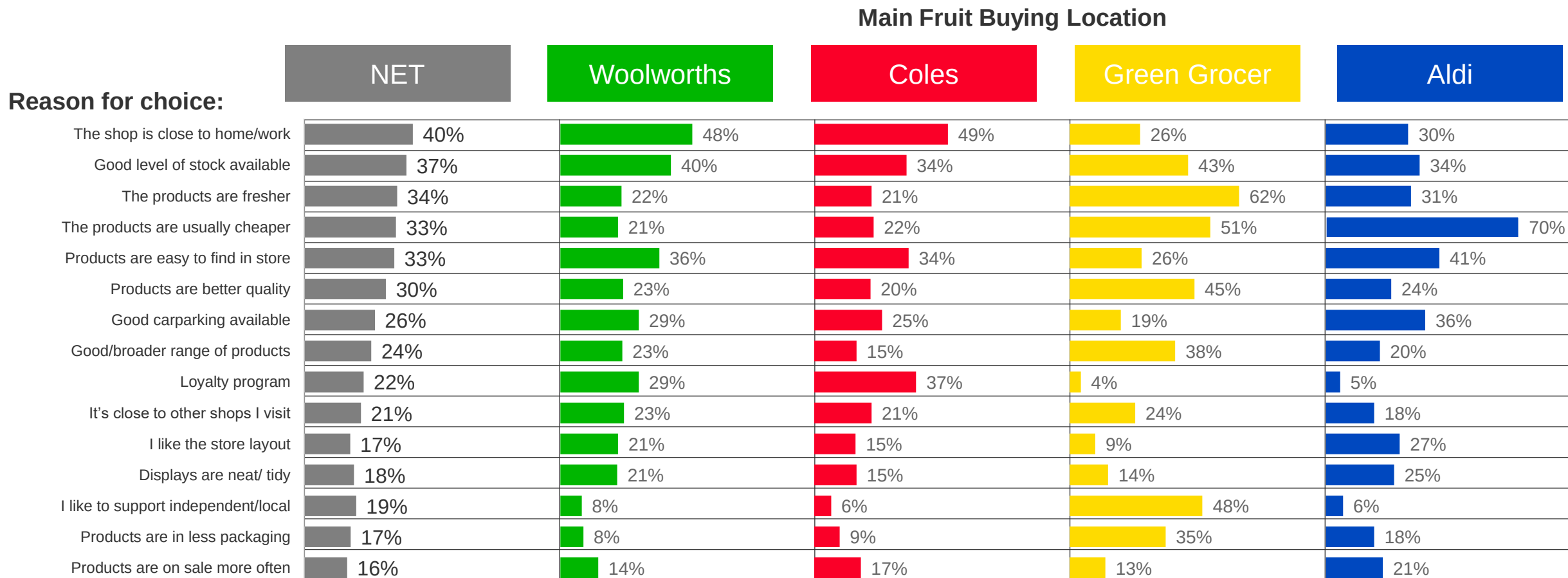


Woolworths is the most common place of purchase for both groceries in general and fresh fruit.

One in three also regularly buy their fresh fruit from local green grocers; with this figure driven by metro residents.



Coles and Woolworths are mostly favoured for location, green grocers for freshness and Aldi for price.

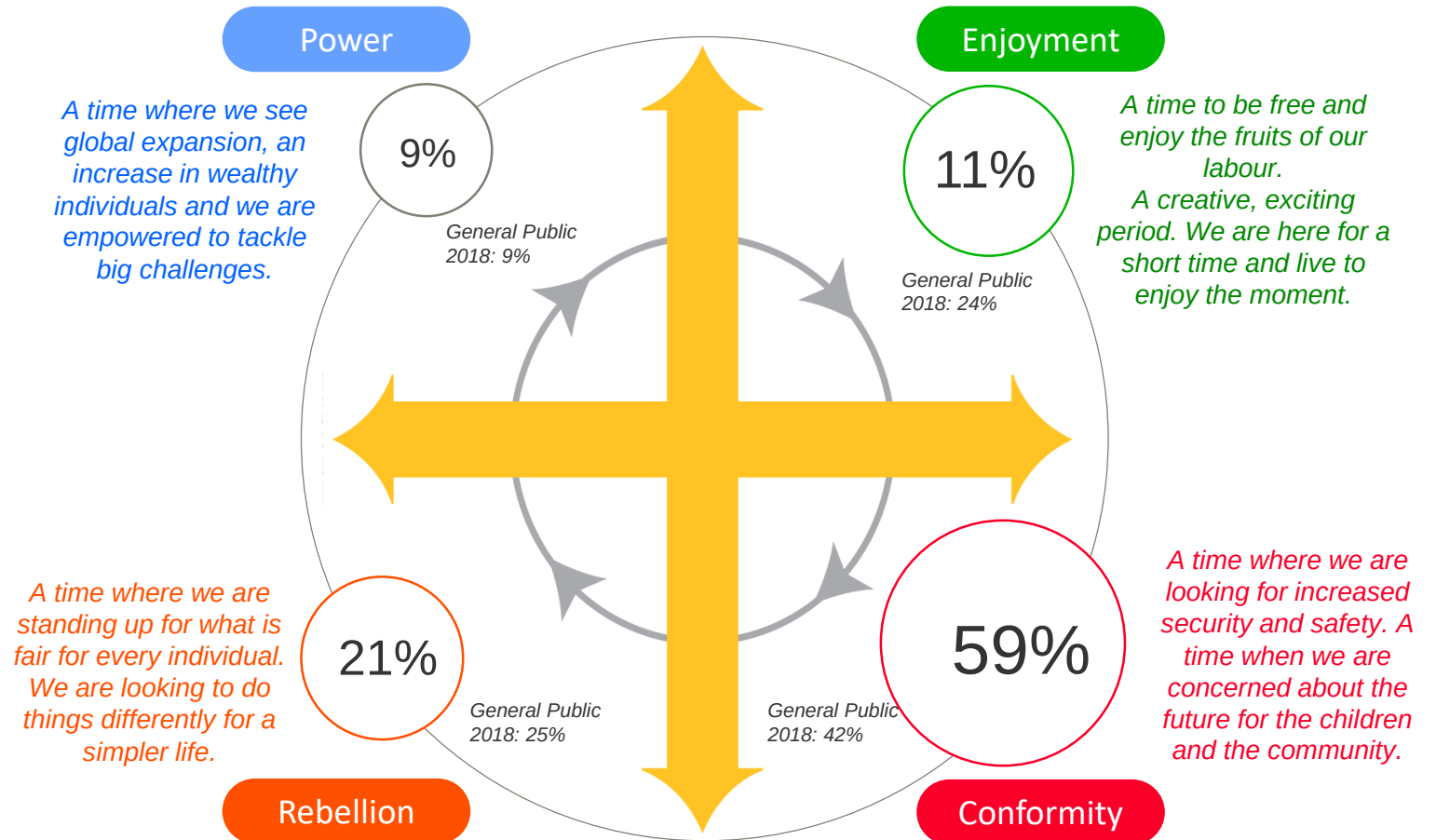


Most fruit shoppers align with Conformity values, with safety and familiarity top of mind.

The fruit purchasers surveyed show a higher proportion of Conformity values and lower proportion of Enjoyment values than the general public in 2018. In a time of conformity, provenance and Australian origin are appealing communications and are given greater importance.

Products that are local, familiar and safe give a sense of security and are desired by those with Conformity values.

In the coming years Rebellion values are expected to strengthen as consumer values shift. During this time a product's functional benefits and the advantage it gives the individual will grow in importance.



6

Fruit as a category: when, why,
what.

Consumers are highly satisfied with the range of fresh fruit currently available to them.

Shoppers also consider it extremely important to have a range of fresh fruit available to them.

Australian origin is also considered highly important, with particularly importance placed on it by those age 50 or greater.

Overall there is a slight lack of interest in new fruit varieties; however, this is driven mostly by those 65 or older, who are also more satisfied with the current range of fruit available.

Category Health – Fresh Fruit.

Satisfaction

7.7

(7.2)

Importance

8.5

(6.7)

Interest in New

6.8

(7.8)

Importance of Australian Grown

8.5

Brackets (x) indicate total grocery benchmarks.

On average fresh fruit is bought twice a week and eaten five times a week.

While apples are eaten 2-3 times a week on average, nashi are eaten once a fortnight.

Among those who have bought and eaten nashi in the last 12 months average consumption frequency increases to once a week.

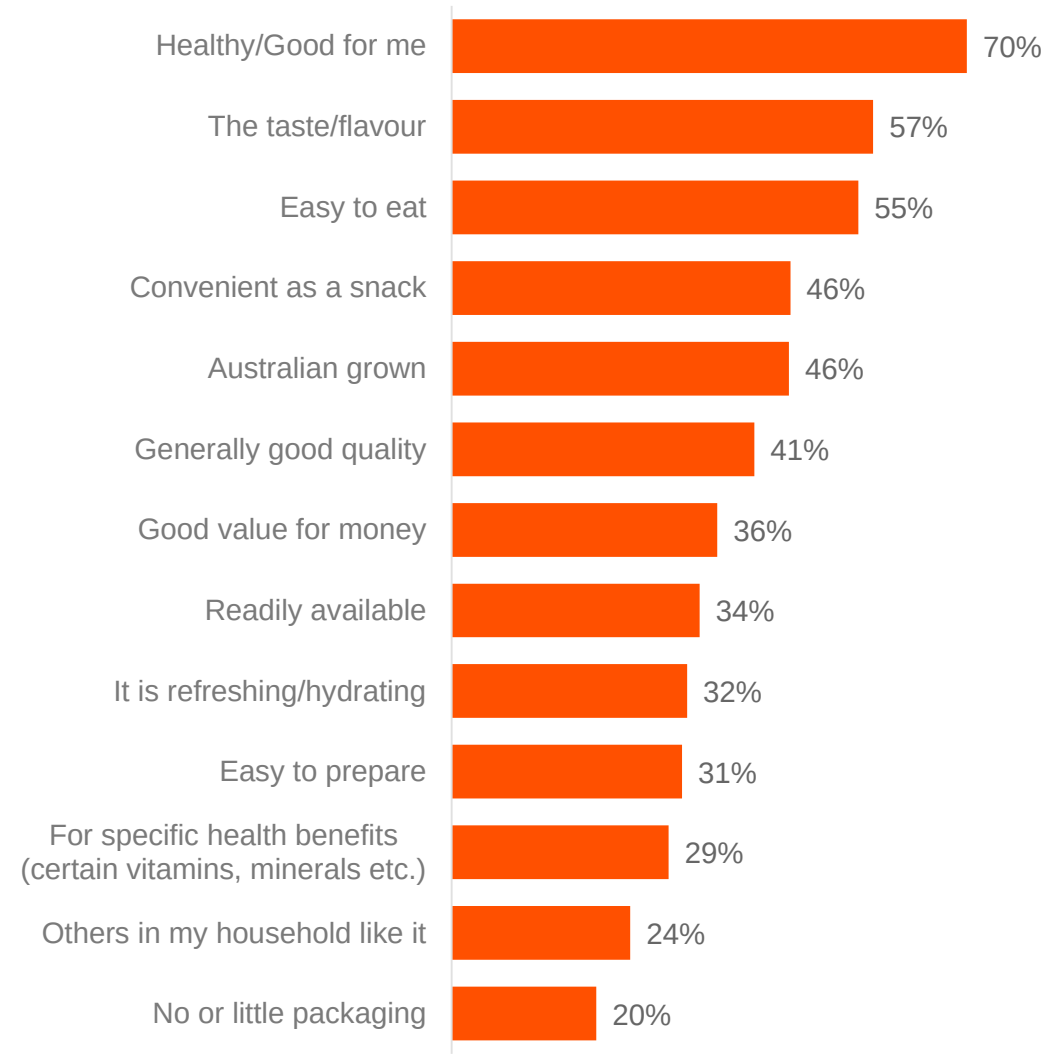
	Buy.	Eat.
	Weekly Average Occasions	
Fruit (General)	2.0	5.0
Apples	1.1	2.8
Pears	0.6	1.2
Nashis	0.3	0.5

Fresh Fruit is most commonly eaten because it's healthy.

It's also commonly chosen because it's tasty, easy to eat, convenient as a snack and Australian grown.

Males are significantly more likely to buy and eat fruit because it's Australian grown (50% vs females 41%), as too are regional consumers (53% vs metro 42%).

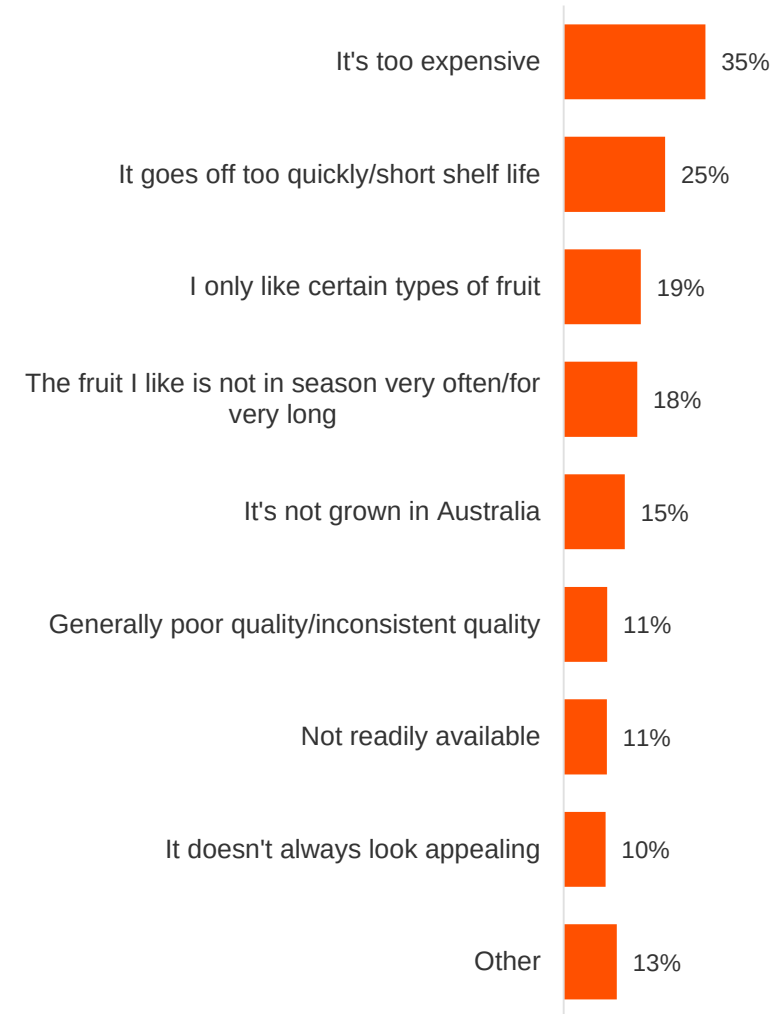
Meanwhile females are more likely to buy fruit because it's a convenient snack (52% vs males 40%).



Price is the main barrier to greater fresh fruit consumption.

A short shelf life, personal preferences for particular types of fruit only and short seasons of availability also restrict fresh fruit purchase and consumption for some.

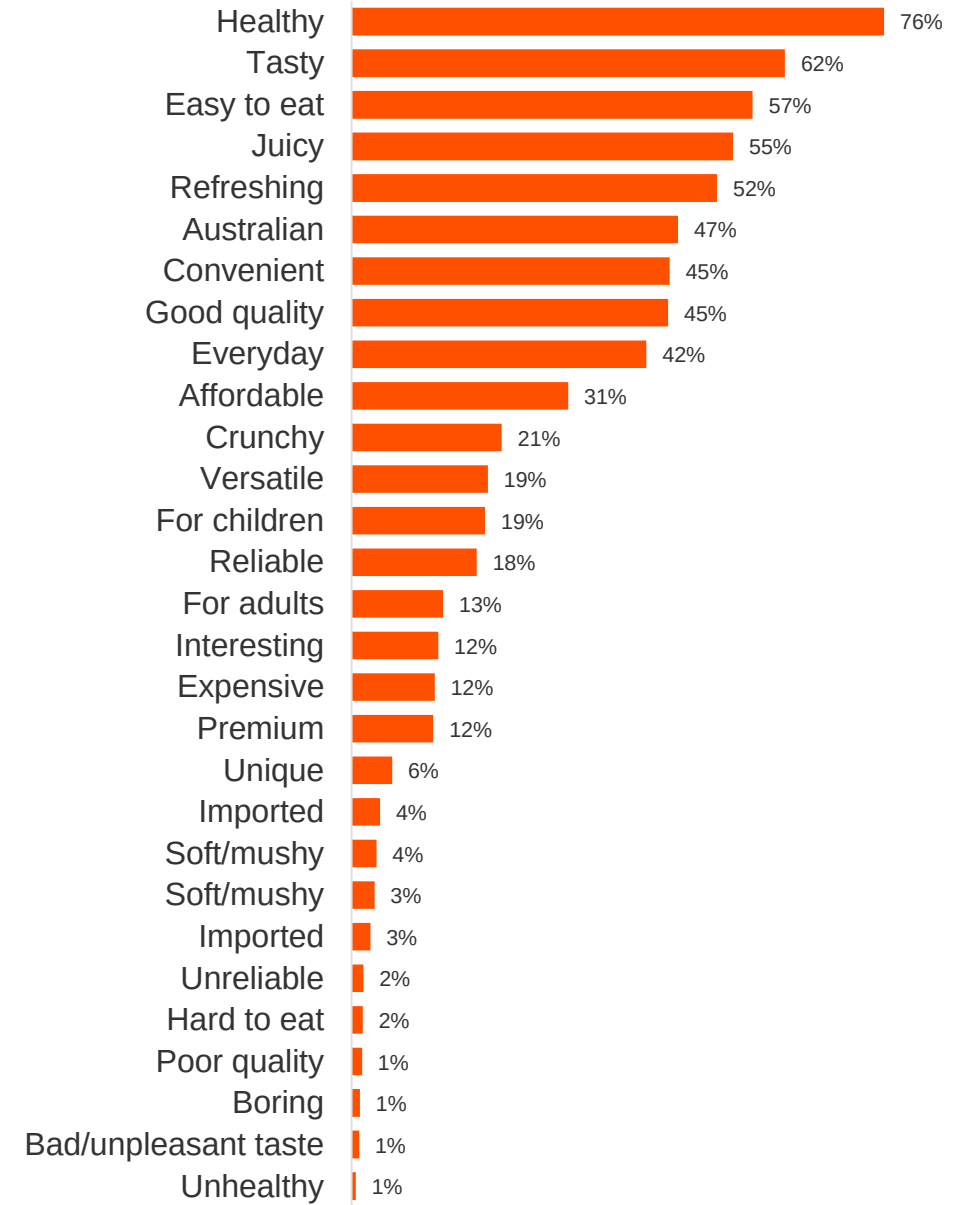
Those aged 50 or over are significantly more concerned by fruit not being Australian grown (22% vs 9% for 18-35yo's) and not being in season very long (22% vs 15%). While younger consumers are more likely to restrict their purchase due to fruit going off quickly (29% vs 21%).



Fresh fruit is associated with being healthy, as well as tasty, easy to eat, juicy and refreshing.

A short shelf life, personal preferences for particular types of fruit only and short seasons of availability also restrict fresh fruit purchase and consumption for some.

Those aged 50 or over are significantly more concerned by fruit not being Australian grown (22% vs 9% for 18-35yo's) and not being in season very long (22% vs 15%). While younger consumers are more likely to restrict their purchase due to fruit going off quickly (29% vs 21%).

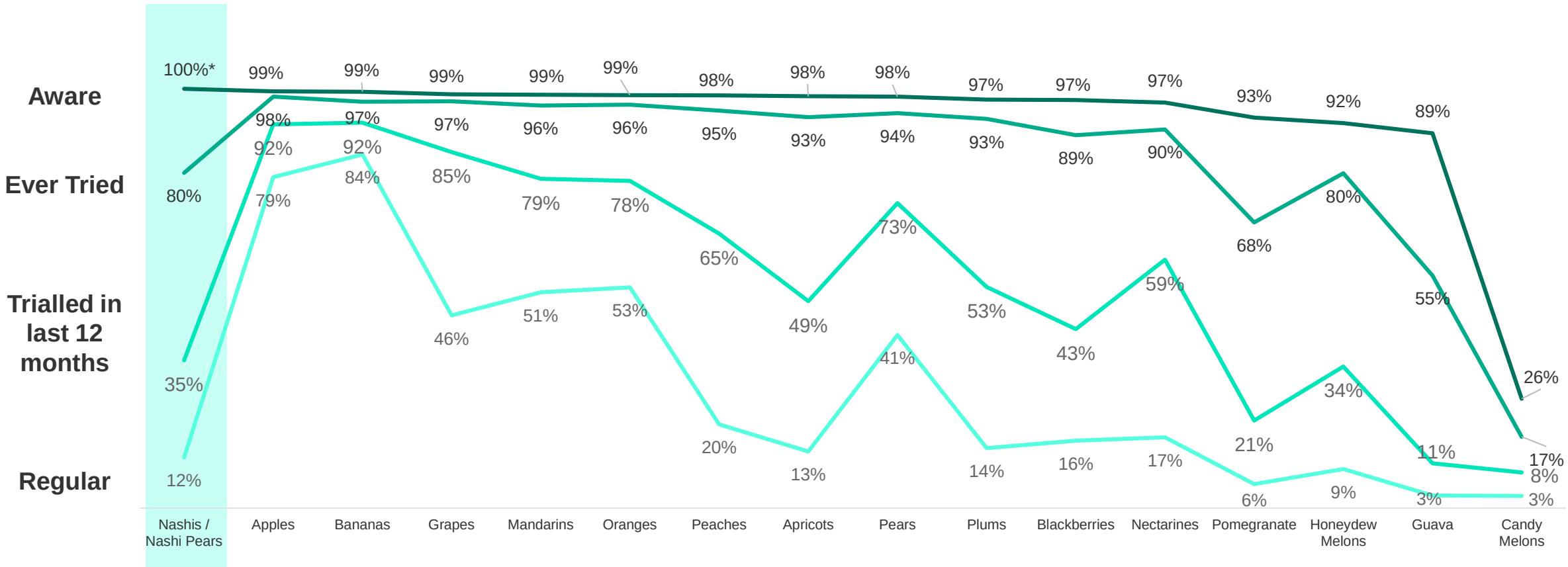


7

How familiar are shoppers with nashi?
Do they notice them in store? Who
buys them?

Awareness, Trial & Purchase

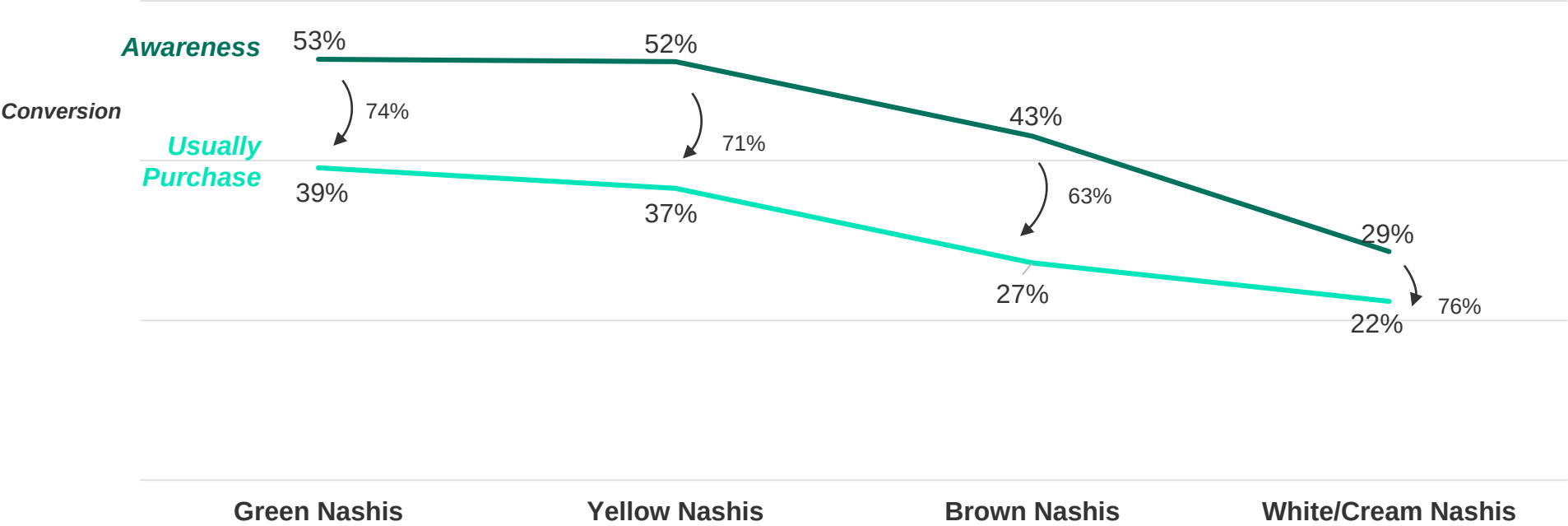
Nashi trial and purchase figures are most similar to honeydew melon. Only 1 in 3 who are aware of nashi have bought and eaten them in the last 12 months.



*Note: all respondents were required to be aware of nashi to participate in the study

Recent nashi buyers have low awareness of nashi types, with green and yellow nashi the most well known.

