

## EVENT REPORT



# Flavourtalk 2020 Natural Flavours: Innovations, Technologies and Authenticity

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This firm fixture on the flavour industry's calendar was sadly impacted by the emerging COVID-19 crisis. The exhibition and conference started a matter of days before the USA and many European countries announced travel restrictions and varying degrees of lockdown. Some delegates and exhibitors had taken the difficult decision to pull out and others left early, unsure if their return home would be hampered by restrictions. However, the reduced number of exhibitors and delegates

were able to make the most of some excellent product demonstrations and specialist presentations. The event, run by Flavour Horizons, focused on key emerging themes such as defining 'natural', clean labelling, sourcing, purity, health and of course cost.

As in the past the event ran on a two-day format with the first day consisting of table-top exhibitions.

Advance Biotech's presentation stated that 'derived herbal and botanical extracts will experience some of the fastest growth this

year.' Thyme, rosemary, ginger, basil and habanero extracts were demonstrated with a range of uses across both food and cosmetics from baked goods to beverages and confectionery with all products being both Kosher certified and organic. The company also announced a number of new products under development including Strawberry Glycidate 2, Pyrazine Mixture IX, with a nutty, coffee chocolate odour, and Cocoa Hexenal.

Merck (Sigma Aldrich) demonstrated seven scent samples,



Above: Flavour Talk Amsterdam (hall) The Barbizon Palace's 15th century chapel, Olof's with day 2 presentations set to begin

Above Right: Lionel Hitchen Ltd, ingredient demonstrations underway

## The Flavour Raw Materials Exhibition and FlavourTalk conference are presented by Flavour Horizons in association with the British Society of Flavourists.

three of which were also available in tasting formats. Delegates were invited to smell, think and interpret the aromas and flavours, checking against the catalogued aroma and taste notes. As always, a full table of developers and buyers will often pick up on different nuances across the samples and discussions around potential uses was evidence of the shared innovation that these sessions can offer.

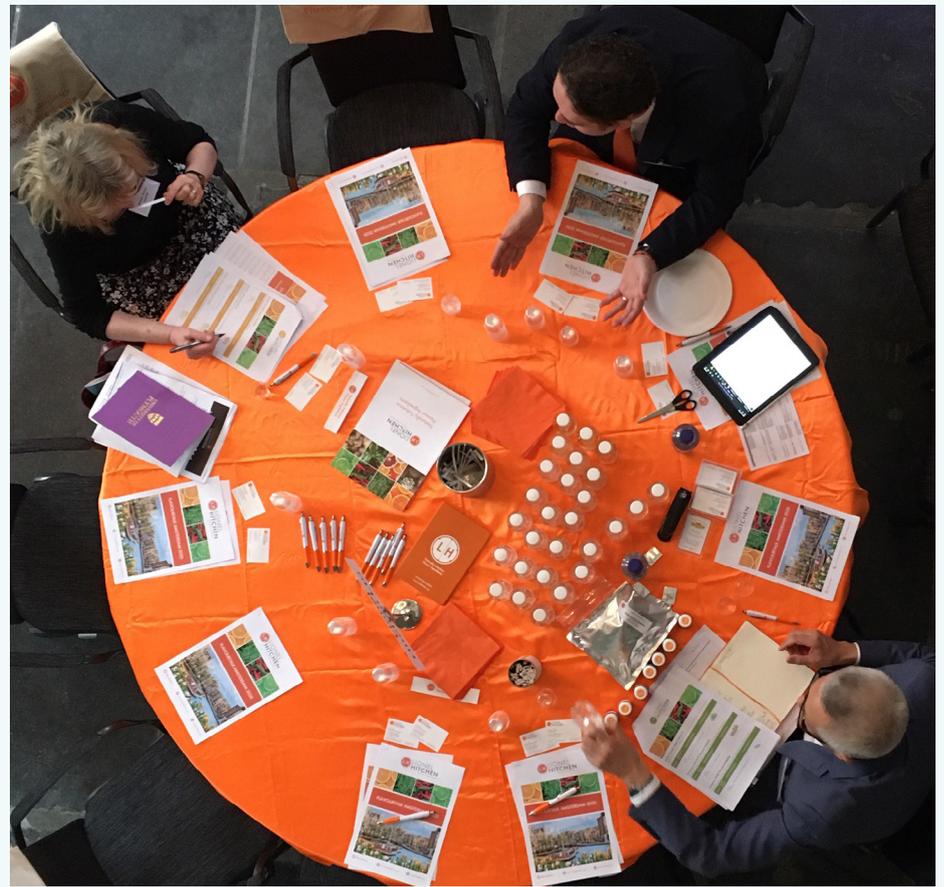
Omega demonstrated their kiiNote® natural extracts in a delicious non-alcoholic Bloody Mary recipe, re-imagined as a 'Bloody Shame'. Carrot flavours added a fresh vegetable depth, beetroot a more earthy depth, unmani a complex and slightly smoked savoury note and tomato essence, created unusually from English grown tomatoes, those that don't quite make the grade for supermarket display. The final kick of Sancho Pepper kiiNote® and Capiscum filled the alcohol gap. They had replaced celery salt, a known allergen, with watercress. The 'Bloody Shame' was an entertaining showcase of Omega's drive for pure and natural ingredients.

