## Grain reaction









A diet rich in whole grains can provide multiple health benefits, including lowering cholesterol levels, aiding weight loss and reducing blood pressure. The use of grains can also help manufacturers improve the taste, texture and healthiness of their formulations. FoodBev's Gwen Jones takes a closer look at the goodness of grains.

According to a report by FMCG Gurus, 64% of global consumers said that they are taking a proactive approach to their health, resulting in a growing interest in wholesome ingredients that provide nutrient density and functionality.

Cue grains. Whole grains provide fibre, vitamins and minerals, and have numerous health benefits – from lowering cholesterol, supporting weight loss and regulating blood pressure, to reducing the risk of diabetes and heart disease, among other illnesses.

"Brand transparency is also helping garner consumer confidence in grain-based products, whether that's an ingredient used to make a crispy pizza crust, a muffin high in plant protein and fibre or a loaf of keto-friendly bread," Paula LaBine, marketing director of milling and baking solutions at ADM, told Foodbev.

She added: "Such options are appealing to consumers to meet their 'better-for-you' aspirations, for both themselves and the planet".

Grains are also helping manufacturers to improve the texture and taste of their formulations while ensuring they meet the demand for transparency and the clean label ingredients trend.

## The oat factor

Oats are leading the way in the grain ingredients space, largely driven by their health benefits, sustainability credentials and functionality.

In addition to making breakfast great again, Avril Collins, marketing manager of ingredients at Tirlán, notes that oats are also winning in the dairy alternatives space – "with oat milk being the top produce base for new launches in 2021 and 2022".

"The most notable nutritional components in oats are fibre and beta-glucan," Collins added. "Fibre is extremely important for the digestive system and gut health, while beta-glucan – a soluble fibre found in oats – has proven health benefits associated with heart health, blood sugar levels and cholesterol blood levels."

Tirlán recently added a gluten-free liquid oat base ingredient to its Oat-Standing portfolio of flakes and flours. The base helps manufacturers deliver a "sweet sensory profile and a smooth mouthfeel to the end product".

The flake, flour and liquid oat formats can be used in a range of food and beverage applications – from breakfast cereals and bars to a variety of dairy alternatives. They also solve the common challenge of grittiness found in standard dairy alternative applications.

Tirlán's oats are grown on Irish family farms through the company's closed-loop supply chain, called OatSecure, "which gives manufacturers the added assurance of gluten-free status," said Collins.

## Upcycling is on the up

In addition to health, sustainability is another trend driving every sector of the F&B industry. In the ingredients space, companies are converting spent grains into value-added, nutrient-rich products.

"Upcycled ingredients are probably the biggest trend right now, and the grains that can deliver nutrition and a climate-positive proposition are going to win in the marketplace," Greg Belt, global head at EverGrain, told FoodBev.

Backed by drinks giant AB InBev, EverGrain upcycles barley protein into high-quality, sustainable ingredients. "With the upcycled protein, we've been able to remove barriers to formulation creation such as the grittiness, chalkiness and bitterness associated with other proteins," Belt added.

Upcycled barley provides nutrients such as antioxidants, vitamins and minerals, and may be linked to health benefits such as muscle building, recovery and reduced muscle soreness.

This June, the company will launch EverPro Original, a complete protein isolate powder that contains 30g of protein, 3g of fibre and 1g of sugar. The powder is said to have fast absorption properties for optimal muscle recovery and build, as well as a smooth mouthfeel.

It follows the launch of EverPro Clear, a translucent protein powder developed for hydration-based products. The powder allows for a higher concentration of protein to be used in hydration sticks and ready-to-mix protein powders, without "the barriers of opacity, poorer taste and thicker texture," explained Belt.

EverGrain is also working with partners to create an ice cream that features its protein powder, as well as performance gels and lifestyle beverages.

Meanwhile, Meurens Natural – a manufacturer of organic and conventional cereal syrups –













is also transforming its grain side streams into plant-based proteins.

"There are a lot of waste products generated in cereal production," said Tim Van de Gehuchte, international sales and marketing manager at Meurens. "We turn our rice and oat byproducts into nutritional proteins – but this can be done with any type of cereal that we process."

Van de Gehuchte says that Meurens' grains can be used for a wide range of applications, including "bakery, plant-based drinks, confectionery, etc. while our oat protein can also be used in meat alternatives".

He continued: "Our main mission is to provide healthy food that is sustainable. Our upcycled products aim to replace purely sugar-based products with more healthy and wholesome alternatives."

## **Trending spaces**

ADM says it is innovating in several trending areas, including: expanded protein choices, balanced wellness, proactive personalisation, experiential eating and earth-friendly production, which all incorporate the use of grains.

The global nutrition company has also been focusing its efforts on the baked goods sector, as LaBine explained: "From our low net-carb flour replacer that blends speciality grains and wholesome ingredients to our baking mixes, as well as our pizza and cake flours, along with our plant proteins, and fibre and biotic solutions, we're supporting a wide range of baked goods applications with our grains to meet consumer demands and individual lifestyle needs".

In addition, ADM's MaxFlex systems of pea and wheat proteins combine the characteristics of each plant protein source, resulting in improved taste, texture and higher protein quality scores (PDCAAS from 0.89+) than the individual sources can provide, for applications like snacks, bakery items and sports nutrition products.

Grains – the powerhouses of goodness – carry a multitude of benefits, from minimising waste to maximising plant-based protein and nutrition. As grains such as oat and barley help to overcome challenges associated with taste and texture, particularly in plant-based products, such ingredients are ensuring the sector continues to flourish.

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