

Meatless produces innovative textured plant-based ingredients as fish and meat substitutes for the large food-processing industry worldwide. This seems like an area that is poised for huge growth. Tell us what you're seeing from inside the sector.

In the past several years we have seen huge growth in the plant-based sector, in both dairy and meat substitution. A third promising market, fish substitution, is now evolving and fast growing. In Germany alone, sales of fish substitutes increased over 600% in the past two years. Recently Bloomberg predicted that the plant-based alternative market might grow from just under USD 30 billion in 2020 to USD 162 billion in 2030, an eight-fold increase in just a decade, reaching 7.7% of the total human consumption of proteins. Bloomberg bases

its forecast on the success story of plant-based milk, which has entered the mainstream.

In 2030 the world population will hit 8.5 billion, a fact that will force the market to look seriously at efficient plant-based alternatives, if only for food sufficiency. We know that consumers today are motivated by concerns about both health and sustainability.

So, yes, the market, though still niche, is growing exponentially with promising outlooks all over the world.

Meatless was founded in 2005. How have your customers changed over the years?

The plant-based food segment evolved from a niche market growing at a steady clip to a huge business with exponential growth. Though not unexpected, the rate

of relative growth at this moment is tremendous and never seen before in the food industry. In countries such as the UK and the Netherlands, 2020 growth was over 25%. In the past decade and a half, companies in this field transformed from pioneering ventures, or smaller departments within larger companies, to professional production companies that deliver large volumes of vegetarian and vegan consumerproducts for distribution in supermarkets and quick-service restaurants. Plant-based is now taken very seriously in the food business, whereas in 2005 it was seen as a very small niche for a limited number of consumers.

#### Curiously enough, Meatless began as an offshoot of a meat-processing company. How did your knowledge transfer from meat to vegetarian products?

Actually the knowledge to develop plant-based consumer products is similar to meat processing. Lots of rare and highly technical meat-processing know-how is applicable to the technology we now use for plant-based products. To give an example, we re-invented the production of vegan sausage for a number of customers using the same techniques used in the meat industry. The core of our product is a special plant fiber, and we discovered the process to produce it at one of the big sugar companies. We refined that technique into the Meatless concept using our experience in meat-processing technology.

# How much demand do you see today from your former colleagues in the traditional meat-and-fish-based market for innovative solutions and for a change towards sustainability?

It is very clear that a shift is slowly occurring in the western world from animal-based protein towards more plant-based products. At the moment in countries like the Netherlands, Canada, and the UK, we have five times as many vegetarians under 35 years of age as over 35 years of age.

Large meat, dairy, and fish producers recognize that trend and want to get involved in the alternative markets as it threatens the growth of their business. In the past five years, plant-based was growing fast and that growth is expected to continue. So, a large number of the big meat and fish companies is integrating plant-based in their activities, which from a business perspective is a logical and sensible thing.

According to the United Nations, over 85% of the world's marine fish stocks are now fully exploited, overexploited, or depleted. More and more we realize that sustainable food production is not only an environmental issue, but also a matter of sufficiency.

Scarcity and the cost price mechanism will force everyone in the food sector to produce more product using less resources and the start of all food production—plants—will play an essential role in this quest for a better diet.

## Where do your new ideas come from? Do you have a team dedicated solely to innovation?

We have an R&D team of two, closely cooperating with five people in sales who translate customer requirements to R&D. Meatless is R&D-driven: we re-invented mimicking whitefish back in 2013, and we have created lots of new techniques and ideas such as tuna and sausage substitutes, as well as new varieties in the textured product. It's a creative and not always structural process



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in which we give our people the freedom to think and try new things. This process leads to surprising and sometimes brilliant new products in the market.

To facilitate the R&D team and future expansion of R&D activities within the company, a spacious new test center is currently being built, including equipment similar to that in use by our customers. It will support a professional approach to product development for customers using Meatless products in their processes and gives us the ability to do professional bench testing of new innovative concepts.

We are convinced that a next stage of development will target lower cost prices and competitiveness in the market, a new challenge for plant-based food.

#### How much research and testing lies behind introducing new products, such as those currently under development, made of pumpkin or kidney beans?

The lead time for new products differs, but usually from idea to high-volume production, we are talking years. The development of fava started in 2017, and the first high-volume production contracts begin in 2022. Certainly, when it's necessary to test different crops, it can take a long time before we have the exact raw material we want. However, we are convinced that the investment is worth it, as bringing more variety to this business is key to success in the future.

#### Can "high-tech" and "ecological" go hand-in-hand?

The market now places a premium on minimally-processed products, which is important. At Meatless we have always sought the most efficient way to produce, using as few resources as possible. Ecological is not just organic or "natural," it's also about reducing resources used per kilo of product. We are proud that Meatless is the most efficient plant-based textured product available and we have the lowest footprint per kilo of product in the business. We use whole foods, do

not separate proteins, and use gentle processes and seaweed extracts to bind our product.

Is it high-tech? We don't think of ourselves that way. It is a technique to prepare food, in the same way you boil an egg or make a sauce.

### What was the impact of the pandemic on your business?

We had growth in 2021 of over 60% so in terms of revenues, there was no negative impact whatsoever. However for R&D, it has been a challenge not to be able to travel and test new products together with the R&D teams of our customers all over the world. It is still a handicap to not be on the spot to assist customers with development and scaling up of production of consumer products. We have made the best of communication technologies that are now the norm, but we really look forward to the day we can visit our customers in person again.

## Do you take sustainability into consideration in your supply chain, packaging, and other processes?

Yes, we do. For example, we bulk pack. Our packaging is functional and cannot be easily altered, but we also look closely at things like sustainable transport. We are in the process of introducing renewable energy into the company. Within 10 years we aim for a reduction of 35% greenhouse gases per kilo of Meatless product. The program to do that is in place and will be carried out in the next few years.

Sustainability is a constant process and we all must take a critical look at ourselves, even an innovative company such as ours. ■



Clairfield has advised Meatless since its founding in 2005. For more information on Meatless or alternative foods, contact Frank de Lange: fdelange@clairfield.com.