Lionel Hitchin showcased a range of taste and aroma samples from both their citrus ranges and their herb and spice ranges, including some more unusual extracts such as Bourbon Oak

Soft Extract. Obtained by aqueous ethanol extraction and distillation of untoasted bourbon oak powder, the aroma presents a rich and woody vanilla scent.

The presentation by Essential Oils of Tasmania was a measure of the global opportunities that this event offers. Boronia, native to Australia, where 12 million yellow flower heads are used to create one kilo of absolute, is used in tobacco, spirits, juices and also fragrance. The leaves of the Tasmanian native pepper, known as the mountain pepper, used to create diverse products, has an exotic scent and spicy top notes. Tasmanian peppermint is harvested from paddocks that have been established for over 30 years and the oil has a strong fresh flavour and aroma with a clean, rich complex background. The state of Tasmania is non-GMO and has one of the lowest air pollution ratings on the planet. Year to year product consistency was discussed, particularly in the light of Australia and Tasmania's recent climatic challenges.

Robertet, one of the oldest businesses in the sector, used a historic theme to demonstrate the journey to today's world of natural products. Robertet presented as *The Botanist* with five healthy concepts combining taste, active ingredients



and clean labelling. There was an emphasis on certified organic and with Gummunity, EFSA approval for labelling as having benefits for relaxation and respiratory disorders.

Besmoke highlighted one of the latest trends in food flavouring with significant growth in demand for smoky flavours in products such as barbeque flavoured crisps. PureTech, the company's revolutionary patented smoke filtration technology, is being used to create the 'next generation', of safe and clean smoky flavours for e.g. rice pouches and crisps. Besmoke's Pure Tech processes enable the reduction of carcinogens and the use of Puremani reduces sugars.

Finally delegates were invited back into the seventies for a colourfully themed presentation by Mane, evoking the 'limitless happiness' of the decade with its vintage themed table.

Although travel and working restrictions are changing working and conference habits the benefits of bringing product innovations and creative flavourists together for practical flavour and aroma session cannot be underestimated.

On day two the usual conference health and safety briefing had the, now familiar, instructions on using biocide wipes and a reminder of the

'no-handshakes' rule. The conference programme had been amended somewhat with some speakers joining remotely and others unable to join. The programme was nonetheless excellent with a range of technical and regulatory presentations of enormous value to the assembled delegates. This year's focus was on the regulatory landscape, the consumer landscape and the ongoing challenges of authenticating natural ingredients.

After welcoming remarks from David Baines of Flavour Horizons, Jan Verhoeven of the European Flavour Association (EFFA) Working Group on Natural Processes, discussed the complex definitions of what is meant by 'natural flavours', whether those flavours come from food or non-food sources. The starting point for the discussion is that consumers regard 'natural' as 'good, desirable and safe' and that this is not necessarily always true. 'The industry cannot follow the (undefined) consumers' opinion but is bound by the regulations, primarily EC 1334/2008'. The EU definitions state that a natural flavouring substance is one that is identified in nature i.e. identified in materials of plant, animal, microbial or mineral origin. It also states that such substances can be processed by appropriate physical, enzymatic or microbial processes to

create a 'natural flavouring substance'. Traditional food preparation processes include for example cooling, cutting, drying, pressing, distillation, mixing and macerating. The presentation formed the perfect introduction to the very complex field of definitions surrounding the narrative of 'natural'.

