Insight AAK Magazine

The Co-Development Company

#4, May 2017

AAK broadens its nutritional focus, pages 4–5 Power to the plants, pages 8–9 The impact of millenials, pages 10–11



Dear readers,

A very warm welcome to another edition of AAK's customer magazine *Insight*. This time we will take a closer look at our newly established Special Nutrition segment. This segment, made up of Infant, Medical and Senior Nutrition, is an important part of our new company program The AAK Way, and the opportunities within the different nutritional markets are both many and very interesting.

The idea behind The AAK Way is to build upon the strong foundation that our former company programs AAK Acceleration and AAKtion so very successfully have created. The AAK Way is built up by a number of important projects and in this magazine we will explain our ambition with the program and what value it will bring to you as a customer.

Millennials - who are they and what do they want?

For companies within the food industry it is always important to study global demographic changes as trends and tastes tend to shift from one generation to the next. With the so called millennial generation now being the largest consumer group in the world this has become more important than ever.

Millennials are customers born between 1980 and 2000 and this generational cohort provides opportunities as well as certain perils, something that we will take a look at in this magazine.

Dairy alternatives is a good example of a category that millennials, for a variety of reasons, are interested in. Whereas these alternatives earlier were limited to vegans or vegetarians and people with special dietary needs, there is today an increasing amount of consumers who actively choose these products. On pages 8–9 we investigate the fast-growing market of plant-based dairy products.

The Co-Development Company

We also give concrete examples of what it means to be the Co-Development Company. We have asked colleagues from different parts of the organization to share some of their recent co-development stories, and to explain how our customer value propositions for health and reduced costs have helped our customers improve and grow their businesses.

If you have any comments or questions about the content of the magazine or if you have suggestions for future articles, please don't hesitate to talk to your AAK representative or contact us via insight@aak.com.

Wishing you an insightful reading.

Arne Frank CEO and President



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Editorial group

Henning Villadsen, Christian Robèrt, Nevin Belul, Bodil Granroth, Rasa Moorthamer, Anne Brødsgaard, Leaslie Carr, Çağla Yazıcı, Jaroslaw Bogusz, Christine Å. Stenbeck

Contact

insight@aak.com

Production: JohnJohn Konsult AB Photographs: AAK, Thomas Hergaard, www.benfoto.se, marchello74/Shutterstock.com Print: Exakta







Excellence

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People



The end of 2016 also marked the end of AAK's company program AAKtion, a program that successfully has guided AAK over the last three years. To build upon the strong foundation AAKtion has created, AAK launched a new three-year program, The AAK Way, in January 2017. *Insight* asked Anne Mette Olesen, AAK's Chief Marketing Officer, to explain the idea behind The AAK Way.

Market

AAK Way of Selling



Focus Areas

/+ DBO - Products

> Anne Mette Olesen Chief Marketing Officer

First of all, how would you summarize AAK's three years with AAKtion?

It has been tremendously encouraging to see the strong commitment to and engagement in AAKtion across all of AAK. We are happy to say that the overall implementation of the program has progressed really well over its three years and resulted in a lot of achievements to be proud of.

During AAKtion our global footprint has been strengthened and new members have joined the AAK family, creating a very strong platform for our Sales and Customer Innovation activities. Furthermore, we have established our sourcing operations in Singapore together with our traceability procedures on palm oil. Both will serve as a solid platform for our continued progress within this important area.

What is the ambition for The AAK Way and how is it to be achieved?

The program should enable us to even better meet the needs of our customers and thereby increase our organic growth in general, specifically within our speciality and semi-speciality solutions.

We have identified five focus areas that we believe will help us to achieve this ambition: Go to Market, Operational Excellence, Special Focus Areas, Innovation, and last but not least, People.

These five focus areas consist of ten global projects which all represent different areas that we believe hold additional potential for delivering on our customers' needs and expectations and that will strengthen AAK in the short and long term. A stringent program management, strong project management for each of the projects, and good support from global and local KPIs are important elements in delivering a successful program.

What value will the program bring to AAK's customers?

We are confident that our customers will experience improvements through each of the projects within the program. Our Go to Market projects will strengthen our ability to create lasting business value together with our customers. With our Operational Excellence projects we are aiming at sourcing our raw materials even more sustainably and cost-effectively, further improving our cost-effectiveness and production flexibility and ensuring delivery on time and in quality.

