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DAIRY

July/August 2026

magazine

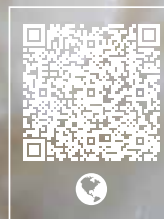
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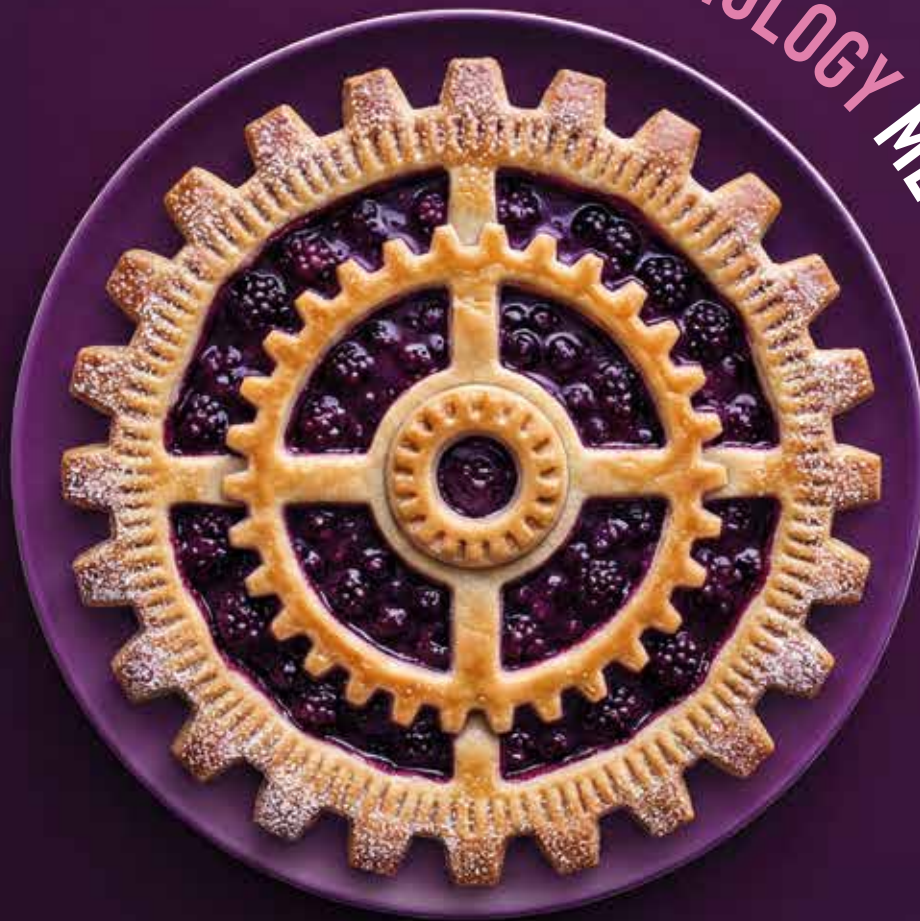
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The balance of power in global dairy is shifting

Europe faces new competition



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The global dairy market is undergoing a profound transformation. While growth is slowing in many traditional exporting regions, the USA is strengthening its position through an unprecedented wave of investment in production and processing capacity.

The USA is pursuing a fundamentally different strategy – one built on investment. According to the International Dairy Foods Association (IDFA), the U.S. dairy industry is investing more than USD 11 bn in new and expanded processing capacity between 2025 and early 2028. A significant share of these investments is directed towards highly automated cheese plants, enabling additional milk volumes to be converted directly into exportable products. Crucially, these investments are not limited to farm-level expansion – they are creating the processing capacity needed to turn additional milk into exportable, value-added products.

This investment strategy is already translating into production growth. USDA data show that U.S. milk production increased by 2.4% year-on-year in the second quarter of 2026, reaching 27.3 bn kg, while the national dairy herd expanded by around 192,000 cows to 9.67 mn head. Supported by abundant feed resources, state-of-the-art production systems and highly efficient herd management, the USA is creating the conditions for long-term growth.

For Europe, this sends a clear message. While production growth is increasingly constrained by structural and regulatory factors, the USA is building new export capacity at an unprecedented pace. As a result, competition in international dairy markets is likely to intensify further, particularly in the high-growth regions of Asia, Africa and the Middle East.

