



SMOKE REPORT

ISSUE 2: AUTUMN / WINTER 2024

DARK NIGHTS



BESMOKE®

SMOKE INNOVATORS



TWENTY YEARS



SMOKE INNOVATION
SINCE 2004

FLAVOUR LEADERSHIP TAKES CENTRE STAGE

THE FLAVOUR OF SMOKE RECLAIMED

INTO THE WILD - THE BEST IN FLAVOUR & FIRE COOKED FOODS

NORDIC FLAVOUR TRENDS SHAPING THE INDUSTRY

BESMOKE PEOPLE: MEET BECKY SHAW

SALT REDUCTION: SERVING UP INNOVATION

INDUSTRY REACTION - EU'S BAN ON PRIMARY SMOKE FLAVOURINGS

TWENTY YEARS



SMOKE INNOVATION
SINCE 2004

Our time has come: flavour leadership takes centre stage

Welcome to Dark Nights, the second in our series of bi-annual smoke reports.

As flavour leaders, we're keen to share market news, customer insights and technological and product developments in the world of smoke and grill.

In our first edition, Light Nights, we discussed the history of smoke and glutamate, some of the technical innovations we champion and focused on Asia's diverse grilling traditions including their influence on street food.

Since that first report, the EU has voted to phase out all smoke 'flavourings' from its list of authorised smoke products.

This ground-breaking decision is a transformative opportunity for us. We are outside the ban because of our patented clean-label approach to smoke flavour ingredients. In fact, we envisaged the ban happening 13 years ago and so began our clean-tech innovations then.

Even before the vote took place in April 2024, we were receiving growing interest from producers and others keen to partner with us. This has only intensified since the announcement.

Now, with Dark Nights, we share details of the many exciting developments we are working on in this new era for the food industry.

Team members describe the work we are doing on industry engagement to support and partner with manufacturers and producers.

We highlight some of the new product innovations we champion to help 'reclaim the flavour of smoke'.

Alongside our vision, we report on new trends and influences that are coming to prominence and elongating the 'summer season' of cooking with fire into the autumn and winter.

As a prime example, we outline the growing popularity of Nordic cooking and some of the techniques and wood flavours involved.

With an eye to the future, we are putting the finishing touches to a new innovation centre at our base in West Sussex, England, to be opened in spring 2025. We have designed it as a centre of excellence where our in-house technologists and our industry partners can test ideas. As with everything Besmoke, it will be fun, warm and perhaps a little unconventional.

If you have any feedback on Dark Nights or our smoke reports in general, we'd love to hear from you. You can still read and download Light Nights by scanning the QR code below. We invite you to talk to us, come and visit to find out more and arrange a flavour demonstration.



Huw Griffiths:

Flavour obsessive
and Besmoke
Founder and CEO

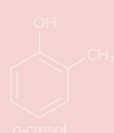




“This ground-breaking decision is a transformative opportunity for us. We are outside the ban because of our patented clean-label approach to smoke flavour ingredients”.

The flavour of smoke reclaimed:

Besmoke's call to action



Whether you seek a slow and low Texan barbecue profile or a spicy Indian rocket boost full of flaming heat, Besmoke enables ingredients manufacturers, food producers and flavour houses to source the cleanest, safest and most flavoursome smoke and grill flavour systems anywhere in the world.

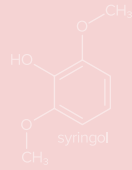


We thrive on challenges and have long recognised the need to revolutionise the smoke industry so that it is fully in line with modern consumer demands and EU legislation. That's why, following intensive lab research and rigorous commercial development, we created PureTech™ filtration technology. Founder and CEO Huw Griffiths and Professor Dave Baines, our Director of Innovation, share more.

At the core of PureTech™ is a patented three-stage process that is able to remove 95% of the carcinogenic polycyclic hydrocarbons (PAHs) from smoke.

Our 'eureka moment' took place at the University of Reading more than a decade ago when we compared a PureTech™ smoke flavour in tomato juice against one that was made traditionally and still had PAHs.

A taste trial proved that the PureTech™ contender was demonstrably more delicious and flavoursome. We had discovered smoke that was not only clean and healthy but tasted way better too!



PURETECH™

Smoke Creation

Stage 1: The Art

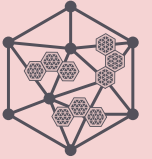
A blend of select wood chips and combustibles are added to the furnace for low-temperature pyrolysis to release only the finest smoke and grill flavour.



Smoke Filtration

Stage 2: The Science

Smoke is filtered to selectively remove the harmful PAHs and smoke tar, releasing the PureSmoke® and PureGrill™ volatiles.



Smoke Infusion

Stage 3: The Art and Science

Creativity comes to life when we infuse these volatiles into the most diverse and flavoursome food ingredients available to create versatile ranges of products from dry, oil-based, or aqueous ingredients.



FOUNDATION FOR TASTE

Launched in 2017, PureTech™ clean declaration smoke ingredients are the foundation on which we create the cleanest, safest smoke and grill flavour profiles and taste enhancers.

Founder and CEO Huw Griffiths says: “We produce naturally smoked food ingredients that deliver the true flavour of smoke.

“They infuse that smoky flavour in meat, fish and other foods and can be in liquid, dry powder or other format.

“In the meat sector for example, we’ve been working with a lot of producers over the past five years or so.

“It’s a big ask for a customer to smoke a large volume of meat in a way that is fast, efficient and cost-effective and make commercial sense.

“We offer far less time inside the smoker, minutes rather than hours. And we deliver the flavour that supports the product’s authenticity.”