Special Focus Areas represents business opportunities with significant potential that we want to mobilize by being even better at meeting our customers' needs within these areas. With our Innovation project we are aiming to be in a league of our own at getting ideas, executing them and securing that our solutions add strong value to our customers. And finally, to achieve our ambitions with The AAK Way our People project is at the heart of the program.

What are your expectations for the upcoming years with The AAK Way?

We have high expectations for The AAK Way and we aim to add several new achievements to our already strong track record. Through the implementation of the program we will become even better at delivering upon our customers' needs and meet the expectations of our other key stakeholders, and thereby further increase our organic growth.

AAK broadens its nutritional focus, creating Special Nutrition segment

AAK's business segment Infant Nutrition has been selling speciality oils and blends to the infant formula industry and the medical nutrition industry for many years. To meet current and future demands on the various nutritional markets the company has now expanded its nutrition portfolio and created a Special Nutrition segment, comprised of Infant, Medical and Senior Nutrition.

Infant Nutrition is one of the fastest-growing packaged food categories in the world and for AAK it has been a segment that has seen tremendous development over the last six or seven years. AAK's Infant Nutrition organization is truly a global one with sales, marketing, R&D, product management, and customer innovation functions serving customers from twelve different AAK plants around the world.

To create synergies and strengthen this successful development AAK has turned its eyes towards the significant opportunities presented within other nutrition markets, making Special Nutrition an important focus area within The AAK Way, AAK's company program for 2017–2019. "AAK has all the capabilities necessary for this wider nutrition platform", says Karel Stoschek, President Special Nutrition. "We have strong knowledge and a solid reputation within speciality oils and fats, we have a global production footprint, and we have commercial and knowledgeable customer innovation teams all over the world." Inject

1000 ml

Although Infant Nutrition initially will form the basis of the new Special Nutrition segment, many important investments, Karel Stoschek explains, will be made in the sub-segments of Medical and Senior Nutrition.

Infant Nutrition

For several decades AAK has successfully been a supplier of speciality oils and fats solutions to the infant formula industry. The company's engagement and understanding of the market and its unique co-development approach has positioned AAK as a global supplier within the industry.

When creating infant formula, human milk acts as the golden standard and is the target for infant formula producers. However, there is no standard 'human milk' composition as it can differ significantly depending on a plethora of factors, including the mother's genotype, diet, lifestyle, and stage of lactation. These factors create diverse demands for different geographical areas, as well as for the different development stages of the child.

> "In cooperation with our customers, we create tailor-made solutions for their desired products", says Karel Stoschek. "The products aimed for infants are carefully refined to reach a high level of product quality and food safety, meeting requested legal demands and Codex recommendations."

Medical Nutrition

Although not as large as the infant nutrition business. AAK has served the medical nutrition market for a number of years, particularly to European customers. With the broadening of the company's nutritional focus, AAK aims to expand its supply of medical nutrition solutions to a global level.

The market for medical nutrition is expected to grow over the next couple of years, due to an aging population, a rising demand for health care services globally, and higher health care spending in emerging markets. The standards of the medical industry are very stringent and AAK's facility in Karlshamn. Sweden has been audited and approved both by the European Medicines Agency (EMA), and the US Food and Drug Administration (FDA).

"Our skills within lipid technology, achieved over half a century, have enabled us to build advanced structured triglycerides creating speciality oils and fats", says Karel Stoschek. "Together with the certifications by regulatory authorities, our AAK active lipids are approved effective for medical formulations."

Senior Nutrition

Sodium Chlorid

ion USP

Just as for the two above-mentioned sub-segments, there is, for a variety of reasons, great potential for the senior nutrition market. Firstly, the aging population in western countries and in Asia is increasing. In 2015, people over 65 years comprised 10 percent of the global population and this is expected to double in 2040. Secondly, more and more consumers from a wide range of age groups are adopting healthier and more active lifestyles. In particular older consumers are increasingly focused on becoming more active and on remaining healthy for longer.

Markets targeting foods for seniors are today most prevalent in Japan and China but the demand is shifting to a global level, making senior nutrition an emerging market. In addition, seniors are, according to research gathered by Mintel, the population group that is most concerned about nutrients in foods, citing increased energy levels, better heart and digestive health as well as healthy aging in general as desired benefits from food.