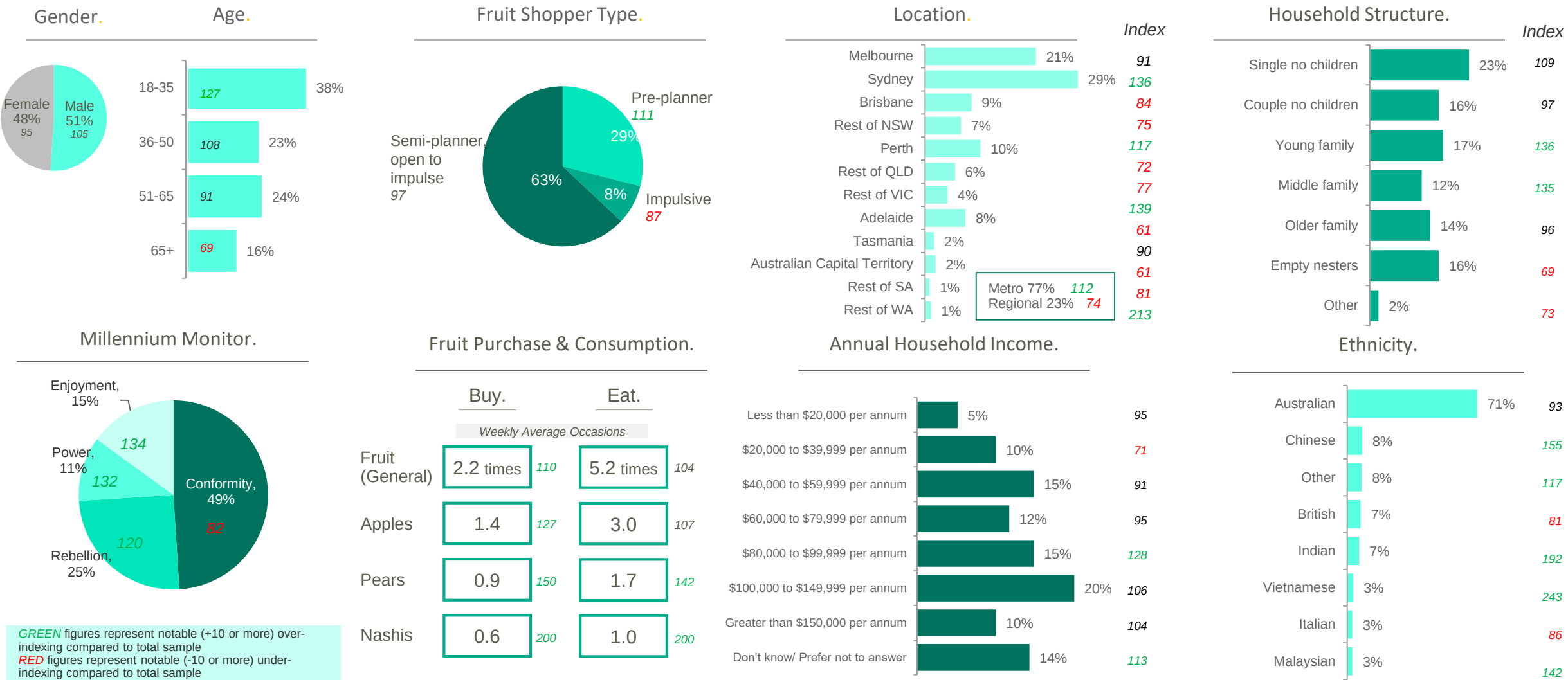
Half of nashi buyers are only aware of one type/colour of nashi, with 80% buying just the one type of nashi.



Number of nashi types aware of	
1 type	47%
2	33%
3	12%
4	7%

Number of nashi types usually bought	
1 type	80%
2	14%
3	3%
4	3%

Nashi consumers are most likely to be younger city-dwellers, more likely than others to pre-plan what fruit they'll buy, and more likely to be of Asian descent.



Millennium Monitor.

Enjoyment,
15%

134

Power,
11%

132

Rebellion,
25%

120

Conformity,
49%

82

Fruit Purchase & Consumption.

Buy.

Eat.

Weekly Average Occasions

Fruit (General)

2.2 times

110

5.2 times

104

Apples

1.4

127

3.0

107

Pears

0.9

150

1.7

142

Nashis

0.6

200

1.0

200

Annual Household Income.

Less than \$20,000 per annum

5%

95

\$20,000 to \$39,999 per annum

10%

71

\$40,000 to \$59,999 per annum

15%

91

\$60,000 to \$79,999 per annum

12%

95

\$80,000 to \$99,999 per annum

15%

128

\$100,000 to \$149,999 per annum

20%

106

Greater than \$150,000 per annum

10%

104

Don't know/ Prefer not to answer

14%

113

Ethnicity.

Australian

71%

93

Chinese

8%

155

Other

8%

117

British

7%

81

Indian

7%

192

Vietnamese

3%

243

Italian

3%

86

Malaysian

3%

142

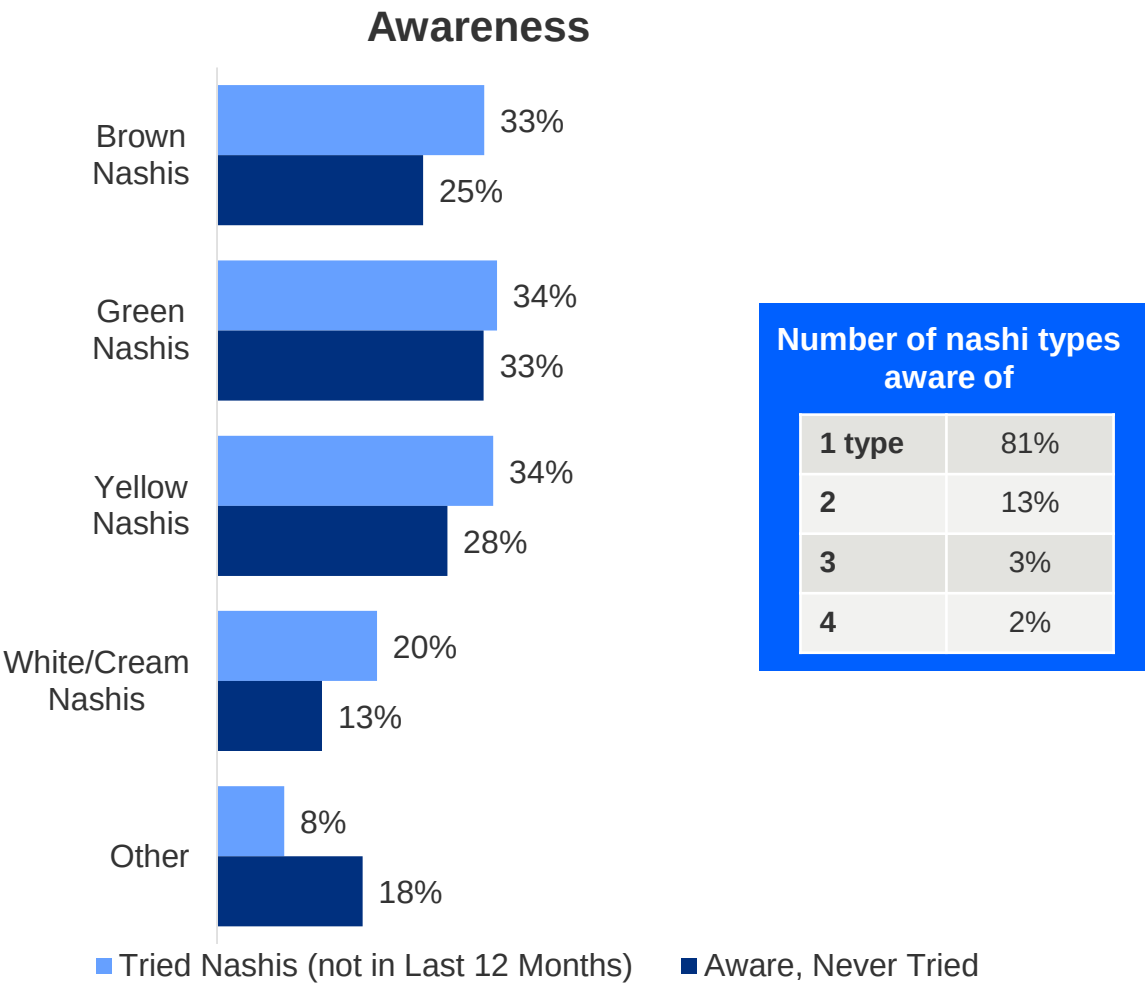
GREEN figures represent notable (+10 or more) over-indexing compared to total sample

RED figures represent notable (-10 or more) under-indexing compared to total sample

Non-nashi buyers have low awareness of nashi types; but are equally familiar with brown, green and yellow nashi.

Most of those who haven't recently bought nashi know little about them, with the vast majority aware of only one colour/type of nashi.

Awareness of yellow nashi is strongest among those of Asian descent.



Cultural heritage plays a key role in nashi awareness and familiarity.

Consumers from Asian backgrounds had often grown up eating nashi and tended to be familiar with the fruit's qualities and usage.

“

It was a staple fruit, more so than apples. We would get really soft and lousy apples growing up in Asia, although the pears were succulent and juicy. – Regular nashi consumer.

“

I've had nashi pears throughout my life as I have an Asian background and we have quite a lot of those fruits in our local supermarkets in China. – Regular nashi consumer.

“

I've been having them since I was a child. I have an Asian background and it was usually the pear of choice in the house. – Regular nashi consumer.

“

I grew up in Japan and nashi are from Japan and are common there. I grew up eating them a lot. – Regular nashi consumer.

Consumers from other backgrounds were generally less familiar with nashi and had become aware of them from a range of sources.

- Seen on a cooking show.
- On the menu in a restaurant.
- Seen at market or supermarket.
- Taste samples in supermarket.
- Working in fruit shop or supermarket.
- Seen when travelling in Asia.
- Word of mouth.
- No advertising or other information (e.g. POS) recalled.

“

I found them about two years ago when I was looking through dessert items on a menu. – Non-consumer of nashi.

“

I do recall seeing them when I was in Japan previously. I just dismissed them at the time as unique to Asia. I did not know there were even Australian variations.. – Regular nashi consumer.

Deeper familiarity with the fruit drives awareness of varieties, but not an appreciation for the range possible.

Consumers from Asian backgrounds were generally familiar with more varieties of nashi.

- This awareness comes from time spent in their country of origin and/or from Asian green grocers.
- However, although aware of varieties other than the green and brown nashi commonly found in Australian supermarkets, they do not call specific varieties by name.
- Asian background consumers may be familiar with larger sized nashi and may therefore “miss” the smaller Australian versions in store.
- They may also associate nashi with Asian grocery stores and therefore not expect to find them in a mainstream supermarket.

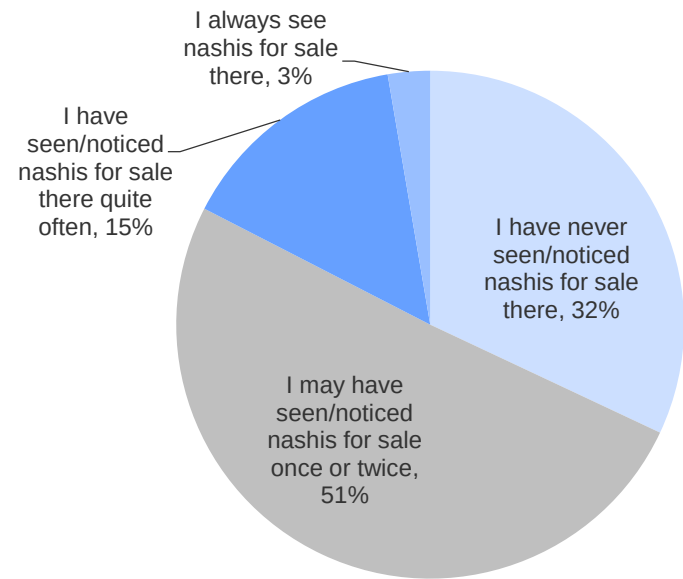
Raising awareness of the presence of nashi in mainstream supermarkets has potential to increase uptake by consumers of Asian background who commonly shop at supermarkets but may not be expecting to find nashi there.



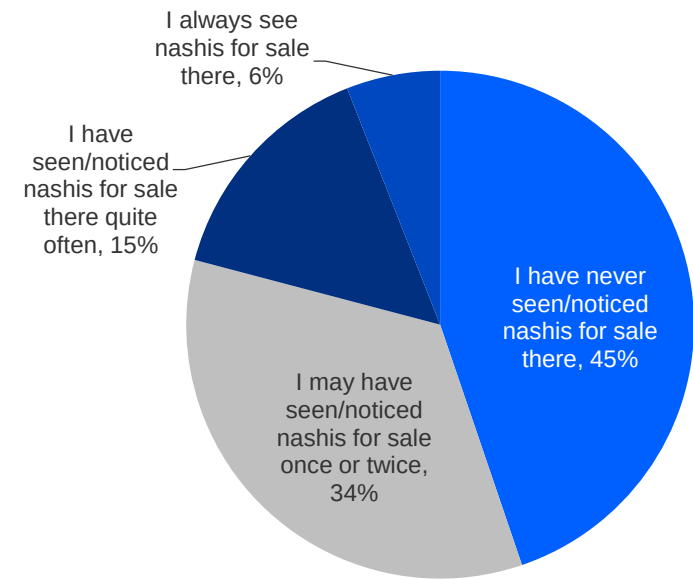
Most non-nashi buyers have only seen nashi for sale once or twice, if ever, at their usual fruit or grocery shop.

A lack of awareness and prominence in-store is hampering trial.

Tried Nashis (not in L12M)



Never Tried Nashis



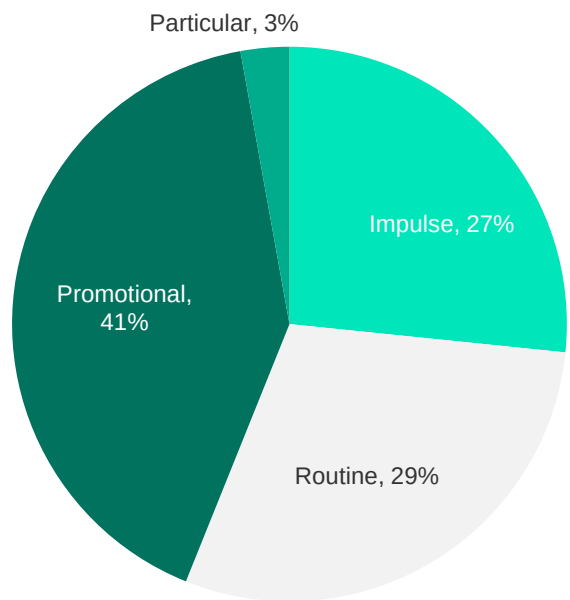
8

What is the in-store experience like when shopping for nashi?

What is most important?

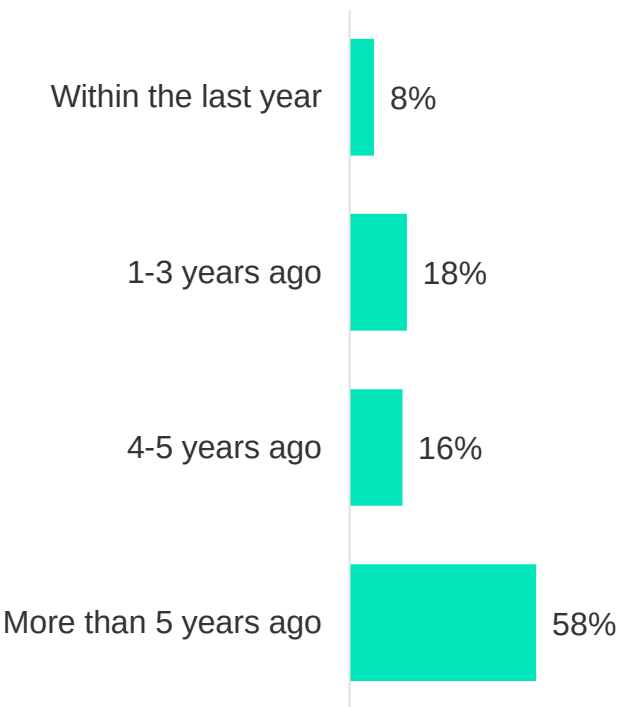
Nashi are usually bought when they are on promotion, with few shoppers having taken up buying nashi in the last five years.

Nashi Shopper Type.

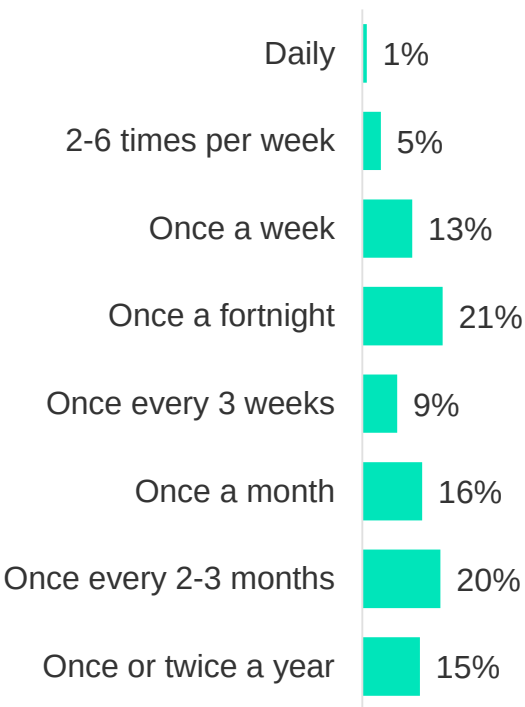


- I usually buy nashis on impulse
- I purchase nashis as part of my routine
- I purchase nashis when I notice they are on special or part of a promotion
- I always buy nashis for a specific reason, and no other product will do

Duration of Nashi Purchase.



Nashi Purchase Frequency.

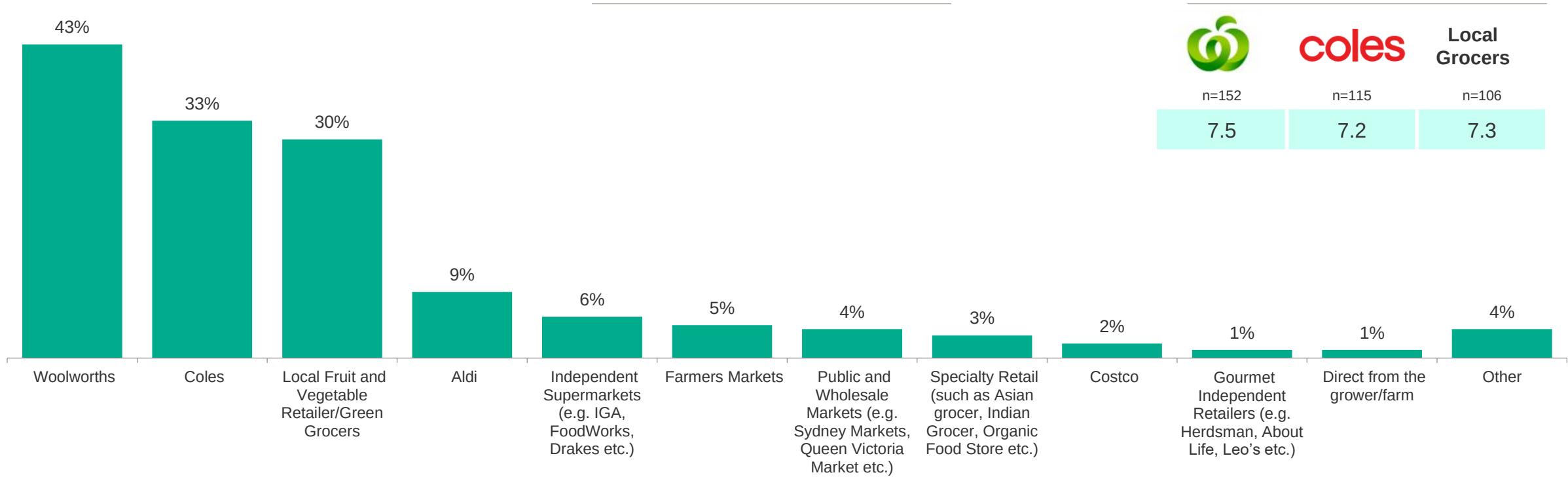


Avg
0.6
Times per week

Q52. Thinking about when you are shopping for and purchasing nashis... Which of the following statements best describes you?
Q51. How long ago did you first start buying and eating nashis...?
Q67. On average, across the year, approximately HOW OFTEN do you BUY NASHIS?
Base: Nashi buyers/consumers, n=353

Nashi are mostly purchased at Woolworths, consistent with general fruit and grocery shopping behaviour; with most existing buyers finding it easy to locate nashi in-store.

Nashi Place of Purchase.



Ease of Locating Nashi In-Store.
(scored out of 10)

		Local Grocers
n=152	n=115	n=106
7.5	7.2	7.3

There is no real consistency across store environments as to location of nashi.

Ease of finding is impacted by signage, placement, display and stock levels.

Both the placement and size of the display influence ease of locating nashi:

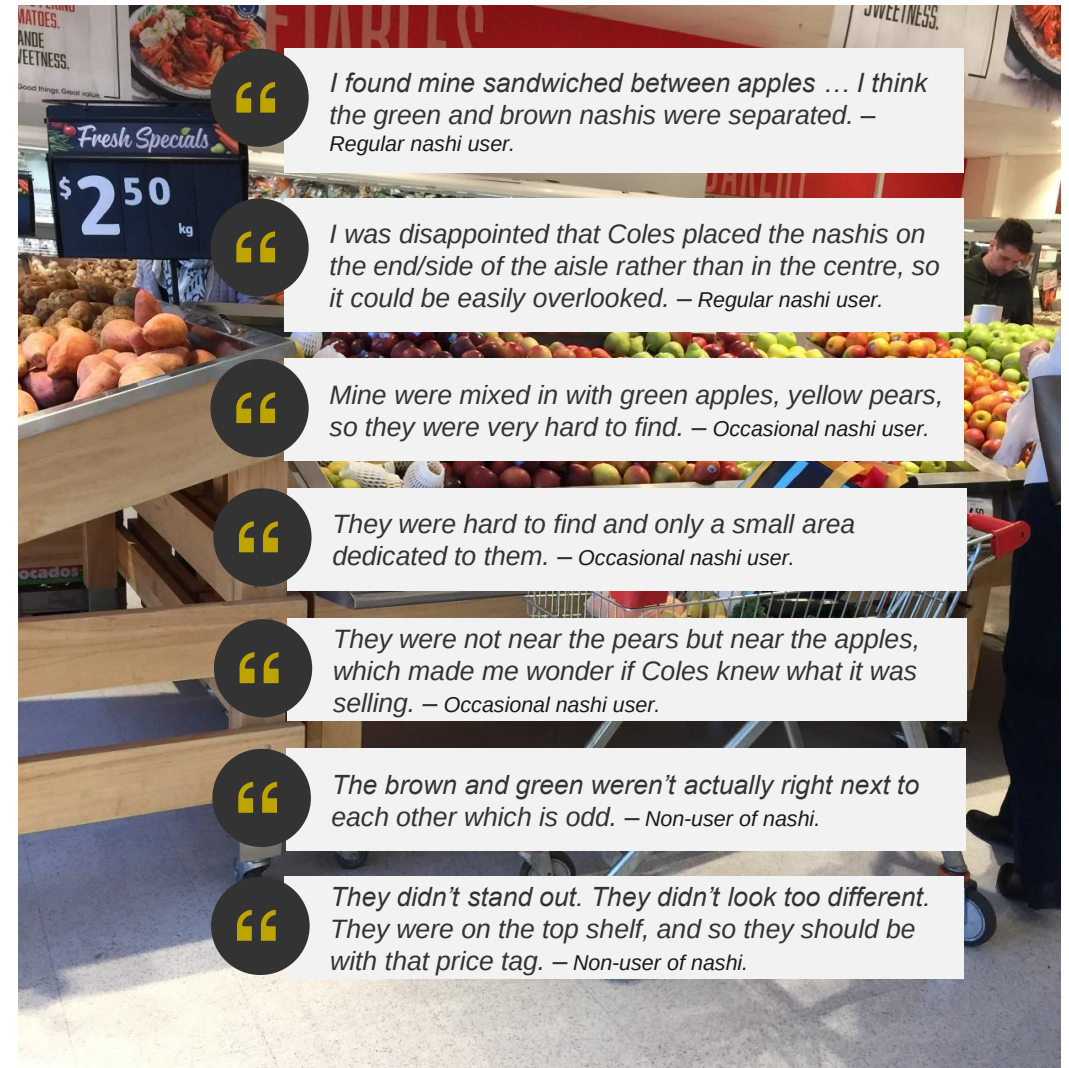
- The fruit and vegetable section is generally familiar and easy to navigate.
- However, although nashi are located amongst loose fruit displays, there appears to be little consistency in terms of actual placement in this section.

Shoppers start by looking for pears and apples (which are typically plentiful and easy to find) as a reference point, with the following results:

- Most expect co-location with other pears, but nashis may be amidst apples only (and separate from other pears) or next to other fruits e.g. mandarins.
- Green and brown nashi variants may be located next to one another, or may be separated entirely, with the two types located in different places.
- Nashis may be located with other tropical, “exotic” fruit e.g. pawpaw, pineapple, kiwi, passion fruit.

Other aspects impacting navigation include:

- There is little signage to indicate the presence of nashi in-store, and signage is not distinct from that for “regular” pears, meaning that nashi may be missed.
- Placement at the end of an aisle (esp. if only a few are displayed) can also mean that nashi are overlooked by consumers.
- In-store tastings would help to elevate awareness.