GAMECHANGER

Now, with the much-anticipated EU ban on ‘smoke flavourings’ confirmed, it’s finally time for us to shine.

Huw says: “We’ve done the science and we’re now ready to reclaim the true taste of smoke, one redeveloped product at a time, for the world.

“For too long, people have been sold a poor relation. Smoke flavourings have been mass produced and, more often than not, with substandard taste.

“The ban means in the food industry, producers using smoke flavourings for meat, fish, sauces and seasonings must re-engineer what they do and quickly.

“It’s a massive, game-changing opportunity for us. That’s because we don’t produce primary smoke flavourings. Instead, we specialise in wholesome, clean-label smoked ingredients. There is a world of difference.

“There have long been concerns about the safety of smoke flavourings. People saw the writing on the wall. We were incredibly busy in the run-up to the EU



Article continues
on next page...

vote as customers began to recognise there was an imperative to align with the requirement to get rid of smoke flavourings.

“The pace has intensified even further now. We are getting enquiries from around the world. We’re hearing from producers from North and South America who export into Europe, especially Spanish speaking companies worried about the knock-on effect of an EU ban and considering the future of smoke flavours.

“The EU is at the forefront of food safety and the UK is aligned. Companies based here that sell into the EU must follow the legislation.

“Our unique position in the market, coupled with the interest people are showing in us, gives us tremendous confidence. We are optimistic and firmly set on a growth trajectory. We’re going for it right now, investing and building for the future.”

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NUANCES AND BENEFITS

Huw’s comments are echoed by Professor Dave Baines, our Director of Innovation and a world-renowned food chemist and flavour scientist.

Dave regularly lectures on legislation regarding smoke flavourings, helping people understand the nuances and benefits of natural smoke.

“Smoke flavourings will be gone completely from dairy, meat and fish by 2029,” says Dave. “But they will be banned in seasonings and sauces even earlier, by July 2026 which is less than two years away leaving little time for companies to reformulate products.

“Our message is that Besmoke offers a unique patented technology that gets rid of carcinogens from smoke and creates clean smoke flavour profiles that are outside the ban.

“The opportunity is there to develop alternatives to smoke flavourings. At Besmoke, we’ve spent years on research and continually introduced innovation.

“The time is now ripe to realise the potential we offer customers around the world keen to consume the cleanest, safest and most flavoursome smoke and grill.”

We asked Huw and Dave to explain further why Besmoke is outside the EU ban...



Huw says:



“The key differentiator is that we don’t manufacture smoke flavourings, we manufacture foods and ingredients that are smoked.

“We don’t condense or fractionate smoke produced at 650°C through ultra-high-temperature wood pyrolysis.

“That flavourings process typically produces dense acrid smoke condensed into water or another solvent and delivers a result that is burnt and doesn’t have a true taste. It’s like a furnace that creates acidic, bitter wood tar that tastes the same whether it’s apple or hickory.

“Our approach is completely different. When you create smoke from a log, it ignites at around 260 to 300°C. Natural woodsmoke is lovely, gently aromatic and intact.

“We enable it to retain its delicate qualities to produce flavour that is distinctive, natural and beautiful.

“When we create woodsmoke, we ensure the flavour volatiles remain intact, so when you are comparing hickory versus applewood for example, the aroma and taste is very different.

“It’s down to how we burn the woodchips, retaining the integrity of the woodsmoke and adding our safe, clean Puretech™ technology on top.”



Professor Dave Baines:

World renowned food chemist and flavour scientist Besmoke’s Director of Innovation.



Dave says:



“There is a fundamental difference between ‘naturally produced smoke flavour’ and ‘smoke flavourings’ and people need to understand the nuances in terminology.

“Smoke flavourings are explicitly defined in the EC 1334/2008 regulation on flavourings.

“They also have their own specific regulation, EC 2056/2003, on smoke flavourings used or intended to be used in or on foods.

“They are regulated separately from other flavourings as they contain a complex mix of chemical substances that give rise to safety issues.

“The fractionalisation and condensation process used to produce smoke flavourings results in so-called primary products (primary smoke condensates) and/or primary tar fractions.

“Regulation 2065/2003 was instigated to produce a positive list of approved smoke flavourings following safety evaluations by EFSA (European Food Safety Authority) the European watchdog on food safety.

“The intention is to reduce the exposure of the human population to harmful PAHs. A total of ten smoke flavourings were approved and listed in another regulation, EU 1321/2013, and their levels of application in food products carefully determined to minimise the content of PAHs applied to food products.

“This legislation was legally time-limited until 1 January 2024 and then granted a six-month extension.

He continues:



“However, on 24 April 2024 EU Member States voted to ban smoke flavourings and regulation 1321/2003 was amended to allow transition periods for the phase-out of smoke flavourings applied to food products across the EU.

“Conversely, what we do at Besmoke is produce a natural food stuff. PureTech™ is a patented, three-stage process: creation, filtration and infusion.

“First, we apply low-temperature pyrolysis to a blend of select wood chips and combustibles.

“Then we filter out the PAHs and release only the naturally occurring highly desirable smoke flavour volatiles.

“Finally, we infuse these into food to create the finest smoke and grill flavours.