"In conjunction with our customers, we will utilize our knowledge of speciality oils and blends to produce a finished product with fats which are nutritionally designed to support and maintain good health in the growing senior population", says Karel Stoschek. "There is no 'one-size-fits-all', as consumers approach health differently around the world. Therefore, the industry, and AAK, needs to create solutions for each region according to its preferences and trends."

Akovita® – lipids for life

For the senior nutrition market AAK offers a range of products under the brand Akovita®, supporting the category "Heart Health". A high cholesterol level is a risk factor in developing coronary heart disease (CHD) and AAK has a range of products containing plant sterol esters, which are clinically proven to maintain and even reduce the cholesterol level in the blood. This is supported by Article 14(1) health claim in the EU. In the same product AAK has included alpha-linolenic acid, which also supports the maintenance of healthy blood lipids.

"To support normal brain function, we at AAK use, in synergy, DHA and choline in the same product", says Bodil Granroth, Commercial Product Manager within AAK's Special Nutrition business. "DHA is clinically proven to support brain health, an approved EU health

claim. Recent evidence indicates that choline improves recognition memory and cognitive function."

To maintain an active lifestyle going into the 'third age' - post-retirement - energy-dense and easily absorbed food with a good nutritional profile can support digestive health. By incorporating AAK's structured fats together with high amounts of the essential omega-3 fatty acids, this can be achieved, Bodil Granroth explains. These benefits from low saturated fats and high omega-3 fatty acids can be supported by several EU nutritional claims.

"As partner, AAK provides knowledge and expertise, through extensive scientific documentation, in the development of the products to ensure the highest possible quality", says Bodil Granroth. "By doing so we help our customers to differentiate their products in the market."

The chocolate challenge –

The growth in chocolate consumption is, by far, highest within hot climate zones and the chocolate markets in countries like Brazil are currently experiencing double-digit growth. To see what the status and potential in these hot climate markets look like, *Insight* asked market intelligence agency Mintel for a comment.

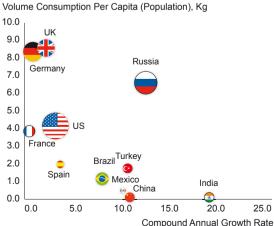
Measured in volume consumption, countries like Germany, the UK, the US and Russia is today's biggest markets for chocolate and confectionery products. But when it comes to annual growth rate the key opportunities are found in countries such as China, India, Turkey and Brazil. These hot climate zones offer significant potential in the global chocolate confectionery market with established volume consumption and relatively strong value growth over the next five years.

The growth in these countries is largely due to an increased demand of premium varieties which, in turn, is partly due to increasing disposable incomes that enable people to buy more luxury products such as chocolate.

Despite the relatively low consumption rates, these markets offer significant growth potential, if – and this is crucial – manufacturers are able to overcome the challenges that are offered by warm temperatures.

Chocolate confectionery, global market performance

Note: The size of each bubble represents the respective size of the market in volume. Source: Mintel.



(Average value growth over past five years, %)

Brazil: 49 percent of consumers buy chocolate as an everyday treat

Mintel estimates that the retail revenues of the Brazilian chocolate confectionery market reached approximately USD 3 billion in 2016. Penetration of chocolate consumption in Brazil is high, with 91 percent of consumers eating chocolate of some kind, signalling that this is a relatively mature market.

Brands need to go further to keep consumers engaged through product development, a focus on product quality, and efforts to keep them from fleeing the category due to health concerns or high prices.

Brands are encouraged to push 'me time' occasions, as chocolate eaters often put personal pleasures gained from eating chocolate above health concerns, and they like to treat themselves with chocolate.

Preserving the integrity of chocolate in warm temperatures

Chocolate confectionery is stored and consumed at "room temperature" as opposed to being refrigerated for storage and chilled before consumption. Indeed, chocolate experts suggest that the confectionery should be stored at $18-20^{\circ}$ C (65–68° F). These refrigerated conditions are not possible to be kept for the everyday consumption by the consumers.

The issue of keeping chocolate's integrity in hot weather has been the subject of considerable research, and the "melt factor" has led manufacturers to offer a number of solutions, primarily by experimenting with changing the formulation of the product.

