

# INTERNATIONAL DAIRY magazine



**Food ingredients 2015** was surely a success, both for the organizers and the exhibitors. And given the circumstances, also a little victory of the many visitors who dared to come to Paris despite the terrorist attack just a few days before the show opened.

There was no security to be seen other than the safety control at the entrance that required several visitors up to an hour of standing in line before they actually could get into the halls. On the other side, exhibitors and everyone entitled to the VIP parking lots moved in completely without any security checks. Admittedly, the press may also use the VIP services, therefore our team of editors had no problem in getting in – which did not really make one feel safer in the end when thinking about how easily a press ID card can be faked ...

Nevertheless, here's our detailed report on Fi 2015. Compare us to any other dairy industry publication: none reports faster or more detailed. To make it easier for you to get the information you need, we have put all reports under suitable headline categories.

## **VEGETARIAN AND NON-DAIRY**

### **Cargill: Soluble hydrolyzed wheat protein**



Cargill showed a new soluble hydrolyzed wheat protein named sProwLiz that is a cost-effective and sustainable source of protein. It is easy to use, has neutral taste and does not influence colour or texture allowing for the manufacturing of clear, protein enriched beverages. Processors do not need to change their processes when using such hydrolyzed proteins. On display was a sample of a highly nutritional ice cream designed for people with swallowing difficulties. The protein profile of this sample was optimized by a combination of milk and wheat protein, the fat content of 10% was delivered by coconut oil. The product had a very good texture and excellent melting characteristics.

Other samples were a 50% fat-reduced yogurt, a fruit yogurt with no added sugars and a chocolate flavored milk (using carrageenan made from seaweed).

Cargill underlined the importance of plant-based proteins with the statement that a soon 10 billion world population cannot be fed on the basis of animal protein. [cargill.com](http://cargill.com)

### **Doehler: On the non-dairy path**

Doehler had an enormous amount of product ideas at the booth. This time, quite much effort has been taken to highlight possibilities in the growing non-dairy market. Samples on display comprised products made from oat, soya, rice and almond „juice“. There was also a range of non-dairy creamers based on coconut fat that came flavoured (Caramel, French Vanilla, Irish Cream) or plain. [doehler.com](http://doehler.com)

### **SVZ go ‚vegetastic‘**



SVZ highlighted their entry into vegetable ingredients. The company can deliver individual ingredients based on veggies and fruit based on the production plants in Poland, Belgium and Spain. The expanded portfolio consists of a premium range of vegetable purees, juices and concentrates. A special focus is on green veggies like cucumber, zucchini and the like. SVZ stated that Europe is following the veggie trend in the US and Japan which already has hit the UK market.

In parallel, SVZ announced massive investment in their Tomaszow plant in Poland that will boost capacities, improve environmental credibility and add vegetable processing capacity. SVZ use self-developed evaporation technology that allows processing at very low temperatures. [svz.com](http://svz.com)

## **INFANT FORMULA**

### **‚Infat‘ for happy babies**

AAK and Advanced Lipids have introduced „Infat“ to the babyfood market. Infat means specially formulated fats for infant food formula that are produced from vegetable oils in an unique enzymatic way so that the triglyceride configuration mimics that of human milk where palmitic acid always sits in the middle of the triglyceride. Clinical trials have shown that Infat has several important benefits for intestinal health or bone

strength and that infants cry less often. AAK are partner for production and sales of Infat while Advanced Lipids are responsible for R&D and marketing. Infat comes in dry form. [advancedlipids.com](http://advancedlipids.com)

## FOOD COLOURING

### DDW: Walnut Brown

DDW introduced a new coloring food „Walnut Brown“ that is a combination of anthocyanins and burnt sugar. The water soluble liquid blend provides a rounded, chocolate-like colour opposed to a burnt sugar tan. The E-no. Free product is UHT stable and is ideal for chocolate drinks or ice cream. [ddwcolour.com](http://ddwcolour.com)

1 F GNT\_Colouring Foods in Multiple Applications.jpg

### GNT's consumer focus



[gnt.com](http://gnt.com)

GNT highlighted a recent consumer survey that TNA has made in several countries on the perception of natural ingredients and colouring foods. It turned out that 67% of consumers demand a declaration of products that they can understand. 45% of the consumers mistrust any „natural“ claims on foods and 38% want natural colorants in foods. GNT has consequently developed a proposal for labelling such as „coloured with fruit and vegetables“ – in an attempt for fully positive communication. GNT expects colouring foods to become the industry standard in the long run.