If Europe is to remain competitive, it needs political and regulatory frameworks that encourage investment in modern production and processing technologies. Without a policy framework that supports investment and innovation, Europe risks losing further ground in global dairy markets. Sustainability and competitiveness must go hand in hand

thinks

Anja Hoffrichter



NEWS

TMICC invested €10m in Veszprém plant New production line

The Magnum Ice Cream Company (TMICC) has invested around €10 mn in modernising its production site in Veszprém, Hungary, and has installed a new production line there. Thanks to this investment, the plant is now also equipped to manufacture Magnum sweets. The plant currently employs more than 500 staff.

TMICC achieved a turnover of €7.9 bn in 2025 and operates a network comprising 32 factories, 13 research centres and three million freezer cabinets across 80 markets worldwide. At the factory in Veszprém, in western Hungary, 230 mn portions of ice cream are produced annually for the Hungarian and European markets under brands such as Magnum, Cornetto and Carte d'Or.

(photo: The Magnum Ice Cream Company)

RAPS Innovation Days 2026

NEWS

Trends, applications and innovation opportunities

The RAPS Innovation Days 2026 provided a platform for customers and partners to exchange ideas on current challenges and future developments in the food industry. Across two event days in Kulmbach, customers and partners from Germany and across Europe came together to discuss food trends, market requirements and practical innovation approaches for tomorrow's savoury food solutions.

The programme opened with market and consumer insights presented by Euromonitor, offering attendees a forward-looking perspective on global product launches and innovation opportunities for the next years. From there, participants moved into six rotating innovation sessions, each dedicated to a key topic shaping the future of the food industry.

Throughout the day, RAPS demonstrated how its technologies, ingredient systems and application expertise help food manufacturers address current market demands. Visitors explored ingredient solutions that combine authentic taste, functionality and processing reliability – from meat and plant-based applications to next-generation snacking concepts, natural flavour profiles enabled by CO₂ extraction, organic and exotic spices and herbs from the BIOVA portfolio and innovative micro-encapsulation technologies. An exclusive factory tour provided behind-the-scenes insights into how these capabilities are translated into industrial production.

Opening of the RAPS Innovation Days 2026

(photo: Raps)



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World of brown flavours

80 Years of PROVA

Back in 1946, a French manufacturer of vanilla extracts was born. Now, 80 years later, that company has become one of the leading specialists in so-called “brown flavours”. This year, PROVA is therefore not only celebrating its anni-

versary and reflecting on the story of its success, but also looking forward to an exciting future.

Today, anyone walking through a well-stocked supermarket encounters countless

innovative product concepts and a remarkable range of options. This appetite for exploring new flavour profiles is especially visible in dairy. Lifestyle products are trending: milkshakes with barista coffee notes, matcha-style yogurt, cookies-and-cream



protein shakes, oriental-inspired ayran drinks with pistachio flavour, or ice cream with a peanut butter swirl. It's clear, then, that flavour plays a major role in this segment. Around 40 per cent of all dairy innovations launched in the EMEA region in 2025 were flavoured in a market that, according to Innova, is valued at nearly €200 billion in Europe, the Middle East and Africa alone, and has grown by three per cent annually since 2022.

The category has therefore redefined itself. Alongside familiar classics, milk specialties such as skyr and lassi have entered the market, fermented products like ayran and kefir are on trend, and high protein remains one of the most popular claims. Plant-based protein products are also emerging in this segment – on shelves, in consumers' minds and, increasingly, in dairy portfolios. The winning formula? A novel base product combined with a familiar, yet exciting, flavour profile with a lifestyle positioning. Exclusivity adds to the appeal, with limited editions and special releases keeping the product carousel spinning ever faster.

Top of the shop: Vanilla, chocolate, nut and caramel

Despite this appetite for experimentation, consumer preferences remain remarkably stable. Chocolate and vanilla have continued to top the list of flavours in dairy launches over recent years in the EMEA region, followed by pistachio, caramel, hazelnut and, increasingly, coffee. But delivery is key: plain vanilla becomes Madagascar bourbon vanilla, caramel becomes salted caramel brownie, and simple coffee flavour turns into macchiato or cold brew. In effect, the familiar is being redefined and reframed.

PROVA's approach is built on a desire to develop new products with highly convincing sensory properties. Achieving this requires proven expertise, years of experience, the right technologies and access to high-quality raw materials.

Flavour development starts with raw material sourcing

"Developing a flavour for a cold brew milk drink, for example, is a genuinely complex undertaking. The process begins with the selection and processing of the coffee

bean itself: origin, growing region, roast level and extraction method – all of which shape the sensory outcome," explains Ralf Benesch, Sales Manager for PROVA in Germany and Switzerland.

