

We are searching for innovative, IP-supported technologies, devices, chemistry or physics relating to improved methods of applying flavour to potato crisps / chips, extruded and baked products.

Background

Our client manufactures a range of snack food products that are either produced from potatoes or vegetable bases which are washed, sliced and fried, or from dough-based ingredients which are mixed together, then extruded and baked or fried. Most of these products are subsequently seasoned using a tumbler drum (either using dry powder seasonings, or a combination of oil and powder seasonings). Once seasoned the products are bagged by multi-weight head baggers.

Requirements

We now seek new physical application methods and flavour design construction to deliver improved taste and aroma whilst reducing fat, salt and artificial ingredients, to a range of savoury snack food and other food products. Any proposed solution should either:-

- Deliver improved flavour and aroma
- Maintain or improve the nutritional profile (reduce oil / fat, salt or adding nutritionally positive ingredients e.g. fibre, etc)
- Maintain or improve clean (natural) ingredients list
- Apply flavour as late in the production process as possible
- Have no adverse impact on sustainability footprint
- Drive cost out of process

The focus is on three areas of flavour delivery, namely:-

Seasoning design

- Alternatives to current powder seasoning format – e.g. in base flavours, marinations, liquids, emulsions, encapsulated particles
- Improved ingredients – natural replacements for artificial ingredients, healthier ingredients, etc
- Means of removing bulk / filler ingredients without compromising taste, mouth-feel, etc
- Cost-effective methods of delivering multi-sensorial (taste / aroma / mouth-feel) effects, e.g. successive releasing of different flavours to create a 'journey of taste'
- Use of taste modulators or other means to enhance taste, with reduced salt, fat content, etc

Mechanisms of sticking

- Means for reducing fat / oil content whilst maintaining or increasing the 'stickability' of the seasoning to the product
- Methods of cutting / extruding products to give a surface which will attract more seasoning to stick
- Nanocoatings or other mechanisms for making the product surface more receptive to seasonings / increase bond between substrate and flavouring

Method of application

- Alternatives to current tumbler drum method
- Innovative use of heat / electrostatics / gases / liquids / sprays / other means to apply flavour
- Methods to reduce amount of seasoning / wastage of seasoning
- Means of applying the seasoning at point of bagging, in-bag flavour delivery / enhancement etc

Further technical details on certain criteria can be made available where appropriate.

We are willing to explore any reasonable commercial arrangements, including licensing in of proprietary or innovative products, systems or technologies, strategic alliances or partnering arrangements and outright purchase. Please send preliminary information on any proposed opportunity to - Mrs Elaine Rhodes, Operations Manager. Thank you.