



# Stilling the hunger

**IMAX DISCOVERY** A German-Italian joint venture is seeking alternatives to fatty, sugary or salty foodstuffs. IMAX Discovery develops natural flavours for the food and beverage industry aimed at making sweet and savoury seductions a lot more healthy.

Managing Director of IMAX Discovery Thomas Henkel knows what the food and beverage sector wants: "The industry is looking for ways to reduce sugar or fat content in their foods. But at the same time, they don't want to change the taste." In a world where processed foods containing large amounts of sugar, fat and salt are available around the clock, over-consumption is causing huge health problems. To combat them, German IMD Natural Solutions and Italian Axxam joined forces four years ago in an attempt to make convenience foods healthier.

Past efforts with compounds like sugar surrogates to do just that have met with limited success. "It's not enough to find a chemical alternative to sugar, for example," explains Henkel, "as long as consumers notice the difference."

But what about substances that can amplify sweetness in a food, decreasing the amount of sugar needed to sweeten it without changing the taste? Additives like this would have to be safe for consumption, of course, and should preferentially come from natural sources. "That's a very tall order," says Henkel. "From the beginning, it was clear to us that the search would not be easy or straightforward."



## COMPANY PROFILE



**IMAX Discovery GmbH**

Founded in 2010

Based in **Dortmund, Germany**

Managing Directors: **Dr. Alessandro Sidoli and Dr. Thomas Henkel**

Web: **www.imaxdiscovery.com**



**THOMAS HENKEL**

Managing Director IMAX Discovery

**?** How are you going to change the world?

**!** We'll help bring delicious food to consumers without any of the health disadvantages.

But that is the task that Henkel and IMAX Discovery's second Managing Director Alessandro Sidoli have set themselves. While the Germans have provided a collection of 100,000 samples from naturally-occurring compounds, isolated mostly from microbes, but also from plants, marine microorganisms and insects, the Italians added their high-throughput technology.

Led by Sidoli and co-founder Stefan Lohmer, Milan-based integrated discovery services provider Axxam is supplying the technology that allows the automated identification of flavours that might be suitable for taste modulation, instead of using traditional methods for finding new flavours such as randomised taste sensory testing. "Our mechanism quickly sorts the wheat from the chaff – automatically," Henkel explains. "It works like a kind of

artificial tastebud." The joint venture's aim is to apply the pharma approach of high-throughput testing in the food industry. There's also the experience Henkel and Sidoli bring into the business. Both companies started out as spin-offs from pharma giant Bayer, one reason why the work is progressing apace. "We work very well together, and we expected nothing less," says Henkel. "After all, we had been co-operating for years before founding the joint venture."

## In a hard-fought market

Four years into the project, Henkel remains confident IMAX is on the right track. Although battles for market are hot and competitors are using similar technologies to find taste-enhancing additives, most produce synthetic substances. "That's not what consumers want," Henkel believes. "When it comes to food, they want ingredients from natural sources." Furthermore, several states have passed laws to force the industry to produce 'healthier' food products.

Against this background, the big 'flavour houses' like French Givaudan or Swiss Firmenich are demanding new solutions, and IMAX Discovery has already signed several cooperations with nutrition companies – although Henkel is not allowed to say with whom. Although the business manager still thinks of IMAX as a start-up, firmly rooted in research, the company is operating profitably and starting to recover its initial investments, he says. The market is still in a state of flux, however, and the whole field of flavour-discovery technologies is in the midst of a steep learning curve. "We're always sailing close to the wind," concludes Henkel. "We constantly have to adapt." **um** ■