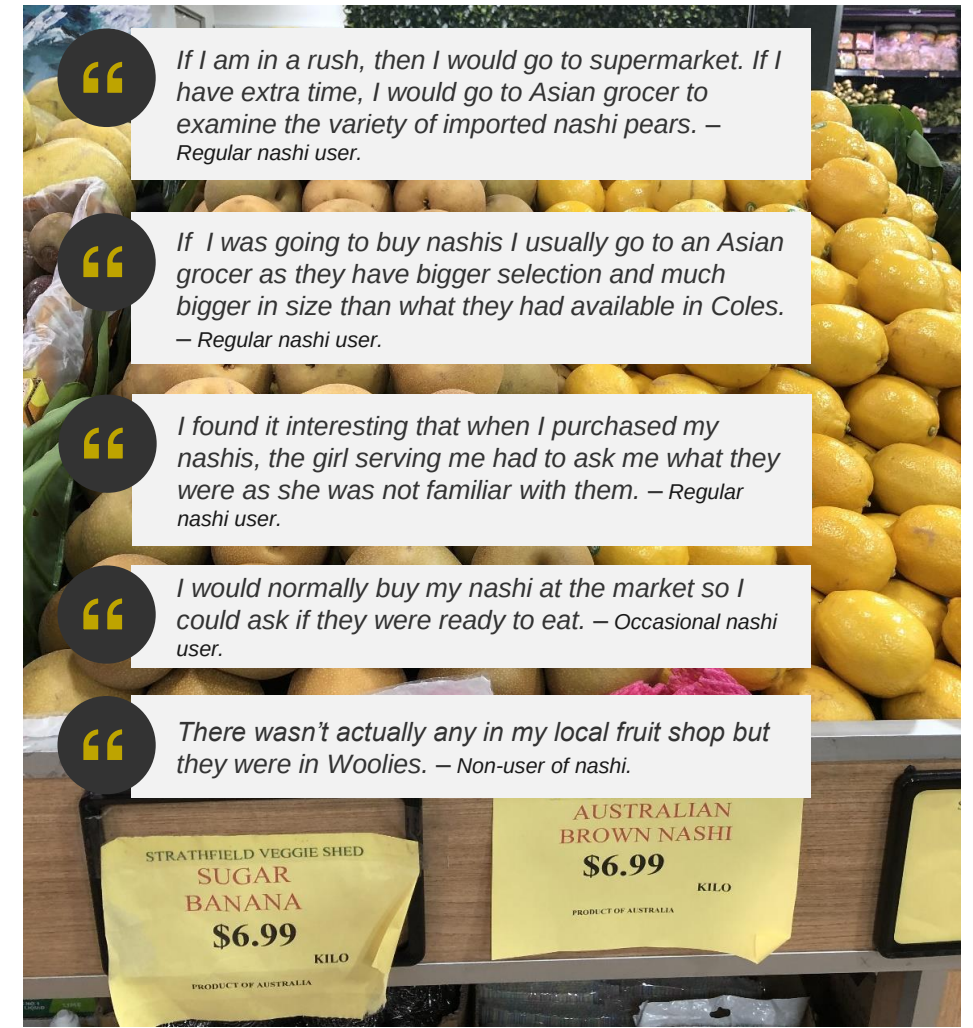
Supermarket vs greengrocer: Supermarkets offer convenience but not necessarily the best range, quality or price.

Selection of shopping channel depends on a range of factors:

- Convenience – proximity; multi-purpose (multiple purchases/tasks achieved at once);
- Range stocked – whether both green and brown, or other imported nashis.
- Selection available – number and quality of fruit (freshness, size, shape, skin condition).
- Store knowledge (familiarity with nashis) and advice e.g. Whether fruit is ready to eat.
- Price.

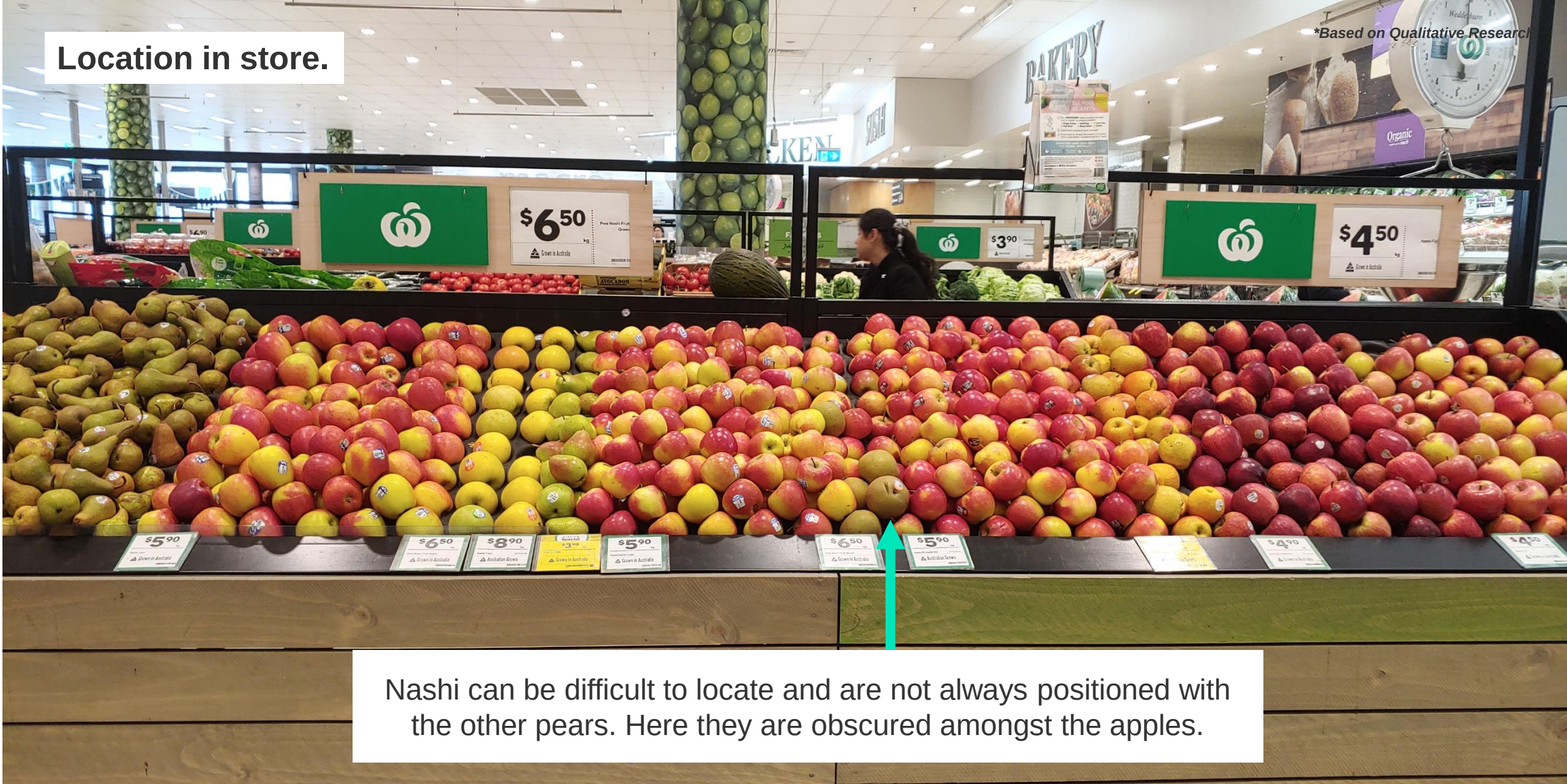
Amongst regular and occasional purchasers:

- Supermarkets are visited regularly for staples and were therefore the regular source of nashi for many research participants.
- Asian grocers are expected to have greater range of variants (local and imported), more stock, more “expertise” and higher quality fruit available. However, they are less convenient to visit overall – can be more of a top up shop.
- Green grocers (Asian and otherwise) are more likely to have imported product than supermarkets, and typically fresher and lower priced. They can also be easier to navigate/ find nashis.
- Markets and grocers offer an opportunity to get advice regarding the fruit.



Location in store.

*Based on Qualitative Research



Nashi can be difficult to locate and are not always positioned with the other pears. Here they are obscured amongst the apples.

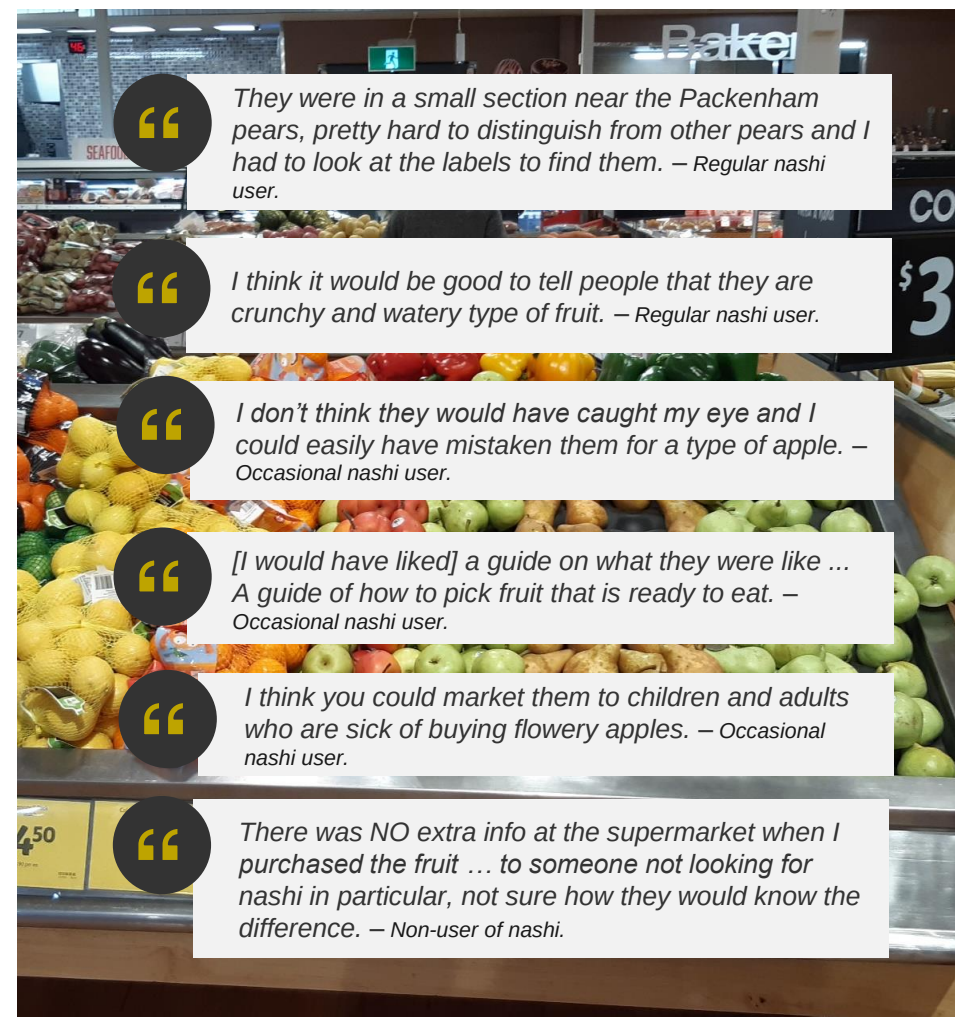
Enhanced signage has potential to aid take-up, especially for those less familiar with nashi.

Information provided about nashis differs from store to store. In general, however, little information is available other than price and provenance.

- Only one instance of a descriptive label was found by research participants. This described taste, texture and the inside of the fruit, and was considered extremely helpful.
- There were some instances of mislabelling which impeded recognition and location of the two variants available (wrongly labelled or only one variant labelled).
- Stickers on fruit are welcomed, particularly communication of Australian provenance.

Ideally, signage would contain product information including:

- The taste and texture of nashi – including a description of interior qualities.
- How to choose a ripe nashi.
- How to store nashi.
- The differences between variants.
- Meal or serving suggestions e.g. recipes, what to pair them with.
- Health or other benefits.



A well-stocked, visually appealing display has potential to aid take-up.

The visual appeal of the nashi display differs from store to store. Elements that contribute to a visually appealing and user-friendly display include:

Distinct position and containers.

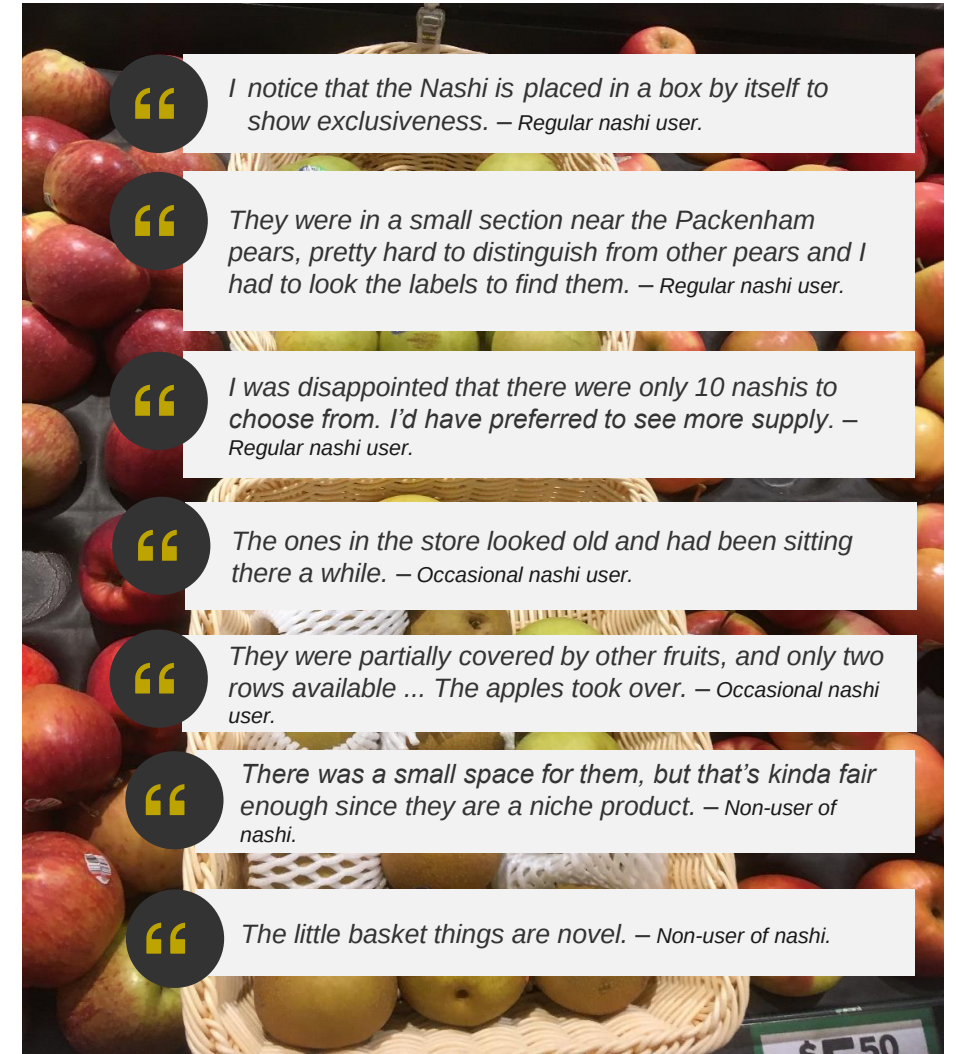
- Baskets or elevated boxes distinguish nashi from other fruit, draw attention and drive premium associations. However, nashi are sometimes displayed alongside or between apples or other fruit making them difficult to locate.
- Displaying green and brown nashi adjacent to each other to creates impact. However, separation of the two variants in displays is not uncommon.
- Packaging or pockets underneath the fruit preventing it from rolling also aid the visual appeal of the display.

Maintaining a high volume of fruit in the display.

- Displays with plentiful fruit have greater visual appeal, as well as improving stand-out.

Maintaining the quality of the fruit on display.

- There is overall preference for unblemished fruit. Some of the fruit (especially green nashi) appears soft or “scarred”/“scratched”/“bruised” which is off putting.
- Locating nashis with the exotic/specialty fruit may afford greater protection.



“

I notice that the Nashi is placed in a box by itself to show exclusiveness. – Regular nashi user.

“

They were in a small section near the Packenham pears, pretty hard to distinguish from other pears and I had to look the labels to find them. – Regular nashi user.

“

I was disappointed that there were only 10 nashis to choose from. I'd have preferred to see more supply. – Regular nashi user.

“

The ones in the store looked old and had been sitting there a while. – Occasional nashi user.

“

They were partially covered by other fruits, and only two rows available ... The apples took over. – Occasional nashi user.

“

There was a small space for them, but that's kinda fair enough since they are a niche product. – Non-user of nashi.

“

The little basket things are novel. – Non-user of nashi.

In-store experience of nashi.

Images submitted by research participants illustrate variability in terms of location, display method and use of protective coverings.



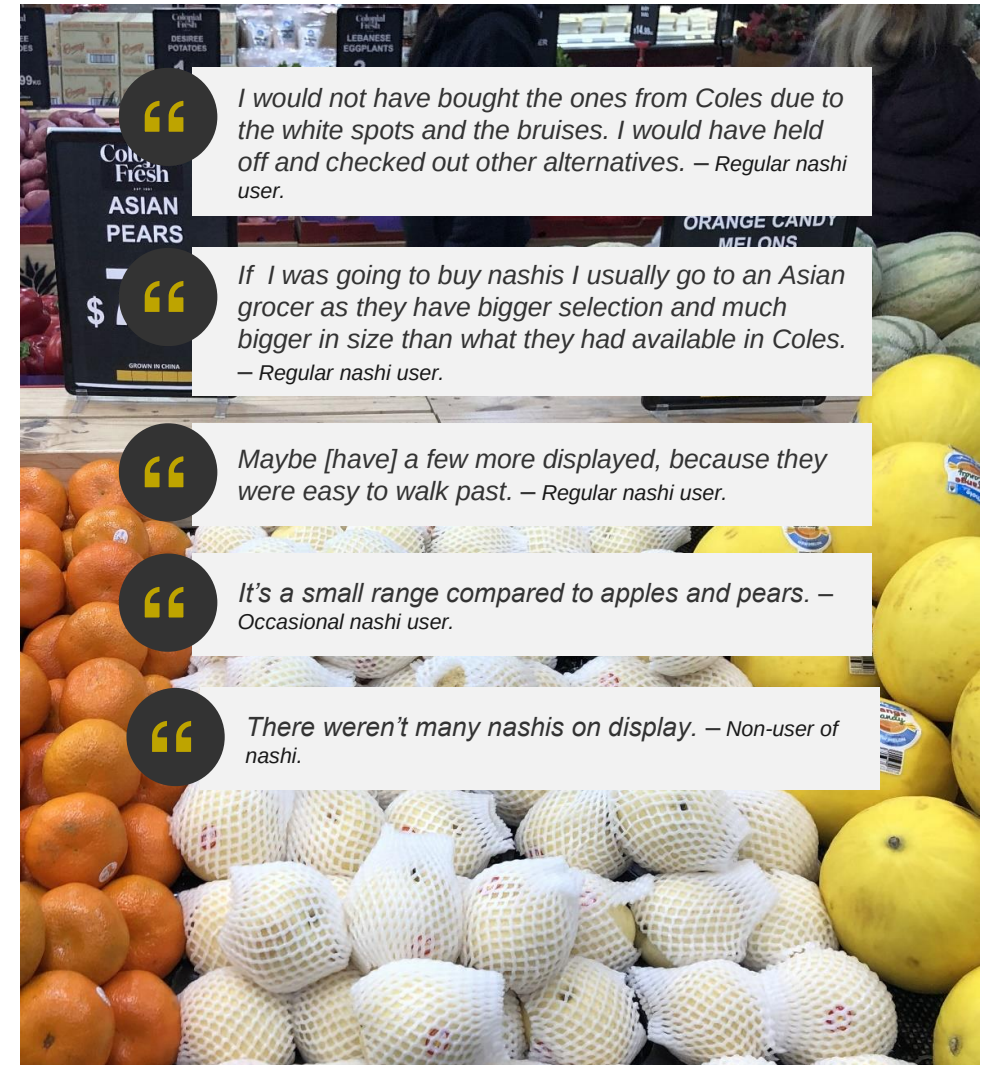
There is great variation across stores as to the selection of nashi available, impacting on quality perceptions.

The selection of nashi available differs from store to store.

- Although most supermarkets had both brown and green nashi available, the few specialist stores (Asian Grocer; Fruit and Veg store) visited by participants stocked only green nashi. NB: This may have been due to disruptions to imports during the COVID-19 period.

The number of fruit available impacts on standout and overall appeal:

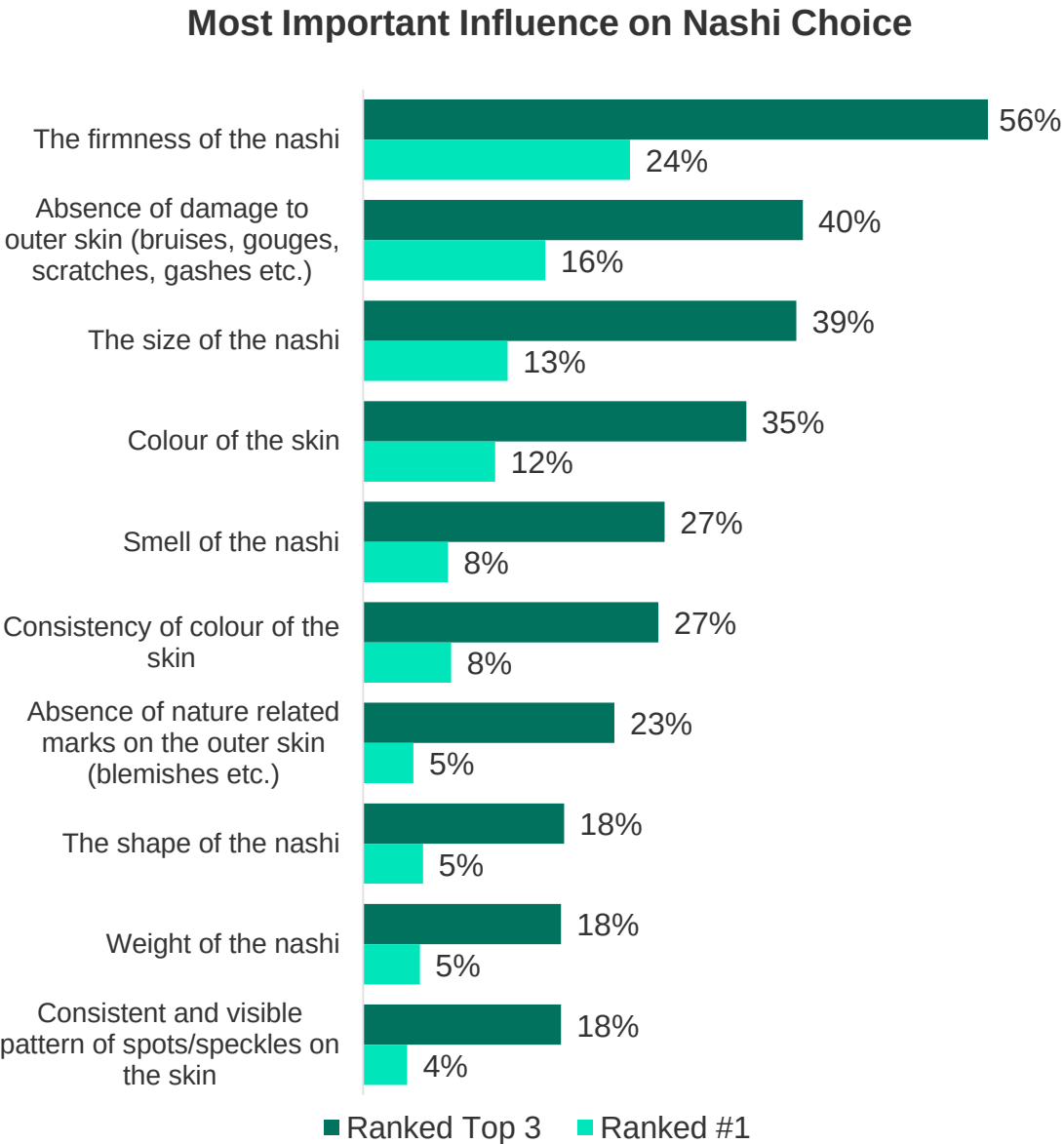
- Plentiful stock aids awareness and standout of nashis.
- Where there is plentiful stock, customers welcome being able to choose what they feel is the freshest and least damaged fruit (also sometimes the fruit they feel is biggest and most evenly rounded/shaped).
- Low levels of stock make locating nashi more difficult and customers feel they have to settle for what is available. Typically what is left also appears more “bruised” than it should.
- Low stock impacts negatively on perceptions of freshness. There is a sense that the remaining fruit has been “sitting” on the shelf, or has been rejected by others.
- Stock levels and consequent selection differs widely from store to store. On occasion participants had to seek out the few remaining green nashis when sourcing product for the research.



Firmness is the single most important factor influencing nashi choice.

The firmness of the nashi is considered significantly more important than any other factor when deciding which particular nashi to choose in-store.

This is followed in importance by an absence of skin damage, such as bruises and scratches, and the size and the colour of the nashi.



Firmness is used as an indication of freshness.

There are three key considerations when selecting nashi: freshness, quality and size.

