

# THE FRUIT & VEGETABLE CONSORTIUM

A fresh approach  
to increasing fruit  
and vegetable  
consumption

## Business case & blueprint summary

The business case and blueprint outlines the recommended approach to attracting investment and material support from interested industry, health and government stakeholders to establish a collaborative behavioural change program aimed at increasing consumption of vegetables in Australia. As well as outlining an evidence base and rationale for the project, it is designed to aid implementation by outlining a blueprint for the required governance and documentation including business plans, budgets and the creative brief to agencies.

## Purpose of the program

The motivation for this initiative is to improve health and social outcomes, reduce national health costs, as well as generate economic activity that flows through to vegetable production regions of Australia. Improving environmental sustainability will be an added benefit.

## Report Structure

- Part A: The business case
- Part B: The funding and governance model
- Part C: The behavioural change strategy.

## Business Case Executive Summary

The Business Case Executive Summary is an extract from the larger business case for a behavioural change program to increase vegetable consumption for all Australians. The business case and executive summary have been developed by members of the Fruit & Vegetable Consortium in collaboration with McKINNA et al.

McKINNA et al  
2/131 Victoria Avenue  
Albert Park VIC 3206  
Telephone: +61 3 96961966  
Email: [strategicinsights@mckinna.com.au](mailto:strategicinsights@mckinna.com.au)  
[www.mckinna.com.au](http://www.mckinna.com.au)

Insight Outlook Consulting Pty Ltd  
trading as McKINNA et al  
ABN 47 241 485 028  
Established 1983  
Contact: Dr David McKinna

## Part A: The business case

The business case for collective investment in a national behavioural change program to drive vegetable consumption is convincing. The evidence base has been structured around six core propositions, each of which includes compelling evidence drawn from Australian and international literature; data analysis undertaken for this and related prior projects; as well as the substantial knowledge base and expertise of the Fruit & Vegetable Consortium members.

### Proposition 1:

#### The vast majority of Australians are not eating the recommended serves of vegetables

- The NHMRC Australian Dietary Guidelines recommend at least five standard serves of vegetables per day should be consumed for good health (NHMRC, 2013). The 2017-18 National Health Survey (ABS 2018) records that only 7.5% of Australian adults and 6.3% of children did consume the recommended serves.
- In 2017/18, on average, men aged 18 years and over consumed 2.3 serves of vegetables each day and women consumed 2.5 serves. School aged children and teenagers over-index in under consumption (ABS, 2018) and 18 to 24 year olds are the lowest consuming cohort within adults.
- Total vegetable consumption (fresh and processed) has been steadily declining at 1.1% p.a. (5 year CAGR), suggesting that Australians today consume 13 kilos per year less vegetables per capita than they did in 2001 (see following analysis).
- It is estimated that only 55% of vegetables produced are actually consumed due to wastage in the supply chain and at home (McKINNA et al, 2018)
- The factors contributing to the under-consumption of vegetables are diverse, each requiring specific interventions to address (McKINNA et al, 2018)

### Proposition 2:

#### Low vegetable consumption is causing poor public health outcomes and escalating the health cost burden

- Vegetables are vital for good health and inadequate consumption can have serious health consequences from pregnancy to end of life (Duthie et al, 2018)
- Overweight and obesity are linked to chronic diseases, the leading cause of ill health and death in Australia (AIHW 2016). Australia was identified as the fifth most obese country in the OECD (OECD, 2017). More than two thirds of Australian adults are either overweight or obese (National Health Survey 2017- 18).
- Eating adequate vegetables has a direct linkage to maintaining a healthy weight (Schlesinger, 2019 and Nour, 2018).
- Many studies show that a diet rich in a range of vegetables is a critical part of preventative health, reducing the risk of high blood pressure, heart disease, some cancers, eye and digestive problems (Harvard School of Public Health, 2020)
- The disease burden could be cut by 14% if Australians who are overweight or obese (i.e. 63% of the adult population) maintained a weight loss of 3kg (AIHW, 2018)