AAK's breakthrough innovation TROPICAO™

There is always a risk that re-formulations potentially could change consumer experiences. In order to maintain the sensory attributes of a chocolate product, while at the same time avoiding heat-related bloom, AAK launched its revolutionary chocolate solution TROPICAO[™] at the end of 2015.

6

The three components of TROPICAO™



"Our solution protects the chocolate from heat-related bloom in temperatures up to 37°C (98.6°F) and extends its shelf life with more than six months", says Marco Oomen, AAK's Marketing Director, Chocolate & Confectionery Fats. "This means that consumers get the best experience with our customers' products and brands – in any climate."

TROPICAO[™], which is the first innovation of its kind, is a carefully tested solution that can be integrated into existing production lines while maintaining and improving production efficiency. The solution consists of three simple components: a TROPICAO[™] CBI, a TROPICAO[™] Seed, and a TROPI-CAO[™] Seeder unit, compatible with all production lines and attached to manufacturers' existing tempering units.

"With our solution, there is no trade-off between heat stability and sensory", says Marco Oomen. "This means that you can stop heat-related bloom while preserving the sensory of the chocolate and retaining the same snap, texture, mouthfeel and taste that is essential to the brand experience."



Watch the AAK bloom film

AAK's new TROPICAO[™] video takes the viewer into a heat chamber (simulating hot climates) where two pieces of chocolate are stored. One piece has been manufactured by using AAK's TROPICAO[™] procedure, the other one by following a standard procedure. To access the video and witness the difference that TROPICAO[™] will make, please visit http://aaktropicao.com.





Bloom stability after heat treatment (temperature cycle: $5 \times 37-25^{\circ}C$ (98.6–77°F)). At the bottom, a chocolate with TROPICAO[™]; at the top, a chocolate without.



Power to the plants – the booming market of plant-based dairy

Over the last years alternatives to dairy products have become a category within the food industry to be reckoned with. Products based on plants, grains and nuts – and free from dairy in any form – is on the rise as health, variety and sustainability have become important issues for consumers across the world.

The base ingredients of plant-based dairy products vary greatly and include soy, rice, almond, coconut, cashew, hazelnut, and hemp. Soy milk was one of the first alternative dairy products before expanding into other categories, such as yoghurt, desserts and ice creams. Soy-based products have, however, seen a decline over the last couple of years with almond-, coconut- and cereal-based products becoming more popular with consumers.

"Dairy alternatives are picked up by more and more consumers and we've seen phenomenal growth in North America and in many European markets", says David Jago, Director of Innovation & Insight at Mintel, one of the world's leading market intelligence agencies. "It's not so much about consumers following a strict vegan diet, but rather what we call 'flexitarians', consumers who opt in and out of dairy products and dairy alternatives according to taste, variety and health." Aside from these factors, David Jago explains, consumers are interested in dairy alternative products from a sustainability perspective. Consumers are increasingly aware of the dairy production's environmental impact which is why they look for less impactful alternatives.

"Consumers are recognizing the fact that plantbased alternatives are far more sustainable than dairy and meat production for example", says David Jago. "They are recognizing the lower carbon footprint that comes from plant-based alternatives, and they are recognizing the more natural values that are typically associated with plant-based foods."

The impact of millennials

Whereas consumers of plant-based alternatives earlier were limited to people who needed these types of products, for example vegans or vegetarians and people with special dietary needs, there is today an ever-growing amount of consumers who want and actively choose these products. This general megatrend or what could nearly be described as a global movement has changed the market dynamics for dairy alternatives dramatically.

"While a general avoidance of products like red meat and dairy seem to be spread across age groups, the trend toward incorporating vegetarian foods into the diet is skewed to younger consumers in many countries", says David Jago.

It is quite common for younger consumers, often labeled millennials, to experiment with different styles of eating and the pattern suggests that there will continue to be a strong opportunity for dairy alternatives going forward.

"We expect to see considerable growth in the dairy alternatives market for the next few years, practically in all parts of Europe", says David Jago. "We also expect to see continued growth in North America, but maybe not quite at the same rate since it already has reached really good levels of penetration. This future growth is more likely than not to come from the added value segments, in other words from cheese, yoghurt, desserts, and increasingly, from ice creams."

