

Final Report

Potato Tracker - consumer and market
research for the fresh potato industry

Colmar Brunton

Project Number: PT13015

PT13015

This project has been funded by Horticulture Innovation Australia Limited using the potato industry levy and funds from the Australian Government.

Horticulture Innovation Australia Limited (Hort Innovation) makes no representations and expressly disclaims all warranties (to the extent permitted by law) about the accuracy, completeness, or currency of information in Potato Tracker - consumer and market research for the fresh potato industry.

Reliance on any information provided by Hort Innovation is entirely at your own risk. Hort Innovation is not responsible for, and will not be liable for, any loss, damage, claim, expense, cost (including legal costs) or other liability arising in any way (including from Hort Innovation or any other person's negligence or otherwise) from your use or non-use of Potato Tracker - consumer and market research for the fresh potato industry, or from reliance on information contained in the material or that Hort Innovation provides to you by any other means.

ISBN 0 7341 3614 5

Published and distributed by:
Horticulture Innovation Australia Limited
Level 8, 1 Chifley Square
Sydney NSW 2000
Tel: (02) 8295 2300
Fax: (02) 8295 2399

Contents

Summary	3
Keywords	5
Introduction	6
Methodology	7
Outputs	11
Outcomes	17
Evaluation and Discussion	24
Recommendations	27
Scientific Refereed Publications	28
Intellectual Property/Commercialisation	29
References	30

Summary

The Australian fresh potato industry is experiencing a number of challenges, including a reduction in the number of growers, as well as a reduction in demand from Australian consumers. Understanding consumer needs, perceptions and attitudes can help identify opportunities and gaps in the market with the aim of providing targeted and actionable strategies for the future. The fresh potato industry was interested to understand consumer perceptions over a 12 month period, as well as examine global potato trends including product launches with potato as an ingredient. A 12 month tracking project commenced in August 2014 with the aim to identify trends in purchase and consumption habits, identify perceptions of value, determine any changes in consumer behaviour including triggers, barriers and needs, summarise news and innovation from around the world and identify opportunities for the Australian market.

The target audience for the research was the Australian fresh potato industry as a whole, in particular growers, packers and retailers. These stakeholders have the greatest influence in implementing findings from this research. To meet the objectives of the industry, the research was designed to include 12 monthly online surveys of 300 potato consumers across Australia. An Interactive Research Tool (IRT) was set up to allow further analysis of the data at a granular level, specifically by month and to allow for analysis by consumer demographic profiles. Analysis of global new product development (NPD) launch trends was conducted on a quarterly basis.

The outputs from the project included Potato Tracker reports, publications and articles, the IRT and presentation workshops. The reports allowed for widespread distribution of the content, whilst workshops provided in-depth feedback on what stakeholders required out of the research. Each report was distributed to industry by AUSVEG in a monthly Potato Tracker email. The findings from this research supported general perceptions that there is little growth in the fresh potato market, with the average purchase frequency of potatoes remaining stable across the 12 month period. Three key barriers were identified that were negatively impacting on the purchase of potatoes in Australia. These were diet and health concerns, a perception of limited meal occasions and a lack of potato variety knowledge (and therefore limited understanding of how to use/cook with different varieties of potatoes to increase consumption).

Actionable initiatives to overcome these barriers were provided in the monthly reports. To implement the initiatives recommended by Colmar Brunton, it is imperative that the findings are communicated

to all stakeholders, and that the impact on their business is understood. This would best be facilitated in face to face workshops. Further, each of the insights could be examined and analysed with an action plan developed including next steps for the industry. As purchase behaviour, consumption and consumer perceptions have remained relatively stable over the 12 months of tracking research, we would recommend conducting the Potato Tracker once a quarter or half-yearly into the future in conjunction with taking action on the key insights. This would allow the industry to monitor the impact of actioning the insights and recommendations, and whether these are having a positive effect on consumers and the industry, i.e. upturn in purchase and consumption frequency. If the Potato Tracker was to run seasonally in the future, this would provide industry with the ability to ask 2 ad hoc questions per wave that can be tailored to any additional topics that are of interest at that point in time. In addition, the industry may wish to consider qualitative research to complement the Potato Tracker findings and explore specific actions and initiatives in detail to help improve consumer purchasing and consumption of potatoes into the future.