Freshness and ripeness are assessed via touch:

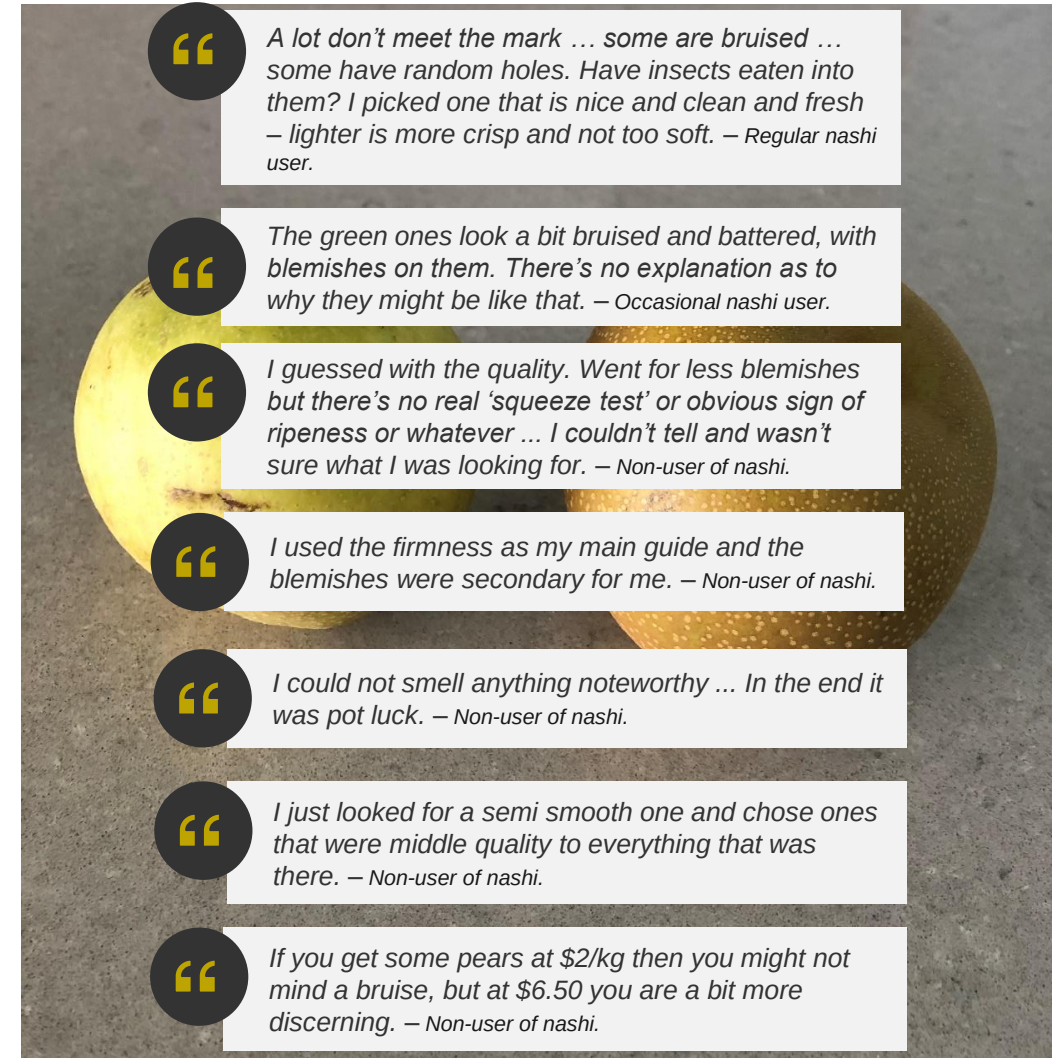
- This can be difficult, especially for non-users who are unsure as to whether a harder or softer texture indicates ripeness.
- A firm texture, judged by pressing the skin, is generally sought. A soft texture can indicate an overripe product.
- Aroma is not strong enough to assist in judging freshness or ripeness.

Quality is largely related to markings on skin:

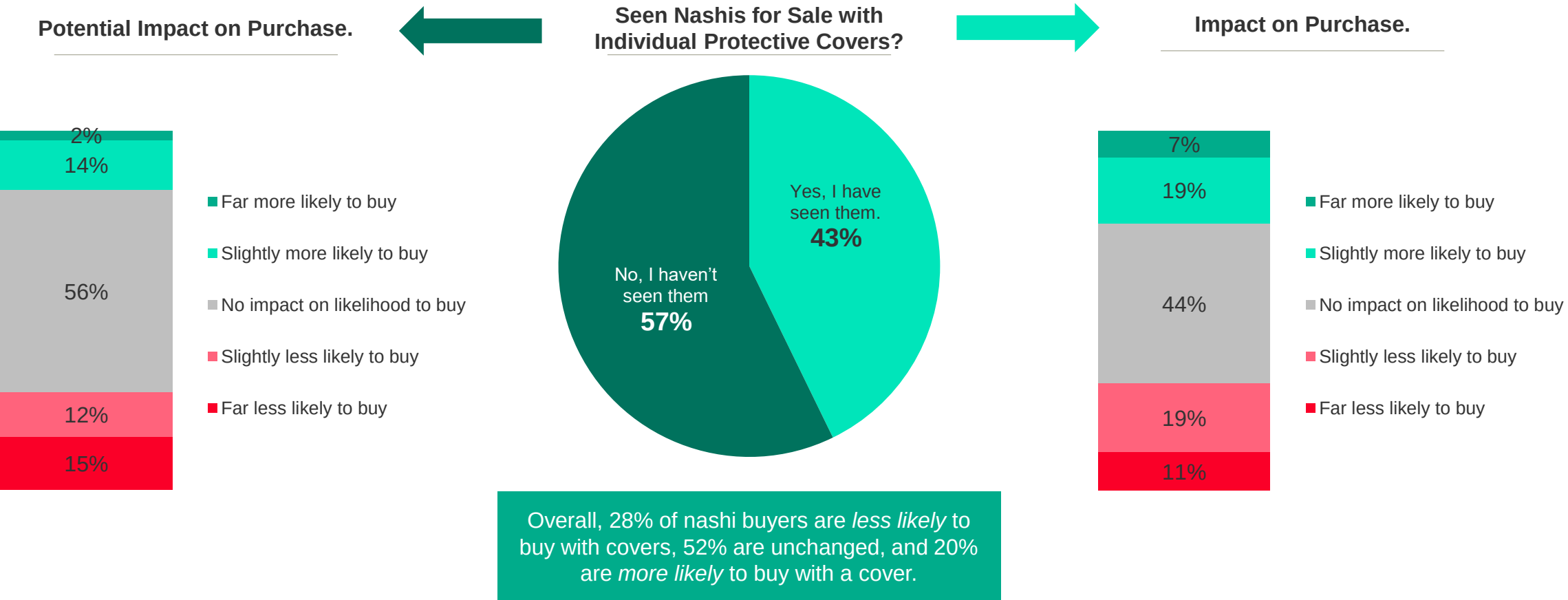
- Consumers look at skin for dents, marks (“*scratches*”; “*bruises*”; “*scars*”; “*scuffs*”), holes or tears and will reject fruit which is considered too blemished.
- Some non-users claim they would more likely choose a brown nashi because these appear less blemished in general.

Shape and size also impact choice of specific fruit:

- Larger and more evenly rounded fruit is favoured.
- However, consideration would be given to a deliberate approach by suppliers to creating an offering that repositions potential “defects” as natural, and offers them at a reduced price point e.g. Odd Bunch type branding.



Just under half of all nashi buyers have seen the fruit with protective covers, with mixed results on propensity to purchase.



Additional packaging in general is disliked but nashis warrant additional protection.

Preference is for a sustainable format that protects but also offers easy access e.g. paper, display baskets.

There is little consistency across stores as to whether nashis are displayed with or without protective coverings.

Where present, different types of protective elements are used:

- Tissue paper wrapping individual nashis.
- Foam coverings wrapping individual nashis.
- Plastic/foam pocketed underlay – to keep nashis in place.
- Separating nashis from other fruit into baskets or boxes.



Those who don't like covers have strong feelings against them, mainly due to environmental concerns regarding excessive packaging.

- Concerns about sustainability/waste and the environment, especially in relation to plastic.
- Coverings can limit product visibility, hiding damaged fruit or making it hard to find in store; and limits ability to ascertain firmness/inspect product.
- May also be viewed as adding to the cost (unnecessarily)

“

I don't like to buy fruit that has packaging. It seems excessive and a waste. — Occasional nashi user.

“

*Could be used with Chinese ones to conceal bruising ...
I need to touch and see them. – Occasional nashi user.*

“

I actually avoid packaged fruit. — Non-user of nashi.

***Based on Qualitative Research**

Why LESS likely to buy with a cover?



I would never buy them. The organic ones we do buy are fine and don't require "protective covers"... It would completely put me off buying them

I try to buy products with less packaging.

May be covering up blemishes in fruit

Why waste money packaging

Extra rubbish that's not needed

Feel that these sleeves are excessive especially in regard to environmental issues

Because I care about the environment.

9

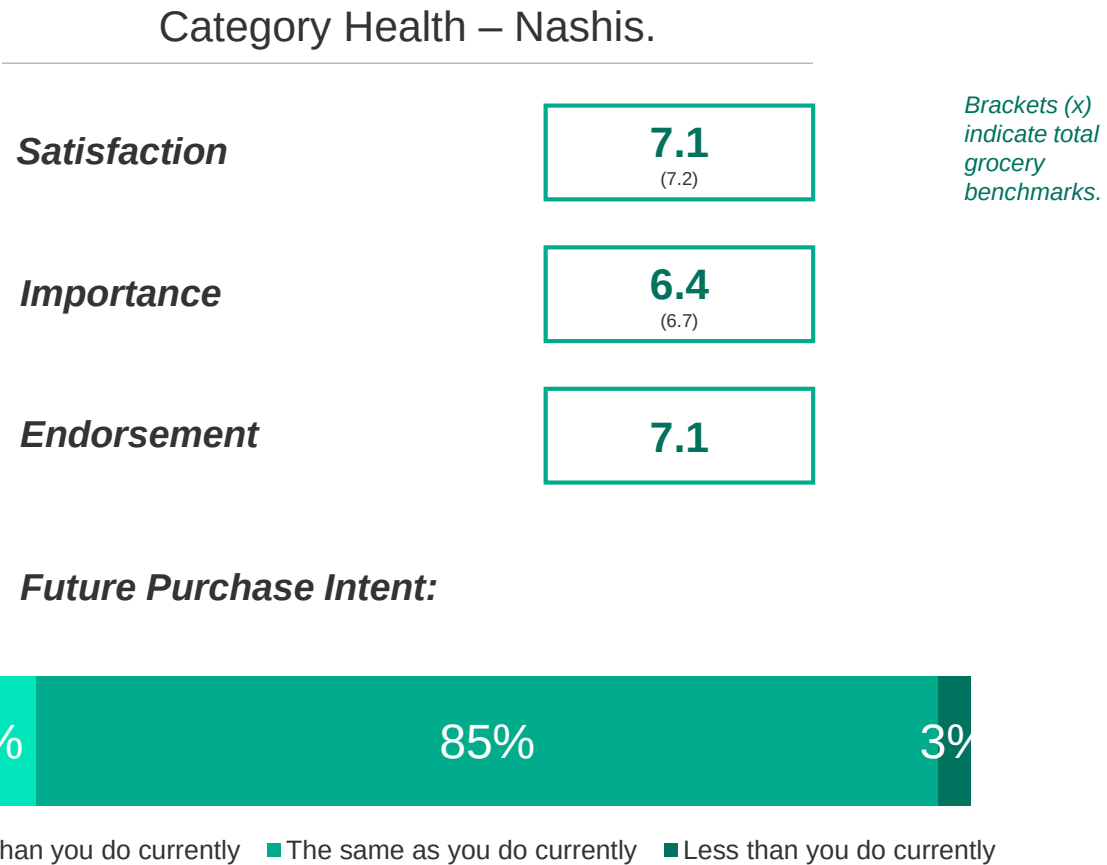
How, why and when are
consumers eating nashi?

Nashi category-health appears to be in reasonably good shape among current buyers

Buyers are highly satisfied with the range of nashi currently available, and likely to endorse nashi to others.

However, there is a slight lack of importance placed on having nashi available, compared to other grocery items.

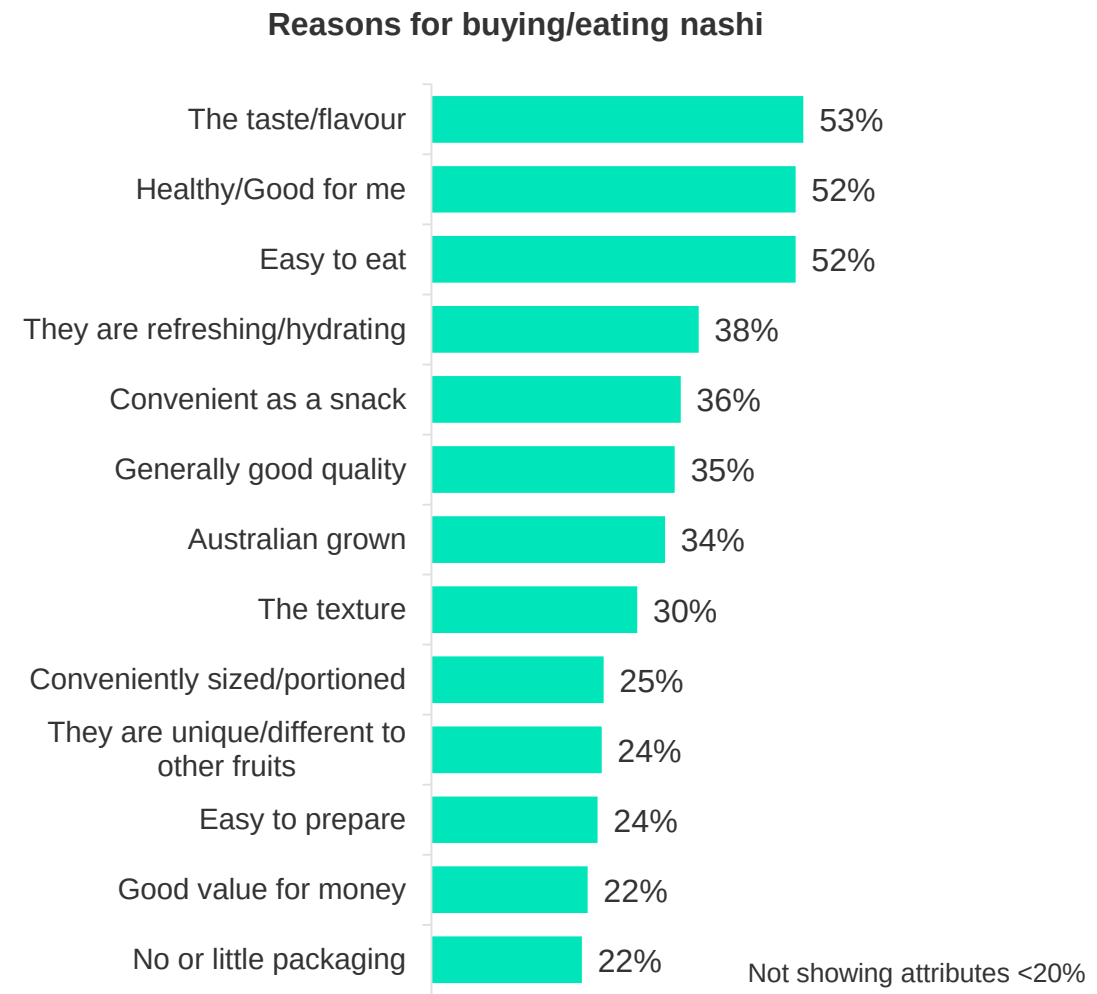
The vast majority of current buyers expect to maintain their same level of nashi buying into the future.



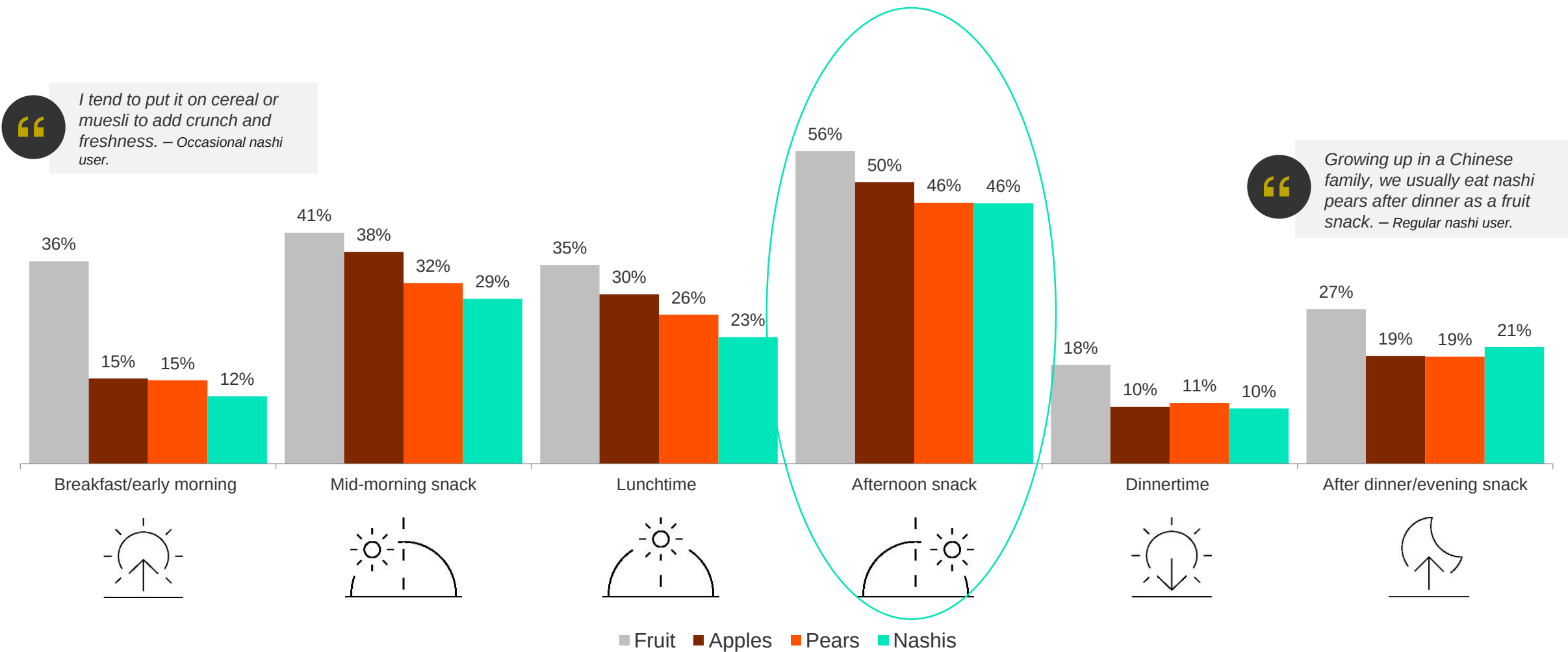
As with fruit more broadly, consumers buy and eat nashi for taste, health, and ease of eating.

However, being refreshing/hydrating ranks particularly highly for nashi; with convenience, quality, and Australian origin also driving purchase.

Compared to green nashi, brown nashi buyers are more likely driven by taste, texture and ease of preparation.



Like other fruits, nashi are mostly eaten as an afternoon snack.



Nashi are most commonly eaten on their own, either cut up or just as they are.

They are sometimes used in fruit salads or fruit platters, with little common usage occurring beyond this.

“

I eat them every week depending on availability in the local grocer. I mix them with fruit salad or simply eat them like every other fruit.. – Regular nashi user.

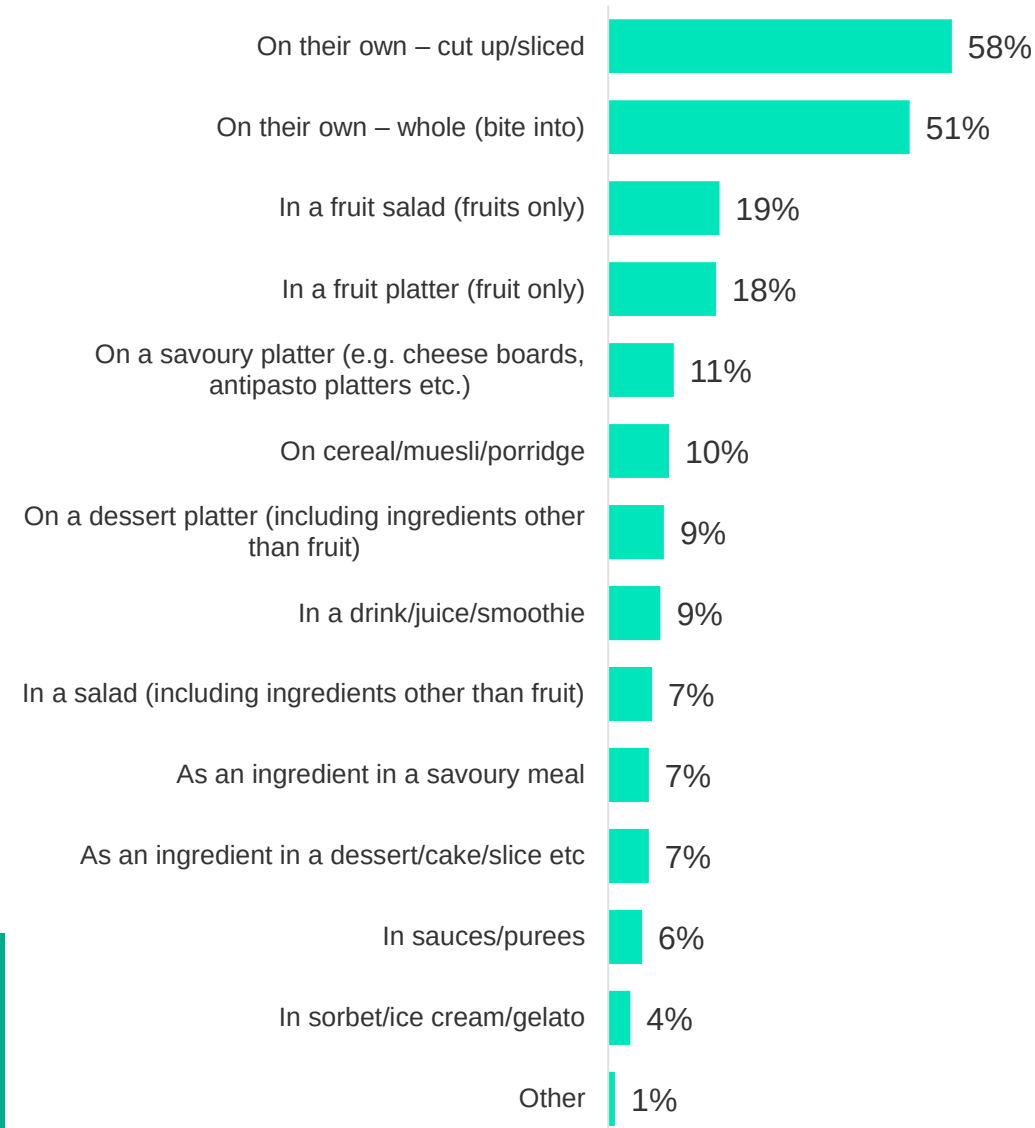
“

I usually buy them whenever I see them at the shop. I buy them as a snack to eat fresh, make fruit salads with them or use them in rocket and nashi pear salads for dinner.. – Regular nashi user.

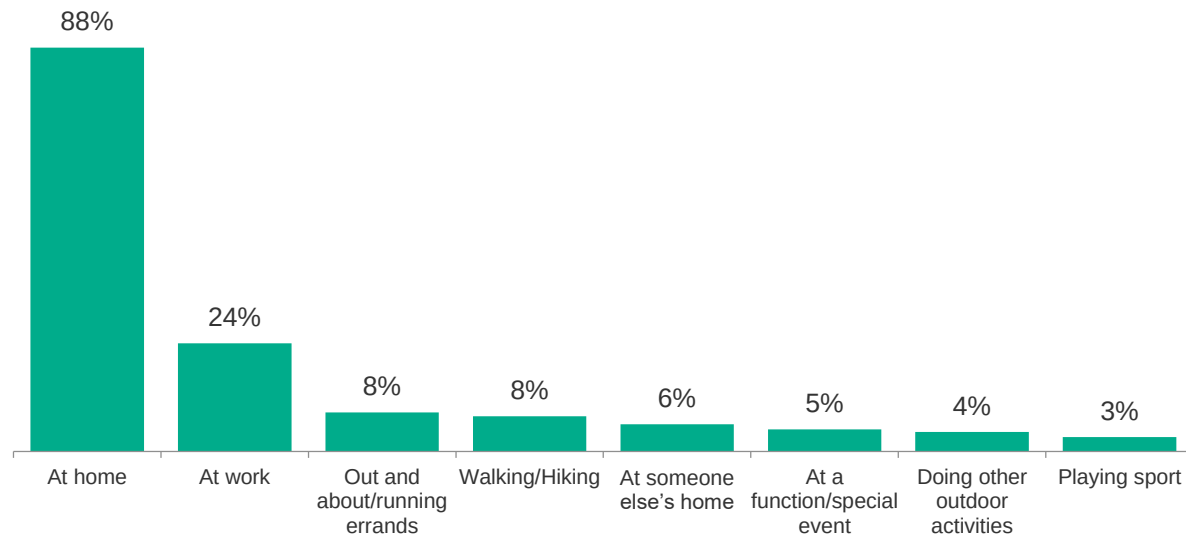
“

It's very versatile and works well on a cheese platter – not overtaking in flavour but complementary. – Occasional nashi user.

Nashi is considered superior to Australian pears in both texture and visual appearance for use on fruit/cheese platters. The premium pricing also supports this use. Promotion of nashi for this purpose through cooking shows and publications has potential to provide a compelling point of entry for new users.



Nashi are rarely eaten anywhere other than the home, or in some cases at work.



Qual findings revealed that occasional users tend to see nashi more as a treat or special occasion ingredient on a platter than an everyday snack.

This is due to either the price or perceived lack of availability.



I have them more for a treat I guess... when I'm making up a platter for dessert. — Occasional nashi user.



I enjoy using them on a fruit platter at home after dinner with guests and also on a cheese platter that I may take to friends. — Occasional nashi user.