Market players and suppliers

Although the market is still dominated by a few major players in terms of taking the lead with new ingredients, it is far from saturated and there is certainly room for more brands to tap into consumers' growing interest in plant-based alternatives.

Ingredient suppliers, among them AAK, have also paid great attention to the development and the potential of plant-based alternatives. With a growth for the plant-based dairy segment for the next three years estimated to 10–15 percent CAGR, AAK has made the segment a special focus area within The AAK Way, AAK's company program for 2017–2019.

"We, of course, also want to be part of this global movement and we believe there is a huge potential for plant-based dairy products", says Henning Villadsen, Marketing Director, Dairy at AAK. "Thanks to improved sensory qualities, an expanded availability and increased sustainability awareness the market is currently booming."

To be able to provide consumers with sustainable, plant-based solutions that makes it easy and attractive to change to a more plant-based and healthy diet, close and progressive partnerships between suppliers and vendors are needed, a model that fits very well with AAK's concept of customer co-development.

"In our co-development process we bring to the table our expertise, our sustainability commitments and our unique capabilities in oils and fats applications", says Henning Villadsen. "But to really meet the demands from the market, we need to work side by side with each and every one of our customers to develop solutions that fit their specific needs. By doing so, both our customers and AAK have all the prerequisites to succeed within the market of plant-based dairy products."

The impact of the millennial generation

With the so called millennial generation now being the largest consumer group in the world, customer service practices and customer experience design have become more important than ever. But who is this very interesting and powerful consumer group, and what is it that they want? *Insight* asked Micah Solomon, a bestselling author and consultant, as well as an expert on millennial customers, for an explanation.



Micah Solomon

For a company in the food industry, the millennial generation (customers born 1980–2000) provides opportunities and particular perils. This is a generation of customers who have strong and various passions about what they put in their bodies. They care not only about taste but about the ethical sourcing of your product – including your environmental, labor and vendor practices – as well as the "experience" aspect of enjoying your product (particularly to the extent that the experience is shareable via social media), and the "terroir" of your product: whether it fits their ideals of authenticity and localization. Millennials will spread the word about your brand enthusiastically if you get these elements right, and they'll skewer you quickly and publicly if you don't.

Millennials are the largest generational cohort in history. They are the offspring of the previously record-setting Baby Boomer generation, who, in turn, were born to the famously-fruitful men and women of the World War II era. The millennial generation, presently 16 to 37 years of age, have a purchasing power that's growing quickly and will soon exceed that of their parents' generation. It's estimated they'll spend USD 200 billion this year alone and USD 10 trillion over their lifetimes.

Meanwhile, advancing age and decrepitude are bringing baby boomers ever-closer to the time when they'll slowly fade in importance as consumers. Thus, millennials will soon become the most important of your customers.

Three principles

What follow are three principles to help you unpack the expectations and desires of millennial consumers. These precepts will help you understand and relate to this generation as it rises to prominence as consumers, both directly and in newly-won positions of power as B2B buyers.

1. Millennials are a social generation – and they choose and consume your products socially.

Millennials are a sociable generation, online and off. This social inclination has big implications for those of us who serve customers. "A shopping habit that sets millennials apart from non-millennials is their tendency to shop in groups and seek the opinions of others", says market researcher Jeff Fromm. More than two-thirds of millennials won't make a major decision until they have discussed it with a few people they trust, compared with around half of all non-millennials. Seventy percent of millennials, continues Fromm, are "more excited about a decision they've made when their friends agree with them, compared to 48 percent of non-millennials."

Millennials don't consume food, beverages, services, products or media in silence. They eat noisily (so to speak) and very visually. They review, blog, tweet, and post to Instagram; they update brands' Wikipedia entries; and they post video reviews as consumers on YouTube.

2. Millennials apply their values to how and what they buy.

Millennials are a values-driven generation. More millennials than non-millennials integrate their ethical and political beliefs into their purchasing decisions. More than 50 percent of millennials make an effort to buy products from companies that support the causes they care about. They are interested in the social values of any company they purchase from: its social responsibility, sustainability, and ethics in treating employees and suppliers.