Keywords

Potatoes; fresh potatoes; consumer perceptions; purchase; consumption; cooking; trends; new product development

Introduction

The Australian fresh potato industry has experienced many changes over the past few decades, with a decline in the number of growers, especially smaller scale farms. There has also been a noticeable deterioration in demand for fresh potatoes in Australia (Australian Fresh Potato Industry Strategic Investment Plan, 2012-2017). Whilst the majority of research has been previously focused on efficiency, production quality and sustainability, little priority has been placed on market research and the relevance of the market from the consumer point of view. Understanding consumer needs, perceptions and attitudes can identify opportunities and gaps in the market, with the aim of providing targeted and actionable strategies for the future.

In 2013, Colmar Brunton was funded by Horticulture Innovation Australia (Hort Innovation) to conduct a monthly online fresh vegetable tracking project (VG12078). This was designed to monitor specified vegetables across a three year period to assist in understanding vegetable consumers. The fresh potato industry was interested in their own study for fresh potatoes; to understand consumer perceptions over a 12 month period, as well as examining global potato trends. The project commenced in August 2014, and aimed to identify opportunities for the industry through:

- Identifying trends in purchase and consumption habits;
- Identifying recalled amount spent and perceptions of value;
- Detecting change in penetration over a 12 month period;
- Detecting change in consumer behaviour, retail changes, triggers and barriers, needs, preparation and consumption changes over a 12 month period;
- Providing indicative retail pricing across major retailers; and
- Summarising news and innovations from around the world and how these can be implemented in an Australian context.

To meet these objectives Colmar Brunton designed a multifaceted research program to collect quantitative and secondary trends information. This was used to provide the potato industry with:

- Monthly consumer behaviour and perceptions trends (captured in an online survey of 300 consumers across Australia, presented in a comprehensive monthly report);
- An Interactive Research Tool (IRT) to easily look at the data at a granular level, specifically by month and by consumer demographic information; and
- Quarterly global new product development (NPD) launch trends.

Methodology

To meet the objectives of the industry, the research was designed to include 12 monthly online surveys of 300 potato consumers across Australia. Internet research was considered ideal for this type of project as it allows us to access large numbers of people, across a number of locations both metro and regional, it includes the ability to show visual stimulus, collect more data from category users and it is also the most efficient and cost-effective methodology.

To ensure that respondents could only complete the survey once, online panelists were sent an invitation e-mail to complete the survey. The e-mail contained the URL link, their user ID and their unique password (when an ID and password has been used once, it cannot be used again).

Colmar Brunton specifically recommended an online survey for this project as we were able to:

- Contact a widely dispersed and large sample.
- Quickly process completed questionnaires for timely reporting.
- Utilise a user friendly interviewing format.
- Provide full logic and flexibility in programming (ability to rotate statements, etc).
- Include visual stimulus as required – mainly around the potato varieties to reduce consumers' confusion and misattribution.

The online survey began with some screening questions. This means that only the target market specified were able to continue with the questionnaire, and all other respondents were politely excluded, thus ensuring that we were talking to the 'right' people. Screeners also ensured the confidentiality of material in the survey.

The target market of consumers we spoke to had sufficient fresh vegetable and potato consumption (fortnightly and monthly, respectively). Additionally, fresh potato consumers needed to be aged over 18 years old, be the main or joint grocery buyer in their household and purchase potatoes at least once a month to qualify for the survey. We ensured that there was representation across most states and territories as well as metro and rural regions.

We had a target completion of 300 consumers per wave/month. Therefore, over the course of 12 months we interviewed over 3,600 potato consumers, see Table 1.

