

What will be the food of Christmas Future?



FENCE LINES
ANNA CAMPBELL

THIS is my last column for 2017. As always at this time of year, I'm flat out finishing contracts, supporting children in end-of-year events and sport and, generally, running on empty. Both of my brothers and their families are here from England for Christmas, so I am looking forward to family time and lazy time.

The thought of what to eat on Christmas Day is still far from my mind, a decision to be made the weekend before. It's likely to be salmon, turkey or lamb — I can't really go wrong.

A more challenging question is, what will I be eating for Christmas day in 30 years' time?

According to Ryan Bethencourt, a Memphis Meats (San Francisco-based synthetic meat start-up) investor, "in 30 years or so, we will no longer need to kill any animals and all meat will either be clean or plant-based".

So, instead of salmon, turkey or lamb, it's feasible that I will

be eating an insect-derived roast or cultured meat.

There is so much written about meat replacements at the moment it's hard to know what's real, what's hype and what's imminent.

Essentially, there are three meat-replacement options: plant-based analogues, which have been in the market for many years but are gaining in traction and investment to make them taste more meat-like; insect-based proteins; and cellular-derived meats.

The last is the most radical, developed by culturing animal muscle and connective tissue cells. The right growing conditions are applied to the cells and they divide on their own. To grow, they need a nutrient-rich medium with a key ingredient of foetal bovine serum.

This weakens the "cruelty free" claims of those companies and some, such as Hampton Creek, are breaking through that, claiming to have grown and harvested chicken without using foetal bovine serum. Of course, their methods are proprietary.

The biggest challenge for these companies now is bio-engineering. How do they scale their systems to reduce product price? With the amount of investment money being poured in and the clever people



Will traditional Christmas fare still be popular in 30 years' time?

PHOTO: GETTY IMAGES

involved, it's hard to imagine this will not be resolved in the next few years.

In the past, I have always thought that cultured meat products will not threaten high-end protein products; rather, they will take the bottom out of the ground beef market produced from high-input mass feedlots. From that premise, I have argued that New Zealand's agricultural products are defensible, providing we position them appropriately.

Interestingly, though, Memphis Meats, Beyond Burger and New Zealand's own Sunfed Meats are not yet producing cheap products, so to get on the market and do well, they will court high-end

consumers, not run-of-the-mill fast-food consumers. It will be interesting to watch the battle play out across the elite retailers such as Whole Foods, and in the meantime, it's not an either-or scenario.

"Flexitarianism" is predicted to be a major future food trend, eating predominantly but not strictly vegetarian, perhaps saving meat for the weekend.

Whatever we call it, in the growing global demand for protein, there will be a proportion of that protein that will not be animal-based. The big question is, how fast and how big will that proportion grow?

When one of the world's largest meat companies, Tyson

Foods, puts a buck each way and invests in plant-based protein producer Beyond Meat, it's pretty clear the traditional food industries are nervous. New Zealand is too, as we should be, given our economic reliance on agriculture.

Watching is not enough, though; we need a seat at the reformulated food table. There is a shortage of food technologists in New Zealand, and I believe we are not being innovative enough in some of our training and delivery of courses. We should always aim to be world-leaders in "natural food production". Companies like Lewis Road Creamery and newcomer Triple Nine Farms are ones to watch, so we should be aiming for greatness in technological advances in food formulation.

To my readers, have a lovely Christmas and festive season. Enjoy every morsel of beautifully produced New Zealand food that you eat.

The world sure is changing, and we're a pragmatic and adaptive nation; we will change with it. For now, let's enjoy the things that don't change: sand in sandwiches, sunburn and Boxing Day trifle.

● Anna Campbell is managing director of AbacusBio Ltd, a Dunedin-based agri-technology company.