"The same applies to cocoa: whether a chocolate profile comes across as fruity and tangy or rich and sweet depends on the bean, the fermentation and the processing technology. It all starts with raw

material sourcing, followed by the development of extracts or functional flavour solutions, and testing for sensory performance and stability in real applications, because a flavour can behave completely differently depending on the matrix and serving temperature."

PROVA's know-how comes into its own in individual product and formulation development, and its work with customers.

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Muriel Acat is leading PROVA in its third generation (photos. PROVA)

"Of course, there are plenty of standard applications too," adds Ralf Benesch. "But whenever a special project arises, we're more than happy to put our expertise to work and collaborate closely with customers. That's how off-the-shelf solutions materialise. We're also constantly developing new technological approaches to make complex, sensitive flavours more stable, more intense and more reproducible. We're not just a supplier – we're an innovator and a partner, and we respond rapidly to new challenges."

INTERVIEW:

"We don't think in quarters, we think in decades"

Muriel Acat is leading PROVA in its third generation. We spoke with the CEO about long-term thinking, the strengths of a specialised family business and the challenges of highly volatile raw material markets.

IDM: How has PROVA managed to secure a foothold in this market?

Acat: Large companies optimise for efficiency but efficiency also means standardisation. We've always taken a different path, though, as we manage complexity too. A customer doesn't come to us because we have the broadest portfolio, but because we're willing and able to respond to their specific requirements. That means focusing on core competency and offering a complete package with which a large company simply cannot compete.

IDM: Cocoa, coffee, vanilla – the prices of your key raw materials are

extremely volatile. What does that mean for the company and your customers?

Acat: It is indeed challenging. But as we've been at home in this segment for so many decades, we know how to handle it. We are totally familiar with the origins of our ingredients, know almost every producer personally and have built structures that minimise the impact of short-term market swings. That's not to say that rising prices don't affect us but we can offer customers continuity when other suppliers have no choice but to announce ongoing price rises.

IDM: What are your plans for the coming decade?

Acat: We want to double our revenue over the next 10 years. That may sound ambitious but we've laid the groundwork: a new production site in Bangkok, the expansion of our international subsidiaries and a continued focus on innovation. What won't change, however, is how we work with our customers.

Danone and Arcor intensify JV Strategic partnership

NEWS

Danone and Arcor have established a joint venture in Argentina, thereby strengthening their position in a market where several competitors are withdrawing or facing financial pressure. The agreement combines Danone's existing regional dairy operations with the long-established Argentine dairy processor Mastellone Hermanos, known for the La Serenísima brand. The two companies previously held a combined 49 % stake in Mastellone and are now acquiring the remaining shares, meaning the new structure will be fully jointly controlled. The logistics subsidiary Logística La Serenísima, which Danone and Arcor were already operating jointly, will also be fully integrated.

The companies emphasise that the new alliance builds on more than twenty years of collaboration. The aim is to create a more integrated dairy platform that accelerates innovation, boosts efficiency and expands market presence in Argentina. Arcor's President, Alfredo Pagani, explained that the partnership would drive growth through a joint strategy focused on high-value-added products. Danone sees the combination of global expertise and Arcor's local market knowledge as a key advantage.



Sidel

Nextgen Innovation Lab

NEWS

Nineteen engineering talents from ten countries have completed Sidel's Nextgen Innovation Lab, spending three weeks exploring real-world challenges in packaging, sustainability and automation.

Held at Sidel's Octeville-sur-Mer site in the north of France, the programme brought together university students to collaborate with Sidel experts on real industrial challenges, including: sustainable operations and packaging, digital technologies and industrial AI, robotics and human-machine collaboration, computer vision and AI-based inspection for quality and mechatronics and intelligent machine control.

Designed to strengthen connections between academia and industry while inspiring the next generation of engineering talent, the three-week programme combined technical workshops, site visits, customer engagement and hands-on project work. The group of 19 worked in teams to develop proof of concepts, prototypes and business cases, before presenting their final results to a panel of senior Sidel leaders and technical experts.

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Job-sharing in palletising

High-performance palletising centre for milk trays

As part of a production expansion, Arla Foods Germany has invested in a fully automated, high-performance palletising centre for milk trays. The system, supplied entirely by KOCH Industrieanlagen, is characterised above all by high productivity and palletising

quality, as well as flexible layer configuration.

