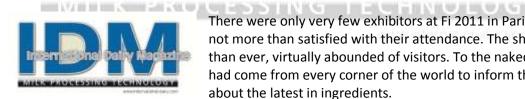


#### Fi 2011

#### 25<sup>th</sup> anniversary – bigger and livelier that ever



There were only very few exhibitors at Fi 2011 in Paris that were not more than satisfied with their attendance. The show, bigger than ever, virtually abounded of visitors. To the naked eye, they had come from every corner of the world to inform themselves about the latest in ingredients.

The IDM team has spent all of 3 show days to snoop for innovation. The following pages show the "truffles" that we found in Paris. For ease of "navigation", we have put the company names in alphabetical order ...

#### ΑΑΚ

#### Ice cream with less saturated fat

AAK call themselves the world's leading supplier of specialty oils and fats for food, incl. infant nutrition. At Fi, the company presented oil blends for infant formula with customized fatty acid composition offering advantages over the use of single oils at the manufacturer site. Akomix LS, another product; can reduce the saturated fatty acids content in ice cream by over 70%. aak.com

#### ADM

#### deZaan Fresco Cacao

ADM Cocoa showed a new range of cocoa products with a fresh, mildly fruity cocoa taste. The deZaan Fresco Cacao range includes a cocoa powder, cocoa mass and chocolate, to give manufacturers the ability to add value and a delicate chocolate taste to products where bitter cocoa flavours can result in an unacceptable taste combination, dairy products included. adm.com

#### BASF

#### New market initiative "Think Newtrition"

BASF's new global market initiative Think Newtrition was launched to strengthen and expand BASF's position as a market-oriented and innovative partner in the food and dietary supplement market segments. "With Think Newtrition we're starting a sustainable and continually expanding open dialog with market experts and opinion leaders to define the unmet needs of producers, retailers and consumers of future nutrition," said Ed Gallagher, Vice President Human Nutrition Europe.

#### New whipping agent

The new whipping agent Lamequick Sun 40 based on sunflower oil is a healthier alternative to conventional whipping agents for desserts and baked goods with cream fillings. Its monounsaturated and polyunsaturated fatty acids improve the nutritional value of products. Lamequick generates high volumes even at low doses; desserts such as mousses made with Lamequick have the same taste of conventional products while at the same time reducing the intake of saturated fats. basf.com

# WHOLE GRAIN RICE CRAIN RICE

beneo's new RemyLiVe ingredient can be used as base for rice drinks (photo: beneo)

#### beneo Tech Center

beneo

beneo informed about their new Tech Center that was now established 2 years after the beneo Institute. The Center will employ 25 of staff (plus several employees in the market companies) and concentrate the group-wide knowhow in applications and ingredients, backed by mother company Südzucker's R&D facilities.

With "Remy LiVe", the company introduced shelf-stable (> 1 year) rice bran that has all the nutrients contained in the rice shell and germ. The product is positioned as a nutritional ingredient. To ensure max content of nutrients, fresh rice bran is processed within only 5 hrs at a partner plant of beneo in the US. Marketing Communication Manager Tim Van der Schraelen told IDM about the excellent texturizing characteristics of RemyLiVe. The ingredient can be used as base for rice drinks, a growing market segment (as rice is non-allergen, contains no gluten and a number of micronutrients), which can provide dairy companies

with new market opportunities (see graph "Most popular dairy alternatives in Europe"). beneo.com

#### Bolasco

#### Expanded portfolio of functional fruit solutions

bolasco functional fruit solutions has added two new brands to its portfolio of quality ingredient solutions this year, Sun-Maid soft raisins and Cherry Central's portfolio of fruit ingredients.