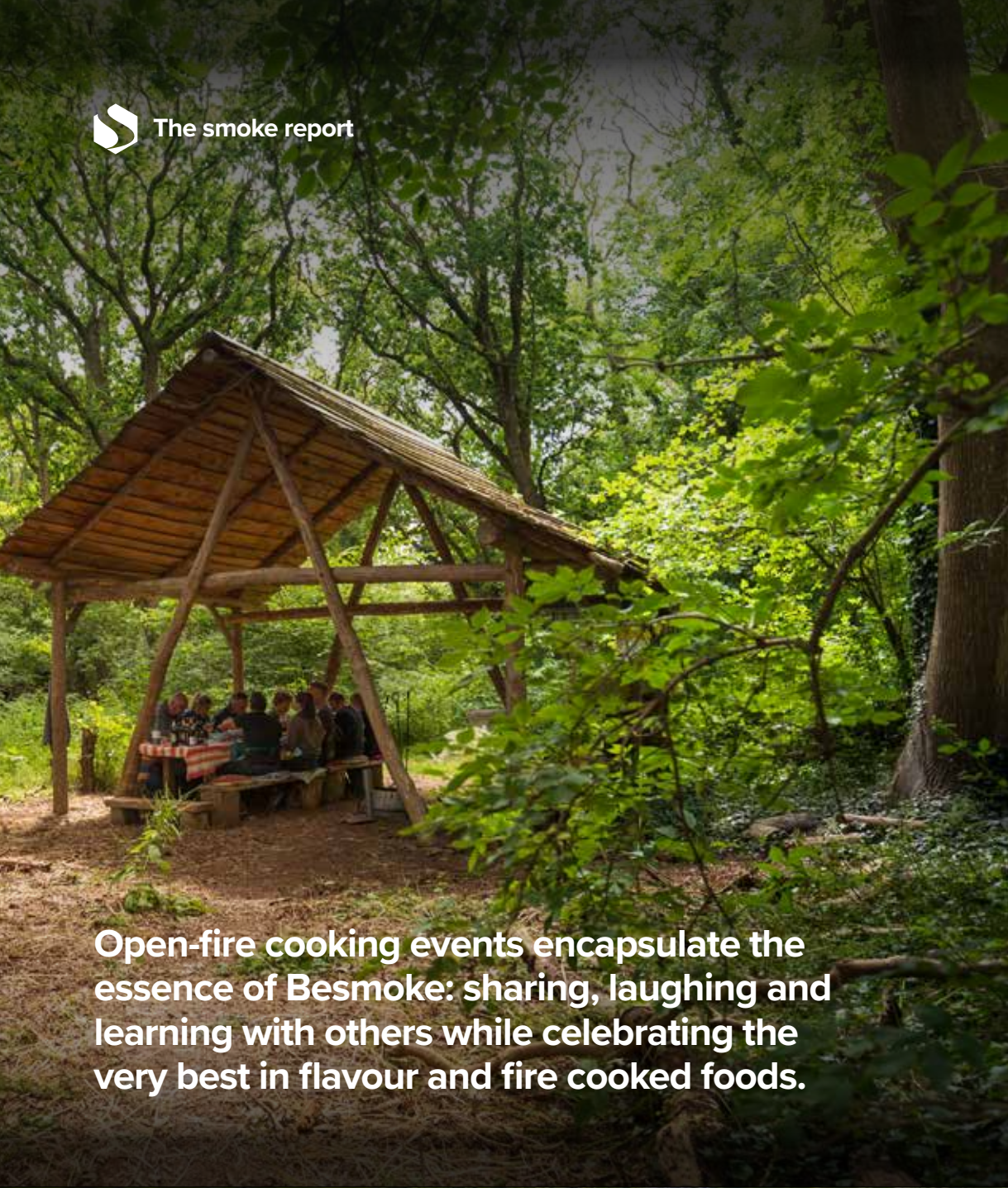
“PureTech™ produces cleaner, safer and tastier smoke ingredients and at the same time gives us endless scope to innovate, experiment and achieve heightened flavour profiles.

“When you create safe smoke, blend its natural flavour molecules and apply their complex, enhanced profiles to embed depth and character in a final product, you create something truly special. PureTech™ yields incredible results in smoke and grill flavour.

“We have been consuming smoke for hundreds of thousands of years and for the first time in human history we have the scientific understanding and the technology to produce cleaner and safer smoke food products.”







Open-fire cooking events encapsulate the essence of Besmoke: sharing, laughing and learning with others while celebrating the very best in flavour and fire cooked foods.



In the wild...

Chefs from Yorkshire-based pork and poultry producer Cranswick recently joined us for a fun cookout deep in the forest.

In a beautiful, natural woodland habitat near Siddlesham, south of Chichester, we set up a fire cage, barbecue egg, drum smoker and campfire grill for a fantastic summer get-together that went on long into the night.

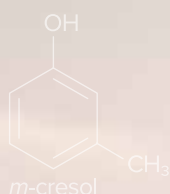
For us, hosting such cookouts is a great way to explore the joy of fire cooking in the open air. Guests

share tips on ingredients and techniques and even take away ideas to inform recipes to recreate in the kitchen.

In early autumn, we also spent a day cooking wild game over flames and embers in the countryside as guests of the culinary team at the global food and beverage giant Kraft Heinz.

Open-fire cooking events encapsulate the essence of Besmoke: sharing, laughing and learning with others while celebrating the very best in flavour and fire cooked foods.





HYGGE:

**Pronounced: (hoo-guh)
meaning 'comfortable conviviality'**

Barbecue is more than just a culinary experience in Scandinavia. It's a cultural tradition deeply rooted in the old Norse concept of hygge. Pronounced 'hoo-guh' and signifying cosiness or comfortable conviviality, hygge refers to a calm, relaxing time of wellbeing with friends and family, often enjoyed with good food and drinks around an open fire.