Table 1. Sample Structure for Waves 1-12

Total Waves 1-12 N= 3,739

Gender

Male n=1,220

Female n=2,519

Age

18-24 years n=243

25-34 years n=688

35-44 years n=606

45-54 years n=673

55-64 years n=800

65 + years n=729

Household

Single Income no Kids n=785

Double Income no Kids n=661

Young Families n=654

Established Families n=736

Empty Nesters n=903

State

New South Wales n=612

Victoria n=615

South Australia n=602

Queensland n=581

Western Australia n=612

Tasmania n=574

Australian Capital Territory n=111

Northern Territory n=32

The questionnaire was approximately 10 minutes in length and the topics covered include consumer demographics, general vegetable purchase and consumption habits, potato category health and consumer sentiment, potato purchase and consumption frequency, purchase location, price and value perceptions, awareness of potato varieties, types and formats of potatoes purchased, triggers

and barriers to purchase, preparation and cooking preferences as well as importance of provenance (see Figure 1). These questions were standard each month and did not change.

An additional 2 ad-hoc questions were asked at the end of the questionnaire. The subjects of these questions were supplied by Hort Innovation and AUSVEG, and were updated each month, exploring topics of interest to the industry.

Figure 1. Methodology Flow

Some of the topics for the ad hoc questions that we have evaluated over the past 12 months include: health perceptions relating to fresh vegetable types, including potatoes, quality perceptions, storage, country of origin, understanding differences in potato varieties, packaging and ideal weight of potato formats, willingness to pay for Australian, organic and imported potatoes and wastage.

To accompany the primary consumer research, secondary desk research was conducted every three months. The Mintel global new product development database was accessed to analyse any product that contained potato as an ingredient that was launched globally in the previous three months. The categories for products containing potatoes included food, drink, beauty and personal care, health and hygiene products. Results were analysed by country of launch, region of launch, packaging type and claims used on pack. The database provided information of the scale and number of launches, rather than the success of the product in market.

To capture indicative retail pricing of fresh potatoes, in-store and online retailers were visited once a month around the country. Colmar Brunton representatives visited Coles and Woolworths to capture the price per kilo of loose, white washed potatoes in Sydney, Brisbane, Adelaide and Melbourne. Online prices per kilo were captured via the Coles and Woolworths online store for all state capital cities. These were also aggregated to provide a national average price each month.

An Interactive Research Tool (IRT) was also set up, which is an online interactive tool where monthly tracker data is updated with each completed wave. The tool allows greater examination of

the monthly tracker, with significance testing applied to the majority of data as well as comparing data by demographic information (gender, age, location etc.) and tracking wave (month). The IRT contains all tracker data except for monthly ad hoc questions.

Outputs

The deliverables for the project included monthly Potato Tracker reports, an IRT, publications, articles and presentation outputs.

Report Outputs

Twelve waves of online tracking have been successfully completed and reported to Hort Innovation and AUSVEG. Potato Tracker reports have been delivered at the end of the month to AUSVEG and Hort Innovation for online publication and dissemination to relevant parties. Four of the monthly reports (wave 1, 4, 7, 10) contained potato global trends analysis. Each report is available on the AUSVEG website. AUSVEG also distributed a monthly Potato Tracker email with a link to the most recent report.

Each report included the following sections:

- Potato fast facts
- Potato grower action plan
- Responses to ad hoc questions
- Category health
- Online and in-store prices
- Awareness of varieties
- Triggers and barriers to purchase
- Meal occasions and cooking styles

Examples of pages from the reports are included in Figure 2.

Figure 2. Examples of Monthly Report Outputs

IRT Output

The IRT is a live and online portal where any individual can log on to review the data. All standard questions that were tracked in the project are available to review; information can also be examined by month and consumer demographics. Results are also highlighted for statistically significant differences. Figure 3 shows the IRT homepage.

Figure 3. IRT homepage

Publications and Articles

Based on the findings from the research multiple articles have been published. Summary articles on the progress of the research have been published in the Potatoes Australia magazine highlighting the key insights for the industry, see Figure 4.

