

# Plastic packaging

## Alto innovates for Fonterra

Hannah Oakman spoke to New-Zealand based **Alto** to find out more.

**Pact** recently launched its new 'light block' milk bottle, with Anchor milk in New Zealand going on shelves in the new packaging.

**Fonterra**, which owns the Anchor milk brand, has long been a customer of Pact – its commercial relationship is with **Alto Packaging** (a **Pact Group** subsidiary in New Zealand).

Eric Kjestrup, general manager of food packaging, Australia & New Zealand for Alto Packaging commented: "We were thrilled to see our light block bottle launched by Fonterra with such a positive response from consumers and customers.

"We believe this really will differentiate Anchor from competitors – with packaging that maintains a products' taste profile over its shelf life and reduces nutrient degradation."

Chris Redfern, group technology manager at **Impact** (Pact Group's innovation arm) added: "This

project has been about two years in the making. From the first seed of the idea, through to research, prototypes, testing and implementation – it has been an enormous and collaborative effort that has spanned eight countries, hundreds of people and innumerable taste tests!"

It began when Fonterra New Zealand approached Alto for a light block bottle solution for fresh milk based on their current bottle design. Overseas light block bottles had only ever been used for UHT milk, not fresh.

Fonterra's research proved that light – both UV light and visible light in supermarkets or fridge – affected the quality and taste of milk. The company wanted to explore the light block technology so Alto set out to see what existed in the international market and, ultimately, to better it.

Chris added: "Our first phase of research spanned South Africa, Spain, Portugal and Italy. We looked at many different manufacturing platforms and



Eric (left) and Chris (right) in the Impact Innovation Centre with the light block bottle

sourced some product for a first round of testing at Fonterra. These first prototypes were generic in style and shape.

"Testing at Fonterra on milk quality, nutrient retention, and flavour profile was positive in these early stages and encouraged us to keep going. We had the next round of prototypes made in the Anchor brand shape and style before further testing continued."

So what were the main challenges with this innovation? Chris revealed: "Critical challenges for us were producing a lightweight light block bottle based on Anchor's iconic bottle design – which is unusual, with a large handle and a rectangular shape. Also, we needed the ability to manufacture bottles at high speed to suit Fonterra's filling lines. And we needed to be able to do it cost effectively.

"Appearance was a big issue and a big challenge. The light block bottle has three layers – a black layer in the middle to provide light resistance, a white inner and a white outer layer.

"People expect their milk to be true white so we really needed to get the colour and appeal of the project right and make sure we were able to hide the light barrier layer without adding too

much to the weight or bulk of the packaging.

"As we edged closer to implementation, installing all the new equipment while still maintaining bottle supply to the fill lines became the final challenge! But we are very proud that we were able to implement without any major disruptions."

Eric explained that the bottle prevents light damage, which is adaptable for further dairy products. "Fonterra will be using light block technology for its Anchor cream range.

"We also believe it is possible that light block could have similar taste, freshness and nutrient benefits for yogurt, so we'll be keen to explore that. I also think that opaque packaging might lend itself to some interesting promotional opportunities too."

Alto is always working on new innovations with the team at Impact – a division of Pact Group that supports innovation in packaging, branding and design. Chris added: "It's deliberately quite separate to Pact's manufacturing operations, which naturally have a focus on materials, machinery, logistics and cost. Suffice it to say that we have hundreds of our own registered designs and trademarks." ■



The light block bottle in its first day of production

© 2013 FoodBev Media Ltd. Reproduced with the permission of FoodBev Media - www.foodbev.com