### Lycored: Natural colouring for dairy foods



One of Lycored's most important target industries for natural food colours is the dairy and cheese industry. The company is processing tomatoes to produce its huge portfolio of heat-stable colours that end up in cheese, spreads, yogurts etc. On display were samples of white yogurt on a layer of fruit prep coloured with Lycored's products. Even after 40 days storage there is no bleeding of the food colour into the yogurt.

Lycored also highlighted SANTE, a taste enhancer that can improve the sweetness profile of foods. All Lycored products are natural allowing for a clean label. [lycored.com](http://lycored.com)

## CHEESE RIPENING

### DSM: Cheese ripening solution



DSM introduced a cheese ripening solution Pack-Age. The ripening foil is the result of cooperation of material and life science research and suitable for naturally ripened, hard or semi-hard coated cheeses like Gouda, Parmesan or Provolone. DSM claim that across the industry a total of 200,000 tons of cheese would not be lost if Pack-Age (that prevents O<sub>2</sub> permeation but allows H<sub>2</sub>O permeation) was generally used. The main product waste occurs due to spoilage, slicing and grating because of the removal of dry rind and coating and can get up to a total of 30% of cheese weight. Furthermore, a yield increase of 121,000 tons could be achieved with Pack-Age, DSM has calculated, as Pack-Age eliminates the formation of strong dry rind (Parmesan-type cheeses develop only a 0.5 cm thick rind). Both factors contribute to the reduction of the amount of milk needed with 3.55 billion liters per year, equivalent to 6.25m tons of CO<sub>2</sub> emission. Pack-Age is also cost-effective as manual work during cheese ripening is reduced and there is

less product loss. [dsm.com](http://dsm.com)

## LESS SUGAR

### BENEO: Taking the sugar out



BENEO showcased possibilities for healthy indulgence. New product concepts were presented that had improved nutritional profiles that convey the great taste and appeal that consumers expect when they look for indulgent products.

Consumers don't want that much sugar anymore, Thomas Schmidt from BENEO told IDM. There is all sort of pressure to reduce sugar consumption and retailers have become a driver of the less sugar move. In this context, even small changes of sweetening concepts can make sense to bring down overall sugar consumption.

To underline that one can actually make well-tasting products that are low in sugar, BENEO had a sample of a vanilla pudding at the booth. The product was made using remyline XS rice starch and Orafit HSI inulin and it had an excellent mouthfeel although sugar was reduced by 30%. [beneo.com](http://beneo.com)

photo: Christian Jung shutterstock\_2015

### DSM: Sugar reduction, simple way



DSM pointed out that a sugar reduction in milk products can easily be achieved using their Maxilact lactase to split lactose. This has a direct sweetening effect and there is less or even no sugar or sweetener required to get to the desired results in finished products. Combined with dairy cultures, texture and mouthfeel of yogurt is retained and provides stability over shelf-life. Furthermore, DSM is working on a fermentative sweetener platform to bring flexible, reliable and sustainable Stevia to the food and beverage industry. [dsm.com](http://dsm.com)

