



Food Innovate Summit, May 2017

Interview with Christian, Head of Creation & Application, Centre of Excellence Flavours, EAME

Why did you choose to speak at the Food Innovate Summit?

Our consumer research programmes give us deep insights into consumer preferences and forward-looking trends. As a result our customers see us as a key partner in defining tomorrow's consumer needs, trends and tastes. We decided to speak at the conference to share our insights and be part of the conversation that drives the food and beverage industry forward. The event is a great opportunity to learn more from our customers and partners and bring our expertise into the wider industry discussions.

Driving innovation is vital to our business in such a fast changing environment and as the flavour industry leader, our customers' expectations are high. We can play a lead role in the future of great taste through the development of unique new flavours and taste tools which help our customers create winning products that delight consumers and meet their labelling expectations and health and wellbeing preferences.

What do you believe are currently the three biggest challenges for food innovation professionals?

Government legislation: sugar taxes

Many governments are taking the initiative to promote health and wellness in their countries. In Latin America, Europe, the Middle East and Africa there is a strong focus on reducing sugar levels in foods and beverages.

To help customers with this challenge, Givaudan has developed **TasteSolutions® Sweetness**. This enables customers to reduce sugar in a product (by up to 50% in some instances) without compromising on taste. It builds back the taste balance and profile with just a flavour and can be provided as part of a natural flavour solution. **TasteSolutions® Sweetness** is also able to mask off-notes and build back a sugar-like taste in reduced-sugar products containing sweetener replacements, such as stevia.

With global demand for healthy, great tasting products on the rise and government actions to promote health and wellness increasing, **TasteSolutions® Sweetness** helps our customers meet consumer demand for the sweeter things in life, while delivering healthier products.

Consumers want healthier foods and beverages, but with the same great taste

Health and wellness is now an essential part of people's lives, right across the world. Whereas once people might have compromised on flavour in favour of lower calorie foods, today expectations are much higher, with taste always at a premium. Givaudan's proprietary **TasteSolutions®** range offers manufacturers a unique portfolio of ingredients for great tasting products with less fat, salt and sugar. We are also investing in the development of next generation tools for protein palatability and bitter receptor modulation. These new **TasteSolutions®** ingredients will ultimately enable the replacement of animal proteins with plant based proteins to continue to address an ever-growing world population with great tasting and nutritious products.

The increasing trend towards naturals and kitchen ingredients

As a result of the strong and growing consumer preference for natural ingredients, food manufacturers are increasingly reformulating with natural flavours and kitchen ingredients. However, this is not a simple matter of like-for-like replacement. Addressing the in-use challenges requires reformulation expertise to deliver the same great tasting products. Over ninety percent of our resource for flavour discovery and development is focused on naturals so we can bring our customers more from nature and help them overcome the transition challenges.



Security of supply is also a critical success factor when it comes to natural products. It needs a natural supply chain that is robust, reliable and also sustainable. As the largest global buyer of natural ingredients in the flavour industry, we use our deep knowledge of the market to build strategic inventories based on raw material market trends. We build long-term strategic agreements with key vendors to guarantee supply and investigate alternate, multi-regional sources of raw materials. Over the longer term supply risks are managed through our unique risk management tool, ensuring we can identify, manage and mitigate risks before they become an issue. This programme addresses both social compliance and supply risk and covers materials with a strategic role in our supply chain.

How do you think food companies should tackle the growing expectations of consumer for healthier products, but with the same taste?

Reformulation is about more than simply replacing ingredients like fat, salt or sugar. Reducing the levels of these ingredients affects a product's aroma and mouthfeel, as well as its taste. Our TasteSolutions® range offers manufacturers a unique portfolio of ingredients to help them create great tasting reduced fat, salt and sugar products that address all of these dimensions. Working collaboratively with the customer at every step of the way we can develop tailor-made flavours, including natural flavours, which meet the customers' expectations and preserve the brand's signature taste.

What is the biggest difficulty in reducing fat, sugar and salt in existing products?

There are many challenges but this is an area in which Givaudan has great practice, experience and industry-leading capabilities. We work closely with our customers to overcome these barriers and find the right solutions for each product. It is all about great collaboration from the beginning. From understanding the holistic recipe of the product to the right application and process know how. The closer we work with our customer the more tailor-made our solution, helping customers to create winning reduced fat, sugar or salt products.

