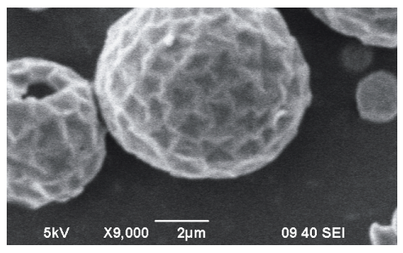
FINALIST IN THE BUSINESS IMPACT – ACHIEVED CATEGORY

SODA-LO™ salt microspheres licensed globally to Tate & Lyle

Innovation

Salt is added to a vast array of foods. It plays an important role in enhancing flavours and has functional roles in inhibiting bacterial growth and ensuring that baked products rise in the correct way. However, a high dietary salt intake is a major factor in stroke, heart disease and kidney disease which affects around one third of men and women in the UK.

Eminate, a wholly owned subsidiary of The University of Nottingham, was set up to turn early stage food-related IP from initial concept, into market ready, commercially viable products. The company has taken a technology which turns standard salt crystals into free-flowing crystalline microspheres. Known as SODA-LO™ salt microspheres these smaller, low-density salt crystals deliver salty taste by maximising surface area relative to volume.



SODA-LO™ is a salt reducing ingredient that tastes, labels and functions like salt because it is salt. By using it, manufacturers can reduce salt levels by 25% to 50% without sacrificing taste.

Technology Transfer

Eminate staff worked closely with chefs and industry partners to determine how SODA-LO™ could be used to replace salt in a range of foods. They produced a range of branded marketing materials and worked with large companies to introduce SODA-LO™ into consumer products across Europe.

Once this work was completed, staff at The University of Nottingham's Technology Transfer Office embarked on a search for the most appropriate exploitation partner. The search and negotiations took 12 months to complete and, as a result, SODA-LO™ was licensed to Tate & Lyle in October 2011 and launched globally the following year. A patent for the technology has already been granted in the USA.

Impact

Tate & Lyle report that SODA-LO™ has been shown to work well in a variety of food, including baked goods, breading, coatings and salty snacks.

Tate & Lyle's global reach means that SODA-LO™ has the potential to help reduce blood pressure for millions of people around the world as its uptake by food manufacturers increases.

SODA-LO™ has won a number of awards, including the prestigious 'Most Innovative Health Ingredient of the Year' held at Health Ingredients Europe in Frankfurt in 2012.

Key points

- The University of Nottingham's strategy to develop SODA-LO™ into a validated, market-ready technology through its Eminate business significantly increased the chances of licensing success.
- Scientists at Eminate took a patented technology to turn standard salt crystals into free-flowing crystalline microspheres which deliver salty taste by maximising the surface area relative to volume.
- Support was received to help develop the technology from the Technology Strategy Board, the East Midlands Food and Drink iNet and the Biosciences Knowledge Transfer Network.
- SODA-LO™ was licensed by Tate & Lyle in 2011 and launched globally in 2012.
- People around the world will experience the health benefits of SODA-LO™ salt microspheres delivering significantly lower levels of salt in food products, typically between 25% and 50%.
- SODA-LO™ has received top accolades in the food trade, recognised in 2012 as the 'Heart Health and Circulatory Innovation of the Year' and the overall 'Most Innovative Health Ingredient of the Year' at the NuW Excellence Awards in Frankfurt.

Team

Dr Sarah Gaunt, Graham Ward and Dr David Park from Eminate Ltd.

Dr Gary Evans and Paul Condliffe from The University of Nottingham's Technology Transfer Office.

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Eminate Ltd

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