Sun-Maid raisins are extremely process tolerant, suited for dairy applications. Cherry Central provides cherries, blueberries, pomegranate kernels and blackcurrants, known for their functional and nutritional benefits, such as high antioxidant levels. These fruits join Ocean Spray cranberries, Blue Diamond almonds, Chiquita banana, Sunsweet prunes, Niagro acerola cherries and BerryFruit boysenberries in the bolasco functional fruit portfolio. bolasco.de

Carbery Whey-based ingredients Carbery launched a comprehensive portfolio of whey-based ingredients for healthy ageing. Loss of lean tissue mass, sarcopenia, is one of the focus areas of the new portfolio. Consumed as a part of an active lifestyle, whey protein supplementation is rich in BCAAs which promote muscle mass and strength, helping adults enjoy life to the full in later years. carbery.com

#### Cargill

#### **Texturizing challenges**

Cargill demonstrated how it can address texturizing challenges – from cost optimization (ingredient and production) and the replacement or reduction of ingredients, to clean label requirements. Some of the prototypes addressing texturizing challenges:

- Improved texture acid dairy drink with improved texture and taste. A silky smooth and pleasantly fruity dairy drink, formulated with pectin from Cargill's Unipectine AYD series, this prototype displayed how specially-designed and standardized pectin can be used to stabilize acid dairy drinks and provide improved texture and taste.
- Strawberry yogurt this prototype features Cargill's Lygomme OFY functional systems series, which delivers a well-balanced fruit distribution and smooth, 'pumpable' texture. In post reaction, Lygomme OFY also improves the texture and creaminess of the yogurt and avoids syneresis.

cargill.com



Jan Aschemann (left) and Thomas Reiner, both Chr. Hansen, presented the first credible concept for probiotic fruit juice at Fi (photo: IDM)

Chr. Hansen Fruit juice with probiotic culture

Chr. Hansen presented as a worldwide first a concept to manufacture probiotic fruit juice. The concept is called L. casei 431 Juice and basespon the probiotic L. paracasei 431 culture. The helath effects were (EFSA-solid) documented in dairy products and dietery supplements. Chr. Hansen says that juice with the culture keep probiotic characteristics (> 10<sup>6</sup> CFU/ml) for over 7 weeks. There are no side-effects like gassing or off-taste as the culture does not ferment fruit juice. To avoid recontamination, Chr. Hansen and Tetra Pak have jointly developed an inoculation system that uses DVS cultures. chr-hansen.com



With MultiSweet Stevia, Doehler presented natural solutions for sugar reduction (photo: Doehler)

### Doehler

#### MultiSweet Stevia

MultiSweet Stevia is a sweetener with outstanding sensory properties. Sweetness Improving Technology (SIT) ensures an especially near-sugar taste. For the claim "with no added sugar", MultiSweet Stevia can be combined with MultiSweet Fruit, a range of partially decoloured or partially deacidified apple juice

#### concentrates.

In addition, Doehler unveiled innovative flavour technologies for natural and sensorially optimal calorie reduction. doehler.com



DSM introduced "Total dairy solutions" - the company is now a full-scale/one stop-shop supplier for each part of the dairy supply chain (photo: DSM)

#### DSM Total dairy solutions

DSM introduced "Total dairy solutions" - the company is now a full-scale/one stop-shop supplier for each part of the dairy supply chain. Starting from dairy cow health (feed supplements, antibiotic tests) the offer ranges to enzymes (such as lactase or rennets), cultures

and a range of natural solutions such as Delvocid (natamycin), Delvocoat (cheese coatings), Delvozyme (lysozyme against late blowing in cheese) and Delvo nis (antibacterial peptide against pathogen bacteria). All this is backed by scientific expertise, applications labs and the almost global presence of DSM. Nutritonal Solutions supplied by DSM Nutritional Products, such as caronete, DHA etc., complement the offer.

