

# Innovative Products Tap Clean Label Trend

IFT17 innovation award winners offer solutions to today's food issues and trends of clean label, sodium reduction, and simple and rapid fat analysis for enhanced quality control.

Clean labeling—the use of minimal ingredients that consumers can easily recognize—continues to be at the forefront of new product development and reformulations in the food industry. So it's no surprise that three of the four winning entries of the 2017 Food Expo Innovation Awards are ingredients that capitalize on the clean label movement.

The 2017 IFT Food Expo Innovation Awards were presented to five companies—CEM Corp., Glanbia Nutritionals, Ingredion Inc. and AGT Food and Ingredients Inc. (joint winners), and Salt of the Earth—at the Awards Celebration at IFT17 in Las Vegas by IFT President-Elect Designate Michele Perchonok and

IFT President John Coupland. “Now in its 11th year, the Food Expo Innovation Awards program is a showcase for amazing advancements in our profession,” said Perchonok. “Exclusive to companies exhibiting at the IFT17 Food Expo in Las Vegas, these awards honor outstanding innovation in products, ingredients, technologies, instrumentation, equipment, and services that were commercially introduced since January 1 of 2016.”

A panel of eight jurors from academia, government, and industry with wide expertise in research & product development, processing & packaging technology, and food safety selected the five companies and their innovations

from 41 qualified entries. Judging criteria included degree of innovation, technical advancement, benefits to food manufacturers and consumers, and scientific merit.

## Pea Protein

Glanbia Nutritionals won the award for its *BevEdge Pea Protein*. The ingredient, which is high in lysine, arginine, and glutamine, uses a patent-pending agglomeration technology that delivers instant dispersability in liquids, an exceptionally smooth mouthfeel, and a neutral flavor profile in powdered drink mixes. The rapid hydration also minimizes dust particles in the air during blending operations. The easy-to-flavor product requires no masking agents. It is Kosher certified, non-GMO, and gluten-free, and is available in an organic version.

*BevEdge Pea Protein* overcomes the problems of clumping and a gritty mouthfeel that may occur with conventional pea protein and its clean label profile uses no lecithin, which may present clarity issues in some drink applications. The 82–86% protein (dry basis) product can be applied to whey-based, milk-based, casein-based, and plant-based formulations including hydrolysates.

A juror noted the product “addresses consumer demand for boosting protein in a beverage and provides a solution to negative textural attributes,” while another juror declared that “demand for vegetable sources of protein is likely to



*Co-developed by Ingredion and AGT Foods, Clean Taste Pulse Ingredients minimize any beany, grassy and other undesirable flavors in pulse flours and pulse proteins while delivering quality protein, overall nutritional quality, and functionality.*



**BevEdge Pea Protein** from Glanbia Nutritionals delivers instant dispersability in liquids and an exceptionally smooth mouthfeel.

continue increasing.” “Dissolution in water is a benefit searched for by beverage manufacturers; the textural benefits and the clean label are impactful,” stated a juror.

### Pulse Flours and Proteins

Ingredion Inc. and AGT Food and Ingredients Inc. were honored for their *Clean Taste Pulse Ingredients*. Co-developed by Ingredion and AGT Foods, a physical process reduces the beany, grassy and other undesirable flavors in pulse flours and pulse proteins without affecting protein content and quality, overall nutritional quality, and functionality. This flavor improvement enables food manufacturers to use the ingredients at increased levels in current applications such as pasta, snacks, bakery, and crisps, and in new applications such as alternative dairy, beverage, confectionery, and savory products.

“With one in three consumers stating that they prefer a vegetable-sourced protein to an animal-sourced protein, Ingredion’s clean taste pulses help make it possible for manufacturers to meet consumer needs and bring added nutritional balance,” stated Igor Playner, vice president of innovation and strategy, N. America, Ingredion Inc. The ingredients are inherently very high in protein and dietary fiber, are rich in minerals such as iron, zinc, and potassium, and are a source of B vitamins and folic acid.

“Flavor of plant proteins is a major hurdle to acceptance; finding a physical treatment to ameliorate the flavor would be welcome,” noted a juror.

At the IFT17 food expo, attendees sampled several product concepts made with the *Clean Taste Pulse Ingredients*. The prototypes ranged from a Burmese chickpea tofu, alfredo sauce, and baked churro to a vegan coconut milk pulse

yogurt and chocolate pulse protein spread.

### Sodium Reduction

Salt of the Earth garnered the 2017 IFT Food Expo Innovation Award for its *Mediterranean Umami BOLD*, which is a unique combination of vegetable and plant extracts and sea salt that are high in umami flavor compounds. The all natural and organic-compliant ingredient enables sodium reduction and savory flavor enhancement in a variety of applications such as meats, dips, dressings, soups, sauces, and ready-to-eat meals. Sodium reduction can range from 25% to 45%, allowing for “reduced sodium” claims. The ingredient can be labeled as “natural flavor”.

Product development utilizing the *Mediterranean Umami* in collaboration with Israeli meat companies demonstrated that a 25% to 33% reduction in sodium can be achieved across a variety of meat products, including frankfurters, sausages, and injected chicken pastrami. In addition, the ingredient was able to eliminate the use of MSG and/or yeast extracts in meat products, while keeping the desired texture. External tasting panels confirmed that the products with reduced sodium containing *Mediterranean Umami* were preferred by consumers.

A juror stated the product was “on trend and targets an important consumer need and desire (i.e., sodium reduction), doing so in a natural way which has become cost of entry in our industry.” Another juror said the

**Mediterranean Umami BOLD**—a combination of vegetable and plant extracts and sea salt—from Salt of the Earth reduces sodium and enhances savory flavor in a variety of applications.



ingredient reduces salt intake, is natural, offers health benefits to consumers, is clean label, and can be used widely as an ingredient.

### Rapid Fat Analysis

The fourth winning entry advances quality control for food manufacturers through simple and rapid fat analysis.

CEM Corp. captured the 2017 IFT Food Expo Innovation Award for its *ORACLE Universal Fat Analyzer*, which can accurately determine the fat content of any food product (known or unknown) in 30 seconds with no method development, calibration, or sample validation



**The ORACLE Universal Fat Analyzer** from CEM Corp. can accurately determine the fat content of any food product (known or unknown) in 30 seconds without the need for method development, calibration, or sample validation.

necessary. Accuracy is comparable to standard extraction methods. The highly repeatable and simple-to-operate analyzer is designed for use in R&D and technical centers as well as production labs near the plant floor.

The instrument utilizes a patented NMR technology developed in 2016 that completely isolates detection of protons on fat molecules from all other NMR signals. Each instrument comes equipped with a barcode scanner, which enables users to automatically import customer codes into sample IDs.

The analyzer “allows for rapid testing regardless of amount of fat or matrix,” declared a juror. “Cross contact and contamination is a huge issue in manufacturing facilities; this system eliminates potential for cross contamination and reuses water,” noted a juror. **FT**

**Bob Swientek** is Editor in Chief, Food Technology (bswientek@ift.org).