# Business case executive summary

## Proposition 3:

### Attempts to lift vegetable consumption in Australia have not improved the national position

- Unlike most developed nations, there is no national marketing program in place to promote vegetable consumption to the broader Australian community (Fruit & Vegetable Consortium, 2020).
- Previous healthy eating campaigns in Australia have been inconsistent with their themes and branding and not well coordinated (Grunseit et al, 2016).
- Investment in healthy eating campaigns to date in Australia are estimated to have been at best around 50% short of the recommended investment levels for effective reach (Grunseit et al, 2016)
- Changes in behaviour are more likely to result when the media and education campaigns are run over a number of years and use multiple communication channels with a focus on specific foods (Mozaffarian et al, 2012)
- A health-driven as opposed to a consumption-driven campaign and insufficient involvement from the industry, including the retail sector are given as key reasons why the national Go for 2&5 program did not meet its goals (Rehky & McConchie, 2014).

## Proposition 4:

### The economic, social and environmental payback from investing to lift vegetable consumption is compelling

- A 10% increase in vegetable consumption would reduce annual health expenditure in Australia on certain cancers and cardiovascular diseases alone by \$100 million (Deloitte Access Economics, 2016)



- An increase in consumption of half a serve per day would conservatively generate an incremental increase in industry returns of \$634 million per annum which is shared by all parties along the food supply chain (McKINNA et al, 2018)
- Increasing vegetable consumption has wider economic potential with increased consumption generating as much as \$1 billion (NPV) economic value after 11 years (Deloitte Access Economics, 2018)
- Every dollar of incremental value generated by an industry has a flow-on multiplier effect on GDP and regional employment. Every new job created in the industry supports an additional job in the regional economy. (Deloitte Access Economics, 2018)
- Based on modelling from the wine industry, it could be argued that for every \$1 of additional industry value created and every additional job created, there would be at least \$1 more contributed to GDP and one more job in the wider community. (Wine Australia, 2019)
- Food production constitutes the single largest driver of global environmental degradation. Without consumption of a greater proportion of vegetables, the world will not meet the UN's Sustainable Development Goals nor the Paris Agreement and may struggle to feed the forecast world population of 10 billion people by 2020 (EAT Lancet Commission Summary Report, 2019).

# Business case executive summary

## Proposition 5:

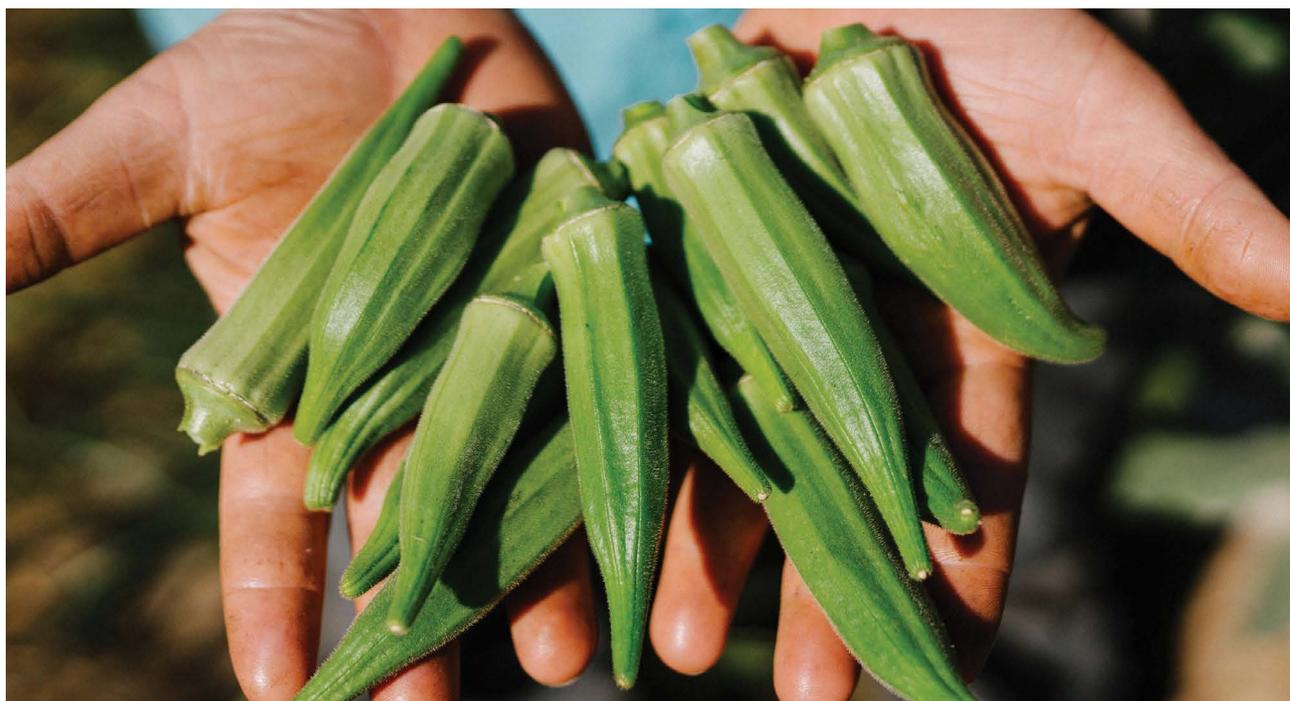
### Pooled resources would more effectively deliver the scale of shift that is now required

