Savouring the Taste of Success



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Researchers at the UCD Institute of Food and Health have spent the last two years developing a new health food technology that delivers every snack food lover's dream - healthy, guilt-free nibbles.

The research team is led by Professor Dolores O'Riordan, Director of the Institute and a leading researcher in the UCD School of Agriculture and Food Science. Under her guidance the team has developed and patented ground-breaking technology with the potential to produce a savoury snack that is high in protein and fibre but low in fat and salt.

Professor O'Riordan has a long track record of successful engagements with industry and, in conjunction with UCD's technology transfer team based at NovaUCD, brought the technology to the point where it was ready for marriage with a commercial partner. Through the efforts of UCD and Enterprise Ireland, the technology has now been licensed to Largo Foods, the makers of one of the nation's favourite snack foods - Tayto crisps.

Largo Foods is a major producer of savoury snacks in Ireland. Apart from Tayto, the company also manufactures King, Perri and Hunky Dorys, and has a 50% share of the Irish snack foods market.

The significance of the technology developed by the UCD research team was immediately recognised by Largo's Operations Director, John Donnelly. "The technology represents a very different take on how to make a snack product and is quite 'out there' in terms of innovative thinking and breaking new ground," he says. "In its raw state it was some distance away from being usable in a full scale manufacturing setting to create a commercially viable product. However, we felt it was worth taking the opportunity of developing the technology further as the potential reward is huge."

"I come from a food science background so product and process are two of my areas of interest and I was very interested by what UCD had come up with," adds Donnelly whose responsibilities at Largo cover manufacturing, quality and new product development.

The UCD team presented the technology to Largo two years ago and Professor O'Riordan says a strong relationship has developed between the two organisations since. "We visited Largo to learn how its business worked and to understand its ethos and we found a company that was progressive, open to new ideas and willing to take a risk. Largo is very entrepreneurial and not at all wedded to convention," O'Riordan says. Once the licensing agreement was put in place work began in UCD on scaling up the technology while Largo began looking at the potential from the consumer perspective, identifying what style of product was needed and where it might be positioned in the market.

"The product is quite different to anything else that's out there. The texture and flavour are not like your typical dense high fibre snack," O'Riordan explains. "What we've achieved is innovative on two levels. The combination of ingredients we have put together is unusual but so too is the manufacturing process. Indeed the really challenging part for the researchers has been to create and scale the manufacturing technology in a way that takes account of key factors in a commercial environment such as energy costs."

The process of patenting the technology and finding a suitable company to buy it was undertaken by UCD's technology transfer team which is based at NovaUCD.

"The UCD technology transfer team was a fantastic support throughout the whole process," Professor O'Riordan says. "They did all of the background work and checks from the patent point of view and advised on the best route to take to protect the IP involved. They subsequently liaised with Largo Foods and drew up the terms of the agreement with them. More generally they play an important role in training and advising researchers in the area of IP as it's not a skill scientists would normally have."

While Largo Foods has its own research and development facilities, John Donnelly says that its R&D is more directly related to its dayto-day business and that resources committed to research are generally linked with specific commercial objectives.

"What UCD is doing for want of a better word is more 'academic' research in that they are not only pushing but reinventing the boundaries and this is not something one would tend to do in a company setting," he says. "By working with them we have gained access to that leading-edge research and to what may ultimately be a snack product with worldwide sales potential."