The following articles were published in the Potatoes Australia magazine:

- “Potato Tracker to tap into consumer habits”, October/November 2014
- “Potato Tracker continues to quiz consumers”, December 2014/January 2015
- “R&D workshops a hit across the country”, December 2014/January 2015
- “More Potato Tracker results released”, February/March 2015
- “Potato Tracker: Aussies still love the humble spud”, April/May 2015
- “Potato Tracker: Two new waves of consumer insights released”, June/July 2015
- “Consumers spill spud secrets in latest Potato Tracker findings”, August/September 2015
- “Spud growers' achievements celebrated at the national level”, August/September 2015

Results from this research have also been used in an ABC news bulletin story (Spud Survey: Name game, July 2015) - highlighting the lack of consumer knowledge and awareness of potato varieties.

Colmar Brunton submitted an abstract to the World Potato Congress (2015), based on the findings from the Potato Tracker. The abstract was titled “Consumer Perceptions of Potatoes and Future Opportunities in the Australian Market”. The abstract was published in the delegate handbook for the conference.

Figure 4. Potatoes Australia publication on results from the Potato Tracker (June/July 2015).

Workshops & Presentations

Representatives from Colmar Brunton presented the findings from the project at grower levy meetings in Ballarat (16 September, 2014) and Warragul (19 November, 2014). The audiences at both events were growers, packers and industry representatives. These presentations provided a great opportunity to receive feedback on how the reports and project was being received and how it could be made more effective for the end users.

Colmar Brunton joined AUSVEG at the Potato Extension booth at the 2015 National Horticulture Convention to meet growers and the end users of the research, face to face, and discuss how the findings could be actioned for grower businesses.

Outcomes

As part of the monthly Potato Tracker report three key insights and results were presented with corresponding actionable recommendations for the industry. Across the 12 months the main outcome themes were around freshness, quality, diet/health barriers, cooking styles, life-stage influences, packaging and perceptions of wastage. These insights for each month are included in Table 2.

Recommendations provide the industry with short term and long term strategies that aim to overcome consumer barriers to purchase and consumption, thus increasing volume and sales.

The outcome of this project is that the Australian fresh potato industry now has access to information on consumer perceptions and attitudes; with insights and recommendations. The long-term potential outcomes of this project are dependent on industry and individual fresh potato businesses taking actions based on the insights and recommendations. Overall, feedback from AUSVEG regarding the project was positive, with a number of growers in Victoria having expressed their support for the research saying that they found it beneficial and the information very useful. Additional comments from growers said that the Potato Tracker was valuable in keeping growers up-to-date, which had a bearing on supply and demand. Growers also indicated that they have used the reports to assist them in creating some value-added potato products that have since been discussed with retailers.

Table 2. Potato Tracker Results and Insights

Results and Insights Recommendations

Wave 1: September 2014

Unprompted and prompted awareness of potato varieties could be improved.

Opportunity exists to further differentiate types of potatoes based on cooking technique. At point of sale highlight potatoes best suited for mashing, roasting and boiling.

Consumers expect potatoes to remain fresh for over 2 weeks.

Highlight longevity of freshness and optimal storage on pack and in-store to increase consumer's perceptions of value for money.

There is substantial potato innovation globally, however only 2% occurs domestically.

Investigate viable new potato products, such as snacks and meals that meet consumers' needs and triggers to purchase, such as convenience, taste and versatility.

Wave 2: October 2014

A large portion of consumers are purchasing both washed and brushed potatoes.

Aim to differentiate both types of potatoes to maintain relevance to consumers. Promote brushed as the value for money option, position washed as convenient and easy to prepare and use straight away.

Diet concerns and weight management is a key barrier to purchase.

Educate consumers on the health benefits and nutritional facts of potatoes, including low in fat, good source of vitamin B6 and potassium, which can help boost heart health and reduce cholesterol levels.

Consumers want information on suitability for cooking styles, country of origin and best before dates.

Work with manufacturers, packers and retailers to develop viable options to ensure this essential information reaches consumers, such as printing on

packaging, point of sale materials or QR codes.

Wave 3: November 2014

Potatoes are perceived as less healthy than other vegetable types.

Promote health benefits and functional claims on packaging.

Investigate the potential for low GI potato varieties that would appeal to health conscious consumers.

Consumers are only fairly confident in cooking multiple types of potatoes.

To increase confidence and experimentation of consumers call out recipe ideas and cooking instructions in-store.