ANCIENT TECHNIQUE

**Traditional preservation
in Scandinavian cuisine**

Smoking is a traditional method of preservation in Scandinavian cuisine alongside salting, curing, pickling and fermenting. These techniques are ancient and originally driven by the need for survival given the long, cold northern winter and short summer growing season. Today, they are used to add flavour and texture to dishes.

SNUG INSIDE:

**Traditional Scandinavian
grilling or barbecue huts**

Generations of Sami reindeer herders have shared shelter and warmth in wooden huts or cabins known as grillkotas. Inside, meat is cooked over a central fire pit with a chimney to allow smoke from the grill to escape. Seasoned hardwoods, such as apple, oak, maple or hickory, are considered best for a long-lasting fire and are excellent for smoke flavour. All Nordic countries have their own styles of 'barbecue huts' or 'grilling cabins' featuring open flame cooking.

GREAT CATCH:

**Loimulohi technique - the method
for roasting salmon**

Flame-grilling fish is an age-old cooking tradition in Finland. A technique known as loimukala or, specifically for salmon, loimulohi, involves roasting pre-seasoned fillets on a wooden board set at an optimal angle around 15 to 20 cm from the flame. The aim is to let the fish cook low and slow.

CAMPFIRE CUISINE:

**Plättys - The Finnish
campfire pancake**

Finnish campfire pancakes are known as plättys while the country's national dish is poromkärstys, a sautéed reindeer stew served with mashed potato, lingonberries and pickles. Sami people in northern Finland have traditionally prepared the stew in large pots over open fire.

BRILLIANT BREAD:

**Delicious Danish snobrød
twisted bonfire bread**

Denmark has a popular bonfire bread known as snobrød, translated as 'twisted bread' and prepared with skewers over the embers of an open fire. The heat from the embers makes the outside of the snobrød crisp while the inside remains deliciously warm and soft. Eating snobrød is considered a fantastic way to put some lovely hygge into a night round the bonfire.



Peter Dingelhoff:

Global Technical Sales Director,
Besmoke's European smoke and
grill expert

Points North:

the Nordic trend influencing smoke and flame menus

Open fire grilling, a traditional mainstay of Nordic cooking, isn't just about leisurely summer barbecues in the Scandinavian wilderness...

Increasingly, wonderful flavour profiles involving different types of meat, fish, wood and fruit from the north are making their way into recipe books and onto restaurant menus worldwide as innovative culinary delights.

While cooking outdoors in the depths of winter may be more 'grill and chill', especially on dark nights, the Nordic summer months offer light evenings and even the prospect of midnight sun.

What could be more enticing and warming than sitting around a wood fire in a Scandinavian forest, drinking coffee with friends as tasty, marinated venison steaks cook slowly over the flames?

The essence of that experience, rooted in the old Norse concept of hygge, is something Besmoke has sought to capture with various flavour profiles and it's also what top, Nordic-inspired chefs have reflected in their ingredients lists, cookbook recipes and menus.

EXTENDING THE SEASON

Harnessing the best of these profiles is a great way to extend the 'barbecue season' into the autumn and winter and enable people to enjoy a taste of the outdoors, indoors.

The smoking of food has gone on for millennia. We haven't always had the convenience of a fridge right there in the kitchen to help keep meat or fish fresh.

As in other parts of the world, the peoples of northern European countries and Scandinavia have

used smoking techniques to preserve and bring out the best in the food sources around them.

Peter Dingelhoff, Besmoke's Global Technical Sales Director, says Nordic cooks have long understood that specific woods, meats and fruits create amazing, distinctive flavours.

"If you go back to olden times when you absolutely had to smoke food for preservation, you find that the amount of smoking in Nordic countries was higher than in southern Europe," he explains.

"There is no universal Nordic smoke flavour as each region or settlement, perhaps even each family, has their own 'signature smoke' and different techniques.

"What is standard is that to create a good dry smoke cloud, you need dry wood. Nordic wood sources such as beech, oak, spruce, pine, fir and alder all offer specific flavour profiles. And you can deepen the profile further by searing the steak or the joint. Searing creates edginess and a darker flavour when you come to grill or barbecue. On top of that, you dry rub in salt, pepper, sugar or different spice blends, ideal for say fish with bouillon sauce or, depending the country, venison, boar or elk.

"Some might argue there are more exotic flavours in the south of Europe but there are certainly many authentic Nordic ingredients and grilling techniques from which you can produce delicious flavours."

Huw's Notes

Manifesto Commitment:

Scandinavian chefs including Claus Meyer and René Redzepi of the Copenhagen restaurant Noma wrote a 'manifesto' in 2004 to condense the principles and values of what they saw as a 'New Nordic Cuisine' movement. They emphasised the use of local, seasonal ingredients, rediscovering traditional Nordic flavours and sustainable practices, and the virtues of 'purity, simplicity and freshness'. Opened in 2003, NOMA has been named The World's Best Restaurant five times in annual reviews over the past 20 years.

Huw's Notes

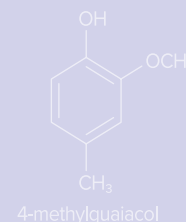
Nordic Numbers:

The high standards of Nordic cuisine are reflected in independent recognition of Scandinavian restaurants. As of 2024, there are 31 Michelin-starred restaurants in Denmark, 22 in Sweden, 20 in Norway and nine in Finland.

Huw's Notes

Branching Out:

The importance of juniper branches in creating a flavoursome wood fire is reflected in smoked dishes at Ekstedt at The Yard, London, the first restaurant outside Stockholm to be opened by Nordic chef Niklas Ekstedt. Menu delights include juniper-smoked apple, juniper butter and juniper-smoked duck breast.