What key innovation or trend do you see as having the largest impact in the food industry in 2017?

'Non-dairy dairy'

In 2016, we introduced several innovations to support the ongoing consumer trend towards healthier food and beverages, including new solutions and capabilities that help enhance sweetness while reducing calories and a 'non-dairy dairy' solution for customers seeking rich, creamy or authentic dairy flavours for low fat, plant-based, alternatives. This new dairy-free solution offers unique mouthfeel qualities which help our customers formulate nutritional products with lower fat and sugar content.

Protein

One of the fast growing trends created by consumer interest in healthy and nutritious food is the growing demand for alternative and plant-based proteins. Many consumers want to eat less meat and are looking for tasty alternatives that are more sustainable. This rapidly developing market is driving strong innovation in alternative protein products, but presents flavour challenges in terms of bitterness or other off-notes. Givaudan's flavour creation expertise and unique taste tools can help manufacturers overcome these challenges and create great tasting, healthy alternative products.

Protein is a key area of focus for Givaudan and we are playing a major role in the public-private innovation partnership led by Wageningen University & Research in the Netherlands. The consortium is working on scaling-up and commercialising an alternative meat prototype made using vegetable protein which resembles real steak meat, not processed or ground meat. Givaudan leads flavour development for the consortium, using our world leading taste capabilities in meat analogues to create flavour solutions which make the new plant-based meat taste delicious.



Labelling

Finally consumer demand for more transparent labelling and the use of natural and recognisable ingredients is driving significant reformulation, presenting many challenges to our customers. We are committed to innovation in this area with over 95% of our science and technology resources in flavours focused on naturals, developing exciting new natural solutions for our customers. For example we are looking at innovation in plant cell culture, extraction and concentration techniques and agricultural intensification where security of supply is critical.

When formulating healthier alternatives: How important is the balance between flavour and mouthfeel?

Mouthfeel, aroma and taste provide the full experience of a product in the mouth. All three have an impact on how a product is perceived and need to be addressed during reformulation to maintain consumer preference.

We have been developing our TasteSolutions® Mouthfeel programme since 2012 to provide flavour solutions that help food manufacturers of sweet and dairy products deliver on calorie reduction demands without compromising on the final mouthfeel of the product. For Givaudan, mouthfeel is not only about structure but also about the taste sensation of body and creaminess. This is where TasteSolutions® Mouthfeel can help. The range combines both taste and flavour technologies, enabling us to work with customers to bring back mouthfeel in lower fat and reduced-calorie products.

In the case of low sugar beverages, bringing back that 'syrupy' mouthfeel is one of many important characteristics of what we call 'sweetness quality'. As consumers experience products holistically, our consumer research programmes study sweetness from many angles, so that we can find every possible edge in delivering a consumer preferred product. For example very early on, Givaudan meticulously documented the sensory experience of sugar versus other sweeteners – HFCS, sucralose, saccharine, ace-K – so that we thoroughly understood where the taste and flavour gaps were.

About Givaudan

Givaudan is the global leader in the creation of flavours and fragrances. In close collaboration with food, beverage, consumer product and fragrance partners, Givaudan develops tastes and scents that delight consumers the world over. With a passion to understand consumers' preferences and a relentless drive to innovate, Givaudan is at the forefront of creating flavours and fragrances that 'engage your senses'. The Company achieved sales of CHF 4.7 billion in 2016. Headquartered in Switzerland with local presence in over 95 locations, the Company has more than 10,000 employees worldwide. Givaudan invites you to discover more at www.givaudan.com.

About Givaudan Flavours

Givaudan's comprehensive knowledge of local flavours, extensive global footprint and strategic insights enable close partnerships with customers wherever they may be. With a customised approach to product creation, the Flavour Division is a powerhouse of knowledge, innovation and creativity equipped to surprise customers and consumers with fresh, unique ideas and solutions. Givaudan creates lasting flavour and taste experiences that touch emotions across key segments including beverages, sweet goods, savoury and snacks; regardless of product category Givaudan's passion is to make food and beverage products taste delicious. We invite you to 'engage your senses' and learn more about Flavours at www.givaudan.com/flavours.