

How ingredient choice can deliver cost and sustainable benefits

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With the environment continuing to move up the consumer agenda, sustainable ingredient choice is becoming a focus for producers. Here Frédéric

Fernandes, Product Manager Functional Proteins at BENEØ, discusses how ingredients with good sustainability credentials, such as those derived from faba beans, can also help producers achieve cost efficiencies in bakery applications.

Consumers push sustainability agenda

Consumers are increasingly looking for ingredients that are both 'good for me' and 'good for the planet'. Almost 3 out of 4 consumers worldwide now believe that for a food or

beverage to be healthy, it must be healthy for both them and the environment¹. Transparency in the sourcing of raw materials also looks set to continue to drive change in purchasing behaviour. Particularly as 76% of consumers globally now expect companies to be transparent about their raw material sources².

Alongside increasing consumer demand for more sustainable purchasing, almost 3 out of 5 consumers across the globe are now interested in plant-based nutrition, with almost one in three identifying as flexitarian³. Aside from the plant-based meat and dairy alternatives category, bakery products have also seen a benefit from this trend. In fact, more than half of global consumers are already buying or interested in purchasing

plant-based baked goods, rising to two-thirds among flexitarians⁴.

As a result, plant-based ingredients continue to hold their appeal, particularly those that can demonstrate their sustainability credentials. However, the key to success for future plant-based products will be the ability of producers to balance the need of delivering appealing plant-based bakery products, with taste and affordability.

Considering sustainability along the value chain

Sustainable sourcing is essential if the food industry is to meet the needs of consumers today and future generations, making it a central aspect to manufacturing processes. To produce plant-based functional ingredients, BENEØ depends on agricultural raw materials, so sourcing begins at farm level.

BENEØ is committed to promoting regenerative agriculture by focusing on improving soil health and biodiversity, mitigating climate change and protecting water resources. Here, collaboration with farmers is key. BENEØ has recently announced the launch of a joint Climate Farming Project with beet sugar producer Raffinerie Tirlemontoise and ingredient company Puratos. The ambitious initiative supports Belgian farmers in implementing more sustainable farming practices and promotes regenerative agricultural principles that contribute to enhancing soil health and reducing environmental impact.

Addressing climate change is essential as it helps maintain stable and predictable agricultural conditions and to achieve this requires strong collaboration between farmers and the industry. That's why BENEØ prioritises long-term partnerships with farmers, while also being committed to jointly supporting regenerative agriculture, to help



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promote resilience in the farming sector towards future challenges. As an industry, ingredients can only be developed with nutritional, health or technical benefits thanks to Earth's resources. So, safeguarding those is crucial for BENEØ as a business, and the industry as a whole.

As a result of increasing pressure, both from authorities and consumers, food manufacturers are having to keep sustainability front of mind from farm to fork - and this includes ingredient sourcing too. Faba bean ingredients such as those from BENEØ are showing potential when it comes to sustainability along the value chain.

Faba beans help to reduce greenhouse gas emissions at farm level, as they capture nitrogen from the air, and provide it for themselves and subsequent plants, which reduces the need for fertilizer input. They also provide an additional crop in farmers' rotation cycle, while enhancing soil structure and increasing biodiversity. BENEØ sources its faba beans at Farm Sustainability Assessment (FSA) Gold level from German farmers, in close proximity to the production plant which is currently under construction. In addition, BENEØ valorizes the entire raw material for food and feed ingredients, avoiding waste, and no water is needed in the production process.

Cost efficiencies using faba bean ingredients

As well as offering sustainability credentials, faba beans can also deliver cost-efficiencies in



recipe development. Looking at opportunities for bakery products for example, the BENEØ-Technology Center has been exploring a range of egg replacement recipe formulations and initial successes have included the development of an egg-free plant-based muffin and meringue. With a pleasant taste and texture, they contain faba bean protein concentrate at a reduced dosage than would have been needed if eggs were used,

resulting in the potential for lower recipe costs and stable pricing. BENEØ's faba bean protein concentrate is light yellow in colour and has a relatively neutral, mild beany taste. Containing a minimum of 60% protein on dry matter, the concentrate also has an excellent essential amino acids profile and very good emulsifying, foaming, thickening and binding properties, making it a suitable solution for egg replacement.

Thanks to plant-based ingredients such as those derived from faba beans, it is now increasingly possible to meet consumer demands for 'good for me' and 'good for the planet' products, while offering cost reduction potential without compromising on taste and texture.

References:

- 1 HealthFocus International Global Sustainability Report 2022
- 2 Innova Trends Survey 2024
- 3 BENEØ Global Plant-Based & Meat Hybrids Survey 2023 - Dynata conducted an online quantitative survey in January 2023 in Germany, UK, France, Spain, Poland, USA, Brazil and Thailand (Total sample = 6167).
- 4 BENEØ Global Plant-Based & Meat Hybrids Survey 2023.



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For further information on BENEØ and its ingredients, please visit: www.beneo.com and www.beneo.com/news or follow BENEØ on X (formerly Twitter): @BENEØ or LinkedIn: www.linkedin.com/company/beneo

BENEØ has long-term experience in developing and producing plant-based functional ingredients from natural sources for the food, feed and pharmaceutical industries. By supporting health and optimising taste and texture, they help improve the nutritional and technical properties of a wide variety of products.

Through a unique chain of expertise, BENEØ offers customers advice and inspiration on new product ideas that support a healthy lifestyle in a holistic way. This includes the BENEØ-Institute that provides decisive insights into nutrition science and legislation, and the BENEØ-Technology Center that consults in application technology.

Formed in 2007, BENEØ is active in over 80 countries, employs more than 1000 people and has six state-of-the-art production sites in Belgium, Chile, Germany, Italy and the Netherlands that deliver high-quality ingredients at all times.