Vision and experience: 'science-led with a crazy artistry'

Becky Shaw, an experienced flavourist and food technologist, has worked at Besmoke for three years and was an external consultant with us for the previous two. Before that she had worked at seasonings houses in the food industry since the 1990s.

As our NPD (New Product Development) Controller, Becky oversees innovation and product development turning lab research and smoke products into customer applications. Her role is at the very heart of Besmoke's vision and experience of smoke.

Becky's time at Besmoke has come amid rapidly changing consumer demand and market pressures in the food industry.

Safety, sustainability, tighter regulations and a desire for more authentic and better tasting products continue to keep her busy.

The NPD role is a fusion of art and science, Becky maintains, in her words 'science-led with a crazy artistry'. Finding the optimum burn mix for ingredients, creating amazing flavour profiles, meeting customers face to face for taste trials and delivering product demonstrations are all central to what Becky and the NPD team does.

A key in-house contact is Elena Cristea, Science & Innovation Manager, with Becky testing out and applying the innovations that Elena and her research colleagues are working on in the lab.

Becky then teams up with Colin Hitch, Chief Commercial Officer, to showcase and discuss samples of the smoke and grill flavour ingredients requested by the customer.

"We've seen a lot of changing trends," says Becky. "Over the past ten years there has been more and more interest in food quality and the provenance of ingredients and wood types. People want to know the source of the foods they are consuming. At the same time, there has been a much stronger focus on sustainability. Happily, Besmoke reflects that. Sustainability is our founder Huw, through and through. We work to standards set by EcoVadis, the global sustainable procurement and ESG platform. We currently have silver rating accreditation and are going for Gold. We're improving all the time, a growing business that is honest and truthful about what we do and how we innovate."

Becky and the NPD team meet customers both at our Arundel base and at their own premises. "When you are applying touches, checking levels and seeing how something tastes, it's sometimes easier to work through a request or solve a problem if you are at the customer's location. You can get results quicker. Either way, we work in line with customer comments and expectations. If a poultry industry customer says their chicken needs better taste, like rotisserie, we can manipulate the burn mix and look at different smoke and grill flavours and top notes. You're looking at trying different combinations of

herbs and spices with wood flavours, whether spruce, oak, beech or something else, to infuse a recipe or application. It's amazing that you can effectively ask a cloud of smoke to 'take me to Portugal' or 'take me to the Deep South of America'. We'll smoke a small amount with a particular burn mix, perhaps brine some meat dose into a mayonnaise or tomato sauce and try a sample for taste, putting it in or on the product. I've had the fascinating experience of going to a customer to discuss the actual materials of a tandoor oven as part of the whole cooking experience. The tandoor clay oven introduces a dry, charred clay note that is the base flavour for tandoori and masali dishes. With some products, you might get to modification number 32 or 33 before you have approval. There can be lots of to-ing and fro-ing but it's hugely satisfying when you give a customer exactly what they want."

The 'fire and flame' science and imagination behind NPD at Besmoke gives Becky great confidence. "I know there is nothing else like this out there," she says. "We really do provide outstanding recipes and applications built on innovation. We are so well placed to be the main supplier of smoke and grill into the food industry across the world. I love that we are so different, bringing to



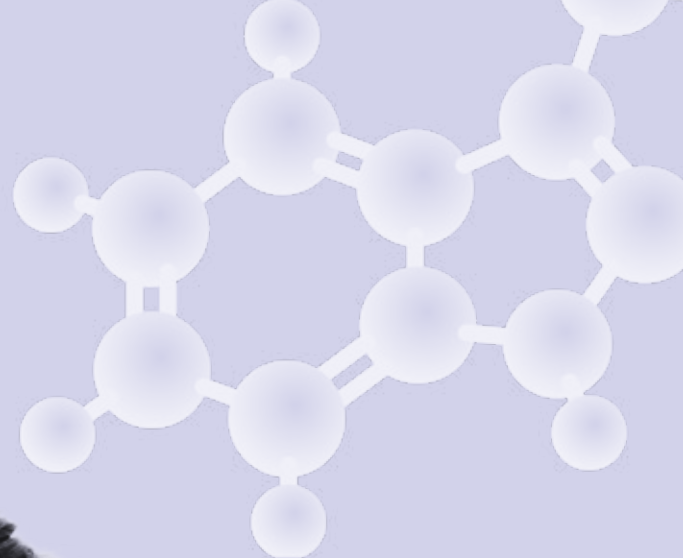
Elena Cristea:

Besmoke's key in-house contact is Elena Cristea, Science & Innovation Manager, with Becky testing out and applying the innovations that Elena and her research colleagues are working on in the lab.



Colin Hitch:

Becky teams up with Colin Hitch, Besmoke's Chief Commercial Officer, to showcase and discuss samples of the smoke and grill flavour ingredients requested by the customer.



Becky Shaw:

Besmoke's New Product
Development Controller

“We’ve always been in competition with flavourings. It’s lovely to have done the groundwork on natural flavour profiles, now coming into their own”

market an ancient form of food preparation that is so appropriate for developing flavour profiles. In our product demonstrations, Colin and I see people completely wowed. Our smoke and grill flavours take people by surprise and their feedback gives us a great buzz. What I most love about it as a flavourist is matching other people’s flavours to what we’re doing. It’s innovative and technical but it also harnesses your imagination.”

