



**2016 SAVE FOOD PACKAGING
DESIGN OF THE YEAR
GOLD WINNER**



SPC
SPC ProVital® Easy-Open Portion Control Fruit Cup

Key Outcomes and Measurement

<p>EASY TO OPEN CERTIFIED arthritisaustralia.com.au</p>			
<p>Easy to Open Certified (95% Popn)</p>	<p>Textured and lengthened pull tab</p>	<p>Clear, readable opening instructions</p>	<p>Easy grip decagon shaped cup</p>
<p>+8 ISR = 8 Accessibility Rating</p>	<p>Designed to assist hospital patients</p>	<p>No pain in opening</p>	<p>No need for any tools</p>

Save Food Packaging Guidelines

<p>Portion Control</p>	<p>Easy to open & handle</p>	<p>On-Pack communication</p>	<p>Balance environmental impacts</p>



Product: SPC ProVital® Easy-Open Portion Control Fruit Cup
Company: SPC
Country: Australia

SPC is an Australian brand that has been producing high quality products for Australian families for over 100 years. Proud of its rich Australian heritage and provenance, SPC provides naturally better and more convenient options for all Australians to eat well. SPC is committed to delivering Better Food for the Future.

<p>COORDINATED BY</p>	<p>ANZ REGIONAL AWARDS PROGRAM</p>	<p>INTERNATIONALLY ENDORSED BY</p>	<p>EXCLUSIVE ENTRY TO</p>

When considering your services and products within the supply chain through to the end consumer, what is your organisation's understanding of food loss & waste?

According to Mary Sharma, Head of Research & Development, SPC, *"I think of food loss as at farm level, or in the factory. Then I think of food waste, as the consumer-facing piece that occurs in a home. Food Waste can be everything from when a product goes bad, overcooked meals and leftovers that were never eaten."*

Aparna Vinod, Packaging Technologist, SPC, added, *"When speaking from the perspective of packaging itself, packaging can, to a very large extent, help consumers understand their food consumption, behaviour and habits around what food is spoiled and what is not."*

Alexandra Brayshaw MAIP, Accessible Design Manager, Arthritis Australia believes that, *"From an accessibility perspective, food waste is a big one for us. If a consumer cannot open a product, it means that food can't be accessed. If they cannot open it they may hack at it with tools, therefore they are more likely to spill it or damage the product inside the packaging or it will go straight into the garbage."*

What prompted your organisation to consider packaging design or redesign that aims to minimise food loss & waste?

SPC undertook some work within hospitals looking at what is served on trays. A lot of times meal selection is done once a day, such as the night before. The staff look at the patient's dietary requirements, then select breakfast, lunch, dinner and a snack.

When you look at cafeteria style - where things would have been plated out - it often did not take into consideration that somebody might be in theatre the next day, or that the hospitality staff team may not be aware that somebody would not be in the room. This led to a lot of unnecessary food waste.

This means the hospital is no longer able to use that meal for somebody else; either because of the dietary restrictions, or just from a food safety or infection control. This was leading to 40% product waste in hospitals which is a significant amount of food that was unable to be given to someone else. Another reason for waste is when patients are discharged unexpectedly.

Part of what SPC looked at was the format of portion control with the fruit cups, so that they stay sealed and hygienic, food safe until the time that they are needed. So, if somebody is not in their room, it does not take into account the entire meal. That product can still be utilised and therefore is minimising waste.

SPC also investigated people living in a home who have fine motor skill difficulties. A lot of times this is where people would be trying to stab the packaging to get it open. Not only is it a medical risk, because they can injure themselves, but it can often put particles into the food, the plastic or glass might break into it, which then means the entire component of the food needs to be thrown out because it has been contaminated. The cups are designed so that they are very easy to open, with the peel force offering lifting strength, so that there is much less risk of the product going in the bin before it can become someone's meal.

When a fruit cup is designed, shelf life and barrier are considered. An easy open tab was incorporated into the pack to make it easier to use and open; hence minimising product waste. One of the first considerations when designing the packs is that they must be easy to open without the use of tools. People should not need knives, scissors or stab at the pack through frustration. This leads to people throwing food away because they cannot open the pack.

SPC also considered what is a correct size for a customer. A product, like a fruit cup, could be a snack, for morning or afternoon tea, but it could also be a dessert after a main meal. The packaging design needs to reflect that appropriate serve size as well.

The design also needs to consider nutrition. Food waste was an aspect of packaging that was going onto patient's trays, that was unable to be opened and then consequently going into the waste stream. Food waste is an important area and to minimise it, you really need to address accessibility.

The design process is a huge driver as the hospital system really wants to reduce food waste and improve nutrition. To be able to achieve both Accessible & Inclusive packaging is an extra helping hand.



What was the packaging like before the new design?