- Learnings from international campaigns suggest that a high degree of collaboration between all stakeholders including industry is an important criterion for success (Rekhy & McConchie, 2014).
- The Grunseit et al study (2016) identified that there had been over 55 different physical activity, nutrition and obesity campaigns conducted in Australia between 1996 and 2015.
- Consistent messages from multiple sources are more likely to have an influence on the purchasing and consumption behaviours of targeted groups (Kraak, 2017).
- A review of 57 US fruit and vegetable consumption programs concluded that only a multifaceted approach that integrates government, industry and community across all ages would be successful in increasing intakes (Thomson, 2011).

## Proposition 6:

### There is much goodwill among stakeholders to collaborate on addressing this national crisis

- Consultation conducted for this project indicated a strong willingness to collaborate amongst stakeholders from both industry and the health sector (McKINNA et al, 2020)
- Consultation with the vegetable industry for a study on implementing a marketing levy indicated a close to unanimous willingness to endorse a collaborative marketing program (McKINNA et al, 2018).
- Supporters of the Fruit & Vegetable Consortium include over 130 organisations across both health and industry domains and the 12 founding members have made substantial financial contributions to the project, indicating a deep commitment to the initiative (Fruit & Vegetable Consortium, 2020).
- Government can play an important role in facilitating collaboration between all players in the food system (Morgan, 2009).



# Business case executive summary

## Part B: Governance, management & funding model

### 1. Governance model

It is proposed that the vegetable program be operated and branded under a separate entity to the Fruit & Vegetable Consortium, based on the view that the Consortium has a broader agenda than vegetable consumption alone and that the company needs to be commercially focused to succeed, reflecting the needs of the funding partners, but without compromising the principles of the broader stakeholder group.

The proposed entity structure (subject to advice from legal and financial advisers) is a not-for-profit Company Limited by Guarantee as registered under the Corporations Act 2001. The working title is the 'Vegetable Collaboration Company'. The shareholders of this entity would be its founding and contributing member organisations.

### 2. Mission

The mission of The Vegetable Collaboration Company is to bring together parties from the health sector, government, NGOs and the vegetable supply chain to collaborate in order to deliver:

1. Improved long term health outcomes for Australians through increasing consumption of healthier and more delicious vegetables.
2. Reduced national health costs through the preventative health benefits associated with increased vegetable consumption.
3. Economic benefits to regional farming communities engaged in vegetable production.
4. Environmental benefits to all Australians and the planet.



### 3. Operational objectives

1. To inspire increased daily consumption of vegetables in Australian households through building the level of consumer engagement, confidence and eating enjoyment of vegetables.
2. To integrate and reinforce the messaging already in the marketplace about the nutritional qualities, quality and integrity of Australian grown vegetables.
3. To take a leadership role in coordinating the collective directions and activities of the various other stakeholder groups with the common goal of increasing national vegetable consumption.
4. To engage with retailers to gain maximum impact and product pull through from the marketing program at the point of sale.
5. To improve the accessibility and convenience of vegetables for consumers by strategic R&D investment in new product formats and improved packaging and labelling.
6. To identify and develop programs to showcase vegetables in food service outlets.