The palletising centre's productivity is based, amongst other things, on the division of labour. In the system's three palletising cells, each of which is fed by two pre-group-

ping lines for milk trays, three robots share the tasks. For each line, a small, very fast robot is installed in every cell, which grips the trays with its handling system and pre-groups them. The robot is so flexible that it can even form layer patterns with gaps arranged as required.



(photos: KOCH Industrieanlagen GmbH)

Precise layer patterns

A palletising robot, with a load capacity of 700 kg, picks up the finished layers and places them onto a pallet. To do this, it uses its freely programmable layer gripper – designed for loads weighing up to 210 kg – which also precisely centres the trays. Jürgen Thommes, Technical Project Manager at Arla Foods Germany's Pronsfeld (Eifel) branch, observes one of the robot teams. "Thanks to efficient task sharing, each of the three cells achieves a palletising rate of up to 4,800 trays per hour. During this time, the two pre-grouping robots each handle up to 2,400 trays, whilst the palletising robot handles twice that amount."

In addition to this productivity, Arla requires the fully automated high-performance palletising centre – based on the KOCH PalletSystem 5000 – to offer high availability, low

maintenance costs and precise layer patterns as a prerequisite for stable layer formations. Furthermore, flexibility regarding new layer configurations and stacking patterns is important to the operator. These can be generated quickly and easily using the KOCH EasyPallet software, which is also used to manage them centrally. Thommes emphasises that the system, which is designed for 24-hour operation seven days a week, is capable of palletising the branch's entire product range. This requires approximately 65 layer configurations, which can be selected using the software without the need for any mechanical adjustments. The gripper systems, developed specifically for this application, also play a key role in ensuring precise layer configurations and the stability of the palletised stacks. The layer gripper is equipped with three servo motors – which are controlled by the robot controller as additional axes and also eliminate the

need for changeover times – as well as a vacuum suction system for the interlayers. The gripper operates with a rake-type pick-up system and a torque- and position-controlled four-sided centring mechanism. The resulting benefits include gentle handling of the milk trays, high palletising quality and the gripper's ability to adapt to the company's wide range of products.

The palletising robots installed at Arla use their layer grippers to handle products measuring between 700 x 700 and 1,350 x 1,350 mm. As they are equipped with a rotary axis, they are able to place pre-grouped layers onto pallets either lengthways or crossways, in accordance with the desired layer pattern. The pre-grouping robots, whose grippers are fitted with a servo axis, also meet the high demands for flexibility. In this case, the focus is on the varying sizes of the trays as well as the rotational movements of the grippers,

which range from a maximum of 180° to one side and up to 90° to the other.

Compact footprint

Thommes highlights the relatively compact footprint of the high-performance palletising centre. “KOCH utilises different conveyor levels for feeding product and empty pallets, thereby making full use of the hall’s height. This design leaves enough space for integrated maintenance platforms, providing excellent access to all parts of the system.”

The milk trays are conveyed on belt and roller conveyors into the cells of the palletising centre, whilst the empty pallets and the protective-layer magazines are conveyed on roller conveyors. The palletising robot can stack the layers – up to five different types of which can be combined on a single pallet – to a height of up to 2,400 mm. For all its products, Arla ensures that the trays are not subjected to excessive stress, either during handling or due to the weight exerted on the lower layers. In this respect, the achievable stacking height also depends on the quality of the trays, the product weight and customer requirements.

As the system is designed for all standard pallet types, including both wooden and plastic versions, the operator can use, for example, Euro, industrial and Düsseldorf half-pallets. Once the palletising robot – which achieves a throughput of 250 cycles per hour – has fully loaded a load carrier, a roller conveyor transports the goods to the automatic wrapping machine. A conveyor system then transports the palletised milk trays fully automatically to the high-bay warehouse.

A PLC integrated into an industrial PC controls the entire system, which operates with an availability of over 98 per cent, and displays its status on a screen. The PLC, which is connected to a higher-level process control system and communicates as a master with the robot controllers – which act as slaves – enables complete product and tray tracking from filling right through to the finished pallet.

The production control centre transfers the product types to be palletised and the corresponding stored layer configurations to the palletising system’s control unit, where the operator simply has to confirm the data when switching between products.

