

# **How do we connect with consumers by using smart packaging?**

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## **Executive summary**

Fresh Produce is often sold in loose form without the use of potentially valuable marketing messages that other food produce packaging uses. This report looks at why it is important to try to improve the connection with consumers through messages delivered through smart packaging of fresh produce. Initially I look at why fresh produce is important and what messages should be getting through to the consumer. I briefly look at the health benefits associated with consumption of fresh produce. This is followed by why the consumer might not currently be hearing these health messages loudly enough to alter their purchasing behaviour and finally how the use of packaging might encourage the consumer to increase their purchase of fresh produce.

## **What is fresh produce consumption important?**

Fresh produce has always been marketed as healthy and there is scientific research that supports this suggestion. According to the World Health Organisation (2004) consumption of fruit and vegetables modifies the risk of many non-communicable chronic diseases including cancer, cerebrovascular accident (stroke), high blood pressure, type two diabetes and coronary heart disease.

Despite the evidence that fruit and vegetables modifies health risk, 90% of Australians do not consume the recommended two serves of fruit and five serves of vegetables per day (National health and medical research council 2003). The Australian Government acknowledge that lack of consumption is an important issue and have begun a campaign encouraging consumers to “go for 2 & 5” aimed at driving increased consumption levels (Department of health and ageing 2011). In order to better understand why Australians do not consume the recommended amount we need to look more closely at what barriers they see.

## **Health risk modification in the future as an incentive**

Standard economic assumptions predict that individuals will rationally make tradeoffs between current consumption and future health risks. As a result, individuals will make optimal risk choices as long as they fully understand the risks they face. Research has shown that as the time period of the risk faced is further away, consumers will discount this risk more than if the risk was more immediate, rendering short-term impulses supreme over long-term goals (Scharrf 2009). This is known as hyperbolic discounting and suggests that the most effective mechanism of encouraging

consumption to prevent future risk is to transfer the present value of the long term costs closer to the point of consumption. This is reflected in the fact that as consumers are older they consume a greater amount of fruit and vegetables as the risk is more immediate (Freshlogic 2011).

## Where is the health message?

Some consumers will discount more and some less. If firstly we assess those consumers that discount more, they will be interested in easy and convenient food and not necessarily in the health benefit. But some consumers will discount less and be interested in the health benefit associated with a balanced diet. The savvy marketers of the alternative foods such as breakfast cereals have no qualms in calling those benefits out to the consumer with claims such as “may lower cholesterol”. These consumers that are health conscious may be confused by the messages from the processed packaged food and bypass the natural fruit and vegetable alternatives.

## Immediate payoff – breakfast cereal packaging

Some alternative foods to fresh produce might be breakfast cereal or fruit snacks. Images showing packaging are shown below:



The consumer faced with two alternatives; a loose fruit making no health claims, or a packaged cereal claiming to lower cholesterol might choose the one loudly making health claims.

## Other barriers to consumption

A USA study analysing why people are not consuming the requisite amount of fruit and vegetables to modify their health risks came up with the common objections:

- Fruit and vegetables go bad too quickly
- Fruit and vegetables did not satisfy hunger

- Fruit and vegetables were not available in the home
- The cost of fruit and vegetables
- Preparation time for fruit and vegetables
- Study participants did not know how to add more to their diet (Richards et al 2010).

In a recent study by PMA-ANZ it was shown that the average cost of 2 serves of fruit and 5 of vegetables was \$1.15 per person per day. Cost of fruit and vegetables is definitely not a barrier to purchase. It is also interesting that in a society that suffers obesity, and one that does not consume the recommended amount of fruit and vegetables, then consumers must be substituting alternative foods where they may have otherwise consumed fruit and vegetables. It is important to think about how these barriers may be overcome by using smart packaging.

### **Smart Packaging for Fresh Produce**

If packaging can be used to sell less healthy alternatives to fruit and vegetables then it must be able to be leveraged to sell the truly healthy fresh produce. Smart packaging could be used to connect to the consumer and help to break down further barriers to consumption. The packaging should call out the health benefits and considered to be targeted to the likely consumer.

Packaging might show a QR code, which is a kind of barcode that can be scanned by smartphones. A European company is currently introducing QR codes on their produce linking to video with preparation tips for the produce or storage tips to combat the objection that the produce may go bad too quickly.

Further to this a US company is developing a product called ripeseense that allows the consumer to purchase pears in the state of ripeness that they are looking for from crisp to juicy. The packaging responds to the aroma from the ripening fruit and tells the consumer on a scale how ripe the fruit is.

### **Recommendations**

Smart packaging that brings the health benefit into immediate vision should be considered by the fresh produce industry to increase consumption. This might be in the form of phone applications for children that give immediate payoff such as a creature that is fed fresh produce and grows healthily or if fed less healthy alternatives develops disease. This could embed behaviour from an early age and encourage children to translate the behaviour and health of their creature to themselves.

Alternatively an application that shows preparation techniques that would allow consumers to try different fruit and vegetables might be useful. Spark People have an application that shows what is

in season, how to choose, store and prepare fresh produce that could be looked at for further inspiration ([www.sparkpeople.com](http://www.sparkpeople.com))



It is important to really understand what the consumer is motivated by to sell fresh produce. It is easy to say the fresh produce looks lovely and speaks for itself but if the consumer wants something different or will be motivated by something different then suppliers must embrace this.

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