It was initially launched in the large A10 and about three kilo tins for the larger establishments like residential aged care. Then it was determined that it made sense to put it in a portion control type with the little paper lid.

SPC started working with Arthritis Australia, Georgia Tech University (USA) and HealthShare NSW. SPC took into account not just the portion control aspect, but the attributes of the cup that needed to be very defined to ensure that consumer needs were being met.

Considerations were needed for people with motor skill difficulties such as arthritis but there are even a lot of children that have juvenile arthritis. Considerations were needed to design the cup to a decagonal shape, having a ridged surface to grip. Even if someone has motor skill difficulty, it is much easier to put your hand on it or hold it on the bottom. They also tested the pack with the Arthritis Simulation Glove. The glove is designed to simulate what it would like to open a lid, glass jar, or a pack if you have arthritis. This testing allowed SPC to place little nubs on the pack so that it has texture. They extended the length of the tab making it much easier for someone to grab and open. SPC designed eight attributes that makes the packaging unique.

The new attributes even included making sure that the font of the print is much more legible. If someone has any sight difficulties, that helps.

None of those attributes were on the packaging before this design, so it was a massive leap forward. The new pack took some trial and error to ensure it was not over-engineered.

What factors prompted you to enter the PIDA awards?

Being encouraged to enter through our partners enabled the wider industry team to be recognised for bringing this intuitive packaging to market. The partners included a lot of the engineering aspects as to how would it work on manufacturing lines and what type of equipment would be required for this type of packaging.

The PIDA Award brings awareness to the industry to show what should, and can be done to respect people who are having either swallowing difficulties or motor skill difficulties. This pack should be the gold standard for design thinking.

The new packaging design needed to meet the needs of the consumer and makes a significant difference in the hospital system.

Fruit is really important nutritionally, so just to deliver that product in an accessible way, and make sure it was not going into the food waste streams, was a key driver. It was good to get recognition for that and make people aware of the big change.



When thinking about developing your award-winning packaging, what were the design considerations for minimising food loss & waste and why?

It is making sure that the portion control size is suitable for a daily serve or fruit requirement. For example, the cup is 120 grams, it makes no sense in doing 150 grams because you either get tired of eating the exact same thing, or you fill up too fast before being able to finish the product.

SPC wondered how they would they store the remaining 30 grams, so there was a lot of work to determine what that appropriate size should be. By the same token, the team did not double it either because you would still have to then store it. Storing it means putting it into some other type of plastic container, and then there is chance of food contamination or sitting in the refrigerator too long.

SPC also stayed away from a flavour profile that is unusual. Some fruit has a little bit of tartness, which is natural to the fruit, but would not be spicy. Taste is king so it is best to not introduce a flavour that no one wants to eat; as that creates food waste. If they do not want to eat it due to flavour then this is in SPC's control.

Particularly fibrous fruit for instance, can give that full feeling quite quickly. So, that also influences serve size. Equipment considerations are also very important to how the product is filled and will it need adjustments due to the changes to the pack? What is the cost to fill the product, fill the tub? As sometimes when you are filling a smaller portion pack you see splashing. Whereas if you are filling into a bigger can, you might get splashing but because the product is in a big pack, it is not an issue. When you are talking about nozzles filling smaller packs, there can be waste, cleaning and sanitary issues that are created if there is a lot of splashing around the filling heads. There are design considerations as well.

The team also needed to take into account design and cost trade-offs based on customer needs. When designing the pack the peel off lid cannot be set at the minimum force. If it is too easy to open, it might not perform well on the line and you are going to have spillage there. You may also find additional spillage across the supply chain, so for example, on pallets or in transportation that can also lead to issues.

The pack also needed to have adequate sealing capabilities to ensure that it survives shelf life.

SPC also needed to better understand the environment in which these meals are being served. If you are in an aged care facility or a hospital they need to be working at a fast speed because they are serving so many people. There were even changes to the carton with the inclusion of a perforated opening, making it easy to open without needing to use any sharp objects.

There are several small design considerations with the actual packaging to make it accessible. Addressing that tab was key. The tab is large and overhanging the side of the tub that put texture on it, which was the first of its kind.

The pack also allows consumers to grip it easily and have a low peel force. It uses visual cues so that people know where the tab is and it has clear, legible, large font and labelling so people can see what was in the product. People can independently open the product, eat all of it and not waste food.

Are these considerations implemented in your NPD process every single time?

SPC always breaks down the process of all the tasks the consumer has to do to open the product. We then try to align it with the abilities of the consumer and see the areas that need to be improved. Therefore, it is a key part of the design development process.



How does SPC measure the impact your product's packaging design has on food loss waste levels?

SPC does not measure it to get a single number; it is more about all aspects of the product and the packaging as a system. SPC needs to ensure that they are not seeing food loss in their factories or food waste with the consumers.