They are more expensive and not as readily available as apples and pears. — Occasional nashi user.



As the cost is higher than an apple or pear, I might use it for a pear and rocket salad or decorative topping on a cake or apple tart. — Non-user of nashi.

There is a lack of knowledge on nashi shelf-life and how to judge ripeness.

Storage:

- Nashi are stored in the fridge to make them last longer (especially in warm weather) and/or taste more refreshing.
- OR in the fruit bowl to eat at room temperature (especially in winter) and/or to ripen the fruit.
- There is considerable discrepancy in consumer understanding around the shelf life of nashi. Estimates range from a couple of days, especially if kept at room temperature, to one to two weeks after purchase.
- There is some perception that nashi pears “go off” quickly, which can limit quantity purchased.

“ I keep them out in the fruit bowl if not in summer and if the weather is too hot I keep them in the fridge to keep them fresh. – Regular nashi user.

Information about both how to judge whether a nashi is ripe and how best to store nashis would be welcomed in building consumer confidence at purchase/trial (and ensuring a positive eating experience).

Judging ripeness:

- Those unfamiliar with nashi may not know whether they are ripe when firm or soft to the touch.
- However, even regular users can have difficulty judging whether or not the fruit is ripe. Some expect nashi to be ripe immediately and others expect to leave it to ripen on the fruit bowl.
- Pressing the flesh of the fruit to gauge the texture is a common strategy when shopping for nashi.

“ There’s usually no need to wait and I eat them straight after I bought them. – Regular nashi user.

“ I tend to keep them in the fridge – I like the taste of them cold and I often buy ahead of time. – Occasional nashi user.

“ I guess they’re ripe when they’re firm. I don’t really know.. – Regular nashi user.

“ I know when it starts to brown a lot it means it is ripening.. – Regular nashi user.

“ I’m not really sure how to tell if they’re ripe but I’ll start eating them once I’ve purchased them. – Regular nashi user.

There is some discrepancy between nashi seasonal availability and ideal availability.

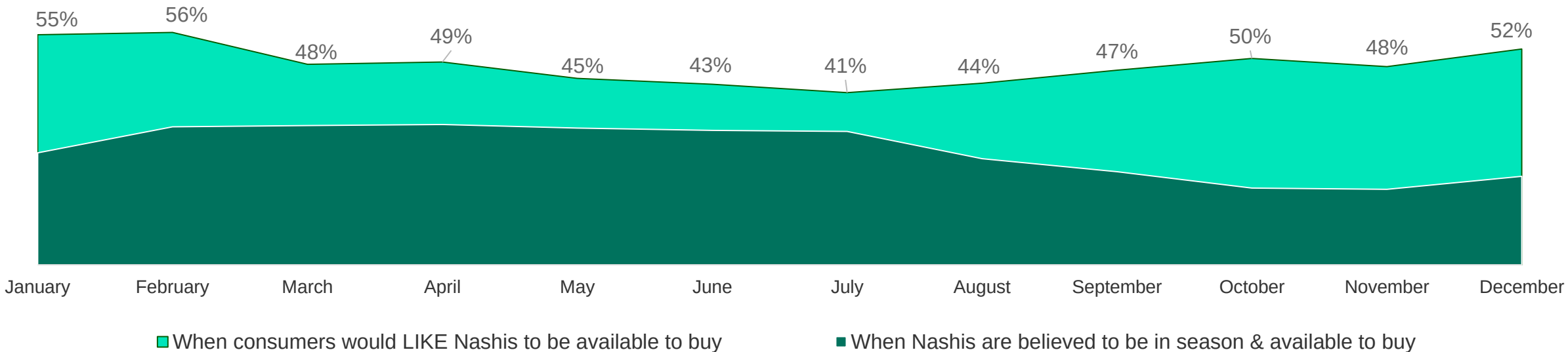
There is appetite for nashi all year round, however consumers would most like nashi to be available in the summer months of December-February. Promoting nashi as a refreshing snack for a hot day, served chilled from the fridge, has potential to encourage trial amongst non-users and increase frequency amongst occasional users.



Nashi is crunchy and great on a hot day. I've served it in crushed ice and it's gold. – Regular nashi user.



Typically we eat nashis during summer when we are thirsty and want something cold and refreshing from the fridge. – Regular nashi user.



Buyers consider it very important that the nashi they buy are Australian.

However, many are currently unaware of the source of the nashi they are buying.

“

I have greater confidence if they are grown in Australia. – Regular nashi user.

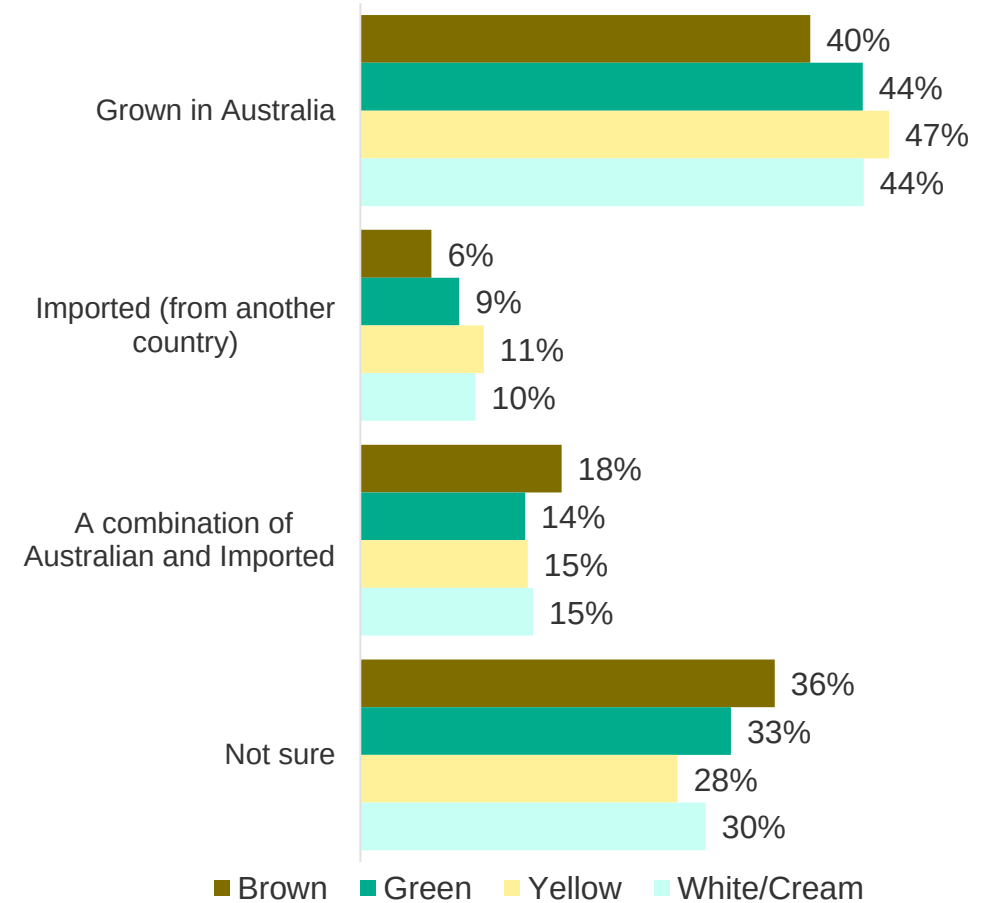
“

I won't buy fruit unless it's Australian grown. – Non-user of nashi.

**Importance of Nashis
being Grown in Australia:**

7.9_{/10}

Nashis Purchased



Preference for Australian grown nashi is in line with general purchasing behaviours and attitudes.

Fieldwork conducted during the qualitative research revealed that the nashi supermarket stock was labelled grown in Australia.

- This is reassuring, especially to those less familiar with nashis.
- First choice is for Australian grown, though for very regular purchasers, provenance may not be critical nor noted.

Australian grown means:

- Likely to be fresher fruit, high standards.
- Supporting local farmers.

“

I don't really mind where they're grown, but if the label says Australian, I'd assume it's fresher and good to support local farms. – Regular nashi user.



“

I do care about where fruits are grown but in this case it's a novelty so I'm not gonna get weird about it being imported. – Non-user of nashi.

“

I don't know if the quality standards in China is as good. – Occasional nashi user.

Greengrocers and Asian grocers are more likely to stock imported variants:

- Imported variants can be cheaper – but may be due to supplier (not large supermarket chains) rather than fruit itself; or conversely can be more expensive (based on anticipated transit costs).
- Imported nashi may differ in flavour, shape and size. Imported Asian varieties are sometimes described as more flavoursome, “*more juicy*”, bigger and sweeter by those who are familiar with them.
- Of imported nashi, preference is for Japanese, and then Korean nashis rather than from China, where quality standards may not be as strict. Some also reject Korean grown nashi.

10

Why aren't shoppers buying nashi?
How to encourage purchase...

Lack of awareness and familiarity is a key barrier to trial.

Potential consumers are also:

- Unsure about taste, texture, ripeness
- Unsure how to use/serve
- Lack of info about the difference between brown and green varieties.
- No perceived need
- No clear perceived point of difference from Australian pears or apples.
- Lack of visibility in the supermarket.

Lack of familiarity is a major barrier to trial. Providing information at POS has potential to grow the market by attracting new users.

“

I had never heard of this fruit and did not notice them at the shop because of the plain appearance. – Non-user of nashi.

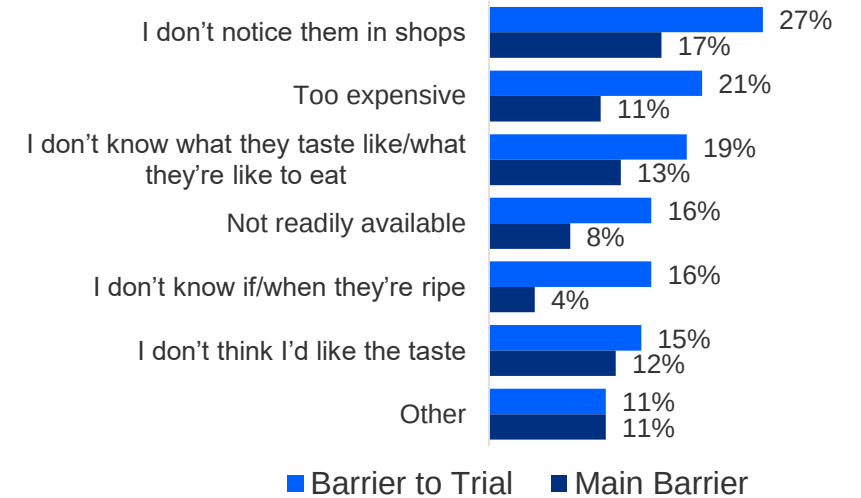
“

There was no extra info at the supermarket when I purchased the fruit. – Non-user of nashi.

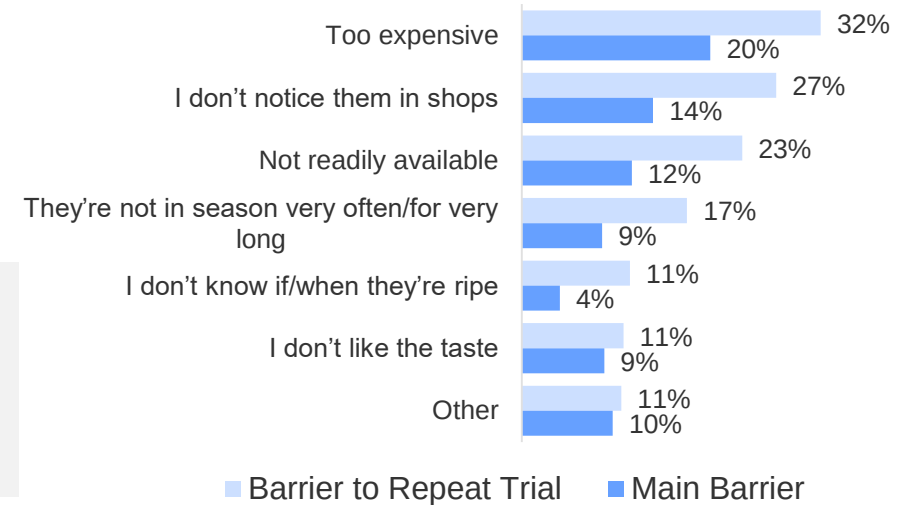
“

It would be good to have a profile, like they do with apples, for the different varieties. – Non-user of nashi.

Never Tried Nashis (n=201)



Tried Nashis (not in L12M) (n=447)



Feedback from those who had not previously tried nashi was generally very positive when trialled during the research.

- Current non-users were pleasantly surprised with the sensory qualities of the fruit, which were often unexpected based on the external appearance of the fruit.
- The crisp texture, juiciness and subtle flavour are highly appealing and differentiate nashi from both apples and pears.
- Non-users generally expected to purchase nashi in future based on their experience of trial during the research. However, the cost compared with apples and pears could be a barrier to frequent usage.

“

I've bought them since (trying them for the research) – love the subtle taste. – Non-user of nashi.

“

I'd probably buy it as a snack for the refreshing feeling and crunch. – Non-user of nashi.

“

I think now that I'm more aware (since taking part in the research) I will naturally buy the green nashi more as a regular fruit because I really enjoyed it. – Non-user of nashi.

“

I think the whole family would like the texture and the innocent taste. Not too overwhelming. – Non-user of nashi.

“

I'd probably try it again due to it being a good blend of smooth sweetness and crunch. – Non-user of nashi.

“

I'd probably use it in a fruit salad for when I'm entertaining and want to surprise those coming over with the texture. – Non-user of nashi.

“

I might use one to place on a cheese board to impress guests. – Non-user of nashi.



In-store samples may tempt those who have never tried nashi before to buy them, as would price promotions.

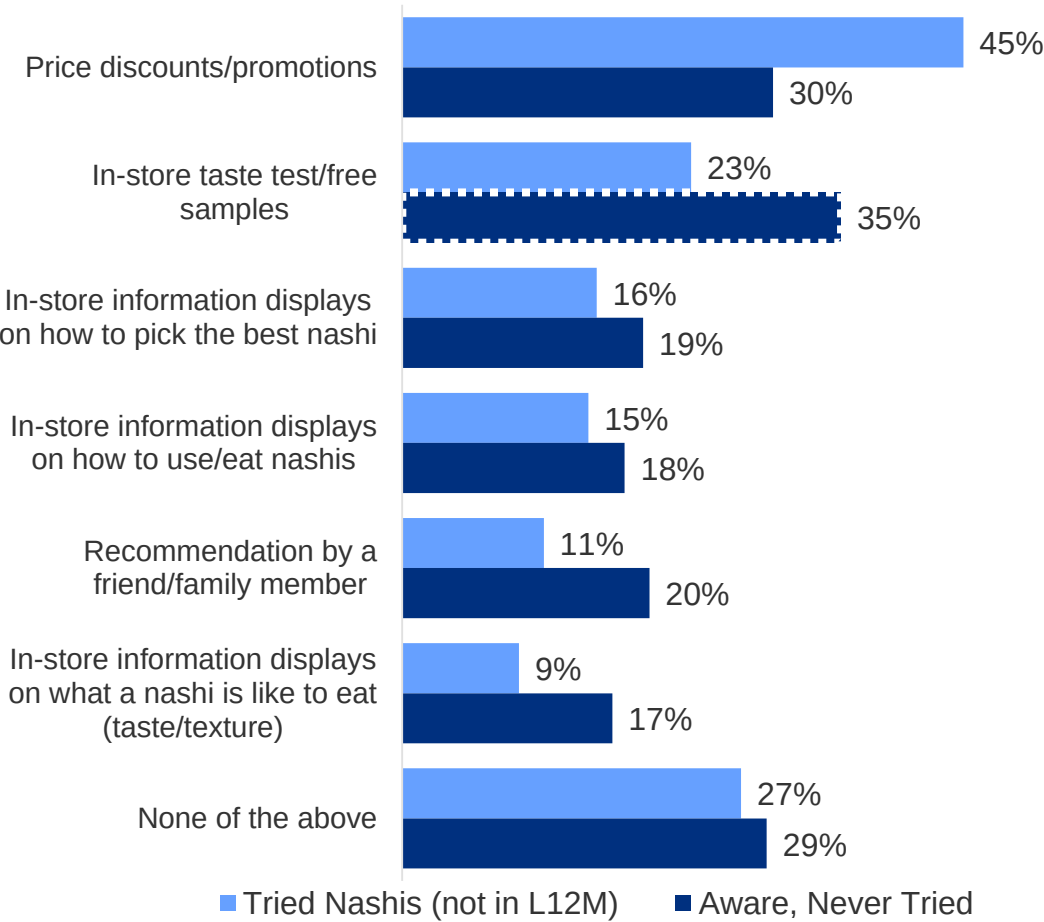
For those have tried Nashi's before but don't usually buy them, the factor most likely to influence purchase would be a price discount or promotion, whilst those who have never tried Nashis would be most encouraged to purchase if there were an in-store taste test, or free trial samples.

“ How do you tell when they're ripe? Why are they in those strange packages?.. — Non-user of nashi.

“ I liked the flavour, but at double or triple the cost, not sure I would eat them all the time. — Non-user of nashi.

Encouraging trial through offering taste testing in store (post-COVID 19) has the potential to grow the market by allowing non-users to experience the sensory qualities of the product.

Factors that would influence nashi purchase



Non nashi buyers have little idea what a reasonable price for nashi is, and what they may be willing to spend.

Over half of non-nashi buyers have no idea what a reasonable price is for nashi and are unsure of how much they would pay if they discovered they liked nashi.

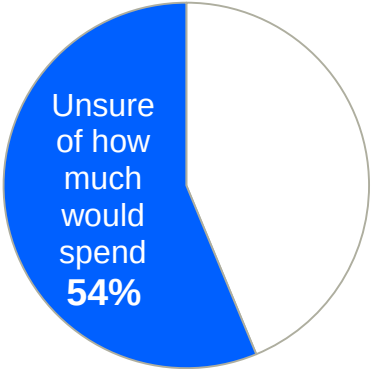
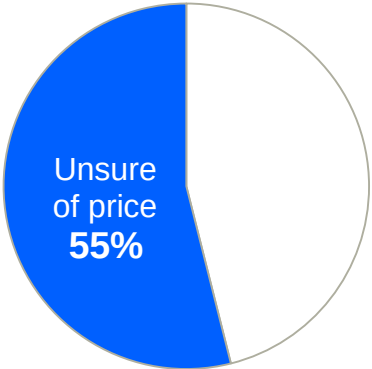
Others report expecting to pay \$4 a kilogram for nashi.

There is opportunity to increase the perceived value of nashi and set the standard of what the ‘normal’ price is; via methods such as increasing consumer familiarity with nashi, enhancing Australian grown claims and promoting its unique characteristics and versatility.

	Nashi Trial Price	Nashi Repeat Price
	Expected Price (Median)	Expected Price (Median)
Non-Nashi Buyers/Consumers	\$4.00	\$4.00

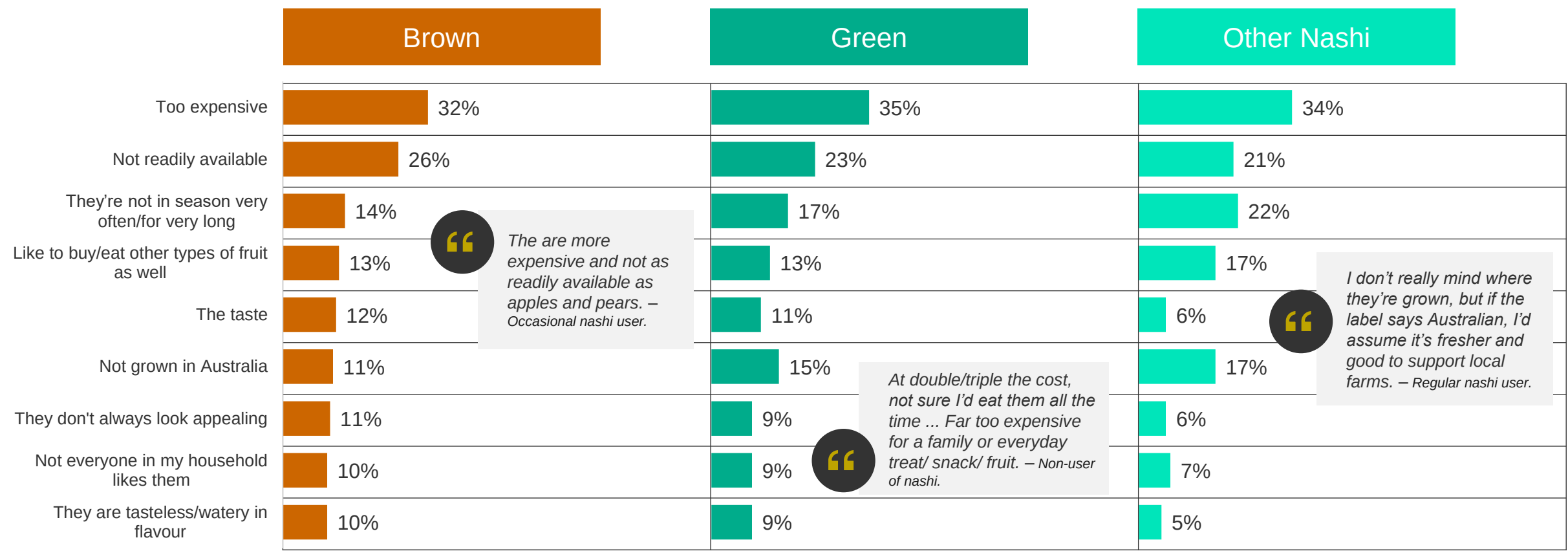


I won't pay more than \$6.50 per kilo esp. as they're quite heavy! 1kg is only 3-4 pears. I'd stock up if it's cheaper as they keep for few weeks. – Regular nashi user.



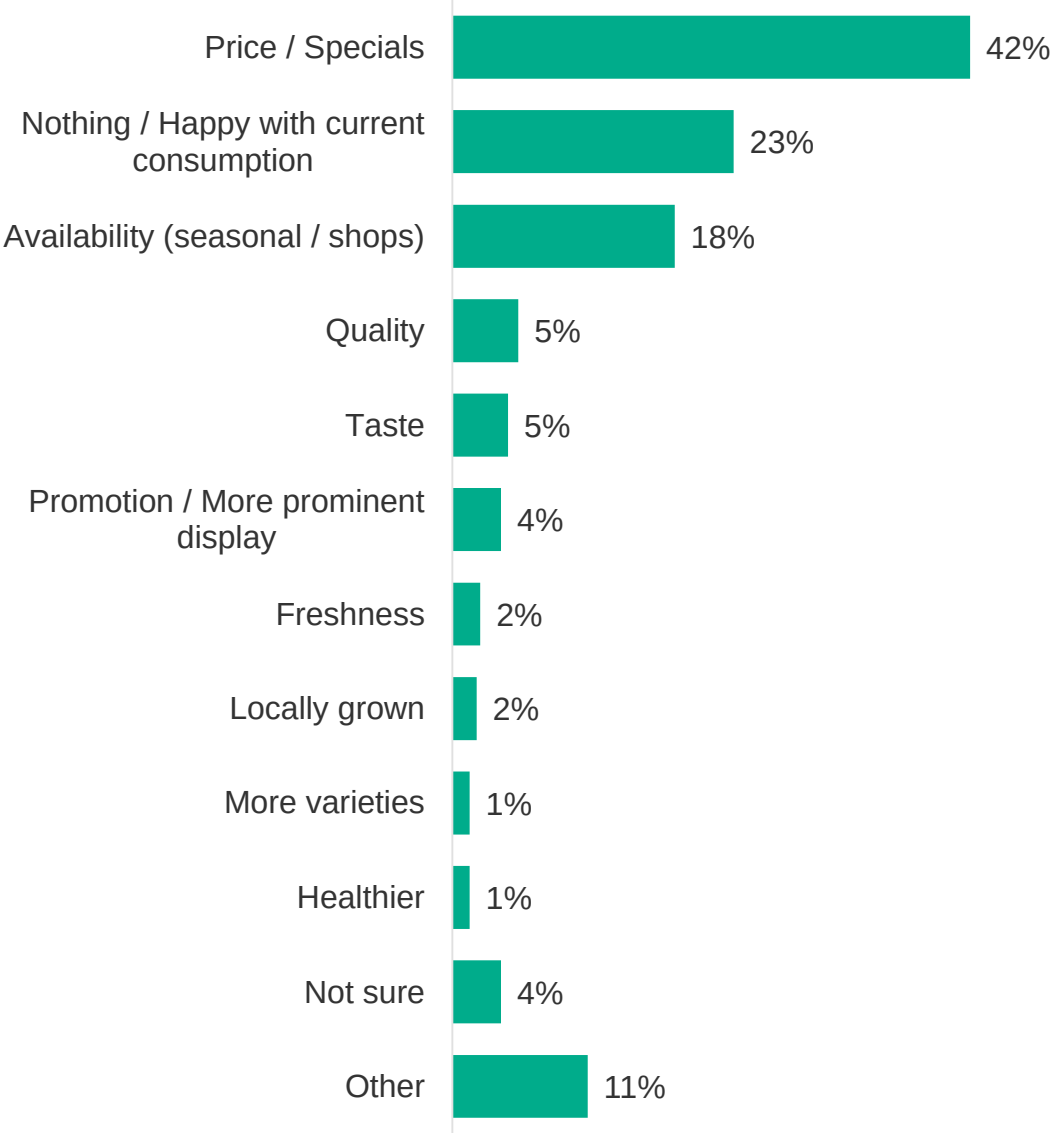
For those who are buying Nashi, price is the biggest barrier to more frequent purchase, followed by the fruit not being always readily available or in season very long.