### 4. Organisational structure

It is proposed to administer the Vegetable Collaboration Company through the following three bodies:

1. A skills-based governance board
2. A core management team supported by appropriate contractors
3. A behaviour change expert panel.

# Business case executive summary

## 4. Funding model

A hybrid funding model is therefore proposed comprising:

- A recurring annual grant from government
- Annual corporate and supporter membership fees
- Hort Innovation funds (representing levies from all vegetable growers)
- Health industry contributions
- In-kind contributions from program partners and NGOs
- Sponsorships
- Philanthropy
- Self-generating revenue from operations such as licensing fees or web advertising.

The potential reduction in national health costs from this program present a compelling argument for the Commonwealth Government to contribute seed funding for its establishment and development.

Funding source	Annual target
Government grants (Federal & State)	\$15 million
Membership fees	\$1 million
Hort Innovation (including grower levies)	\$1 million
Health insurance companies	\$2 million
In-kind contributions from program partners	\$10 million
Sponsorships	\$1 million
Online revenue	(longer term)
<b>Total</b>	<b>\$30 million</b>

An annual funding target of \$30 million per year is proposed.

# Business case executive summary

## Part C: The behavioural change strategy

It is proposed to implement an holistic behavioral change program employing both traditional marketing techniques as well as a range of interventions. Behaviour change programs are essentially social marketing that 'stiches together' and coordinates the collective efforts of multiple interested parties around a common framework. In this case, the various interventions will be linked by a common umbrella brand (e.g. an active brand such as the Slip Slop Slap or Quit brands), supported by an advertising campaign. It is intended that the interventions would be able to embrace many of the current activities of the program partners.

The behavioural change model proposed is evidence based and has been successfully employed in an Australian context for such diverse programs such as safety at work and women's fitness.

The recommendation for a behaviour change strategy rather than a marketing program alone, is that there are a range of factors constraining vegetable consumption, which vary across different cohorts and meal occasions, therefore, a wide range of targeted and nuanced interventions is required beyond advertising alone. Although advertising can be targeted to some degree, it is essentially 'broad brush', focusing on just one touch point with a 'one size fits all' messaging. A behavioral issue such as vegetable consumption needs to be far more nuanced in its approach, with distinctly different interventions for each consumer segment that infiltrate their various meal occasions. Furthermore, the strategy needs to evolve over the years to reflect the changing dynamic as behaviors begin to shift.

The behavioural change strategy has been constructed around a segmentation model that groups consumers into sets, based on heir consumption, behaviours and motivations regarding

vegetables. The segmentation model has been purpose built for an Australian context, specific to vegetable consumers. It is based on the authors' many years of extensive qualitative and quantitative research with vegetable consumers and the intent is that it would be validated by further research and modified as the project evolves.

The central thrust of the behavioural change strategy is to educate, inform, inspire and empower Australians to consistently have positive eating experiences with vegetables with a secondary message that quietly points out the underpinning health and nutrition messaging. This approach is based on a body of research that indicates that health and nutrition messaging alone has not been successful in driving a sustainable increase in consumption in past campaigns.

This program represents a 'once in a generation' opportunity to positively influence the course of Australia's future. The consultation undertaken in preparing this document indicated a high level of willingness across all stakeholders to collaborate for the greater national good. However, this collaboration brings together parties with diverse interests and motivations so it will require compromise and goodwill from all positions to ensure the opportunity is captured for the benefit of future Australians.



# Business case executive summary

## Acknowledgements

Dr Daniel Terrill, Deloitte Access Economics

The Fruit & Vegetable Consortium Working Group

The Shannon Company for expert opinion and contribution of content in Part 3: Behavioural Change Strategy

# THE FRUIT & VEGETABLE CONSORTIUM

A fresh approach to increasing fruit and vegetable consumption

Members of the consortium include:



## Visit and stay up-to-date

Visit [thefvc.org.au](http://thefvc.org.au) to read the full Business Case and find out how to invest in a healthier Australia. To contact the Fruit & Vegetable Consortium, email Secretariat Michelle Lausen at [mlausen@nutritionaustralia.org](mailto:mlausen@nutritionaustralia.org), or Chair Lucinda Hancock at [lhancock@nutritionaustralia.org](mailto:lhancock@nutritionaustralia.org).