Commenting on the EU flavourings ban, Becky says: “We’ve always been in competition with flavourings. It’s lovely to have done the groundwork on natural flavour profiles, now coming into their own. We continue to educate people on what we can offer. That hasn’t changed. We’ve persevered and stuck to our values. Since the ban, I have felt the shift with customers. I’ve had people say, ‘Thank goodness you are still here, we’re so thankful you haven’t thrown the towel in’. Our ingredients are so appropriate for the food industry following the ban.”

Huw's  Notes

Talking Flavour:

We're preparing to meet fellow food industry professionals at the forthcoming flavour showcase FlavourTalk. This 'speed dating'-type conference and expo takes place at London's Kensington Millennium Gloucester Hotel in March 2025. There was a record attendance by 42 food manufacturers, suppliers and flavour houses at the 2024 event, with momentum gathering all the time.



PUREMAMI®

Innovative taste enhancement technology that elevates savoury flavours with umami and kokumi depth.

Key Features:

Clean declaration
Neutral taste with a powerful flavour boost
Masks bitterness and elevates sweetness naturally
Puremami® Zero - Yeast Free Range available

Applications:

Seasonings, Snacks, Condiments, Sauces, Coatings, Bakery, Plant Based, Soups, Meals, Dairy

Formats Available:
Dry Powder



SMOAX® Woodsmoke

High strength smoked profiles in powder formats

Key Features:

Clean and safe alternative to smoke flavourings
Intense flavour delivery from 0.2%
Wide range of authentic wood smoke flavours
Blendable to create unique and signature flavour profiles

Applications:

Meat, Poultry, Fish, Brines, Cures, Seasonings, Coatings, Sauces, Dairy, Bakery, Plant Based

Formats Available:
Maltodextrin or Potato Starch



SMOAX® Fire & Flame

High strength grill profiles in powder formats

Key Features:

Clean and safe alternative to grill flavourings
Intense flavour delivery from 0.2%
Wide range of authentic grilling flavours
Essential flavours for authentic barbecue

Applications:

Meat, Poultry, Fish, Brines, Cures, Seasonings, Coatings, Sauces, Dairy, Bakery, Plant Based

Formats Available:
Smoked Maltodextrin or Potato Starch



SALTEx®

Breakthrough sodium reduction solution without compromising on taste

Key Features:

Sodium free natural flavouring
Achieve up to 50% sodium reduction
Low cost in use
Neutral flavour with no bitterness or metallic taste

Applications:

Seasonings, Snacks, Condiments, Sauces, Coatings, Bakery, Plant Based, Soups, Meals, Meat, Fish, Poultry, Dairy, Brines

Formats Available:
Dry Powder



“We’re taking smoke and using it in ways that you would never think possible, engineering it to deliver in lots of applications and possible ingredients”.



Colin Hitch:

Chief Commercial Officer who's driving the global sales strategy to bring Besmoke to the masses.

Serving up innovation: Salt Reduction

Using smoke in new ways

“We are serving up more innovation than ever,” says Colin Hitch, Chief Commercial Officer as he reflects on a busy year of product development, launches and customer engagement. “We’re able to manipulate smoke volatiles to create superior flavours within smoke and grill. This has led to a breakthrough in some extremely advanced taste enhancement technology which includes salt and sugar reduction.”

As an example of forward thinking and innovation, Colin cites the application of Besmoke’s technology in smoke and taste enhancements. This has led to the creation of SALTEx® to help reduce the levels of salt by 25-50% in a wide range of food products such as pizza dough, sauces, marinades and snack seasonings.

Another industry trend impacting retailers is the desire to reduce or remove ultra-processed ingredients. An example is maltodextrin. Again, Besmoke has developed an alternative carrier, an ultra-clean-label smoke and grill powder called SMOAX®, based on potato starch and declared as smoked potato powder. It has wet and dry applications across a range of foods.

The Fire & Flame SMOAX® range is ideal for replicating methods of cooking over open fire in popular world cuisines. These are unique flavour profiles that range from Tandoor to Hibachi grill or the simple but amazing meaty grill flavour of a rotisserie chicken cooked over open embers.

Other customers are showing a preference for the FUMODO® range which can be labelled as natural

flavouring, all delivering the cleanest, safest smoke and grill flavour profiles in the global food industry.

This summer Besmoke was among four suppliers invited to a Pilgrim’s Europe barbecue innovation event where we were able to demonstrate all the above technologies in action to a cross section of the R&D teams.

Next up is Food Ingredients Europe which will be held in Frankfurt this year, where we will be able to join the booth of Azelis, our latest distributor partner for Benelux, DACH (Germany, Austria, Switzerland), Poland, Italy, France, Nordics and the Balkans. We welcome the opportunity to update visitors on everything Besmoke.

IFFA also in Frankfurt, in May 2025 will be the first time Besmoke will have its own booth to host customers and discuss their requirements particularly around alternatives to smoke flavourings.

Colin says: “On that note we have been kept extremely busy this year with enquiries from users of smoke flavourings in Europe.

“That has coincided with wider interest from our global customers particularly those with production facilities in North America and China.

“This positions us perfectly to establish Besmoke as the leading global brand within the next five years.

“Our clean-label technology, specifically patented to filter smoke, will safely deliver natural smoke and grill flavour to the global food and flavour industry.”



TOP NOTES:

Creating high-intensity flavour



Given the EU's decision to phase out primary smoke flavourings across Europe, food and beverage manufacturers are challenged to rapidly innovate and reformulate popular smoke-flavoured products.

One way we are supporting customers in this era of change is through our redeveloped FUMODO® range

Meaning 'unique smoke' in Latin, we have made FUMODO® the home of our new, next-generation Natural Flavourings.