The barriers to increased purchase are generally consistent across varieties.



Current nashi buyers indicate they would buy more nashi if they were cheaper or on special more often.

This is the main barrier to greater purchase, with the only other common responses centring on buying more if there was greater availability in shops and across seasons.



11

The nashi sensory experience
and ideals.

Responses to trial were very positive for both green and brown nashi.

Those who had not tried before were pleasantly surprised and occasional users were reminded of why they liked nashi.

Key product features driving liking are:

- Juiciness (delivering a refreshing eating experience)
- Crisp, crunchy texture
- Subtle sweetness
- Mild, subtle flavour

Negative experience was minimal but included:

- “Stringy” or “floury” internal texture
- Bitter skin (especially green variant)
- Rough or tough skin (especially brown variant)
- Blandness/lack of flavour

On the whole both past experience with nashi and response to trial during the research was very positive. Neither product features nor product quality appear to be barriers to purchase or a cause of lapsed purchase.



Juicy, crunchy and tasty – refreshing. – Regular nashi user.



I found them to be very refreshing, especially the green nashi. I found it better than a drink of water. – Occasional nashi user.



Crunchy – that’s the most important thing for me. – Regular nashi user.



I think the good thing about nashi pear is the subtle flavours. – Regular nashi user.



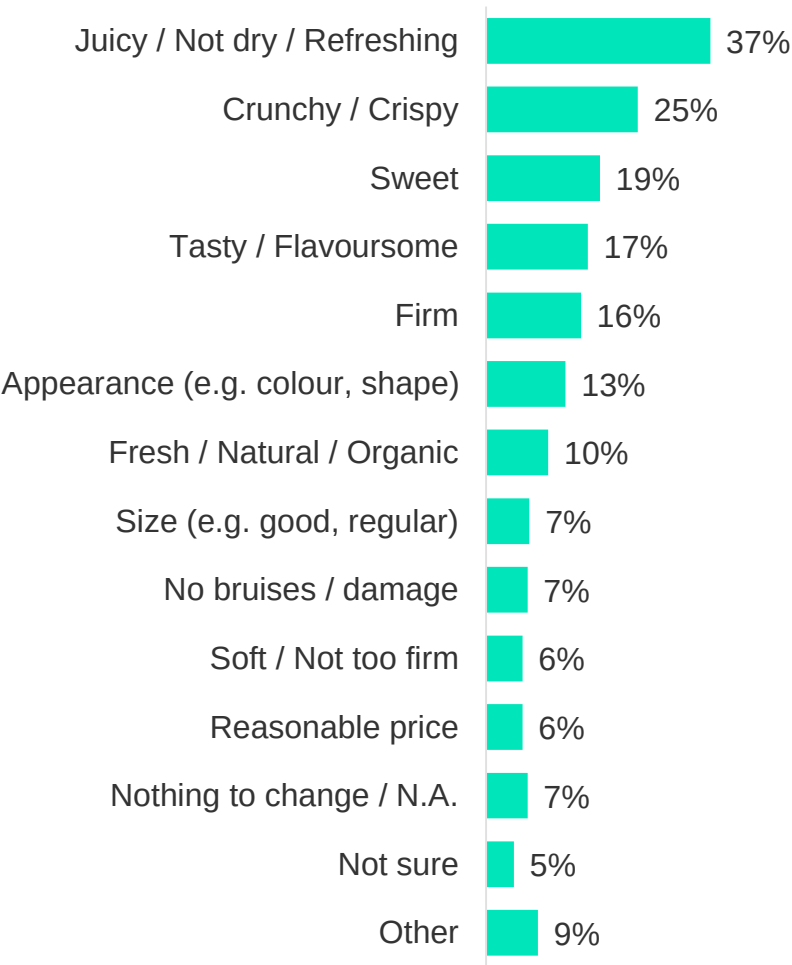
I wouldn’t eat it with the skin. It’s tough and bitter.. – Occasional nashi user.

The ideal nashi is described as juicy and refreshing.

Nashi consumers also consider the crunchy/crispy texture to be key; with sweet, tasty and firm also mentioned when describing the ideal nashi.

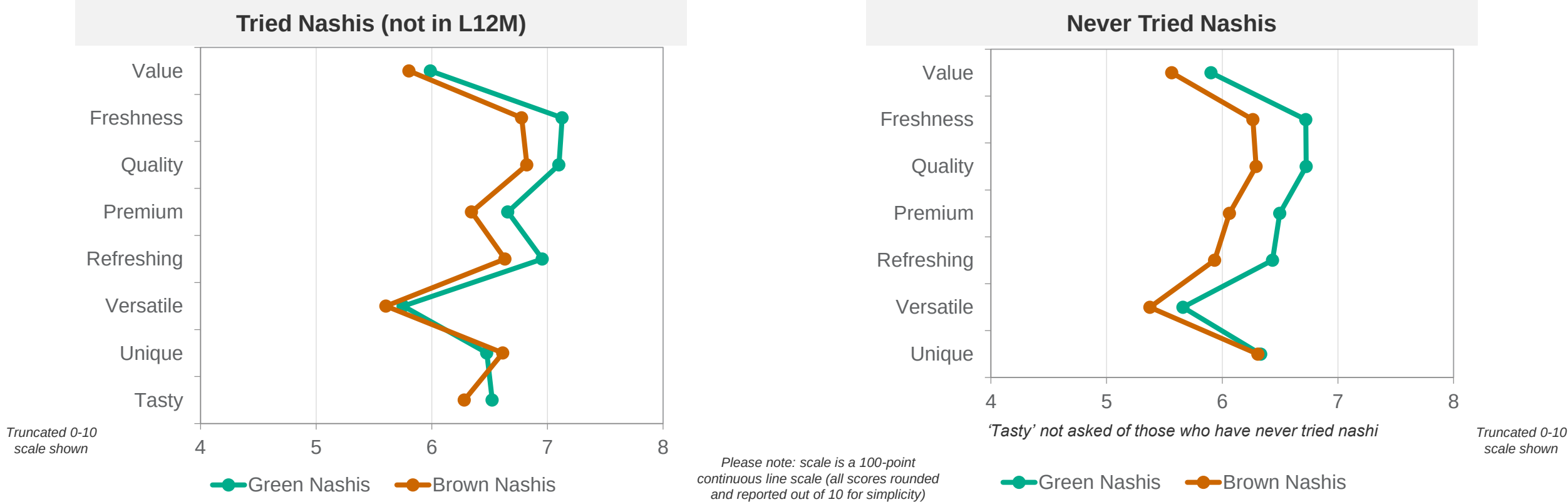
- “Crunchiness and good colour without blemishes
- “Juiciness, smooth texture, sweet flavour
- “Cheap, crisp, crunchy, flavoursome, easy to eat.

Descriptions of Ideal Nashi



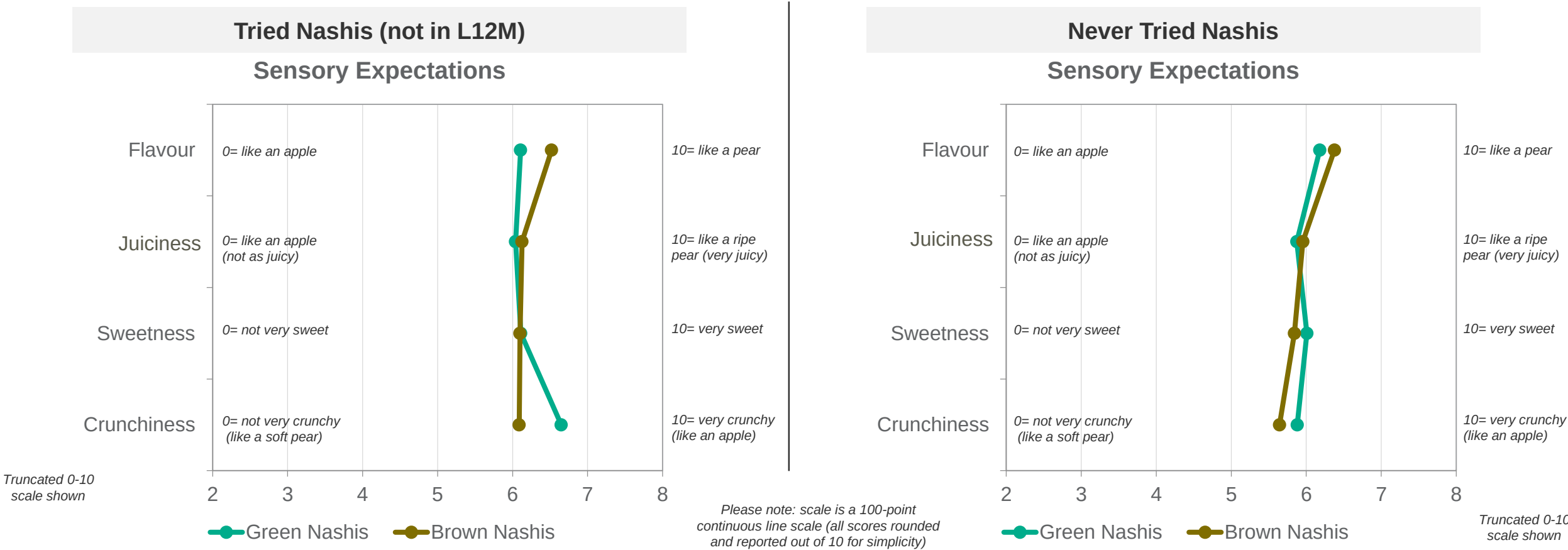
Non-nashi consumers perceive green nashi significantly more favourably than brown nashi (except for uniqueness), with both varieties lacking perceptions of value and versatility.

Trial corresponds to more positive perceptions for freshness, quality and refreshment; however even those who have never tried nashi rate green nashi strongly on these attributes



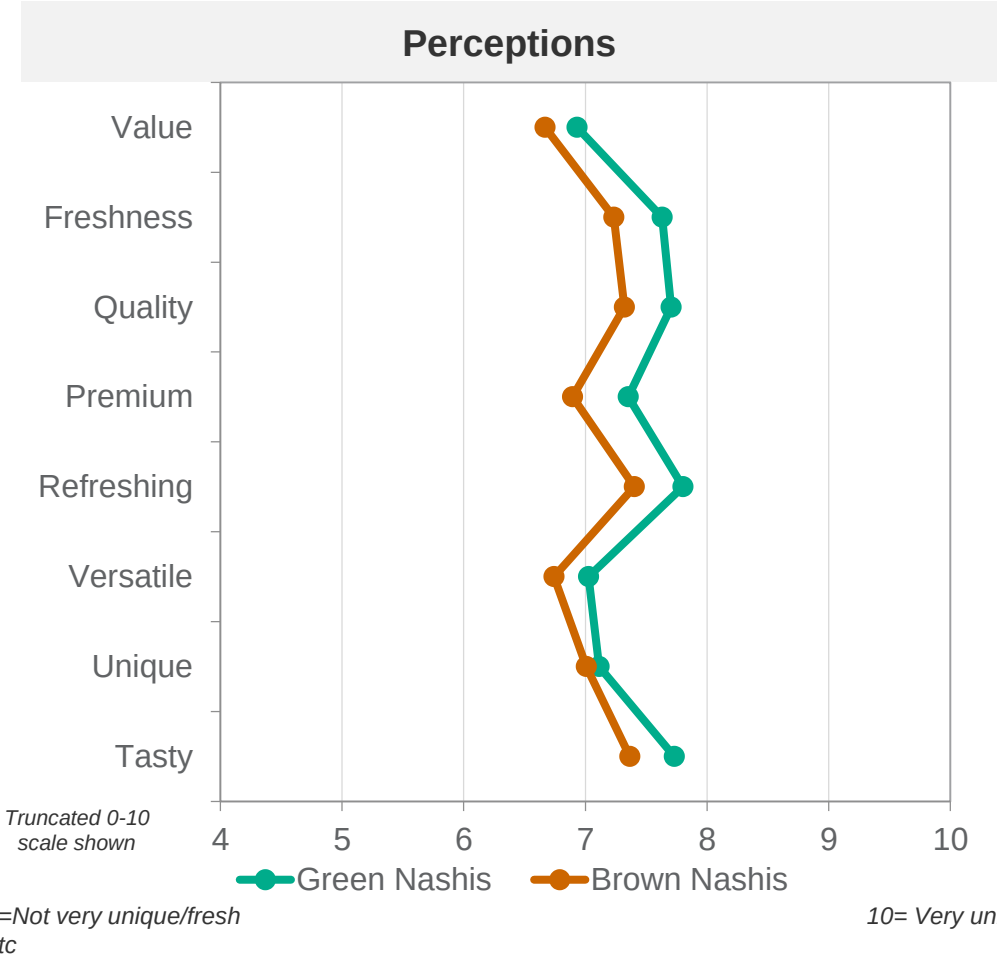
Non-nashi consumers expect nashi to taste more like a pear than an apple and to be only slightly juicy and crunchy.

The results suggest nashi's juicy and crunchy qualities are not understood or expected by non-consumers. Overall, brown nashi are expected to taste more similar to a pear than green nashi, and to be less crunchy.



As per non-nashi consumers, regular nashi consumers rate green nashi significantly more positively on everything except uniqueness, compared to brown nashi.

However, both brown and green nashi are perceived very positively across all perceptual attributes, particularly refreshment, taste, quality and freshness.



Please note: scale is a 100-point continuous line scale (all scores rounded and reported out of 10 for simplicity)

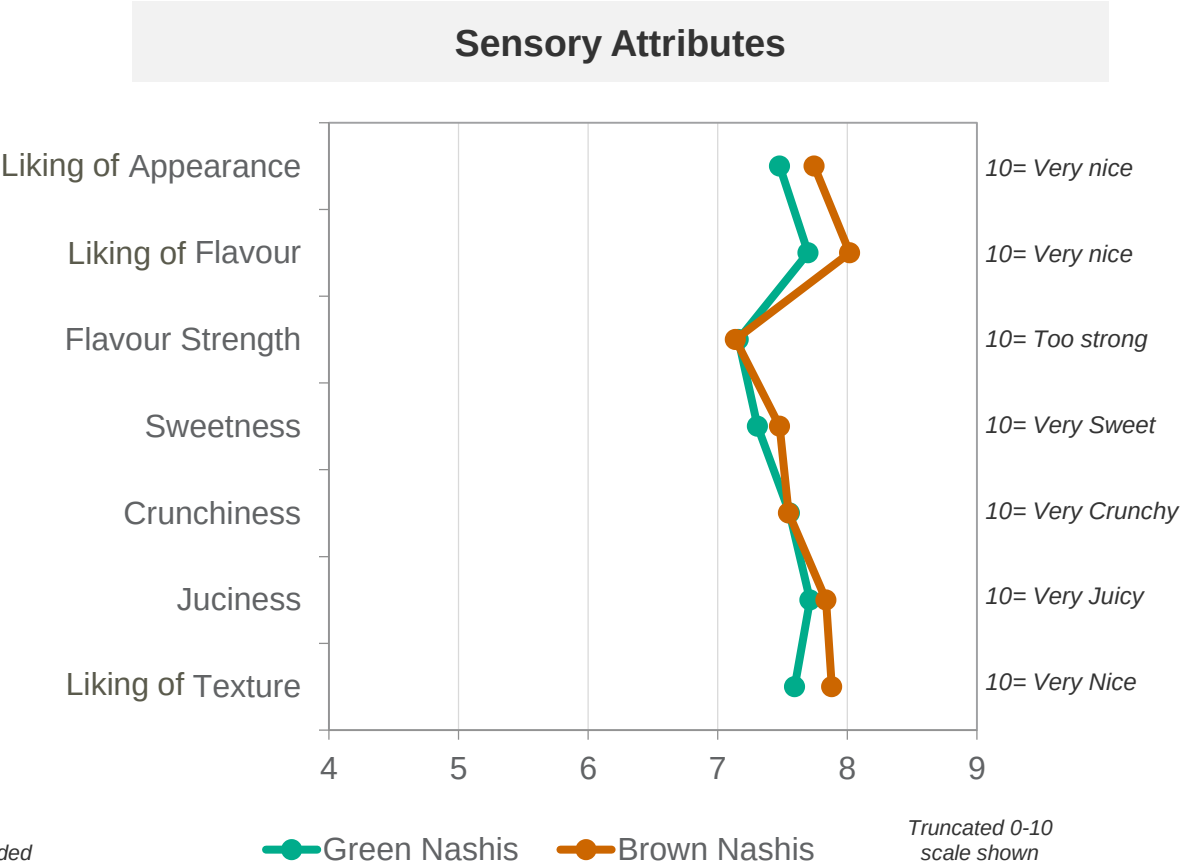
Nashi consumers rate the sensory delivery of both green and brown nashi very positively, with no significant differences between the two varieties.

Nashi are rated particularly highly for the appeal of the flavour and texture, and the level of juiciness.

- “ I enjoyed the experience of eating the nashi. I liked how crunchy, fresh, juicy and crispy they were. – Regular nashi user.
- “ I like the difference in taste/texture that it brings compared to other fruit, and overall its not too sweet. – Regular nashi user.

*Quotes based on Qualitative Research

Please note: scale is a 100-point continuous line scale (all scores rounded and reported out of 10 for simplicity)



Visual appearance.

Skin appearance and markings.

- The “small dots” on the skin are accepted as a natural feature of the fruit.
- Other markings or blemishes can be a source of concern, especially for those less well acquainted with the product.
- Those familiar with nashi, especially if they have grown up with them, see skin markings (except very obvious or deep bruising) as normal.
- It is acknowledged that some blemishing will occur as a result of weather, transit or handling and that blemishes do not necessarily impact negatively on the eating experience.
- It appears that promotion of “the odd bunch” by supermarkets and a movement away from food waste has contributed to this perception. Perfect looking fruit are therefore not necessarily considered superior.
- However, while some blemishes are accepted, the “ideal” nashi has minimal blemishes with a uniform colour and distribution of “dots”. Consumers tend to look for these qualities when purchasing nashi.

“ (Ideal nashi) Super fresh with not bruising or markings.. — Regular nashi user.

“ I personally don't mind the markings. As long as they're not bruised I'm happy. — Regular nashi user.

“ Some blemishes on the surface were distracting, but I cut them off with a knife. — Non-user of nashi.

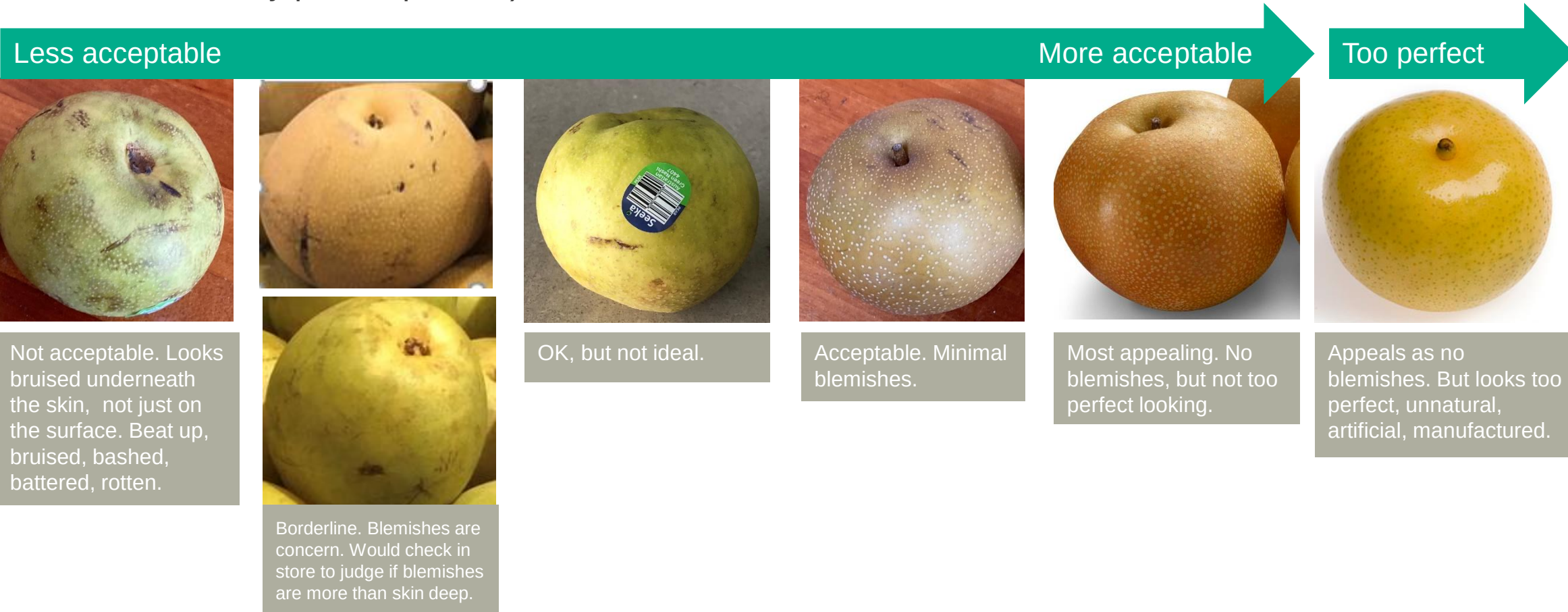
“ I don't mind markings as long as the skin still feels firm and it's not pierced. — Regular nashi user.

“ They always look banged up so (ideal nashi would have) skin like an apple. — Regular nashi user.

“ I believe that they (blemishes) are just part of the natural skin, and not a sign of damage. — Occasional nashi user.

Visual appearance: Perceptions and acceptability of markings.

Ideally, the external appearance of a nashi is evenly coloured and patterned with small dots. A degree of imperfection is accepted as natural outcome of growing or processing, and indicates a natural product (rather than an unnaturally perfect product).



From a sensory perspective, the flavour and aroma of nashi are secondary in importance to the texture and juiciness of the flesh.

Aroma.

- Very little aroma was detected by participants when trialing nashi.
- When detected described as fragrant, fresh or sweet.
- The “ideal” nashi has a very subtle, gentle slightly sweet or fresh aroma.



When you smell it, it would have a sweet fragrance but not overpowering... I would expect my first bite to be a crunch followed by watery juice. It would taste sweet, but not as sweet as a pear. – Regular nashi user.

Flavour.

- The flavour is commonly described as subtle and more similar to pear than apple. There was some mention of a stronger or slightly sour aftertaste.
- The “ideal” nashi has a subtle, delicate, refreshing flavor.



Crunch like an apple, refreshing like a cucumber, but tastes like a pear. – Occasional nashi user.



I think the good thing about nashi pear is the subtle flavours. – Regular nashi user.

Sweetness.

- Feedback on sweetness varied and is clearly influenced by individual palates. Overall the sweetness level is generally appealing. Sweetness can be experienced more strongly as an aftertaste.
- The sweetness of the “ideal” nashi is described as subtle, neutral, mild, a hint of sweetness. A slight note of sourness was also mentioned.
- In comparison to European pears, nashi is less sweet.
- Ideally, the skin also tastes sweet.



Nashi pear is a delicious, crunchy, watery and juicy fruit. It is not as sweet as the ordinary pears and not as sweet sour like apples. – Regular nashi user.



Sweet like a pear but crisper and has a nice bite – not squishy. – Occasional nashi user.



Mildly sweet as it's not as sweet as European pears but not as sour as apples. – Regular nashi user.

The crunchy, juicy texture of nashi flesh is key to the appeal and differentiation of nashi.

Internal texture.

- Actual and ideal texture described as: Crisp, crunchy, firm, dense, clean, smooth.
- However, some negative experience of fibrous, stringy, bitty or powdery texture.

“

I love the crispness of it and prefer the texture over a regular pear. – Regular nashi user.

“

It's a mix between a Pink Lady apple and a crispy pear. Very crunchy and fresh". – Non-user of nashi.

“

(Ideal nashi) It's crisp on the tooth, easy to bite through and fills the mouth with juice. – Regular nashi user.

Liquid content.

- The juiciness of nashi is a key feature providing a unique sensory experience when biting into the flesh.

“

It's like draining the juice when you crunch on it. – Regular nashi user.

“

(The juicy texture) Gives an effervescent sensation in the mouth". – Occasional user.

“

It (texture) seems like there are tiny spheres filled with juice. – Regular nashi user.

“

(Ideal nashi) Packed with juice. – Occasional nashi user.

Skin texture.

- Skin can be tough, difficult to chew (mainly applies to brown nashi).
- Ideally: Smooth, crisp, fine/thin skin with no bumps or dents. Easy to peel and eat.

“

(Ideal nashi) Thin skinned fruit with great textural crunch and juice oozes into your tastebuds as you chew into it. – Regular nashi user.

“

A round pear. Either fibrous brown skin, like a kiwi, or green and smooth like a granny smith. – Non-user of nashi.

Nashi shape and size preferences.

Shoppers prefer an apple/tennis ball size for nashi, and a round shape.

Size

- The nashi purchased by the research participants in the qualitative stage were commonly compared to a medium to large apple. This was considered an ideal size for individual consumption both from the perspective of portion size and handling.
- There is little interest in a larger sized fruit, even from those from Asian backgrounds who have been used to bigger varieties of nashi.

“

The size I purchased were ideal; about the size of an average apple. – Occasional nashi user.



Shape

- A round shape is preferred. This distinguishes nashi from other pears and also suggests the crispness of an apple.