David Baines continued with a comparison between EU and US legislation on the subject summarising the EU criteria that a natural flavour must therefore be 1. made from natural source materials 2. prepared using traditional processes and 3. found in nature. The UK will be adopting EU regulations post-Brexit. In the US natural flavourings must be derived from natural starting materials and must also be Generally Recognised As Safe (GRAS) listed. The FDA (Food and Drug Administration) in fact discourages the food industry from using the word 'natural' on labels because of its ambiguity. They gave up on attempts to formally define the term 'natural' in 1993. The IOFI guidelines determine that natural flavouring substances are derived from natural materials using permissible processes. There are many oxymorons surrounding the use of 'natural' as a description that can be confusing to the consumer and Baines called for clearer definitions.



In summary the simple concept of 'natural' in the mind of the consumer, is far from simple from the perspective of regulators and therefore producers.

Delegates were then introduced to the area of authentication of natural products with three detailed presentations covering specific research projects. Christina Ramos, European Operations Manager for Beta Analytic, presented by live video, having returned to Spain after day one of the event. Her research has focused on identifying the mis-labelling of products and detecting (economically motivated) adulteration using carbon 14 analysis. Sandrine Bodin a Flavourist for Solvay, discussed her research into the authentication of natural vanillin. Sophie Lavoine-Hanneguella, R&I Manager for Robertet, presented research into the authentication of the Zanthoxylum genera of peppers with cryomilling and DNA analysis as two methods trialled.

Lewis Jones, Innovation, Analytical & Sensory Manager for Sensient continued the natural labelling theme and the topic of clean labelling, stressing the market appeal and consumer demand for more complex

and well defined labelling. In a Sentient survey of 5,000 Americans, 61% strongly agreed that 'when buying new products, ingredient labels impact my food and beverage purchasing decisions'. For example the terms 'natural ginger extract', 'natural ginger flavour', 'ginger extract', 'ginger flavour' and 'artificial ginger flavour' were compared for their 'clean label' perception with the results clearly demonstrating the weight placed on the words 'natural' and 'extract'. There was some variance across generations with Boomers being the most likely to pay a premium for foods that contain extracts instead of flavours.

Nick Eskins of Taste Connections Ltd, stepping in with just 14 hours notice, presented further research into complex consumer taste drivers with geographic provenance as part of the story and introduced delegates to the concept of 'small but perfectly farmed'. Taste Connection's research has identified a number of contemporary trends:

- Food production revolution – changing attitudes to farming and animal welfare – 'it's cool to be kind'

- Veganism – the rise of *PLNT PWR*, now a lifestyle cornerstone
- Under the sea – sustainability vs. plastic
- Question everything – trust and traceability – it's all part of the story
- Traditional 'good and proper'
- 'Hyperlocal'

Eskins contrasted that historically, savoury snacks primarily involved two key flavours - salt and MSG but today's market is far more complex with people vociferously demanding traceability, healthier options and redefined food. The company has observed a number of new food concepts emerging from changing tastes and buying behaviour including savoury twists in Danish pastries and yoghurts, conversely combining fruit and sweet flavours with things that are traditionally savoury and vegetables being cooked like meats e.g. vegetable terrines and ragout. Delegates were introduced to a relatively new product, Salmon Crisps, made from the often-wasted but nutrient-rich by-product of fish skin and asked to ponder the future concept of edible jelly fish – a massive potential food source.



Far Left: Omega Ingredients inviting delegates to discover the flavours in their 'Bloody Shame' alcohol-free cocktail

Left: Sea Chips, the UK's first salmon skin crisps. Credit Nick Eskins, TasteConnection Ltd

Below: Mane Caption Mane - imaginatively evoking the 'limitless happiness' of the seventies through flavour ingredients

The focus returned to authenticity as John Points of John Points Consulting explored the role of analytical testing in ensuring authenticity. Around 20% of global food scares related to food fraud, representing around 2000 cases in 2019, but only eight of these related to flavouring. 'Should everything be subject to analytical testing? If so, where in the food chain should testing take place?' The reality is that analytical testing is very expensive and is therefore likely to be used as a small element of a range of sources of intelligence that can combine

to strengthen integrity through the supply chain. Analytical testing should be more about building a case, sharing intelligence and data in a collaborative, non-competitive way to mitigate risk of false claims and interpretation.

So from Salmon crisps to savoury yoghurts – the 12th annual FlavourTalk exhibition and conference did indeed offer food for thought on both adventurous consumer-driven food trends and the challenges of appropriate product labelling and authentication of those increasingly diverse food stories.