The IHHC, which is the Institute of Hospitality and HealthCare, conducted an in-depth study of the amount of food waste in a hospital setting specifically. The SPC product is one they used to help measure versus other meal occasions that are happening back of house.

The SPC ProVital brand was listed as one of the bright spots of having already done some of that work upfront, as opposed to it being mandated by the government.

When the pack was re-designed it was tested across all parts of the value chain and process; including prototyping. The pack went on to receive Arthritis Australia's +8 Accessibility Rating and Easy to Open Certification. SPC undertook a lot of accessibility testing to achieve this result.

What do you believe is the most successful outcome/benefit from this design?

A lot of times, it is difficult when you are just looking at dollars to justify a higher cost product versus imported options. This new design allows the team to talk about the easy to open and easy to grip consumer features plus the recognition and awards that the pack has won. These discussions assist SPC to win tenders.

SPC does not use the award themselves, or the award winning design necessarily just to pat themselves on the back. However, the recognition does come in handy because they can tick off those key attributes of the product and packaging, that helps somebody look beyond just comparing the price of A versus the price of B.

In places such as aged care the daily spend is approximately \$6.40 a day and that covers breakfast, lunch, dinner morning and afternoon teas and snacks. Six meals for \$6.40 a day does not allow for increased packaging costs.

However, if the team can explain the benefits of the product and packaging in reduced waste and infection control, then this really helps.

Was the award-winning Save Food Packaging design comparatively more expensive than standard packaging? If so, could you estimate in percentage how much more?

The lidding material with the peel for strength and product integrity, is more expensive than other options on the market. The cup itself is slightly more expensive for that same reason.

For SPC it was a balancing act between providing a high quality product, offering unique packaging that minimises food waste and meeting the customer's requirements.

Because the hospital system wanted to address accessibility, it was something SPC was willing to invest in to reduce food waste. So it was one of those things where they could reward good design.

As an award winner and a best practice leader, would you recommend/promote to other organisations the Save Food Packaging design benefits? If so, what would these be?

Yes, we would recommend the packaging design benefits. It's imperative, however, to be clear on what your objective is and what consumer issue you're trying to solve. For SPC, it was making sure that people had access to good quality food.

You would have to put yourself in a position of who your end user is going to be, you have to feel like you are the person that has the arthritis, or you are going to be frustrated because you cannot open your own packaging.



As a winner of the PIDA awards, how valuable is the award to your organisation?

Maria Naughton, Senior Brand Manager for Functional Foods, SPC said that “One of the things I have started doing in all of our communications is to make sure that we are using the PIDA award logo.”

“We also utilise the Easy to Open logo from Arthritis Australia on our industry and trade publications. Due to our partnership with Arthritis Australia we are also now addressing concerns of other like-minded organisations such as Parkinson’s Foundation and MND Australia in matters of dexterity and accessibility. The organisations are now interacting with each other and have developed an industry alliance for best-practice sharing.”

Alexandra Brayshaw MAIP, Accessible Design Manager, Arthritis Australia added that “It is great to have an innovative example out there that consumers love, and highlight what can be done through collaboration. The recognition from the packaging industry is also very important to encourage other organisations to review their own packaging’s accessibility.”



How is winning a WorldStar Packaging Award valuable to your organisation?



Mary Sharma, Head of Research & Development, SPC says, “I am incredibly proud that we have these awards. I am sure the people who worked on it were very chuffed that they got that award as well. I would say it is not something that is probably widely known across the organisation and I think we can all do a better job on that for sure.”



The Australasian Packaging Innovation & Design (PIDA) Awards are an Australia and New Zealand program that is coordinated by the Australian Institute of Packaging (AIP). The awards recognise companies and individuals who are making a significant difference in their field across Australia and New Zealand. The PIDA Awards are the exclusive entry point for Australia and New Zealand for the prestigious WorldStar Packaging Awards.

The Design Innovation of the Year company awards recognise organisations that have designed innovative packaging within each of these six manufacturing categories:

- Food
- Beverage
- Health, Beauty & Wellness
- Domestic & Household
- Labelling & Decoration
- Outside of the Box

There are four special awards available:

- Sustainable Packaging Design
- Save Food Packaging Design
- Accessible & Inclusive Packaging Design
- Marketing Award

The **Save Food Packaging Design Special Award** is designed to recognise companies that are working to minimise or prevent food waste from paddock to plate using innovative and intuitive design features that can contain & protect, preserve and extend shelf life; all the while meeting global sustainable packaging targets. This is a WorldStar Packaging Award category.



The Australian Institute of Packaging (AIP) is the peak professional body for packaging education and training in Australasia. The AIP helps shape the careers of generations of packaging professionals – from packaging technologists to international packaging business leaders along with a host of people in associated disciplines – sales and marketing, purchasing, production and environment.

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