Investigate media and online information to educate consumers.

Purchase and consumption is more popular in older age groups and 'empty nesters'.

Appeal to younger, time poor consumers with alternative formats (pre-prepared) and bundle packs (potato, broccoli and cauliflower mixes) that capitalise on convenience triggers to purchase.

Wave 4: December 2014

Potatoes are consistently served with carrots, peas and broccoli.

Explore packaging opportunities to bundle these vegetables together, whether whole or pre-cut, an offering of 'meat and 3 veg' will appeal to older consumers who regularly cook traditional Australian cuisine.

Family meals and perceptions of suitability for families are both on the rise.

Encourage families to purchase more potatoes by clearly labelling number of serving sizes on packaged potatoes.

In-store, indicate flavour offerings, something that is mild will most likely appeal to the whole family.

Gluten free and health trends are continually on the rise.

Investigate processing opportunities to supply potatoes. There may be greater demand for potatoes, as wheat and gluten substitutes in products as gluten avoidance and allergies increase.

Wave 5: January 2015

Consumers prefer an all-purpose variety, rather than cooking specific potato varieties.

Investigate a versatile, all-purpose potato variety.

Promote the commodity as 'Perfect for all your cooking needs.' The potato will need to mash, roast and boil well across key cooking styles.

Triggers to purchase potatoes do differ across consumer segments – opportunity to drive purchase in a variety of ways.

Utilise a multi-layered approach to encourage purchase, e.g. for those that are time poor- potatoes are the convenient vegetable, for young and established families- potatoes are the family favourite and for the budget conscious-potatoes are a pantry staple. Capture attention in-store and on-pack utilising multiple messages.

Poor quality potatoes has doubled as a barrier to purchase.

Explore quality issues across the supply chain.

Ensure that appropriate quality checks are in place so as to not alienate consumers.

Wave 6: February 2015

Quality issues arise at both purchase location Reassure consumer's in-store that despite visual and

and at home whilst cooking. superficial defects, the quality of the potato is not affected. Investigate the possibility of an 'ugly' potato bin for non-uniformed produce (a campaign that has been highly successful overseas). This may increase overall volume and sales.

Expense has increased as a key barrier to purchase this month.

Expense is primarily driven by consumer perceptions (rather than an increase in retail price). Debunk 'potatoes are expensive' by highlighting value for money options, such as loose and brushed formats. A reduced price, 'ugly' potato bin may also combat negative price opinions.

Length of potato freshness and perceptions have fallen.

Freshness concerns may be related to the quality issues reported (especially the firmness of potatoes).

Educate consumers on correct storage to extend shelf life and freshness perceptions. Ensure that regular quality checks are in place and enforced to maintain freshness throughout the supply chain.

Wave 7: March 2015

Consumers who waste potatoes on average throw out 15% of what they buy.

Wastage can be decreased by communicating ideas where consumers can use the whole potato, such as mashing with the skin on and using left over potato as pie and stew toppings. Consumers also require storage information and best before dates to enhance freshness and reduce wastage.

This month saw a decrease in consumer satisfaction and a rise in the barrier of 'consuming enough for my needs'.

Consumers may be running out of ideas on what to do with the potatoes on offer. To spark interest in new varieties and negate disengagement by promoting a 'potato of the month' which is particularly good for a seasonal dishes – i.e. salads or stews.

Importance of provenance has noticeably increased this month.

Emphasise the provenance of potatoes, if possible, extending to fertilisers and mulch with

communication 'All Aussie Made'. Retailers should consider very explicit 'Aussie' labelling– 'Aussie White Potatoes' etc.

Wave 8: April 2015

The increase in 'quick meals' that incorporate potatoes is reflected in their popularity as an accompaniment to a dish (i.e. roast potatoes, mashed potatoes) rather than the key ingredient in a meal (Shepherd's pie, Communicate recipes in-store where potatoes are the key feature in the dish. This may have a positive impact on the declining consumption evident in the past month.

Gnocchi).

The continued growth of Asian culture within Australia is likely contributing to the substantial decrease in tradition and habit as drivers to purchase.