Economic sustainability

By purchasing the palletising centre, Arla has also recognised that Germany is one of the company’s most important core markets. The Arla branch in Pronsfeld – the largest of the globally active dairy group’s sites, with a daily production volume of up to 3.8 million kg – invested in the fully automated, high-performance palletising centre to expand its production capacity. The decision to opt for the system from KOCH Industrieanlagen was based, for example, on its favourable price-performance ratio, but above all on the experience the site had gained with another palletising system from the robotic systems provider. “KOCH demonstrated a high level of expertise on the first project. Furthermore, the collaboration was very much based on partnership,” said Thommes. The fact that Arla has once again opted for a robotic palletising system is due to the system’s low noise level and minimal maintenance requirements. Furthermore, articulated-arm robots – unlike gantry robots – are flexible handling modules that can be adapted to new requirements with relatively little effort. “Thanks to this investment, we have sustainably increased our productivity and delivery quality, and consequently our profitability as well,” concluded Thommes.

Safer plant-based drinks

Industry alliance investigates bacterial spores in ingredients

An industry alliance comprising Ripple Foods, FrieslandCampina, Tetra Pak, SPX FLOW and HP Hood has published a statement on the topic of ‘bacterial spores in plant-based ingredients for beverages. The consortium has addressed critical knowledge gaps regarding the microbiological safety and spoilage risks of plant-based ingredients used in plant-based milk alternatives. As the global market for plant-based drinks continues to grow, manufacturers face greater challenges in ensuring product safety, quality and shelf life, particularly when formulating low-acidity plant-based drinks that are sold in long-life formats.

The consortium’s research has contributed significantly to improving our understanding of spore-forming microorganisms in a wide range of commonly used plant-based ingredients. Furthermore, the research has provided valuable data that enables companies to better assess, predict and control the associated risks.

The ‘Plant protein contaminants’ project was initiated and coordinated by NIZO. The research focused on understanding the occurrence, heat resistance and growth behaviour of microbial contaminants – particularly spore-forming bacteria – in plant-based ingredients such as peas, oats, almonds, broad beans and coconut-based ingredients.

NEWS

New approaches to clean label in plant-based alternatives

Meeting consumer expectations

Consumer expectations for clean label products continue to rise. Surveys by the Good Food Institute and Innova Market Insights show that familiar ingredients and shorter ingredient lists increasingly influence purchasing decisions. But clean label is not just a matter of switching out individual ingredients. It requires a carefully balanced combination of ingredients, processing expertise, and functionality, as demonstrated by Planteneers' clean label systems.

For the dairy alternative segment the company has developed declaration-friendly systems that work without carrageenan. "Carrageenan is a highly effective tool for stabilizing texture and mouthfeel in plant-based milk and yogurt alternatives. It helps inhibit the sedimentation of proteins and other components, and provides a creamy, homogeneous consistency," explains Dr. Pia Meinschmidt, Head of Product Management at Planteneers. "However, consumers are critical of this ingredient, as it is strongly associated with highly processed foods and controversial health debates, regardless of its proven safety on the regulatory side. Therefore, for many consumers 'carrageenan-free' can be a more tangible message than a general clean label claim can. It directly addresses one of the most common consumer concerns and thus supports the acceptance of plant-based products."

For example, the fiildDairy NEB series includes a carrageenan-free functional system for the manufacture of hybrid as well as purely plant-based mixed milk beverages in various flavors. It enables the production of hybrid mixed milk beverages with up to 50% less dairy milk, the same fat content, and full dairy-like taste. The lower content of saturated fatty acids and the possibility of making protein and low-sugar claims, when regulatory criteria are met, further contribute to a health-oriented image. Purely plant-based products can be based on raw materials like almonds, rice, oats, or buckwheat. The protein content can be set as desired, either at the level of conventional milk or higher for special high-protein concepts.

Another carrageenan-free functional system is designed for plant-based alternatives to pudding, whether conventional pudding or high-protein varieties with up to ten percent protein. Oats, coconut, and soy are suitable as plant-based protein bases. The final products have a creamy texture. A wide variety of flavor options are possible, from popular classics like chocolate, vanilla, and hazelnut to cookies and salted caramel.

Planteneers has also developed a special clean-label concept for the ice cream category. This plant-based premix enables lactose-free, fiber-rich ice creams that feature authentic dairy ice cream texture and are free from declarable E-numbers, additives, and flavorings, as well as containing less sugar. The system is ideal for a wide range of declaration-free ice cream alternatives, from premium ice cream, soft serve ice cream, and frozen yogurt to frappé type desserts.