These combine smoke and grill flavour profiles with the latest innovations in natural top note creativity using a PureTech™ based bio-engineered process, FumoTech™. The result is clean, safe and flavoursome products that deliver the authentic taste of smoke and grill into all applications.

'Natural Flavouring, Smoked Water', for example, harnesses FumoTech™ in smoked waters that help to lower acidity while infusing meat applications with the most delicate of flavours.

Likewise, successful laboratory trials and product development see new FumoTech™ processes inform FUMODO's oil-based and dry powder solutions.

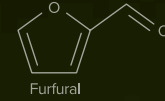
As direct replacements for flavourings that come within the ban, the options from Besmoke are FUMODO® Woodsmoke for natural smoke flavourings and FUMODO® Fire & Flame for natural grill flavourings.

In Smoke features hickory, apple, mesquite, oak and beech flavours while In Grill has grill and sear variations.

As with other Besmoke flavour profiles, relevant solutions across the range comply with kosher, halal and vegan specifications as required.

"It's all about meeting the demand for clean label flavours as customers seek to conform to the new regulations," says Colin Hitch, Chief Commercial Officer. "This is another example of bringing taste, technology and innovation together to create authentic smoke and grill flavours that deliver great taste. The move to redevelop FUMODO® supports EU-compliant applications in meat, poultry, fish, brines, seasonings, coatings, sauces, cheese and bakery."





“It’s all about meeting the demand for clean label flavours as customers seek to conform to the new regulations.”



BESMOKE®
SMOKE INNOVATORS



FUMODO® Fire & Flame

The next generation of natural flavourings in grill

Key Features:

Cutting edge FumoTech® innovation
Ultra clean declaration
Wide range of authentic grilling flavours
High intensity flavour impact
No primary smoke flavourings

Applications:

Meat, Poultry, Fish, Brines,
Seasonings, Coatings, Sauces, Dairy,
Bakery, Plant Based

Formats Available:
Aqueous, Oil, Powders



FUMODO® Woodsmoke

The next generation of natural flavourings in smoke

Key Features:

Cutting edge FumoTech® innovation
Ultra clean declaration
Wide range of authentic grilling flavours
High intensity flavour impact
No primary smoke flavourings

Applications:

Meat, Poultry, Fish, Brines,
Seasonings, Coatings, Sauces, Dairy,
Bakery, Plant Based

Formats Available:
Aqueous, Oil, Powders



Colin Hitch:
Chief Commercial Officer who's driving the global sales strategy to bring Besmoke to the masses.



Petra Tsitlakidou:
Besmoke's Technical &
Regulatory Director

Winter warmers: we combine technical know-how with imagination

As we enter the cooler months, Petra Tsitlakidou, Technical and Regulatory Director, reflects on some of the key trends and market developments in the past year.

“The regulation banning smoke flavourings in the EU is in force now and it’s a huge change,” says Petra

There are transitional periods for phasing out smoke flavourings based on food categories. Manufacturers and producers need to reformulate recipes and move away from smoke flavourings. Smoke flavourings have one dimension and are so overpowering, dominant, and lack the variations offered by natural alternatives. Now is the moment for us to show how smoke flavour tastes. It’s high time for Besmoke to step into the limelight. We are experts in smoking food. The years have given us tremendous knowledge of what to feature in the burn mix. That has led us to create a whole range of woodsmoke flavours to please the palate – all sorts of authentic, woody, spicy flavours you won’t be able to find in flavourings. This will have such a positive benefit for consumers.”

Petra is clear that Besmoke’s state-of-the-art facilities soon to be extended with a new innovation centre - coupled with the team’s strong scientific backgrounds and experience make for a compelling, revolutionary proposition as the impact of the ban kicks in.

“We have built many partnerships with big companies centred around how smoke can boost flavour. We smoke such a vast range of ingredients. We use 50 to 60 different raw materials as carriers for smoke. Smoking pairs nicely with umami as an amazing flavour booster, and in response to market demands we are taking our grill range global with applications across different cultures such as piri piri in Africa, tandoor in India and jerk in the Caribbean. You can mimic any culinary experience in your home wherever you are, for example using your air fryer for an indoor barbecue. We’ve been doing customer demonstrations of chicken brined with different flavours and spices and cooked in an oven on a rainy day. The moment you have your first bite you have the impression it was brought to you from an outdoor

barbecue featuring woodsmoke, flame and grill.”

Behind Besmoke’s creativity is a robust approach to science backed by independent safety standards and certification. There are official halal, kosher, vegan and organic products and ingredients plus alternatives to additives derived from plant origin such as rice flour, cellulose powder and vinegar.

This year we have redoubled our efforts to support manufacturers who rely on smoke flavourings. We have redesigned and improved our smoke generators in partnership with suppliers. This has enabled two clear advantages: a more intense flavour; and a more efficient process that can dramatically reduce the smoke time.

“We operate two different types of smoking units,” explains Petra. “One is a traditional chamber with a back-end furnace from which wood smoulders and the generated smoke flows through a pipe. It’s an indirect smoking approach based on safest principles. We are increasing the number of units we have like this from seven to ten over the winter.

The second is a ‘modern smoking’ model in which smoke infuses in huge blenders that replace the chamber, we have installed six of these units. Some products and ingredients are lightly smoked for a few hours, others for a few days. It depends entirely on the product or customer need involved. Both types impart the same authentic smoke flavour to food ingredients.

