

Let's celebrate New Zealand's healthy food

By Mark Ross

What was the last thing you ate? Do you know where it came from or the journey it took to get to your plate?

When consuming a meal, or creating one, we often think of how the flavours and textures work together, or how our family and friends will enjoy the experience of a meal lovingly created, or dutifully thrown together last minute at the end of a busy day. We might consider the cut of meat, breed of animal, how it was fed or how much it cost. Many indulge in watching the sweat and tears of contestants beating the clock to produce a plate that would make Al Brown salivate.

But we don't often consider the farmers and plant scientists who work diligently each day to maintain our food supply and make nutritious food available. Even before the first seed is sown, or animal is conceived, a plethora of science-based innovation and safeguards are in place to ensure that what ends up on the dinner plate is safe and good to eat.

Some people imagine that food is simple to grow, not considering the multitude of factors that got it through the supply chain and onto the plate. The threats that crops and animals face - from pests to diseases to harsh weather - can ruin a crop harvest or threaten the health of livestock.

Farmers may be more fixated on meteorological forecasts, the prospect of a drought or water quality, rather than the veterinary medicines and agrichemicals - such as antimicrobials and herbicides - needed to ensure an abundant and reliable product to sell. But these tools are critical to farm production, to effectively manage pests and diseases, and grow our primary sector.

In developing a new product, thousands of newly synthesised chemicals need to be analysed, one by one, for their effects on plants, animals, and pests. Those with promising properties are subjected to further, more detailed research and testing, until only a few remain.

In fact every crop protection product that reaches the market costs US\$ 286 million and takes 11 years of research and development to ensure the highest safety and efficacy standards - according to a study by Phillips McDougalⁱ, commissioned by Crop Life International earlier in 2016. The crop protection industry spent a total of US\$ 2.6 billion on new innovations in 2014, according to this study.

The cost of bringing a new product to market has increased by 55 percent since the turn of the century, the study reports. Much of the increase can be attributed to a rise in the volume and complexity of environmental safety and toxicology data required by regulatory bodies to ensure products are safe.

The time commitment to bring a product to market from eight years in 1995, to more than 11 years now, reflects the rigorous research and development phase as well as delays in regulatory decisions.

In New Zealand and overseas, the crop protection and animal medicine industries continue to invest heavily in cutting edge innovations to help farmers around the world to protect their crops and livestock from pests. Given the growing cost, the report demonstrates why we

need predictable and risk-based regulations alongside robust intellectual property rights to give companies the confidence to continue to invest.

Agrichemical and animal medicine products have never been more thoroughly tested and screened to ensure product safety. In New Zealand any product must get the approval of our two regulators, the Ministry for Primary Industries and the Environmental Protection Authority, prior to it being available to the farmer. This ensures that the product is safe for people, the environment and has a high level of efficacy.

So as you relax over the holiday break, consider a reality of food shortages and price increases for basic food. Imagine your summer barbeque without wine, beer or lamb chops. It's a dismal prospect. Enjoying a cool beer and grilling a good quality steak in the sun is at the heart of many kiwi festivities at this time of year.

In the land of the long white cloud, we are fortunate that all products in our food chain have been thoroughly tested and are safe - something not always guaranteed in other parts of the world. So enjoy your bottle, steak or chop of choice this holiday season and reflect on the science and technology that enabled it to be in your hand.

- Mark Ross is chief executive of Agcarm, the industry association for companies which manufacture and distribute crop protection and animal health products.

ⁱ The study can be found on the Croplife website at: http://www.croplifeamerica.org/wp-content/uploads/2016/04/Phillips-McDougall-Final-Report_4.6.16.pdf