So-called Quali-Blends reduce complexity in the value chain by bringing together R&D, manufacturing, purchase, marketing, QM and supply-chain excellence in the DSM group. At Fi, DSM showed a new vegetarian DHA Omega-3 product. The algae-derived DHA has proven (EFSA approved) health effects and can be added to dairy products. Organic liquid milk in North America, cheddar sticks or yoghurts with added DHA have for long been in the market. dsm.com

## International Daity Nagazina



Jens Bleiel, CEO Food for Health Ireland: Our ambition is good science rather than a rush to the market (photo: IDM)

#### Food For Health Ireland

Food for Health Ireland (FHI) is a partnership set up in 2008 between four of Ireland's public research organisations (University College Cork, University College Dublin, University of Limerick and Teagasc Food Research Centre, Moorepark) and four dairy companies (Carbery, Dairygold, Glanbia and Kerry). FHI's participants have established a multi-location, multidisciplinary food research centre that aims to address some of world's most pressing health issues. With a focused 'bench-toconsumer' approach, FHI seeks to develop, and ultimately manufacture and market, functional food ingredients that target metabolic health, infant development, infection/immunity and healthy ageing.

FHI's programme, supported by the Irish government through Enterprise Ireland, involves a sophisticated pre-competitive

search for functional milk-derived ingredients using 'intelligent' mining tools. One of the focus areas is sustainment of muscle mass to allow consumers an independent living. The basic studies have been modeled in a way that FHI can apply for claims at EFSA. FHI CEO Jens Bleiel told IDM that his ambition is good science rather than a rush to the market. fhi.ie



The Exberry range stands for colouring concentrates made from ripe fruits, vegetables and other edible plants – GNT's booth at Fi really reflected the world of colors (photo: IDM)

#### GNT

**Colouring foods taking the place of E numbers** GNT Group showcased the diverse spectrum of colouring foods made from edible fruits, vegetables and plants. The Exberry range stands for colouring concentrates made from ripe fruits, vegetables and other edible plants, derived through physical processes without the use of organic solvents.

The colouring foods range can be used without limitations and does not require additive labelling, E numbers or warning notices, and thus are suitable for clean label products. GNT

stressed that it manages the whole supply chain – from the selection of seeds through to the final processing.

#### **Balanced nutrition**

With Nutrifood, GNT has developed an ideal solution for balanced yet uncomplicated nutrition. The concentrates from fruits and vegetables are manufactured using gentle physical processes and are a source of phytonutrients. They can be applied in food, drinks and nutraceuticals. Nutrifood doesn't contain additives and allows for Clean Label formulations. gnt-group.com

#### IDI

**Cheese technology revolution** 

## neese technology revolution O CESSING TECHNOLOGY

IDI, as part of INGREDIA group, introduced its latest innovations in its two products ranges proteins & functional systems. Cheesing'up is an innovative cheese-making process designed to enable the production of a wide range of cheeses without whey separation, by combining protein, water and fat. Compared to traditional cheese production, Cheesing'up simplifies the production process by reducing the number of steps. Beyond improved flexibility, this new technology also reduces operational costs and investments. idi-ingredients.com



Textur-Melt LS-50 is a 1:1 replacement for traditional emulsifying salts (photo: Innophos)

#### Innophos

#### Sodium reduction "easy cheesy"

Innophos, one of the world's leading producers of speciality phosphates for the food industry, launched a sodium reduction ingredient for the cheese industry. Textur-Melt LS-50 is a carefully-balanced blend of potassium and sodium phosphates which allows processors to reduce the sodium content of their products by 15% to 35%. At the same time, it boasts "outstanding" emulsifying properties for optimal texture and retains the desired flavour profile of the product.

Developed primarily for processed cheeses popular in the convenience food, sauces, snacks and foodservice sectors, Textur-Melt LS-50 is incorporated

easily into existing production processes and is designed to be a 1:1 replacement for traditional emulsifying salts. innophos.com



Lonza announced a global commercial partnership with Lipogen for the exclusive rights to sell PS (photo: Lonza)

#### Lonza Partnership with Lipogen

Lonza announced a global commercial partnership with Lipogen for the exclusive rights to sell phosphatidylserine (PS) and PSbased formulations. PS is the only cognitive health ingredient in

the US which received a qualified health claim from the FDA. Lipogen PS also obtained FDA affirmed GRAS status. Lipogen is one of the world's leading suppliers of PS and phosphatidic acid (PA). lipogen.co.il; lonza.com

#### LycoRed

#### Boosting the milk market with Milk V

Tnuva, Israel, has launched Milk V for children. With double the calcium content and increased levels of vitamin D, Milk V relies on the CapsuDar vitamin D solution provided by LycoRed, Israel, which was involved in the development of the product. LycoRed developed a formulation structured for pasteurizing that performs well under a wide range of pH. CapsuDar vitamin D formulation is microencapsulated food grade cold water dispersible, protecting it from oxidation. All ingredients of the CapsuDar formulations are GMO and allergen free.