**Planteneers has also developed
a special clean-label concept
for the ice cream category**

(photo: Giorgio Scarlini/Planteneers)



When data truly works together

Why standardised interfaces now determine the performance of production systems

The digitalisation of industrial processes is no longer the challenge – their integration is. The decisive difference today no longer lies in additional sensor technology or automation, but in the quality of integration. Production systems only realise their full potential when data is available consistently, in a structured manner and in real time. This is precisely where the real challenge of modern production environments lie: established plant landscapes with different manufacturers, proprietary interfaces and heterogeneous data models. The bottleneck is no longer data acquisition – but its consistent use.

OPC UA as the common language of industry

To manage this complexity, standardised communication structures are needed that connect systems in a way that is mutually understandable. This is precisely where OPC UA (Open Platform Communications Unified Architecture) comes in: an open industry standard that enables machines and software to exchange data independently of the platform – in such a way that it is not only transmitted but can also be unambiguously interpreted and processed.

What makes it special is that OPC UA not only provides the description of individual measured values, but also provides contextual information. A system therefore recognises not only what is being sent, but also what it means. This transforms pure data transmission into genuine, interoperable communication – an essential prerequisite for automated processes and data-driven decisions. “The decisive added value arises when data is not only available but is clearly understood within the entire system context – this is precisely what OPC UA was developed for,” says Nils Hubrich, Product Manager at Minebea Intec, a leading global manufacturer of weighing and inspection technologies.

This approach is further refined through so-called Companion Specifications. They define industry-specific data models and en-

sure that different devices and systems use the same structures and terminology.

Standardisation in weighing and inspection processes

It is particularly in data-intensive sub-processes such as weighing and inspection technology where the importance of this standardisation becomes clear. Here, high material value densities, strict quality requirements and direct impacts on costs and process efficiency converge.

Whether it's the precise weighing of raw materials, recipe control or quality assurance: critical process data is continuously generated here, which must be seamlessly integrated into higher-level systems – because even the smallest deviations can have an immediate impact on product quality, material usage and regulatory compliance. “In weighing technology, minimal deviations often determine quality, costs and compliance – which is why it is so important that this data is available consistently and without media breaks,” says Hubrich.

The VDMA Guideline 40200 specifically applies the OPC UA concept to weighing technology. It defines standardised data models and variable structures, so that, for example, a load cell or a control system can be consistently integrated into existing production architectures regardless of the manufacturer. The result: integration becomes predictable. Individual interface programming and time-consuming adaptations are significantly reduced – and production systems gain in transparency, flexibility and future-proofing.

From measuring point to integrated data node

This development fundamentally changes the role of traditional components. Weighing electronics should now be viewed less as



(photo: Minebea)

isolated measuring systems and more as an integral part of end-to-end data architectures. Modern weight indicators not only record weights but also present measured values, status information, diagnostic data and process parameters available digitally in a structured form – in real time and usable across systems.

In doing so, they assume a central role in production control: they provide the data basis for traceability, quality assurance, formulation processes and efficiency analyses.

Current solutions such as the MiNexx® weight indicators from Minebea Intec are designed precisely to meet these requirements. They combine highly accurate measurement data acquisition with end-to-end, standards-based communication, making data directly usable without additional gateways or proprietary adaptations.

They act as an intelligent interface between the field and control levels. In addition to classic industrial protocols, they support OPC UA, integrated web server functionalities and ethernet-based communication as standard, thereby enabling direct connection to MES, ERP or cloud systems.

Another crucial aspect in this context is the issue of cyber security. As connectivity increases, so does the importance of secure communication structures. Modern weight indicators take this into account by utilising encrypted data transmission, clear authentication and role models, and secure communication protocols.

This ensures that, particularly in sensitive production environments, data is not only available but also protected and trustworthy. “As connectivity increases, so does the responsibility to protect data reliably – which is why cyber security must now be an integral part of every industrial communication solution,” says Hubrich.

Integration as an economic factor

The economic significance of standardised interfaces is often underestimated. In many projects, a significant proportion of the effort is spent on system integration – not on their actual function. Particularly in complex plant projects, integration capability is increasingly important for project durations, cost structures and the future expandability of production systems.

Standardised communication significantly reduces this complexity: systems can be commissioned more quickly, expanded more easily and operated more flexibly in the long term. At the same time, data availability improves along the entire value chain – from raw material intake through to production and delivery.