## FUNCTIONAL INGREDIENTS

### Frutarom: Mind booster

Frutarom highlighted a bundle of functional ingredients. Holger Riemensperger, CEO of Frutarom's health division, informed IDM about the importance of vitamin K2 intake for calcium absorption. Another development of Frutarom is the botanical ingredient Neuronova that, according to several clinical studies, positively affects cognitive performance within only 45 minutes. The hyper-pure oat extract is produced by a proprietary technology and it has a neutral taste. It can be added to dairy products as well as it is resistant against heating or fermentation. A similar, although not as effective product is already in the market since Danone has launched a ginseng yoghurt in Spain. As Mr. Riemensperger said, the dairy industry really needs innovation and Frutarom can bring significant input for innovation. [frutarom.com](http://frutarom.com)



## MILK POWDER & MILK DERIVATIVES



**Nikolaj Noeddebo Knudsen, Regional Account Manager Arla Foods Ingredients, was proud of his Fi Award for Nutrillac LowCal (photo: IDM)**

### **Arla: Focus on women**

Arla Foods Ingredients focused on the different nutritional requirements of women during their life (pregnancy, sports activity, work life, elderly and so on). Nutrillac LowCal, a new protein product by Arla Foods ingredients (which has won the 2015 Food ingredients Innovation Award as Best Dairy Innovation), was developed reflecting that 50% of women think they are overweight. Two samples, a low-cal fruit yogurt (0.2% fat, 5% protein) and a drinking yogurt (4.2% protein), illustrated that it is possible to achieve well tasting low-cal products that even have a superb texture and create a satiety effect – all with a clean label. Arla reported a very good response from the Fi visitors for the new solution.

Another solution for the elderly generation is Arla's 'Ageless' concept. It brings the necessary proteins without compromising product viscosity or mouthfeel/taste. The ingredient Capolac stands at the core of the concept which was illustrated by a high-quality super-indulgent dessert that had 3.5% fat and 7.5% protein and was made using fresh cheese cultures. [arlafoodsingredients.com](http://arlafoodsingredients.com)

### **Biocatalysts: Better whey protein hydrolysate**

Biocatalysts introduced a new enzyme for whey protein hydrolysis. The resulting product is bland and non-bitter. Promod 782MDP can be used alone or with flavour enhancing enzymes to achieve a superior tasting whey protein hydrolysate. The company also launched a new website at the occasion of Fi. [biocatalysts.com](http://biocatalysts.com)

## DMK INGREDIENTS under one umbrella



DMK INGREDIENTS, DP Supply and wheyco made their first appearance as a single unit. The new key visual with the slogan of “Food Solutioners” highlights the different strengths of the DMK GROUP’s business unit and wholly owned subsidiaries.

**DMK INGREDIENTS** showed a new range of crumbs with a strong caramel flavour for the production of different varieties of chocolate. An out-of-the-ordinary feature is that the intense caramel note comes from a special preliminary process during drying. And because no additional flavourings are used, the crumbs are also an attractive solution from the clean label point of view.

Another novelty is especially low-germ skimmed milk powders that are particularly suitable for manufacturing sensitive products such as baby food or recombined dairy products. These powders have a particularly low thermophilic bacteria count, which is ensured by a secure process.

New to the portfolio of **DP Supply** are whipped products that can be used as cream substitutes and are based on a mixture of dairy and non-dairy fat or on non-dairy fat only as required. These products also include new cappuccino foams, which are particularly in demand in the European market.

**wheyco** presented a new WPC 80 in instant quality. In addition to its excellent taste properties, the product is easy to disperse in cold water or cold milk. It is suitable for both dry mixes and end products requiring quick solubility – sports drinks, for example. wheyco uses sunflower lecithin for instantising. Unlike soya lecithin, it does not have to be listed as an allergen. [dmk.de](http://dmk.de)

### Fonterra: GOS available

Fonterra announced that GOS (galacto-oligosaccharides) made from lactose will be available commercially from 2016 on. The product will be sold under the NZMP brand worldwide to customers in the infant formula business. Customers can benefit from Fonterra’s size, scale and ability to supply globally. Producer of GOS is Dairy Crest in the UK who has invested 20m pounds in a 10,000 ton manufacturing capacity at the Davidstow site. [fonterra.com](http://fonterra.com)

Vana Cappa 26W winner FiE innovation award 2015.jpg

### FrieslandCampina Kievit: Extra texture foaming creamer



FrieslandCampina Kievit has won the FiE Innovation Award 2015 in the category ‘Best Beverage Innovation’. The FiE Innovation Awards jury recognized the innovative nature and added value of FrieslandCampina Kievit products in two areas: Vana-Cappa 26W has won the FiE Innovation Award in the category ‘Best Beverage Innovation’ and Vana-Monte DP96 was nominated as a finalist in the category ‘Best Bakery Innovation’.