LycoRed informed also about the appointment of Ilan Ron as VP Global Marketing & Sales for its international and domestic markets. lycored.com

#### Meggle MPI-85

Meggle has become exclusive distributor for Idaho Milk Products' MPI-85 Milk Protein Isolates in Europe, Africa and the Middle East. Idaho Milk Products is a private milk processor that manufactures MPC. MPI, milk permeate and cream derivatives. meggle.de

#### Molda

#### **Special mixes**

#### AMARINE CONTRACTOR CONTRACTOR

Molda introduced a new Florentine mix with low melting point. Products can be made at lower temperatures, fruit granulates or fruit juice powders can be added without problem. The mix can for instance be a component of twin-pot yoghurts.



Molda are specialists in drying and manufacture some 25,000 tonnes of product a year. 50% of this is contract manufacturing. The company has virtually all drying processes at hand, spray, roller, vacuum belt and freeze drying. molda.de

National Starch/ Corn Products International have developed a nonbitter Stevia sweetener (photo: Nat. Starch)

#### National Starch Stevia without bitterness

National Starch informed about implications from the recent takeover of Corn Products International. The joint portfolio was enhanced by the deal and both companies' combined expertise and market knowledge allows National Starch to better anticipate and respond to market needs for functional and nutritional ingredients. One new product derived from combined knowledge is Enliten Reb A stevia high intensity sweetener without bitterness. The product has "excellent" stability in process and can be combined with other ingredients. It is available as granulate or powder. foodinnovation.com



Emily Lauwaert showing Roquette's new premium-quality dairy-free dessert concepts (photo: IDM)

#### Roquette Indulgent desserts, dairy-free

Roquette had two excellent formulations for dairy-free desserts, one frozen, on their stand. One was a Panna cottatype treat, the other a chocolate frozen dessert. Both products were formulated using "Nutralys" branded pea protein and were fully convincing in terms of texture, mouthfeel, taste and appearance. If IDM editors had not known the products were

plant-based, they would have sworn they were samples of premium desserts in the market. Roquette combines 100% vegetable and 100% indulgence under the label VegDelight – the pea protein in use is a highly purified isolate with optimized sensory profile, emulsifying and viscosifying properties and comes from a sustainable source. The product is lactose-, gluten- and GMO-free, no allergen warnings are required in labelling. pea-protein.com/roquette-food.com

#### Solae

#### New soya ingredients

Solae showcased new solutions for bars that will help advance food manufacturers' offerings in the market. The company introduced a new protein and fibre nuggetand a new soya protein isolate. Supro Nugget 138 is a soya protein nugget composed of 40%t protein and 30% fibre. It provides high quality protein and both insoluble and soluble fibre in a textured form versus liquid or powder. Supro 430 is a soya protein isolate developed to replace more expensive dairy proteins in bars while maintaining textural and eating qualities. Supro 430 also works well in combination with dairy proteins. Data shows that Supro 430 can help reduce firmness in bars containing whey protein concentrate. Isabelle Ardevol from Solae told IDM: "There is a growing consumer group that lives either from animal or vegetable protein. But the preference can change from day to day. We call these people Flexitarians. That consumption behaviour opens new possibilities for the dairy industry as soy and dairy protein are an ideal fit in many applications." solae.com



Candurin Red Sparkle is a new burgundy red, glittering pearl effect color that can replace insolube colorants (photo: Merck)

#### Merck

#### New pearl effect color

Merck presented the new pearl effect color Candurin Red Sparkle, a burgundy red, glittering pearl effect color. Due to its large particle size, the product makes ice cream, chocolate and beverages glitter brilliantly, lending them an irresistible look. This gives food manufacturers ways to differentiate their products. Candurin Red Sparkle is based on natural silicate and

iron oxide and is thus a non-artificial colorant. This enables formulators, food manufacturers and marketers to use the "no artificial colors" claim.