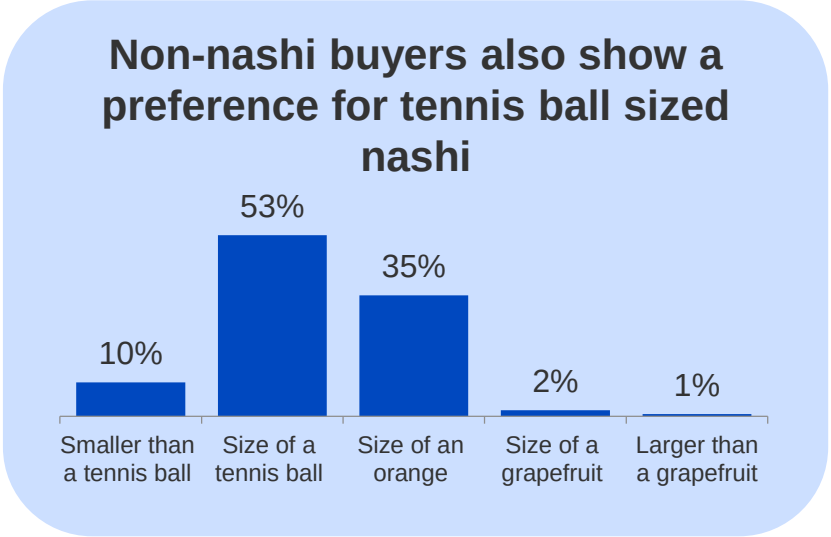
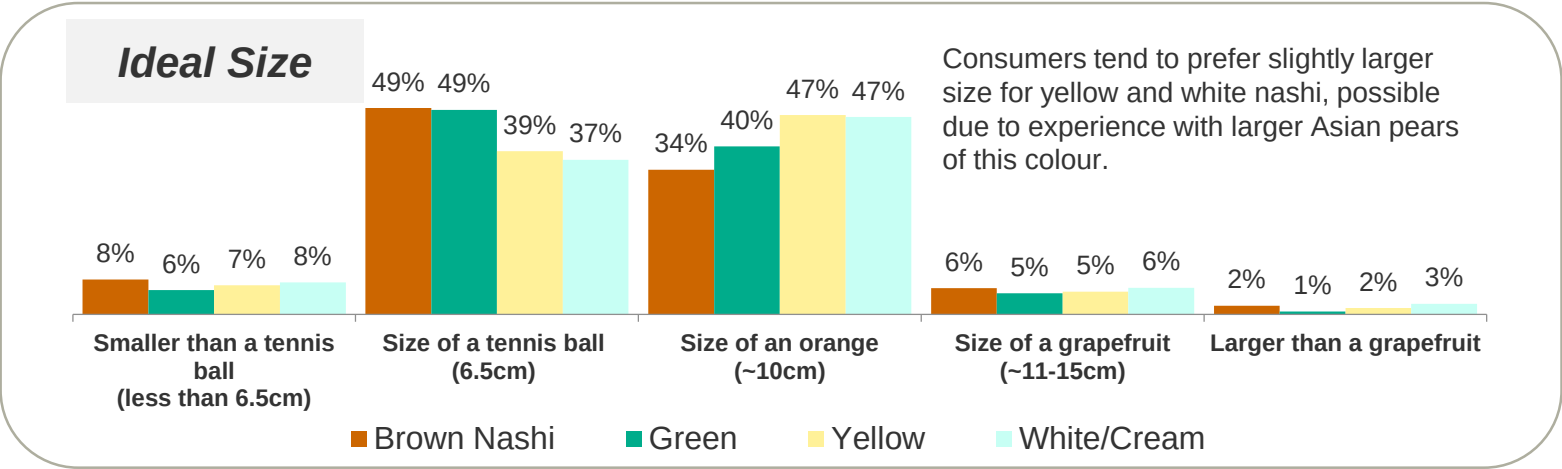
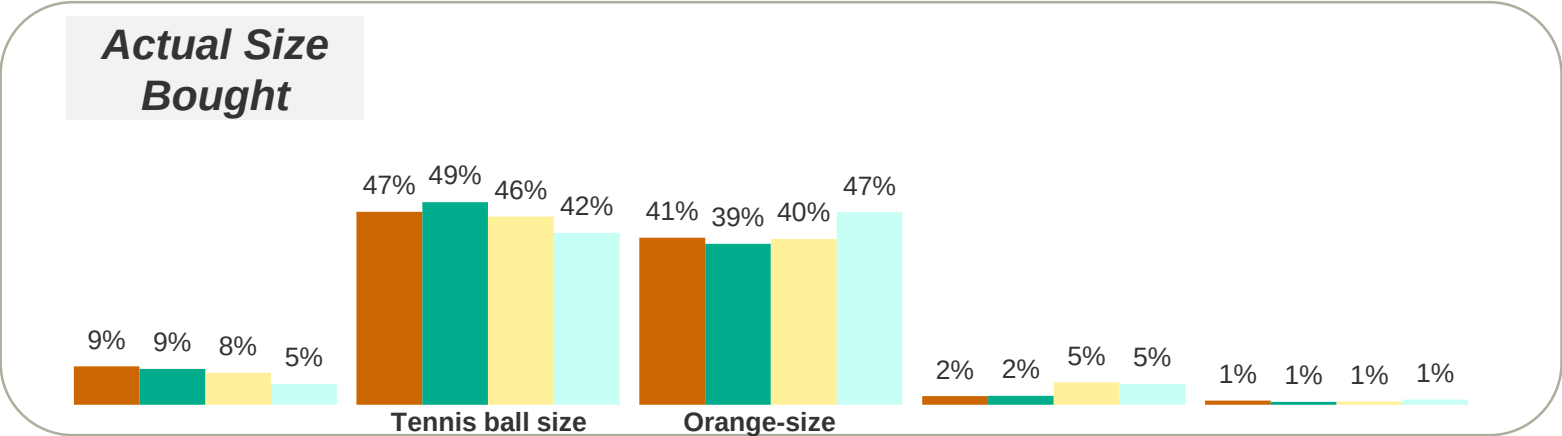
“

(Ideal nashi) Perfectly spherical without any blemishes. Beautiful golden colour of skin. – Regular nashi user.



Nashi Ideal Size.

Nashi consumers usually buy tennis ball-sized green and brown nashi, with this considered the ideal size for both current and potential nashi buyers.



Q59. For the following types of nashis, please indicate the SIZE of the nashis you usually buy.
Q60. IDEALLY, if nashis were available in any size, what size nashis would you PREFER TO BUY?
Base: Nashi buyers/consumers, n=353,
Q41. If you found nashis you liked and were available at a reasonable price, what size nashis would you prefer to buy?
Base: Non nashi buyers/consumer n=648

There is no indication that consumers are dissatisfied or bored with the current varieties available, with little demand for new nashi varieties.

Desired characteristics of a hypothetical new variety.

- When asked about what characteristics they would like to see in a potential new variety, a different colour was the most frequently mentioned feature.
- A third colour choice would provide a point of difference and potentially create interest on a fruit or cheese platter.
- Colours suggested tended towards either red (“to spice things up”) a brighter yellow/orange.
- Other suggestions include:
 - A smoother skinned variety.
 - A sweeter or a sourer version (personal taste).
 - More fragrant.
 - More even skin colour.
 - Less bitter skin.
 - Less core to remove.



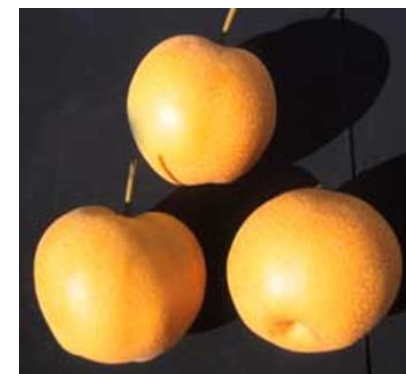
I wouldn't mind having a different colour nashi, like red – to spice things up. – Regular nashi user.



Colour – to look stunning on a fruit platter. – Occasional nashi user.



It would be cool if it was something interesting and unique. – Non-user of nashi.



Varieties identified as representing alternative skin colours.

Visual preference for new varieties of nashi.

Overall, consumers like nashi varieties with a relatively round shape, symmetrical appearance and smooth even skin.

- Colour is also used as an indication of taste and texture, with green or paler yellow varieties described positively as ‘fresh’ and ‘crisp’ or ‘crunchy’.
- Familiar (rounded) shapes are generally preferred, with other shapes considered ‘misshapen’ or ‘peculiar’.
- However, some distinction and point of difference from other fruits is appealing, primarily via different colours rather than shapes. For example, Hakko was among the most appealing (due to its unblemished skin and spherical shape) but was sometimes considered too similar to a Granny Smith apple.

The most appealing nashi varieties evaluated, based on appearance



Shinko



Golden Glory



Hakko

- “ They [Shinko] are nice and round in shape, shiny and unmarked.
- “ [Golden Glory] I like the skin colour and it looks sweet.
- “ [Hakko] just looks like an apple [disliked].
- “ [Hakko] looks firm and crunchy with lovely even skin.

Less visually appealing nashi varieties.

Overall, the least visually appealing nashi varieties had what was considered an unusual shape or colour, or looked too much like a different type of fruit than the familiar nashi or apple appearance.

- Varieties such as Tsu-Li were described as looking ‘knocked around’ due to their unfamiliar shape, with potential difficulties peeling also a consideration for some
- Extremes in colour, such ‘too yellow’ and looking too much like a lemon (cues expectations of sour flavour (Shen-Li)), or ‘too dark’ (Okusankichi) were also unappealing, while uneven skin tone was also the cause of some dislikes.

The least appealing nashi varieties, based on appearance



Tsu-Li



Shen-Li



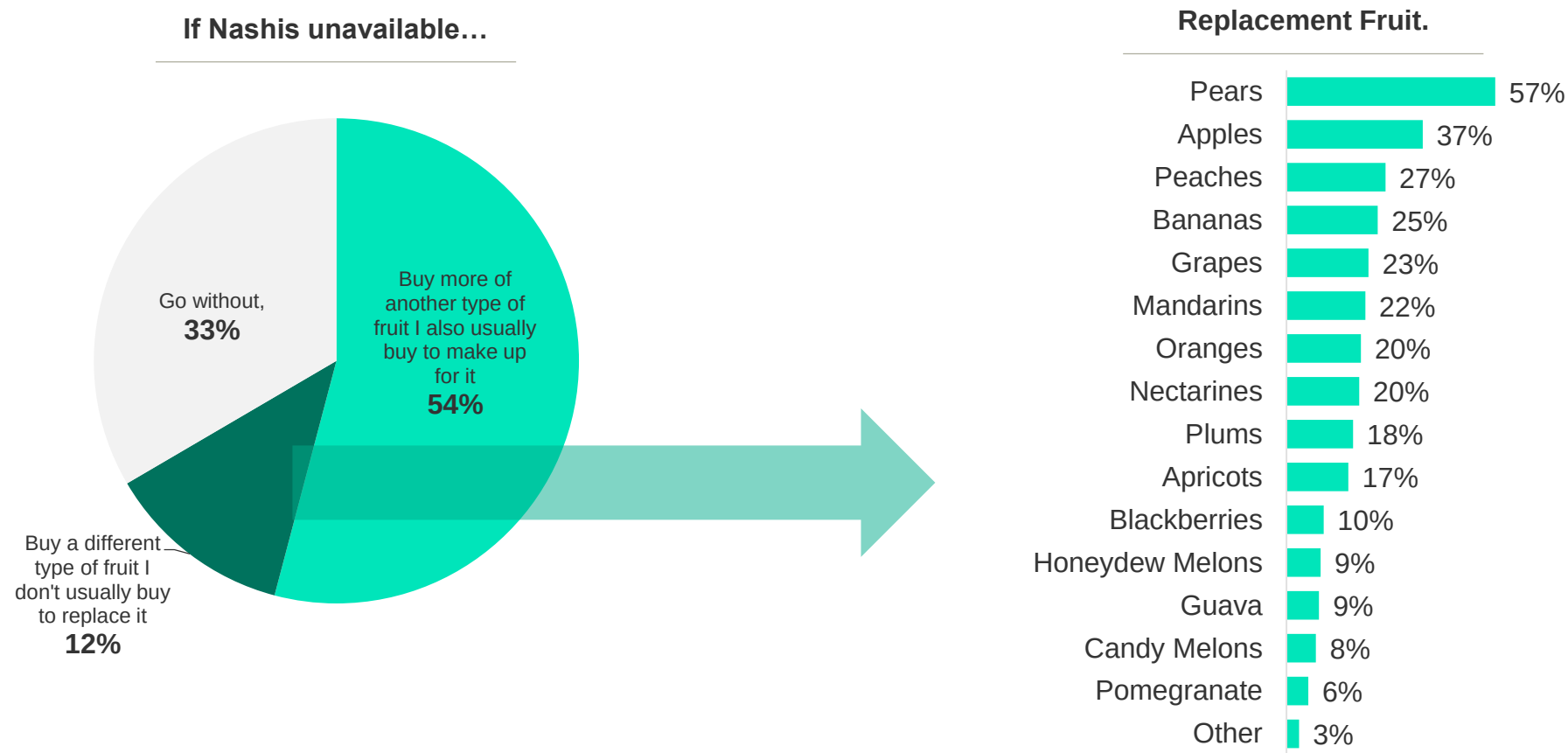
Okusankichi

- “ [Tsu-Li] it looks an odd unfamiliar shape and seems to have an uneven texture/ skin.
- “ [Tsu-Li] looks very spotty and funny shaped.
- “ [Shen-Li] they are not as round ... they don't look like nashi pears ... looks a bit like lemons.
- “ [Okusankichi] colour is unappealing.

12

How does nashi compare to other fruits?

Pears are a natural replacement for nashi, with most buyers buying pears when nashi are unavailable.



Given the lower price point of go-to competitor fruits, nashi needs clear points of differentiation to justify its premium status

Australian pears are considered the main competitor of nashi:

- Nashi may be considered either another type of pear or a different fruit altogether.
- Can be used interchangeably as a snack.
- Nashi is more refreshing (due to crunchy texture and juiciness).
- Nashi can be considered more suitable for a cheese or fruit platter due to the firmer texture. Nashi holds its shape/texture longer than an Australian pear.
- Nashi can also be used instead of Australian pears on oats, in fruit salad or for dessert.
- Nashi are generally considered less sweet than Australian pears, suiting some palates.

“

It would replace a pear. Like pears kinda suck on a cheeseboard because they're too soggy. But this would be pretty great for that. – Non-user of nashi.

Nashi can also be used in place of apples:

- Nashi can be described as similar to apples in terms of shape, texture (crunch) and freshness.
- Nashi can replace apples as a snack.
- Also in Waldorf salad, as a topping for oats, fruit salad, dessert.

“

I would say it's similar to eating an apple. However the texture is similar to an apple and not as sweet. – Regular nashi user.

Nashi also share some qualities with other produce:

- Similar to watermelon and cucumber in water content.
- Similar to cucumber in subtle taste and refreshing qualities.

“

Pears taste totally different; texture and flavour. It's (pear) more like having an apple and nashi is like having a watermelon. – Regular nashi user.

Correspondence Analysis: Fruit associations.

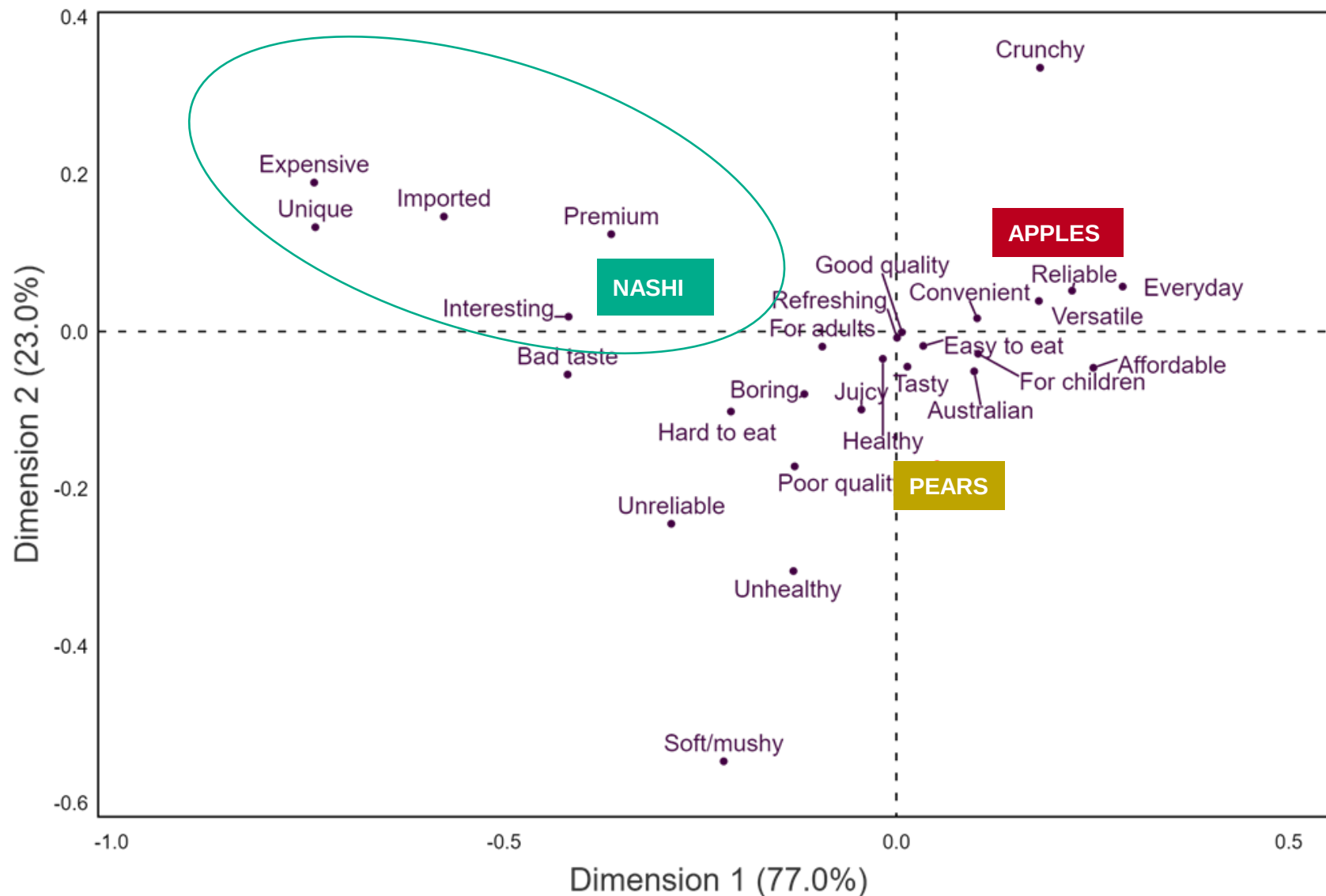
**Please refer to p.99 in Appendix for guidance on how to interpret a correspondence analysis*

Nashi do show some differentiation from pears and apples, more likely to be considered unique, interesting and premium.

However, they are also differentiated by their association with being expensive and imported. Despite the refreshing, juicy experience nashi delivers they are no more associated with these qualities than apples and pears are.

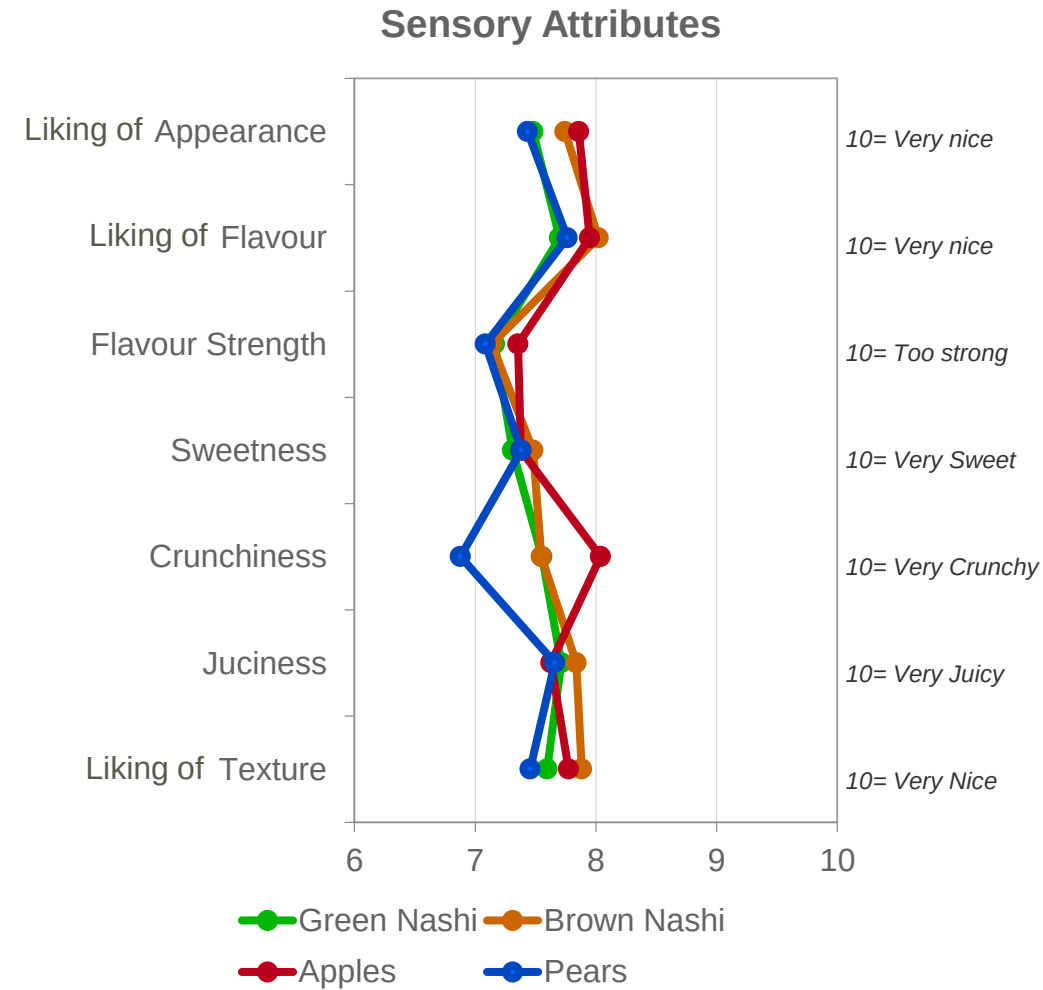
Apples are differentiated by strong crunchy, everyday reliable associations.

Pears lack differentiation aside from being soft/mushy.



Nashi are liked similarly to both apples and pears across appearance, flavour and texture.

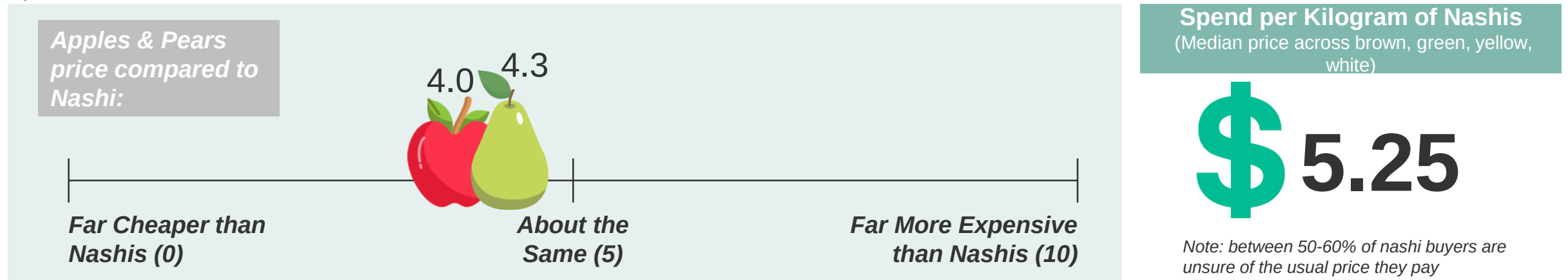
The key difference is the crunchiness, with green and brown nashi considered significantly more crunchy than pears, but less crunchy than apples.



Note: ratings are taken from the online survey based on consumer recall and experiences, not in-situ sensory evaluations.

Consumers rate both apples and pears as being cheaper than nashi, which can impact trial and purchase volumes.

Consumers pay approximately \$5.25 per kilogram for nashi, with most predicting they will maintain their current level of nashi spend in future.



Prices are compared to apples and pears. In general nashis are noted to be more expensive than “regular”, “European” or “Australian” pears:

- This can impact on trial for non users.
- For regular users it may impact on volumes purchased, but the premium price is generally considered “worth it”, particularly for special occasions.
- Commonly, volumes purchased increase with discounted prices (less treat-only purchasing).

- “ It’s dearer than a lot of fruits. But it’s worth it but I won’t go overboard. – Regular nashi user.
- “ I would buy more if they are on sale. If not I usually only get a couple. – Regular nashi user.
- “ They are pricier than other fruit ... hence not an everyday fruit. – Occasional nashi user.
- “ Why are they three times the price of normal pears? ... Maybe harder to grow? – Occasional nashi user.

There does not appear to be huge nashi price variation across retailers

- Green grocers and Asian grocers in general regarded as cheaper (*"They were around \$5 kg at Coles but only \$3 at Asian green grocer"*).
- Some stores had the fruit on special during the fieldwork – discounted at 50c per kg below regular price.
- Regular purchasers are most aware of where they can get the best price, and claim to make decisions based on a round dollar price (e.g. over and under \$5 or \$6 per kilo will impact on volume and frequency e.g. buying regularly vs. as a treat).

On average, consumers intend to spend a similar amount on nashi in future as they currently do.

Future Nashi Spend:



“

At Coles it was \$6.50 per kilo (product of Australia) whereas in Harris Farm it was \$5.99 per kilo (product of China). – Regular nashi user.

“

If they're on special, i.e. under \$5 I would buy more (5+), usually I'd only get three ... I'd buy more if it's under \$5 and less if it's over \$. Usually I wait for summer when there is an abundance of nashi pears. – Regular nashi user.