In particular relation to food, many millennials are concerned about:

- Animal well-being in dairy, egg, and meat production
- Environmental sustainability, including marine sustainability, concern for vanishing terrestrial habit for wildlife, and climate change concerns
- Organic food production: They're twice as likely as their non-millennial counterparts to care whether the food they eat is organic
- A variety of dietary beliefs and practices, from gluten-, soy-, and wheat-avoidance to veganism
- Local sourcing of produce and other foodstuffs
- Support for small farmers, brewers, and other locallybased producers

3. Authenticity and "terroir" are essential parts of the millennial view of the world and directly affect their behavior as consumers.

Authenticity is a concept that's hard to define, but millennials know it when they see it: for example, venerable brands like Tabasco that are seen as being truly original, as in "the original in this category", as well as newer brands that also strike millennials as authentic: for example, the craft brewery on the corner. Transparency is a corporate attribute that millennials particularly feel indicates authenticity. Applegate, a successful purveyor of humanely-raised and slaughtered meats, even employs a transparent approach to customer service, making use of a community software platform called "Get Satisfaction." Applegate regularly fields specific, detailed and emotionally charged questions about both its meat and the packaging in which it is conveyed. Rather than solely rely on its employees to answer these questions, Applegate openly crowdsources commentary and advice from other customers to answer these questions honestly. By using the feedback from customers who have already explored these kinds of questions, Applegate is making transparency work in its favor, elevating the customer and its products at the same time.

Another element that decides whether a brand or product (particularly but not exclusively in the food industry) is considered authentic by millennials is "terroir". Terroir is the French term for the convergence of factors - geography, climate, and so forth - that go into making local wine or produce, and the concept is applicable in broader contexts as well. Terroir explains the appeal, for example, of a restaurant that cultivates its own honevbee hives on the roof, then incorporates the resulting honey into items on the menu. It explains why the five-star Bleu restaurant in Istanbul has found so much support among youthful diners by cultivating heirloom tomatoes right on their patio so that a quest can have a tomato that is less than 15 minutes from vine to table. It explains why the top companies in technology, from Google to LinkedIn to Oracle, have engaged the Bon Appétit company to feed their employees in company cafés: Bon Appétit is notable for its local sourcing and menu variability that provide a specific sense of terroir at each of these famous technology campuses. And, more broadly, terroir explains the "go-local" buying commitment that many millennial shoppers strive to adhere to, whether at the supermarket or the farmer's market.

Adapting to any new group of consumers isn't easy. In the case of millennials, it's essential, for your business to continue to thrive. Develop and refine an approach to meeting these three principles of the millennial mindset, and you'll be well on your way.



AAK USA inaugurates its state of the art innovation lab in New Jersey

In early March, AAK USA unveiled its new innovation lab, AAKtion Lab, with a grand opening ceremony. The Customer Innovation Center, which is AAK's eleventh, is based at the US headquarters in Edison, New Jersey. The facility will be the flagship application lab for the co-development process in the US and Canada.

Invited guests included AAK customers and food industry editors from across the United States who, aside from taking part in the official ceremony, attended presentations and participated in hands-on sessions in the application labs.

"We couldn't be happier to share this important day in AAK's history with so many of our key customers, industry press and our hardworking AAK team", said Terry Thomas, President AAK USA. This innovation lab will allow us to fully execute our co-development approach and will be a huge benefit to AAK's customer partners. Customers can come to us with their most challenging Bakery and Chocolate & Confectionery formulations and our team of industry experts will work hand in hand with them to deliver value-adding solutions and forward-thinking innovation to create finished products that consumers will love." In addition to the ribbon-cutting ceremony and walkthrough of the new facility, guests attended a presentation on sustainability by Mark Becker, Vice President of Sales & Marketing and Mark Zavodnyik, Sourcing and Trading Associate, and a presentation on the co-development process by Dr. James S. Jones who leads the AAK USA Customer Innovation team as Vice President.

"Today's manufacturers are faced with some tough formulation challenges, such as converting from PHO to non-PHO and addressing clean label concerns", Dr. James S. Jones said. "Our innovation lab will allow us to provide new solutions for customers and will primarily be used for the first three stages of our co-development process: Exploration and Ideation, Solutions Creation, and then testing in application."