In addition, in contrast to other red, natural colorants, Candurin Red Sparkle has exceptional thermal, light and pH stabilitymaking it suitable for replacing insoluble red food colorants. merck4food.com



Ocean Spray Cranberries and Complete Phytochemical Solutions cooperate for a cranberry based/cranberry specific PAC standard (photo: Ocean Spray)

Ocean Spray ITG

#### **Specific PAC standard**

Ocean Spray Cranberries and Complete Phytochemical Solutions announced their collaboration on a project to improve the accuracy of measuring and quantifying of proanthocyanidins (PACs) in cranberries. The goal of the collaboration is to develop a cranberry based/cranberry specific PAC standard (derived from cranberry fruit) as an alternative to the Procyanidin A2 (dimer) standard currently utilised in the DMAC method.

A standard is required as scientific studies have shown that cranberries contain unique A-type PACs that may "help reduce the adhesion of certain E. coli bacteria to the urinary tract walls," with a minimum of 36 mg cranberry PACs delivering an efficacious dose. Doubts have arisen, however, over the accuracy of the current methods of PAC measurement in cranberries. oceanspray.com



Satro, functional blend specialist for dairy applications, has developed a new customizable, functional blend solution that enables the dairy industry to manage high cocoa prices by providing delicious chocolate desserts or cocoa milk mix drinks using a cocoa replacement system (photo: Satro)

#### Satro

#### **Functional blends**

Satro's technologists have designed cocoa replacement systems based on carob powder for milk mix drinks (Trolamix), and desserts (Lacmiral). These functional blend solutions provide

taste, texture and mouthfeel in a similar quality to full-cocoa formulations. Satro's functional blend solutions from the Acilac js range offer high gel strength and exceptional water binding properties in Greek-style yoghurt applications. Based on a combination of highly functional milk proteins with hydrocolloids, starches or gelatine, Acilac js blend solutions are efficient texture builders, even at a small dosage. The blend gives improved viscosity and a creamy mouthfeel and appearance. Acilac ms, even at a small dosage, supports the structure of the product while having a neutral flavour. This functional blend gives direct quark a full-bodied texture and improved viscosity. Its excellent waterbinding and gelling properties prevent the curd-like product from syneresis. satro.de



Cardea features colouring solutions composed of exclusively natural raw materials (photo: Sensient)

#### Sensient Food Colors New range of colouring solutions

After the roll-out of the Fusion Imagine Nature brand, Sensient extends its natural portfolio by the Cardea product line. Cardea features colouring solutions composed of exclusively natural raw materials. The innovative Cardea range provides clean labelling and offers a natural positioning. As a special

feature of Cardea, the colouring principles are formulated either as water or oil soluble options, permitting maximum applicability in food systems.

Cardea contains ony fruit and vegetable extracts and concentrates such as paprika, red beet, apple, carrot and spinach. sensient-fce.com



Creamiz can be used as fat replacer and/or creaminess enhancer in ice cream. Production on standard food manufacturing lines does not require any change in the manufacturing process (photo: Tate & Lyle)

## Tate & Lyle

#### Enhancing the creaminess of ice cream

Tate & Lyle has created two new prototypes to demonstrate how ice cream manufacturers can boost the creamy taste of their products with Creamiz. Premium Ice cream Create has an enhanced creamy texture, the prototype illustrates how Creamiz can supplement the indulgent mouthfeel of

traditional ice creams, without increasing the levels of fat, and at a low cost in use.