Acknowledge the shift from traditional cuisines to drive the consumption of potatoes. Educate consumers on potato versatility and use within multicultural cuisines.

The topical issue of sugar in the food industry is likely to be having a positive impact on earlier purchase barriers, including weight/diet management concerns.

Inform consumers with dietary and nutrition information on pack and in-store, clearly call out 'no sugar', along with 'low fat' and other health claims.

Wave 9: May 2015

2kg pre-packaged bags of potatoes are the 'ideal' size and format, followed by 1kg and 5kg+ bags.

Inform and discuss with retailers the importance of larger pre-packaged formats to consumers. To promote larger bags of potatoes highlight the value proposition and perfect size for the whole family.

Difficulty to carry is an increasing barrier to purchase, yet consumers like the value of larger formats.

Investigate alternative packaging formats that would encourage consumers to purchase larger format 2-5kg bags. Alternative formats include boxes with handles or sturdy hessian bags with handles.

Potential to also promote delivery services to address 'difficulty to carry' barrier.

Consumers are purchasing smaller bags of potatoes because of perceived shelf life.

To encourage consumers to purchase larger pre-packaged formats, clearly communicate length of freshness on pack, including best before dates. This will provide consumers with reassurance that there will be minimal wastage.

Wave 10: June 2015

Consumers have distinct attitudes towards vegetables, however all consumers believe

that 'eating vegetables is necessary for their health'.

Your vegetable appeals to Wholesome Habits consumers. These people eat potatoes routinely, and are not looking for anything new.

Be more relevant by: Providing alternative meal occasions outside of dinner time, making the vegetable more relevant throughout the day. This may include lunch and snack size portions of potatoes, including ready to eat jacket/baked potatoes. Formats need to convey value for money and ample servings.

These consumers are conscious of wastage, therefore highlight serving sizes and longevity of freshness (best before dates) on pack or in-store.

Your vegetable also appeals to Eager Explorer consumers. These people are interested in the taste, colour and texture of potatoes. Eager Explorers are more open to experimentation and are more likely to spend on fresh vegetables in general.

Be more relevant by: Attracting them with in-store displays that are colourful and promote freshness and quality.

These consumers are perfect targets for multiple types of potatoes including different skin and flesh colours, such as Desiree, Dutch Creams and Pink Eyes. Clearly communicate the flavour profiles of the different types and provide suitable cooking recipe ideas for consumers to trial in their cooking - mashing and baking are winners.

Provide recipe and cuisine ideas, outside of the typical Australian, including Italian and Thai.

Wave 11: July 2015

Change in season to the colder winter months has seen increased potato purchase frequency and consumption.

Maintain increased purchase and consumption momentum by highlighting and communicating the comfort of warm 'hearty' potatoes as a regular accompanying vegetable with the family meal, and introduce consumers to its versatility with alternative winter cooking styles such as soups or stews.

Consumers' willingness to pay more for potatoes is greatest for loose washed potatoes and organic loose potatoes.

Support increased spend for loose washed potatoes by highlighting the convenience and reduced preparation times, encouraging consumers to spend less time preparing the family meal and more time enjoying it; and the perceived health and sustainability benefits of organic loose potatoes.

Potatoes are considered easy to cook, versatile in their cooking style and good value for money.

Position potatoes as the ideal and essential accompanying vegetable for the family meal, through highlighting its ease of use, versatility with cooking styles, good value for money and price

consistency.

Wave 12: August 2015

Consumers choose specific potato varieties primarily based on price.

Lack of variety awareness is allowing the category to be driven by price, rather than by functional attributes i.e. flavour, freshness, cooking style.

Consumers need to be educated on the differences

in potato varieties, and why one should be purchased over another. This will allow the category to develop and expand into the future.

Consuming enough for their needs remains the dominant barrier to future purchase.

Through other vegetable research, we have found this is intrinsically linked to wastage (and actively limiting waste).

Provide consumers with recipe ideas that utilise the whole potato, including the skin. Inform consumers on the additional flavour and nutritional benefits it will add to engage consumers and prevent waste.

