

WA Food and Beverage Packaging Forum Highlights

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A full day of presentations accompanied by trade exhibits was held on 26 October. Three excellent speakers gave engaging presentations on many aspects of packaging.

Why do we need packaging?

1. To prevent the product from contamination (food safety)
2. To protect the product from physical damage
3. To optimise shelf life and flavour
4. To provide a vehicle for branding and other necessary information such as required information such as use by dates and nutritional information i.e. communication
5. To act as a carrier of the product and enable its transportation.
6. To enable value adding such as freezing
7. Convenience

What are the trends for 2020?

Minimalism consumers appreciate simplicity and economy.

Big bold typography to accommodate consumers shrinking attention spans. A recent 2019 trend report by Crowdspring found people make a subconscious decision about buying products within the first one and a half minutes. Eighty-five percent of people make that judgment based on packaging colour.

Transparency and clean labels being open and honest about what the products contain. More than 50% of consumers will scan a package with their smartphone to see what it contains. The rise of the SmartLabel™ to connect consumers to a landing page where they can see how “clean” their choice may be.

What is important to consumers when purchasing grocery products?

- Just over half of consumers want Australian made
- Just under 10% want recyclable packaging
- Fourteen percent want sustainable sourcing and
- Ethical supply is considered by only 4%

Sustainability & recycling in packaging

The Australian government established Australia's 2025 National Packaging Targets in 2018 to create a new sustainable pathway for the way we manage packaging in Australia. The four targets, to be achieved by 2025, are:

- 100% reusable, recyclable or compostable packaging
- 70% of plastic packaging being recycled or composted
- 0% of average recycled content included in packaging
- The phase out of problematic and unnecessary single-use plastics packaging.

APCO – the Australian Packaging Covenant Organisation is the agency charged with making this happen (www.packagingcovenant.org.au).

These targets were referred to as aspirational targets! Realistically, recycling is an expensive process and is very difficult to make it profitable in Australia. However, as other countries are increasing refusing to accept waste from Australia we have to persevere.

Last year's World Economic Forum saw over 250 companies pledge to use 100% reusable, recyclable or compostable packing by 2025. Sustainability is becoming more and more important.

Recycling should be considered the last line of defence. The first consideration should be reducing the need for that product or packaging in the first place.

The carbon footprint of packaging as a proportion of the whole item has been evaluated. Surprisingly for many food categories it is quite low – for meat and dairy 1% and 2%. Beverages and fruit have the highest at 33% with vegetables and fish somewhere in between.

Each year Packaging Innovation and Design Awards (PIDA) are presented for the best sustainable packaging ideas <http://aipack.com.au/education/pida>.

The colour, size, shape and weight of materials also affect their ability to be recycled. The infrared beams used to help sort materials cannot “see” black so black meat trays cannot be sorted from the waste stream. Some dyes and adhesives used for labels make plastics not recyclable.

Paper has limitations on the number of times it can be recycled – each time it is recycled the fibres become shorter until they are of little value.

Out of the seven types of plastic used in packaging only two are recyclable – PET and HDPE but plastics also have limits as their long chain molecules break down with repeated recycling. They can be mixed with fresh plastic but eventually they are repurposed into other plastic items such as picnic chairs and tables, bollards and speed humps.

Glass has no such limitations, in fact it takes 20% less energy to re-use glass than to melt silica to produce new glass however the different types of glass do need to be separated (such as window glass, bottles, coloured glass, laboratory grade glass and so on). In Western Australia glass may be recycled as road base.

Soft plastics may be recycled through recycle as long as there is no contamination from meat proteins. Pizza boxes are a problem due to the cheese and oil they absorb.

It is interesting to note that in Australia compostable packaging is not recyclable, in fact it is a contaminant in recycling waste streams.

The material in this document is extracted from presentations by John Day (Shopability) and Ralph Moyle from the Australian Institute of Packaging, at the 2019 WA Food and Beverage Packaging Forum.

This event was organised by the Department of Primary Industries and Regional Development's Food Industry Innovation program in collaboration with the Australian Institute of Food Science and Technology, the Australian Institute of Packaging and Buy West Eat Best.

For further information contact the Food Industry Innovation team at FoodIndustryInnovation@dpird.wa.gov.au



From L - R. John Day, Shopability, Patricia Elphinstone, DPIRD, Amelia De Groot, DPIRD, Ralph Moyle, AIP, Nikki Poulish, DPIRD
Photo Credit: DPIRD

Packaging design

Aside from the aspects of sustainability, packaging needs to consider accessibility, we have an ageing population and arthritic hands and failing eyesight all need to be factored into design.

Think about the vulnerabilities of your product – is it physical damage, is it heat, oxygen or light? That will help guide you in choice of material and design.

A great deal of technology exists around packaging – modified atmospheres, high pressure processing, aseptic packaging (eg Tetrapacks), vacuum packs. All aimed at improving shelf life and quality.

Tamper proof packaging has been used in some lines e.g. pharmaceuticals for many years but is expanding into other categories.

Other packaging includes defect detection. For example, a tag changes colour if temperature tolerances have been exceeded.

Digital printing is making it easier to customise packaging and add personalisation to products.

If you are interested in learning more about packaging in the fresh food industry, the Australian Fresh Produce Alliance have published an excellent report which can be downloaded from their website, along with a series of other useful resources
freshproduce.org.au/resources