For manufacturers looking for solutions to lower both the fat content and control the cost of their ice cream products, Tate & Lyle has developed the Optimize prototype. Although dairy is key to the mouthfeel of ice cream, using Creamiz as a fat replacement ingredient can help manufacturers reduce an ice cream's fat content by 20% and deliver significant cost savings, while retaining the product's original creaminess and texture.

Tate & Lyle's new soluble fibre, Promitor Soluble Gluco Fibre, offers food and beverage manufacturers a consumer friendly and cost-effective solution to boost fibre content of their products. This dietary fibre newly made in Europe offers excellent tolerance levels and provides attractive label options.

Because the demand for Splenda Sucralose continues to grow strongly, Tate & Lyle is currently investing in additional production capacity for its high intensity sweetener by restarting its mothballed sucralose production facility in McIntosh, Alabama, USA. Tate & Lyle has also entered the natural intense sweetener space this year with Purefruit Monk Fruit Extract, a fruit-based, calorie-free sweetening ingredient. tateandlyle.com



Vegetable fat components such as essential omega 3 and omega 6 fatty acids as well as MCT become increasingly important for product formulation (photo: Uelzena)

## Uelzena

#### Healthy fatty acids

"Healthy fats" are a nutritional issue that is gaining more and more importance. The Health ingredients range developed by Uelzena comprises various products, which contain valuable functional fat components. High

in unsaturated fatty acids or MCT from vegetable origin, these products combine health benefits with excellent sensory properties and easy application technology. Areas of application include ice cream & dairy products. uelzena.de



The new ParadICE fruit pieces can be added directly to ice cream (photo: Unterelbe-Frucht)

#### Unterelbe-Frucht Fruit inclusions

Unterelbe-Frucht showed new ParadICE fruit pieces that can be added directly to ice cream or frozen desserts without affecting the semi-chewy characteristics of the fruit piece. "In a variety of fantastic flavours including 'superfruits' such as Blueberry and Pomegranate, this is something quite different for the industry" said Kurt Hoffmann, Director of Sales and Marketing.



Unterelbe's 'Only-Fruits' range that offers over 700 SFE (single fruit equivalent) is made from 100% fruit derived ingredients and comes in a variety of shapes and textures. paradies-fruechte.com

Extracts from the microalgae species Spirulina deliver one of the first natural blue

#### colourings for food (photo: Wild)

## Wild

#### Natural sweetening

Wild showed "Taste Optimizing" solutions for use of Stevia as sweetener. The company has taken a share in Sunwin International, major player in the Stevia market, to guarantee continuous supply of high-quality extracts. Wild has developed a bundle of solutions for different applications, based on its sensory panel, that mask bitter off-taste.

Wild's new "Sweetness Enhancing Technology" allows manufacturers to offer products with a lower sugar content but improved sweetness. wild.de



At Fi, Jan-Boeg Hansen, Sales Director Cultures at DSM Food Sepcialties, informed about the new Business Unit Cultures within DSM. The unit was set up in 2011 and runs 2 culture productions (in USA and Australia). A new pilot plant for the culture business will become operative in late summer 2012 in Delft, The Netherlands. R&D will target on ethnic solutions and adjunct cultures and cooperate with DSM's Biotech Center that employs a total of >400 scientists (photo: IDM)



www.mtemat.opai.com.com



Taiyo Europe introduced emulsifiers for spreads and margarine. Josef Skrna (photo) explained to IDM that the range of emulsifiers consists of a blend of PGE and monogylcides that have a special beneficial effect in edible fats. The new range met high interest from visitors of the show (photo: IDM)



The Stern-Wyviol group had actually two stands at the show to cope with the number of visitors. One booth was fully dedicated to services & solutions provided by Hydrosol (photo: IDM)



Roger Altsäter, Managing Director ASM Foods: We were very satisfied with Fi 2011. We have met new customers and existing important customers as well. Quality and number of visitors at our booth were absolutely satisfactory. ASM Foods are suppliers of chocolate, toffee and fruit preps for the ice cream, dairy and dessert industry (photo: IDM)