Latest trends from the 'top man' in ice-cream

We all scream for it, but great ice-cream is not child's play – it's a scientific balancing act. No-one knows that better than Doug Goff, professor of food science at the University of Guelph in Canada and a renowned ice-cream expert. Doug was in Australia in March to present a DIAA ice-cream technology course. He talked ice-cream with Irina Fainberg.

What's the secret of great ice-cream?

You have to have fresh, good-quality ingredients, and you have to make sure not only that each individual ingredient is selected well, but that they all fit together. Then it's a combination of the processing techniques to keep ice crystal size small, good shelf life and good distribution channels. One of the biggest challenges we have in the ice-cream business is not only making good ice-cream, but sustaining that quality through the distribution chain.

What role does the retailer play in ensuring product quality?

When a consumer buys a product whose quality has deteriorated, they don't necessarily blame the retailer, they blame the brand. I think it's imperative that ice-cream processors work with others in the supply chain to make sure the product doesn't deteriorate when it leaves the factory.

One ice-cream company I know in Canada and the US found that its retailers had all sorts of problems associated with defrost cycles, dirty condenser coils, and so on. They put together educational and equipment maintenance programs for retailers and worked with them to make sure everything was working properly and the quality of the product didn't suffer.

What about consumer expectations?

One of the things I've observed here in Australia is that there's a tremendous pressure on price from the two big retailers. Is it fair for the consumer to expect a high-quality product that's done in a sustainable way at \$1 a litre? There's got to be some reasonable expectations on behalf of the consumer, but if someone wants to sell them milk or ice-cream at \$1 a litre, why not? But the consumers have

Doug Goff was in Australia in March to present the DIAA Ice-cream Science and Technology course.



got to understand that you can't sustain that if the farmer, the processor and so on are going to, first of all, deliver quality and, second of all, do it at a reasonable profit margin. People aren't in the dairy business for philanthropic reasons, they are there to make profit.

Where do you see the ice-cream market heading in the next 5-10 years?

Ice-cream has always been an indulgence product, it's always been a treat, and to some extent I think it always will be.

It's interesting that there's a lot of research around nutrition – low-fat or low-sugar formulation, nutrition supplementation, etc. But honestly, we've had low-fat ice-cream on the market for a long time. The fact of the matter is, people say "yes, I want low-fat products," but they don't buy them.

We have an obesity problem and a diabetes problem, but the products that are growing and seem to be doing very well are super-premium, high-fat indulgence-type products.

At the end of the day, people don't buy icecream for nutrition reasons, they buy it as an indulgence product. Although nutrition is an important trend that we need to be aware of, I think we also have to remember why people eat ice-cream.

Having said that, some of the trends I see

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are nutrition based. In North America, there's been a lot of effort put into low-sugar formulations. Diabetes is an issue for us, and I certainly see that picked up. Whether that makes a big impact in the market remains to be seen.

During the course, you pointed out a correlation between ice-cream consumption and obesity levels in the Western world. What's the solution?

I always come back to the idea of balance. In the US there's a problem with portion control. In restaurants, the serving sizes are too big, so instead of people expecting a reasonable scoop of ice-cream for dessert, they get four scoops. To me it's not about the product, it's about portion control and putting it in the context of a balanced diet.

What are your thoughts on the Australian ice-cream industry?

I think it's doing particularly well when you look at consumption levels. It's obviously well-established and it's delivering product that consumers want, catering to the demand out there.

An exciting development in the context of ice-cream as an indulgence product is that consumers are starting to look at ice-cream as a destination. Once a new ice-cream company is established at a local level, many consumers make it a point to drive some distance to visit it.

One of the things I have noted in Australia, and this is consistent with my experience in Canada as well, is the strong entrepreneurial side of the ice-cream business. As the market at the high level

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becomes more and more consolidated in the hands of a few companies at the top, lots of smaller local guys open up at the bottom. We just don't see that with any other sector of the dairy industry – no one is trying this hard to get into fresh milk, and even with cheese it's so much more difficult. But with ice-cream, I see many opportunities for entrepreneurs.

Is ice-cream making an art or a science?

I would certainly argue that it's much more science than art if you compare it to cheese. There's a strong element of art to cheesemaking – you've got to get the pH right, adjust the protein and fat ratio, and you just can't make blue cheese unless you've got the feel for it. I think to some extent ice-cream is easier to make than cheese. It's much more science than art

- you've got to get the formulation right, make sure the mix is well balanced.

One place where art comes into it is on the marketing side of things again – flavour. There you can get your creative juices flowing and make that new, unique flavour that will grab you some market share.

Frozen yogurt is enormously popular in the US at the moment. Is ice-cream in danger of losing ground?

To be honest, I think it's marketing more than anything else.

Frozen yogurt is novel at the moment, but if you look over 30 years, frozen yogurt has been cyclical. It's gone up because people have jumped into it and really tried to grab market share, but then consumers decided that it was not really what they wanted and frozen yogurt went down again.

To me, frozen yogurt is just a small segment of the overall ice-cream market.

What are some of the more unusual trends in Canada and the US?

One of the trends going on now is hot, spicy and savoury ice-creams. That's novel compared to a few years ago, when no one would have developed anything like that. It's pushing the boundaries. I see a lot more spices, such as cinnamon, ginger and cardamom. And it's not just one person with a weird idea – it's becoming more mainstream.

What about different types of milk?

There are a few people here at the course from goat dairies. I've been making sheep's milk ice-cream at the University of Guelph. It's unique, and it's got a bit of a market share. One particular company we're working with is doing okay because it makes a lot of sheep's milk cheese and the dairy's name is well recognised, which gives it a bit of an edge. It's a niche market.

Who says learning can't be fun? Participants at the DIAA ice-cream science and technology course in March tasting and evaluating different types of ice-cream.