“We have a clear, compelling proposition if you are looking for true, authentic smoke or grill flavour and you have only used smoke flavourings that are now being banned. Our message is that we can support you. You can confidently rely on our high-quality ingredients, our safety standards and our experience with smoke. We have a lot to offer companies keen to broaden their horizons on smoke flavour whether for products with salt, sugar or other ingredients. We are here for you”.



Air frying and indoor barbecue



Mimic any culinary experience in your home wherever you are



A more intense flavour; and a more efficient process



Authentic woodsmoke, flame and grill flavour



Our strong scientific backgrounds and experience make for a compelling, revolutionary proposition as the impact of the ban kicks in



We use 50 to 60 different raw materials as carriers for smoke

Working in partnership:

The vital role of distributors



Peter Dingelhoff:
Global Technical Sales Director,
Besmoke's European smoke and
grill expert

A major industry deal involving two well-established brands in Europe has strengthened Besmoke's market reach through food ingredients distribution partners.

In early 2023, Azelis, a leading innovation service provider in the specialty chemicals and food ingredients industry, acquired Smoky Light, a Benelux distributor specialist in smoke ingredients for Besmoke.

Founded in the Netherlands in 1995, Smoky Light had established a team of technical sales experts and run its own formulation laboratory to deliver smoke and grill ingredients, browning agents and additives to more than 200 customers.

With the integration of Smoky Light into the Azelis business, Managing Director Ahrend Buckers subsequently took on a senior role as Business Manager for Smoke and Grill Flavours at Azelis. In last year's announcement press release, Ahrend, a long-standing clean smoke advocate, hailed the deal as mutually beneficial with Smoky Light expanding into "a wider smoke ingredients industry that is now possible for us thanks to Azelis' strong infrastructure in that market".

Evy Hellinckx, Azelis CEO for the EMEA region, who was Managing Director for Benelux at the time, said the acquisition was an opportunity to bolster the group's footprint in the Benelux food and nutrition

market and strengthen its "expertise and activities in smoke ingredients".

Evy added: "This transaction is not only a great contribution to our range of aroma formulations, but it also builds on our growth strategy and reinforces our position as a leading innovation service provider in speciality ingredients. It will also strengthen our relationships with our strong and established partners with whom we both work."

Reflecting on the success of the acquisition almost two years later, Ahrend says: "We from Azelis work together with Besmoke to bring the benefits of innovation in smoke ingredients and natural smoke flavours to our customers. It's a great partnership built on trust, respect, technical and industry knowledge, and a shared approach to growing the market." Peter Dingelhoff, Besmoke Technical Sales Director, says: "This tie-up is of huge benefit to us. With Smoky Light now part of Azelis, we can count on a partner with strengths in different regions. They know the culture, the local markets and they start with deep knowledge of Besmoke products. I see us as one team, working collaboratively so that together we make the business. It's a prime example

of how to grow business mutually through high-level collaboration and a shared desire for a strong market position. We are also strengthening our reach through distributors in other parts of the world. We're intensifying our way of working with them too. As with Azelis, we share company developments and what we're doing with purchasing, R&D and innovation across our range of products. We plan to do more training with our distributors in our new innovation centre so they become part of Besmoke, so to speak."

Likewise, Colin Hitch, our Chief Commercial Officer, says: "Our Azelis partnership represents a big collaboration in our global distribution network. Azelis are just like an extension of our sales team, promoting our entire product range and acting on behalf of Besmoke, but with the addition of their expertise in innovation and a strong portfolio."

Colin, Peter and Besmoke founder and CEO Huw Griffiths will be meeting up with the Azelis team at the expo FIE Europe, standing for Food Ingredients Europe. This major event, in Frankfurt in November 2024, is an opportunity to discuss technology breakthroughs and product and commercial developments with fellow market players.

Fine Fusion

German 'schwenkbraten' barbecue cooking is a prime example of a fusion of culinary traditions. Recipes feature a fire bowl or campfire with wood or charcoal over which a swinging grill hangs from a tripod. One popular recipe is for 'schwenker', a grilled pork steak that has been marinated for 24 hours in a mix of oil, oregano, crushed juniper berries, cayenne pepper, paprika, mustard, sliced onions and garlic. Legend has it that this style of cooking originated in Brazil, from where German immigrants took it home and adapted it in the early 19th century.

Love Letter

At Humo in Mayfair, London, all dishes are prepared using a selection of widely sourced woods to impart subtle flavour differences to each dish. Chefs at the Michelin-starred restaurant describe Humo as a 'love letter' to wood-fired cooking.

The pull of smoke

Basque chef Victor Arguinzoniz has invented a grill 'pulley system' to control the intensity of smoke and how it interacts with different types of wood, herbs and basting oils. Victor says: "People are now looking for traditional flavours again and cooking over.

Flame Fashion

Portuguese chef Alexandre Silva who runs the Michelin-starred LOCO restaurant in Lisbon believes cooking over flames has never really gone out of fashion. "Few cooking techniques offer so many possibilities, and people cannot remain indifferent to fire," he says.

Hot dog

Translated as 'thin bread roll', tunnbrödsrulle is a classic Swedish hot dog. It is made with tunnbröd, a soft flatbread and topped with layers of creamy mashed potatoes, salad, roast onion and sauce. Traditionally, has always been baked outdoors over an open fire.

It's Brat

The main feature of Basque-influence BRAT in Shoreditch, London, is the wood fire grill and oven. The woods used are all sustainable - usually oak, sweet chestnut and birch, for sustained heat and charcoal, while fruit tree woods such as vines, cherry, apple and plum provide seasoning.



BESMOKE®
SMOKE INNOVATORS

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Becky Shaw
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Discover how we can
help bring your flavours to life:

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