Consumers are concerned about wastage and are seeking information on freshness (best before dates).

Ensure that all pre-packaged potatoes have best before dates clearly printed.

If possible, provide estimated freshness for loose potatoes at the point of sale, such as 'will last for 2 weeks in your cupboard'.

Evaluation and Discussion

The Potato Tracker project was effective in the timely delivery of project outputs, with monthly reports delivered to schedule. There was however, a delay in the construction of the IRT. The delay did not impact the progression of the project, and was backdated with all data available. The project was effective in identifying consumer barriers to purchase including health concerns, perception of limited meal occasions and lack of potato variety knowledge. Through the monthly reports, the industry was provided with both long term and short term recommendations on how to overcome these barriers.

Feedback was primarily sought at face to face interactions with the industry, including workshops. These workshops took place in key regional locations for potato growers (Ballarat and Warragul, Victoria). End users indicated that the reports were dense with text and could be made easier to read. Based on those recommendations, the report was amended to provide clear and easy to read insights and recommendations for the industry.

As mentioned earlier, there were three key consumer themes that emerged from this project, which are relevant to the industry, including health concerns, perceptions of limited meal and cooking occasions and lack of knowledge of potato varieties. As purchase of fresh potatoes in Australia is on the decline, it is critical to understand what is driving these barriers and how they can be overcome.

The project identified that diet and weight management concerns were negatively impacting the purchase of fresh potatoes. The Tracker showed that women, in particular, tend to avoid potatoes due to weight management/dietary concerns. Consumers also perceived potatoes to be less healthy than other vegetables. Generally the increased health consciousness has led to consumers becoming skeptical of what they are eating. Not only have potatoes been affected by this, so too have carbohydrates as a category (rice, pasta, noodles, bread, etc.). This may also be linked to the decline in tradition/habit as a trigger to purchase throughout the 12 month tracking period. Popularity of low carbohydrate diets have become more prominent due to perceptions that carbohydrates will lead to weight gain. Potatoes are typically fried and/or loaded with fats such as butter, sour cream, cheese, and bacon bits which add to health / weight management concerns.

However, potatoes are an important vegetable that is low in calories, high in vitamins and minerals, and offers significant protection against cardiovascular disease and cancer (King and Slavin, 2015). An emphasis towards the health benefits of consuming potatoes in its natural and less processed form could be implemented. To support this, specific health benefits and functional claims should be

promoted on packaging and in-store, according to the research. Appealing to health-conscious consumers is key – it has been recommended that the potato industry should work together to investigate the potential for low GI (glycaemic index) potato varieties that would appeal to these consumers.

Further, there is opportunity to capitalise on the global health trend, with obesity on the rise, food companies are looking to provide alternative products that meet consumers' health conscious needs. One such emerging health trend is 'gluten free' diets. Whilst diagnosed coeliac disease is estimated to affect only 1% of the population (Alaedini, 2015), there has been an exponential growth in gluten avoidance. It has been projected that 100 million Americans will consume gluten-free products within a year (Fasano, Saponse, Zevallos & Schuppan, 2015) – similar trends have been observed in Australia.

From the new product database, launches containing potato as an ingredient have seen similar trends. Over the last 3 months there have been close to 3,000 products launched globally that contain potato as an ingredient. Almost one fifth of these launches contain the claim 'gluten free', this is considerably more prevalent in Latin America (46% of products launched) and North America (34% of products launched); however this trend is under developed in Asia Pacific (only 9% of products launched). This is a key area of opportunity for growers in Australia, but also more broadly the Asia Pacific region. In addition, the potato industry has a role to further promote potato as a gluten substitute over and above other industries, including rice and corn.

The second attitudinal barrier that the industry needs to address is the development of additional meal occasions and cooking styles and cuisines. This research has shown that in Australia, potatoes are mashed, boiled or baked, are intimately linked with traditional Australian cuisine and are typically eaten at dinner time. This limited repertoire of consumption occasions and cooking styles has been negatively impacting on the growth of the category, with consumers unable to see past their routine and habits. Consumers need to be prompted and inspired for alternative cooking styles and dishes to increase consumption.