Vana-Cappa 26W is an ‘extra texture’ foaming creamer that meets consumer needs for an indulgent café-style coffee at home. It turns an instant Italian-style coffee into an indulgent experience with improved foam

texture, structure, stability, and a delicious taste. Vana-Cappa 26W is based on non-HVO refined coconut oil and meets consumer needs regarding health consciousness and more natural ingredients.frieslandcampina.com



**Joeren Derks (left), MD Milk & Whey Ingredients at Sachsenmilch, and Dr. Hans Besner, Head of Technology and R&D in the Müller Group: Sachsenmilch's production is research oriented and not driven by installed capacities (photo: IDM)**

#### **Sachsenmilch in Top 5**

Sachsenmilch told visitors of Fi that it has grown into the Top 5 league of functional milk protein suppliers worldwide. The company is part of the Müller Group and runs the world's biggest UF and MF whey separation operations. Next year, Whey Processig Plant No. 5 will go in operation at the huge Leppersdorf plant boosting Sachsenmilch to become the world's biggest manufacturer of lactose with a capacity of 85,000 tons, most of it in dry-mix quality. In contrary to former times, Sachsenmilch today is selling 95% of its products directly to customers in the babyfood, sports nutrition and beverage industry. As Joeren Derks, MD Milk & Whey Ingredients at Sachsenmilch, and Dr. Hans Besner, Head of Technology and R&D in the Müller Group, told IDM, Sachsenmilch's production is research oriented and not driven by installed capacities which is highlighted by the fact that there are six experts employed for R&D in Sachsenmilch's dry products department with another 10 people working in the background on applications as customers today expect 100% advise. sachsenmilch.de

#### **Valio: Fully traceable dairy ingredients**



Valio introduced new entirely soluble lactose free milk powders. Valio Eila milk powders have higher protein and lower carbohydrate content than standard milk powders, which makes them an ideal choice for sport nutrition and dietary applications.

Valio Demi demineralised whey powders are manufactured from Valio's own fresh whey – with over 90% of Valio's whey dry solids being processed for human consumption. Valio Demi in infant formula and baby food creates a whey/casein protein ratio similar to that of human breast milk. [valio.com](http://valio.com)

## R&D

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### NIZO Food Research and Ruitenber



NIZO Food Research developed usable, functional and tasty fibrous plant proteins that can be used in vegetarian products. This fiber's taste and texture (mouthfeel) is as good as meat's, with excellent juiciness and bite.

Development partner is Ruitenber, a company that pioneers creative, innovative solutions for the food industry. Ruitenber is developing an industrial production process for the fibrous plant proteins. At their production facilities, NIZO's special treatment processes that maintain the fiber's functionality and efficacy are being scaled up for mass production. [nizo.com](http://nizo.com)

## FRUIT PRODUCTS

### Inclusions in endless variations

Taura Natural Ingredients, specialist for premium fruit products with long shelf-life in customized solutions, can supply tailor-made ingredients for ice cream inclusions or top-cup applications in dairy. Starting from fruit juices, the composition of the final products has virtually no limit. Any blend and formulation with or without sugar is possible. The products come with a water activity of less than 0.5, have a 18 month ambient shelf-life and can be supplied in various shapes and sizes. And the products are all clean label and natural. Currently Taura, who have been acquired by Frutarom in June 2015, sell about 4,500 tons of their products in the EU with a focus on bakery and confectionery industries. Taura CEO Peter Dehasque told IDM that his products are ideal also for milk products destined for the snacking market. [taurauc.com](http://taurauc.com)

## NUTRITION & INDULGENCE

### Barry Callebaut: Indulgence for all



Barry Callebaut celebrated the 175th anniversary of the Bensch brand and highlighted also their ability to supply solutions based on cocoa powders and chocolate. Analysis of consumer trends has convinced the company that consumers get ever more demanding which opens the way for indulgent innovations in the mass market.