This is particularly evident in processes where weighing technology plays a central role: measurement data is integrated directly into control, quality or ERP systems, thereby enabling end-to-end process control in real time.

The next step: understanding data rather than just transmitting it

Industrial networking has entered a new phase. It is no longer a question of whether systems can communicate, but how efficiently and unambiguously they do so.

Standardised interfaces such as OPC UA ensure that data is not only available, but also contextualised and interpretable. Only this creates the basis for advanced applications – from automated decisions to data-driven optimisations. Or to put it another way: the performance of modern production is no longer shown by individual machines – but by the quality of the data flows that connect them.

Resilient by design

Why dairy supply chains can't rely on efficiency alone



Author: George Ninikas, Senior Vice President of Sales and Accounts, Supply Chain Planning, Americas for ORTEC

For decades, dairy supply chain strategy was defined by one overarching goal: efficiency. Dairy producers, processors, and distributors invested heavily in optimization technologies designed to reduce refrigerated transportation costs, streamline cold-chain delivery networks, and maximize asset utilization. The prevailing belief was simple: the more optimized a dairy supply chain became, the more competitive it would be. However, the past several years have challenged that assumption.

Today's dairy supply chains operate in an environment defined by volatility, but also by tight service expectations, cold-chain compliance requirements, labor constraints, and rising sustainability pressures. For dairy manufacturers and distributors, product perishability adds an additional layer of urgency that leaves zero margin for disruption. Customer expectations continue to tighten even as volatility rises. Faster fulfillment, narrower delivery windows to retailers and foodservice customers, and higher service consistency requirements leave dairy organizations with less room to absorb disruption. Resilience therefore becomes not only a cost issue, but increasingly a product quality and customer experience issue.

On top of this, geopolitical tensions, extreme weather events, shifting dairy trade policies, and fluctuating consumer demand for specialty dairy products have introduced new levels of uncertainty. What once appeared to be temporary disruptions are increasingly becoming structural features of the global economy.

The scale of dairy supply chain activity itself underscores the stakes involved. According to recent industry data, U.S. business logistics

costs reached approximately \$2.6 trillion, representing 8.7% of the nation's GDP.¹ With supply chains accounting for such a large portion of economic activity, even small inefficiencies or unexpected disruptions can have significant financial consequences.

As volatility increases, many organizations are realizing that efficiency alone is no longer enough. For dairy operations, relying solely on minimizing miles, reducing refrigerated vehicles, or cutting buffer time can leave cold-chain operations fragile when disruptions inevitably occur. The most optimized supply chain on paper can quickly become fragile when real-world conditions change.

The limits of efficiency-driven supply chains

Traditional dairy supply chain optimization models were developed during a period when operating conditions were relatively stable. Demand patterns were easier to forecast; supplier networks were more predictable, and global trade operated with fewer disruptions.

In that environment, optimization delivered impressive results. Companies designed transportation networks that minimized empty miles, consolidated shipments, and balanced warehouse workloads. But today's operating environment is far less predictable.

Industry research shows that supply chain disruptions have become both more frequent and more costly. In fact, many organizations report that disruptions now occur twice as often as they did just a few years ago, and companies can lose 5–10% of annual revenue as a result of supply chain interruptions.²



ORTEC USA

(photos: ORTEC)

When disruptions occur, companies often respond by making rapid operational adjustments, rerouting deliveries, expediting transportation, or reallocating inventory across distribution centers. While these actions may resolve short-term challenges, they often erode the efficiency gains that were originally modeled during strategic planning. Over time, the savings projected during network design will gradually disappear during day-to-day operations.

The strategic–operational gap

One of the most common challenges organizations face today is the disconnect between strategic supply chain design and operational execution. At the strategic level, companies make long-term decisions about distribution center locations, supplier networks, and transportation structures. These decisions are often supported by advanced modeling tools that identify the most cost-effective network configuration.

However, such optimal distribution networks may look efficient on paper based on stable demand assumptions. But if customer order patterns shift, driver and labor availability tightens, or delivery windows change, planners often compensate manually; adding routes, changing schedules, and reallocating capacity. The network continues to function, but the original savings model defined during strategic planning quietly erodes over time.

Bridging this gap requires a broader perspective, what many supply chain leaders now describe as taking a “helicopter view” of the supply chain. Because the real challenge is not optimizing individual func-

tions, but managing the interaction between strategic design, tactical planning, and daily execution.