“

I won't pay more than \$6.50 per kilo esp. as they're quite heavy! 1kg is only 3-4 pears. I'd stock up if it's cheaper as they keep for few weeks. – Regular nashi user.

“

At double/triple the cost, not sure I'd eat them all the time ... Far too expensive for a family or everyday treat/ snack/ fruit. – Non-user of nashi.

13 Recap of Summary & Recommendations.



Snapshot of Results

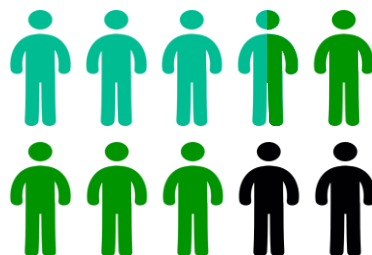
The ideal nashi is:

- 6.5cm (for green & brown fruit)
- Round, symmetrical shape
- Smooth evenly coloured skin
- Firm to the touch
- Juicy and refreshing
- Crisp, crunchy texture
- Sweet and tasty



Current nashi are delivering a great near-ideal sensory experience...

35% have never seen nashi for sale



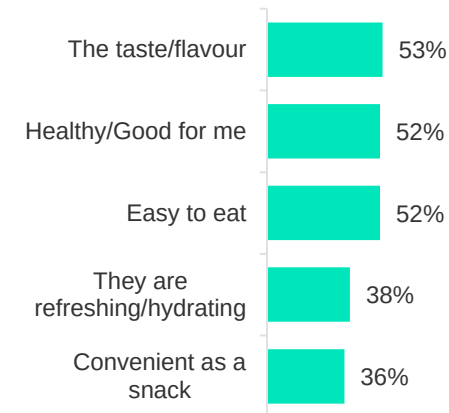
45% have seen nashi once or twice

...however most shoppers never or rarely see them for sale.

	Green Nashi	Brown Nashi
Value (out of 10)	6.0	5.7
Versatility (out of 10)	5.7	5.5

Those who don't buy nashi perceive them as lacking versatility and value

Reason you buy/consume nashi



The refreshment/hydration nashi provide is a key reason for purchase, but not expected by non-buyers

Importance of Nashis being Grown in Australia:

7.9/10

Consumers place value on buying Aussie fruit, but 1 in 3 are unsure where the nashi they buy are grown

Shoppers also associate nashi more with being imported, compared to apples and pears



Those who do buy nashi limit purchase due to:

1. Price
2. Availability



Those who have never tried nashi may be influenced by:

1. In-store tastings
2. Price promotions



Enhanced signage, a visually distinctive and full looking display help attract positive attention in store

Executive Summary.

The Ideal Nashi.

- The ideal nashi is tennis-ball sized, firm, free of bruises and scratches, juicy and refreshing with a crisp, crunchy texture and sweet flavour.
- The current green and brown nashi varieties are delivering a great near-ideal sensorial experience to consumers, but external appearances can be off-putting.
- Consumers may benefit from education on the natural markings of nashi, while highlighting the quality of the firm, crunchy and crisp inside even when the fruit may appear scuffed.

The R&D Pipeline.

- Given the superior sensory performance (and low awareness) of the current varieties there is little demand for new varieties.
- If new varieties are to be explored, the focus should be on those that may be less susceptible to marking and damage, or varieties with a thinner, smoother skin that does not suggest the need to be peeled prior to consumption (as can be the case currently, particularly for brown nashi).
- Varieties with rounded, symmetrical shapes are preferred.

Communications & Marketing.

- Lack of awareness and familiarity with nashi is a key barrier to purchase; even among current consumers there is little knowledge of the range of nashi available, how they should be stored or when they should be eaten.
- In-store sampling offers opportunity to encourage first-trial, while price promotions and other methods of enhancing value perceptions will likely be most impactful for those already familiar with the fruit.
- Increase salience of Australian origin, particularly in this era of conformity; while more functional claims (eg. 'hydrating') will help to capitalise on emerging trends for functional food and drink products.
- Communication of the unique, superior sensory experience of nashi is key to differentiate it from pears and increase appeal: super refreshing and juicy, crisp and crunchy, with a mild sweet taste.
- Nashi are uniquely positioned to complement the broader shifting of palate preferences in Australia towards more mild flavour profiles. However, driving trial will be key in order to be able to capitalise on this opportunity and increase demand in future.

Recommendations.

Actions for Current Buyers/Consumers.

- For current buyers, the higher price of nashi, compared to fruit such as apples and pears, restricts more frequent purchase and contributes to nashi being viewed as an occasional purchase.
- With lower prices not possible for the nashi industry currently, perceived value must be increased in order to make it 'worth it':
 - Promoting the range and possibilities of nashi usage: a hydrating and refreshing snack, on a cheese or fruit platter, in a salad, or with breakfast
 - Inform and educate consumers to give them the confidence to select the best nashi, know how to store them, and know when they are ripe
 - Differentiate nashi from pears by communicating their superior sensory delivery: not soft or 'mushy' but instead crisp, crunchy, juicy and sweet, with mild flavour
 - Does not brown as quickly when cut, maximising suitability for platters or cut-up in a lunchbox
 - Tap into the drive for snacking convenience by highlighting nashi's suitability as a grab-n-go snack, ready to eat as soon as you buy, with no need to wait for it to ripen; as well as increasing awareness of how best to store nashi to maintain their quality.

Additional Actions for Non-Buyers/Consumers.

- Awareness is key. Non nashi consumers are unlikely to notice nashi in-store without communications or marketing
- In-store samples offer the opportunity to increase awareness and appeal of nashi
- In-store signage can also help to give prominence, while additional information and labelling creates interest and can prompt impulse buys
- Displaying fruit in baskets should be encouraged and can help to distinguish nashi from other fruit and drive premium perceptions, but displays should remain full to avoid concerns relating to freshness

General.

- Protective coverings that are not deemed recyclable or environmentally friendly may have a negative impact on likelihood of purchase. Environmentally friendly covers or less conspicuous alternatives, such as pocketed underlays, provide a less polarising alternative to protecting nashi from damage.

Summary of Findings.

- Most nashi buyers purchase just one type/colour of nashi, with little awareness of other types; while non-nashi buyers rarely see nashi for sale in their usual grocery stores.
 - Most nashi purchase comes from Woolworths or Coles, when the fruit are on promotion, with few shoppers having taken up buying nashi within the last five years.
 - Nashi buyers seek fruit that is firm, free of damage and of appropriate size (tennis ball size preferred for green and brown nashi).
 - Nashi buyers are typically younger than average and more likely to be of Asian background and live in metropolitan areas. Those of Asian descent also tend to have greater awareness and knowledge of nashi, but may be unaware they can be purchased from mainstream supermarkets, and grown in Australia.
 - While many consumers are indifferent to protective covers, which can help prevent damage and therefore increase visual appeal, excessive plastic/packaging can deter purchase. Therefore, environmentally friendly protective options should be explored.
 - As for fruit more broadly, nashi are mostly eaten for taste, health and ease of eating; with refreshment and hydration a differentiating driver of consumption for nashi.
 - Greater communication of potential uses and benefits of nashi is required, with consumption mostly restricted to eating by itself. Increased versatility has the opportunity to increase value perceptions.
 - Education on how to store nashi and when they are ripe and ready for eating will also give confidence to consumers; while nashi currently lack Australian grown credentials, which require greater prominence.
 - Nashi's sensory qualities lend themselves to summer suitability and there is some discrepancy between peak season (Autumn-Winter) and greatest demand (Summer). However, for nashi that may be available during the warmer months focus should be as positioning it as juicy, hydrating and refreshing, eaten cool out of the fridge. While for the cooler months alternative uses (eg. Cheese and fruit platters, on porridge) may be communicated, as well as hydrating refreshment for after physical activity.
 - Overall green nashi tend to be perceived more favourably than brown nashi (eg. Freshness, quality, premium), despite nashi consumers rating the sensory experience similarly for both. Those unfamiliar with nashi view the fruit positively, however they lack perceptions of a value and versatility, with a lack of understanding of the level of juicy and crunchiness a nashi delivers.
 - Nashi are most commonly substituted with pears, and expected to taste more similar to a pear than an apple. They are considered more unique and interesting than pears, but also more expensive and less associated with being Australian.
 - There appears to be little demand for new nashi varieties; however, consumers prefer nashi with round shape, symmetrical appearance and smooth even skin.
-

14 Appendix.



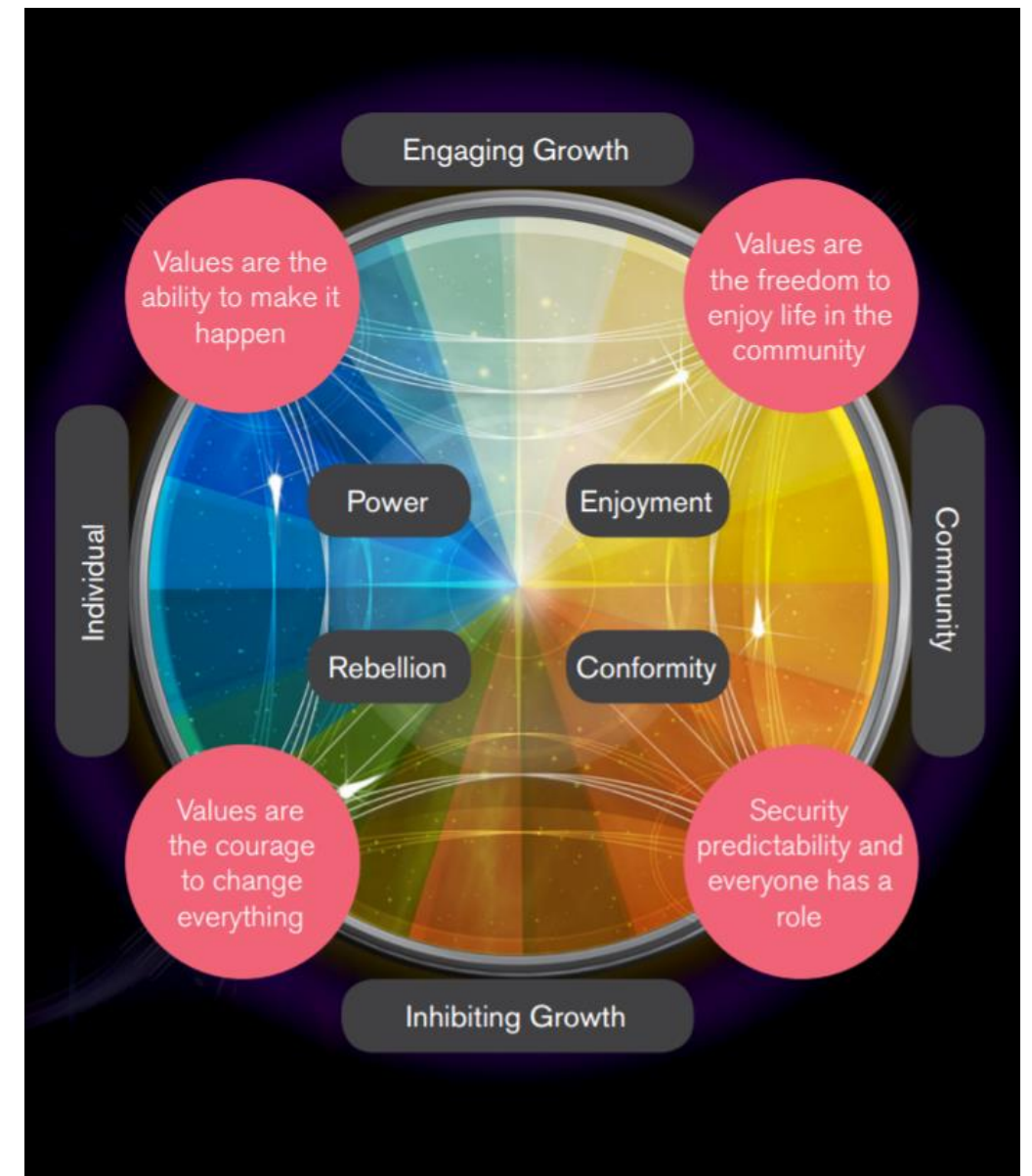
15

Interpretation Aides.

What is the Millennium Monitor?

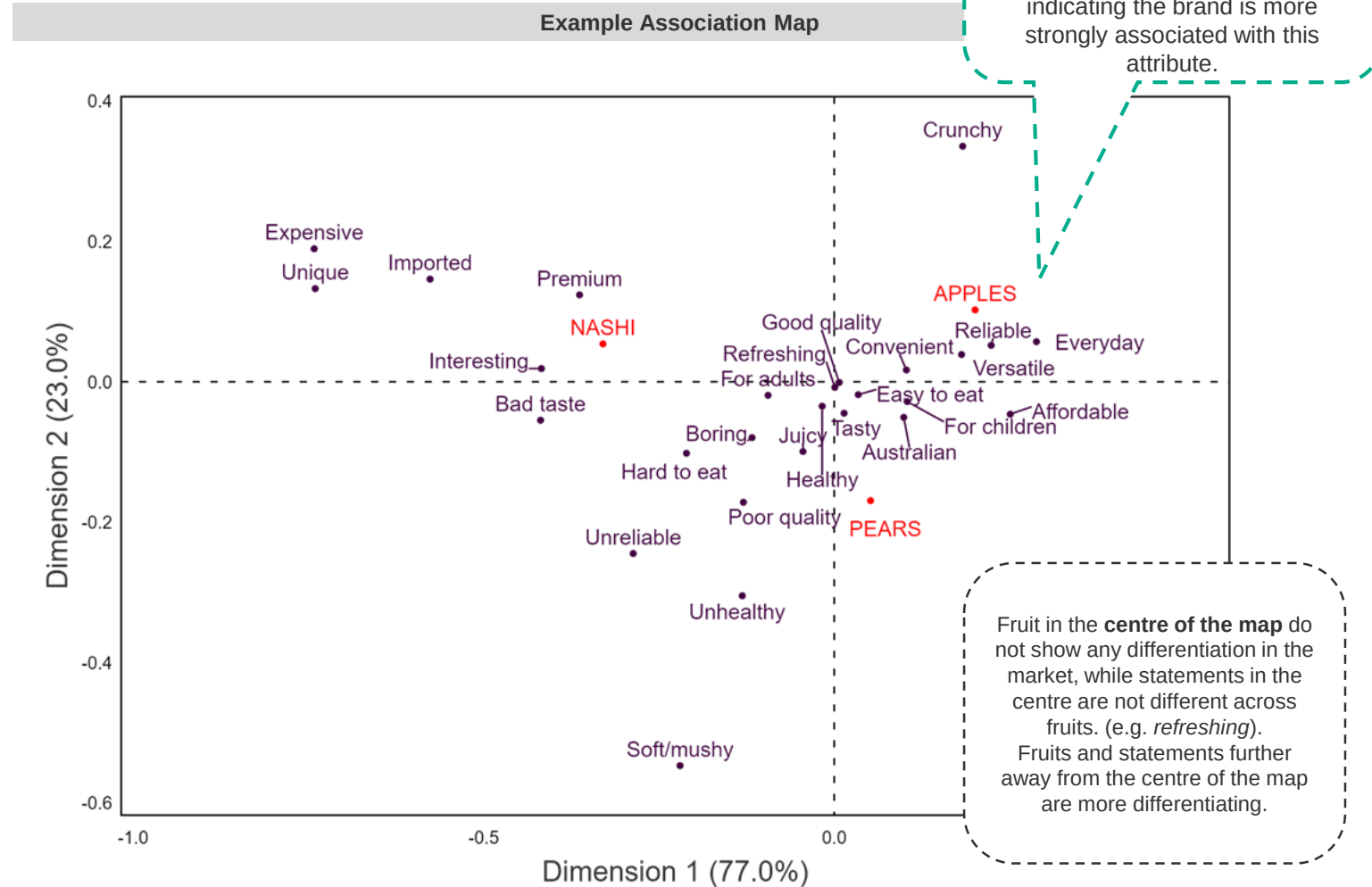
Millennium Monitor Overview.

- A unique Australian monitor of societal trends that helps us see the future. Rather than most other social trackers which tell us what has just happened, the Millennium Monitor focuses on what is about to happen.
- Born in 1999, the Millennium Monitor explores the pattern of change in social values, attitudes and behaviours over the long term, and the implications of these changes. We have found that societal values shifts in cyclical eras.
- The most recent refresh occurred at the end of 2018, whereby 2500 Australians were surveyed about their general attitudes and values, allowing us further insight into relevant societal trends.
- Today's prevailing social values are Conformity values, but we are moving into Rebellion, lead by the younger generation more strongly aligned with values of this era.



How to Interpret Correspondence Analysis Maps.

- Correspondence analysis is a statistical technique that visualises the associations between brands (or fruit types) and statements.
- Each fruit is plotted according to their relationship between statements relative to other fruits and degree of differentiation between statements.
- Fruits and statements in the centre of the map do not show any differentiation in the market while statements in the centre are not different across fruits. Fruits and Statements further away from the centre of the map are the most differentiating in the market.
- This technique simplifies the relationships within the data to two axis, which aims to simplify the complex relationships in the data. The positioning of points are dependent on many attributes and subtle changes in singular perceptions may not reflect a change in the position, although meaningful in isolation.



16

Qualitative Sample
Details.

OVERVIEW OF QUALITATIVE SAMPLE

A TOTAL OF N=32 AUSTRALIAN CONSUMERS TOOK PART IN THE QUALITATIVE COMPONENT OF THE RESEARCH

REGULAR NASHI CONSUMERS

Monthly or more frequent purchase and consumption of nashis



TWO FOCUS GROUPS

OCCASIONAL NASHI CONSUMERS

Purchase nashi between every two months and once a year.



ONE FOCUS GROUP

NON NASHI CONSUMERS

Aware of nashi but have never tried it. Non-rejectors of nashi pears – open to buying and consuming nashis.



ONE FOCUS GROUP

FURTHER QUALIFYING CRITERIA

All participants were:

- Aged between 18 and 60 years
- Based in Sydney, Melbourne or Brisbane
- Main or joint purchase decision makers for fresh produce

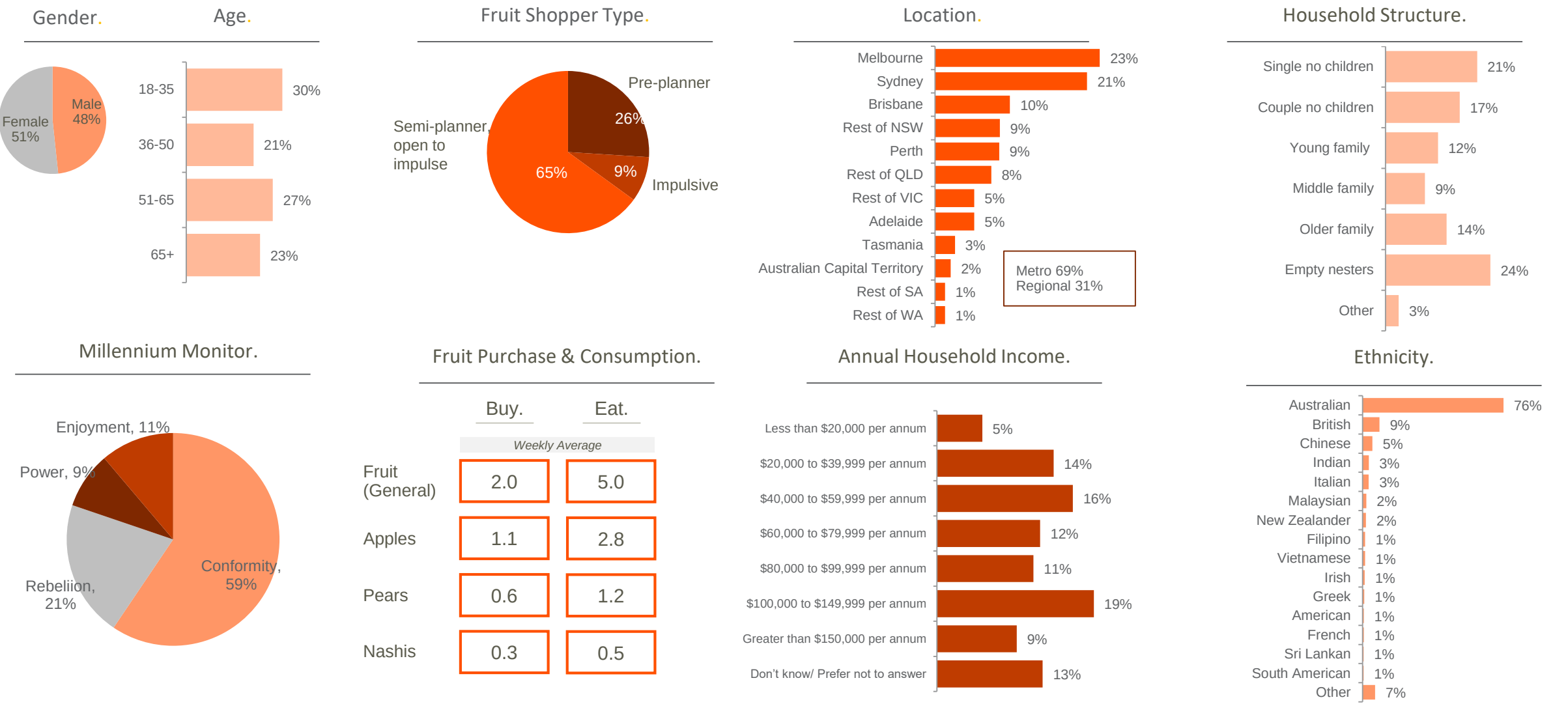
Each focus group comprised:

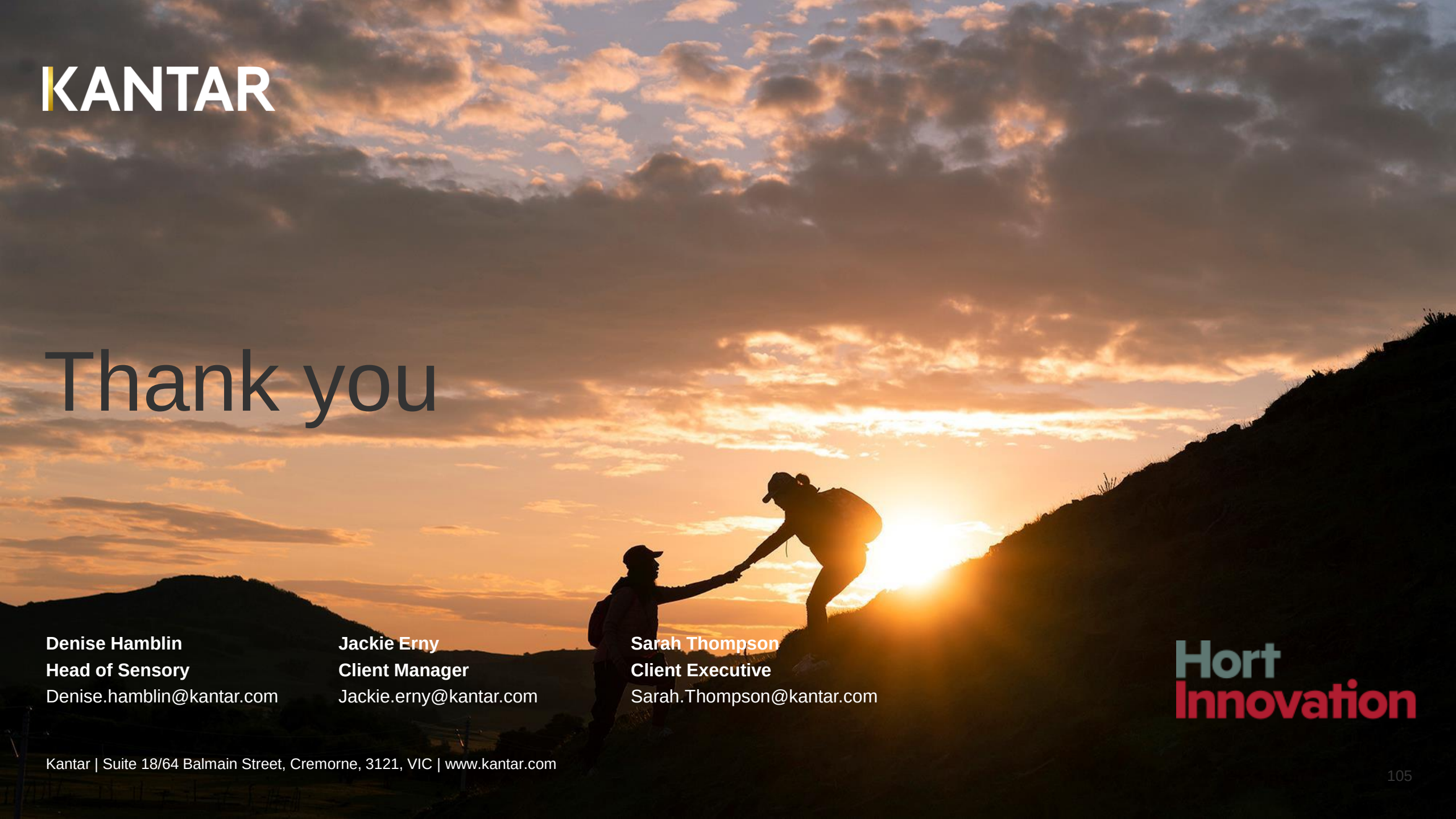
- A mix of gender.
- A mix of household structure.
- A mix of fruit buying locations (supermarket vs green grocer/market etc.).
- A mix of ethnic backgrounds (including people from Chinese, Japanese and Korean backgrounds)

17

Quantitative Research Sample Details.

Demographic Profile: Total Sample





KANTAR

Thank you

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