Areas of growth for food manufacturers are out of the sight of Barry Callebaut: „Home“ (dining is out), „Clean, Clear, responsible“ („green“ is no longer an adequate label, consumers want clean and clear messages), „Wholesome Choice“, „Premium vs. Value“ (mainstream is a dead-end road for food makers) and „My“ (individual products). [barry-callebaut.com](http://barry-callebaut.com)

### Glanbia Nutritionals



Targeting healthy immune development and strong bone growth in children, the gluten free Mighty Morsels Breakfast Boost is a nutritious breakfast snack containing Bioferrin 2000 (lactoferrin). Also included in the breakfast bar is MenaQ7 PURE, a nature-identical synthetic Vitamin K2 as menaquinone-7



(MK-7) which helps to bind calcium for stronger bones, and GanedenBC30, an extremely shelf-stable probiotic for use in products outside the realm of yoghurts. [glanbia.com](http://glanbia.com)

#### **Sensient: Smell the sweetness**

Sensient's sweet segment (dairy, confectionery, baking) focuses on clean label, health, wellness and indulgence. During production of its flavours, Sensient minimizes the stress on the product by a unique extraction technology. Such extracts even allow for „smelling“ sweetness or they can boost dairy notes opening the way for innovation with premium products. Sensient's inclusions plant in Belgium has developed a caramel sauce for ice cream the has a 30% sugar reduction. To demonstrate its capabilities in caramel, inclusions, sauces and decoration, Sensient had a selection of delicious filled chocolates on display. [sensient.com](http://sensient.com)

#### **STABILIZERS & TEXTURIZERS & Co.**

##### **Hydrosol: Concepts for vegan and dairy**



Cheese and deli food makers can benefit from the growing vegan trend as Hydrosol offers new functional systems that are completely free of animal ingredients, for the production of vegan cheese alternatives, spreads and mayonnaise varieties.

Hydrosol also demonstrated innovative product ideas for dairy food makers. A new stabilising system lets dairies present yogurt, quark, sour cream and buttermilk in exciting new ways, as savoury or sweet cubes that have a host of uses and have already found place on the market. The final products are ideal as low-fat alternatives to feta cubes for salads, convenience foods and snacks.

Hydrosol presented also stabilising systems for making whey drinks and high-protein yogurt products, for drinking or eating with a spoon.



##### **ICL: Phosphates meet proteins**

**Photo: Dr. Alexander Smerz and Dr. Anne Grünhagen demonstrated what phosphates and protein can achieve in combination (photo. IDM)**

ICL demonstrated what a suitable combination of proteins and phosphates can achieve. On display was a mango protein beverage that had 4.5% protein and was nevertheless clear and had no pff-taste. The protein content can go up to 10% if desired. There were „Gout Gougere Goodies“, a French pastry in a savoury cake pop that had no pyro off-taste baked without egg. And there was an excellent creamy grapefruit liquor that is especially easy to manufacture using ICL's ingredients. ICL highlighted that it is perfectly backward integrated as Rovita/Prolactal are part of the group. [iclfood.com](http://iclfood.com)

##### **Roquette: Non-dairy indulgence**

Roquette employed a 2 Michelin star chef for cooking live at the show booth using the company's wide portfolio of ingredients. Among the creations of the chef was a high-protein dessert for gourmets, a 100% veggie, creamy, Panna Cotta like product. Using Nutralys proteins, the dessert had significantly lower fat than the dairy based original. Roquette's dessert was non-GMO, protein-rich and lactose-free.

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