To aid inspiration retailers can provide recipe ideas in-store where potatoes are the key feature in the dish. Another opportunity is to provide alternative meal occasions, outside of dinner time. This will assist in making potatoes more relevant throughout the day. The industry can look to overseas trends, such as snack products (the main category for potato product launches internationally, as well the consumption occasions which has seen the most growth in the Australian market over the last decade). Currently, potatoes as snacks were significantly more popular with 18-24 year olds,

whilst the category needs to engage the older consumers, 25+ year olds. Further, value for money should be conveyed through ample serving sizes for lunch and snacks.

The third barrier to growth of the market is the consumer's lack of knowledge when it comes to specific potato varieties. Almost one third of consumers were unable to recall any type of potato, whilst almost one in five consumers were unsure of the potato type they typically purchase. Further, word of mouth feedback had suggested that potato varieties were not uniformly labelled at point of purchase, thus adding to consumer confusion. This lack of knowledge is also associated with restricted meal occasions. Consumers were unsure about what types of potatoes would suit their cooking styles, and thus are limited to purchasing only one or two varieties.

This is an issue that can be addressed by both the growers and the retailers. Each potato variety needs to clearly differentiate itself from other varieties on the market - communicate what cooking style it is most suitable for, the flavour profile and a recipe idea for each variety. Promotion of this information can be executed at a grower and retailer level. This will help discriminate the varieties in consumers' minds and create a specific need, rather than a 'one potato will meet all my needs' perception. Over time, consumers will ideally have a repertoire of potatoes that they use for specific dishes, cooking styles and cuisines.

Recommendations

Throughout the reports, various recommendations have been made as part of the ongoing action plan for potatoes (see Outcomes and Evaluation & Discussion sections). We would recommend prioritising the three key insight initiatives from this project; addressing weight/diet concerns of consumers, increasing perceptions of meal occasions and cooking styles, and improving awareness and knowledge of varieties, as well as maintaining the Potato Tracker (at a reduced frequency) into the future.

Each of the key insights should be analysed individually by industry stakeholders - what can businesses do to reduce the barriers that consumers have to purchasing more potatoes, i.e. addition of nutritional claims and information to packaging, retailers providing point of sale recipe and cooking ideas, etc. Further, each of the insights could be examined and analysed with an action plan and next steps developed at an industry level. To clearly communicate these barriers and initiatives, Colmar Brunton recommends as many face to face workshops as possible where these findings can be presented, with a forum for discussion.

As fresh potato purchase, consumption and perceptions have remained relatively stable over the 12 months of tracking, we would recommend conducting the Potato Tracker once a quarter or half-yearly in conjunction with action on the key insights. This would allow the industry to monitor the impact of any action taken as a result of the insights and recommendations, and whether this is having a positive effect on consumers and the industry, i.e. upturn in purchase and consumption frequency. With the Potato Tracker running seasonally, this would provide the industry with 2 ad hoc questions per wave that can be tailored to any additional topics that are of interest at that point in time. In addition, the industry may wish to consider qualitative research to complement the Potato Tracker findings and explore specific actions and initiatives in detail to help improve consumer purchasing and consumption of potatoes into the future.

Scientific Refereed Publications

None to report.

Intellectual Property/Commercialisation

No commercial IP generated.

References

Book Section D 2015 978-1-4939-2000-6 Nutrition and Bone Health Nutrition and Health. Holick, Michael F. Nieves, Jeri W. 10.1007/978-1-4939-2001-3_37. Celiac Disease and Bone Health. http://dx.doi.org/10.1007/978-1-4939-2001-3_37. Springer New York 2015-01-01. Alaedini, Armin p.633-643.

Alessio Fasano, Anna Sapone, Victor Zevallos, Detlef Schuppan, Nonceliac Gluten Sensitivity, *Gastroenterology*, 9 January 2015, ISSN 0016-5085, <http://dx.doi.org/10.1053/j.gastro.2014.12.049>.

Janet C. King, Joanne L. Slavin. White Potatoes, Human Health, and Dietary Guidance, May 2013, American Society for Nutrition. Volume 4, 3935-4015.