Good vibrations

Invited quests also participated in practical sessions in both the confectionerv and bakery labs, for which the US Customer Innovation team developed several prototypes and demos that showcased the lab's unique capabilities. Prototypes included a pan de chocolate, shortbread cookie featuring compound coating, biscuits with butter and cinnamon flakes, molded milk and dark chocolate bars, and a brioche. These prototypes highlight some of the cutting-edge technology in the facility and include AAK's brand of multi-functional fats that are nonhydrogenated, zero trans, and low in saturated fat. Feedback from the event was overwhelmingly positive with many customers hoping to get into a much more accelerated development opportunity and develop the best products possible for their consumers.

"We had a great time and really enjoyed learning about AAK and we are looking forward to taking advantage by working with the company in this whole new way," said one customer of her experience at the grand opening ceremony.

The capabilities of the innovation lab were of particular interest to many attendees. The lab features equipment typically found in commercial bakery and confectionery production units on a smaller scale. In addition to the enrober, cooling tunnel, and tempering unit found in the confectionery lab, the multi-directional shaker table caught the eye of attendees as a unique feature of a lab of this type.

Guests also enjoyed the hands-on experience in the bakery lab, where they were invited to roll croissant dough, put the finishing touches on pan de chocolate, and then sample the finished product. These prototypes helped to highlight the bakery lab's capabilities and equipment, such as the deck and revolving rack ovens, reversible sheeter, and proof box.

The future of co-development

During his presentation on co-development Dr. James S. Jones emphasized the innovation lab's essential role in AAK's co-development process, from ideation through to implementation. The lab will allow AAK to co-develop specific project, concept, or market-driven solutions together with customers, proving the product and ensuring functionality before production begins. This allows AAK to offer guidance from pilot testing through full-scale production, ensuring support at every stage and a shorter time to market.

In addition, the lab will be used to organize practical courses and classes, so called AAK Academies, on bakery, chocolate/compound coatings, and combination bakery/ coatings & fillings. These academies will promote new product innovation and educate AAK customers.

"This new innovation lab, along with bakery application labs in Louisville, Kentucky and Richmond, California and our acquisition of CalOils in Richmond, California last year, deliver on our brand promise to provide vegetable oils and fats that bring a local, regional, and global approach to solving some of our customer's toughest formulation challenges", said Terry Thomas. "We wouldn't be here today without our customer partners and we will continue to invest in the latest technology and ensure that our team of innovation experts can deliver value-adding solutions to our customer partners, every day."

Application labs in AAK USA's Louisville and Richmond locations are slated to open later this year.

GRAND OPENING

AAK – The Co-Development Company

The Co-Development Company. What is really in that brand promise from AAK? In a simplified way you could say that AAK collaborates with its customers – from idea to product launch – in order to create value-adding solutions. But how does it work? *Insight* asked some of AAK's teams around the world to share some recent successful co-development stories.

Customer Co-Development in Turkey

New AAK solution for Turkish ice cream manufacturers



For Turkish ice cream manufacturers coconut oil has for years been the one and only solution for both ice cream body and coatings because of its sharp melting profile and rapid setting. But this year, things have changed. New regulations from the Turkish Ministry of Health have put pressure on school canteens by limiting parameters such as calorie and saturated fat intake. Together with an extremely volatile coconut oil market, ice cream producers are now looking for ways to replace coconut oil without compromising on good taste and melting behaviour. Because of these factors our close collaboration with a reputable leading manufacturer in the region has been revitalized.

Making a deeper dive into the customer's value chain, we came up with the suggestion of Akoice GP 16, a partly lauric stand-alone fat blend solution. Akoice GP 16 removes the need for handling of multiple products and it sets rapidly on the ice cream with a pleasant meltdown. Furthermore, the solution has approximately 20 percent lower saturated fat than a standard refined coconut oil.

Our customer conducted a factory trial with Akoice GP 16 by applying our suggestions of increasing the dipping temperature, optimizing the emulsifier system, adjusting the particle size in the refining step, and increasing the total fat usage in the coating. The customer was very satisfied with the end product's taste and texture. Moreover, according to the customer's target the thickness of the compound coating was optimized.

This collaboration is a proof that our co-development approach is more than just a promise. We look forward to further develop our leading position by adding more value and creating new success stories for ice cream manufacturers in the region.

Çağla Yazıcı Sales Manager, AAK Turkey

Dinçer Ulutaş Customer Innovation Manager, AAK Turkey

Customer Co-Development in Central Europe

Customized wafer filling for Central European producer



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A few years back, a technician from a customer in Central Europe producing wafers attended our AAK Filling Fat Academy. Shortly after, the customer came up with an idea for a new product – a flat wafer filling with a cooling effect – and asked for our advice.

The filling was to be very thin and it would not be possible to make it cool melting with such a big part of the product being the wafer. This started a dialogue of what could be done. There were a lot of ideas on the table for the two end application products: shaped wafer sheets and wafer praline with fillings with different cream consistency. The fat to be used in the fillings had to be spreadable, whippable and cost effective. Based on our collaboration with the customer, our understanding of its needs, and the cooperation with the equipment supplier, a filling fat with these properties was developed. Together with the customer we had to conduct several trials to fine-tune the consistency of the final filling.

The biggest concern of the technician in charge was the sticking properties of fat – if the wafer cells would stick to-

gether well enough. Through our collaboration and our tests we could ensure that it would. Production installation was ordered and construction started.

We had to work quickly to get the products produced and ensure that the end product turned out as expected and as we experienced during our tests. AAK, the equipment supplier and the customer were in close dialogue to ensure that the equipment was adjusted correctly to meet the requirements of the products, especially the density of the filling.

In 2016, the goal was reached and the production of the new wafers began. Today, it is a very successful product.

Hiske Keller Regional Sales Director,

Central Eastern Europe and the Balkans

Susanne Budde Lund Customer Innovation Manager, AAK Denmark



Customer Co-Development in Sweden

Close cooperation yields best-in-class solutions for a complex task

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While AAK is a major supplier of sustainable palm oil to the food industry, our teams are dedicated to providing our customers with the solution that's right for them, no matter what. Thanks to our multi-oil multi-process approach, we're able to adapt to shifting consumer preferences and supply our customers with the best possible solutions that meet all of their requirements.

Orkla Confectionery & Snacks (C&S), one of AAK's longterm Swedish customers, approached us in 2015 with the decision to eliminate palm oil from their bakery product range by January 1, 2017. Although we had traditionally been supplying them with formulated dough and filling shortenings, they reached out to us because of our extensive experience with palm-free solutions, and their belief in our co-development process.

Simply providing Orkla C&S with an "off the shelf" product was never an option as we knew that replacing a key raw material across their entire product portfolio would be a complex task requiring a more unique, tailor-made approach. Project teams were established, both by Orkla C&S and AAK, and we worked in close collaboration to find the optimal solutions for the different identified groups within their product range. Their main goal was to replace palm oil. However, maintaining or improving the nutritional profile of their products, continuing to use pumpable shortenings for their doughs, and limiting cost increases were also keys to success. Thanks to our ability to source and process multiple types of oils, several solutions were identified. After internal product development, we presented possible solutions to Orkla C&S and they chose to proceed with formulated solutions from AAK. The result of the project is that our tailor-made, palm-free filling fats and pumpable shortening solutions have already been introduced in Orkla C&S's products on the market. All of this was achieved before the January 2017 target.

By taking the time to do a thorough mapping of the Orkla C&S's value chain and needs, we were able to provide them with a true, co-developed multi-solution. The experience for both AAK and Orkla Confectionery & Snacks was extremely positive and has already led to a second wave of projects with the customer.

Christine Å. Stenbeck Key Account Manager, AAK Sweden

Karin Bringsarve Customer Innovation Manager, AAK Sweden



The first choice for value-adding vegetable oil solutions

We develop and provide value-adding vegetable oil solutions in close collaboration with our customers, enabling them to achieve long lasting business results.

We do so through our in-depth expertise in oils & fats within food applications, working with a wide range of raw materials and broad process capabilities.

Through our unique co-development approach we bring together our customers' skills and know-how with our capabilities and mindset. By doing so, we solve customer specific needs across many industries – Chocolate & Confectionery, Bakery, Dairy, Special Nutrition, Foodservice, Personal Care, and more.

AAK's proven expertise is based on more than 140 years of experience within oils & fats. With our headquarters in Malmö, Sweden, 20 production facilities and customization plants, and sales offices in more than 25 countries, more than 3,000 employees are dedicated to providing innovative value-adding solutions to our customers.

So no matter where you are in the world, we are ready to help you achieve long lasting results.

Explore more at www.aak.com