The value of a helicopter view

A helicopter view means understanding the supply chain as a connected ecosystem rather than a collection of isolated decisions. Network design, transportation planning, inventory management, and real-time execution are all interconnected. Decisions made in one area can significantly influence performance in another.

For example, modifying delivery zones might improve route efficiency but increase complexity within distribution centers. Similarly, diversifying suppliers to reduce risk may alter transportation flows or change inventory positioning across the network. Organizations that evaluate these decisions independently risk optimizing individual components while overlooking the broader system.

By contrast, a holistic perspective allows companies to connect long-term strategy with operational reality and ensure supply chain decisions remain adaptable over time. This is where a resilient supply chain begins, with intelligent design supported by technology that can model uncertainty, validate real-world feasibility, and continuously adapt as conditions evolve.

Designing supply chains for a volatile world

Adaptability has emerged as a mission critical requirement for every dairy producer, processor, and distributor. The dairy industry’s inhe-



Transportation solutions

rent vulnerability to weather events, milk supply fluctuations, and temperature-sensitive logistics makes this imperative especially acute. Global supply chains are increasingly described as operating in a “permanent state of disruption,” with trade tensions, climate events, and regulatory shifts continuously reshaping logistics networks.³

In response, many dairy organizations are redesigning supply chains with flexibility built in—adopting diversified milk sourcing strategies, re-evaluating cold-storage and distribution networks, and investing in technology that enables faster decision-making across the farm-to-shelf journey.

Resilient dairy supply chains are enabled by technology that spans the full lifecycle of operations. At the strategic level, scenario modeling and territory design tools allow dairy organizations to test whether their network can withstand seasonal demand swings, milk supply variability, or structural market changes. At the tactical and operational levels, advanced routing solutions validate refrigerated load feasibility, driver constraints, and time-window requirements for retail and foodservice customers, while still enabling rapid re-planning when disruptions occur.

Equally significant is real-time visibility. Driver applications, proof-of-delivery systems, and control tower dashboards provide immediate insight into execution performance, allowing organizations to respond proactively rather than reactively when conditions deviate from plan.

Importantly, resilience does not necessarily mean sacrificing efficiency. The most advanced supply chains are learning how to balance both.

A new supply chain imperative

If the past several decades emphasized efficiency above all else, the coming decade will likely prioritize adaptability and resilience. The frequency and scale of supply chain disruptions suggest that volatility will remain a defining feature of global commerce. Organizations that succeed in this environment will be those capable of aligning long-term network design with daily operational decision-making.

Resilience also depends on continuous improvement. AI is increasingly enabling organizations to move beyond reactive analysis toward predictive intervention – identifying where network assumptions repeatedly fail, surfacing structural inefficiencies, and recommending adjustments before performance deteriorates. By analyzing historical execution alongside planned scenarios, AI can stress-test networks, uncover planning blind spots, and simulate future conditions, allowing organizations to proactively refine both strategy and operations.

The result is a synchronized decision ecosystem where strategic design, tactical planning, and operational execution continuously inform and reinforce one another. In this model, resilience is not a reactive capability, but a built-in advantage. The critical question for dairy supply chain leaders is no longer whether their cold-chain network is optimized. It is whether it remains optimized—and compliant—when conditions change.

1: <https://www.penskelogistics.com/insights/industry-reports/state-of-logistics-report/>

2: <https://zipdo.co/supply-chain-disruption-statistics/>

3: <https://supplychainreport.org/global-supply-chains-now-operating-in-a-permanent-state-of-disruption-industry-report-says/>

Strategic water management

Why internal water systems determine safety, efficiency and competitiveness

Author: Zhanar Sadyk

In food production, water is simultaneously a raw material, a cleaning medium and a technical process factor. Yet its strategic importance is frequently underestimated. Internal water systems, however, are decisive for product safety, process stability and sustainability — and thus for a company's long-term viability. In public perception, water in food-processing plants is regarded as a well-controlled parameter: it complies with drinking water regulations, is tested regularly and therefore appears to pose no acute risk. This view, however, falls short. Between the water utility's handover point and the point of use in production lies a complex, often historically evolved system of treatment, storage and distribution.

Dr Anett Winkler, microbiologist at Cargill and Chair of the EHEDG Working Group "Water Management", points out that water in day-to-day operations is often not treated with the same attention as other ingredients. While raw materials are specified and monitored in detail, water is frequently not perceived as a product-relevant component — even though it directly or indirectly influences the quality of the end product in many processes.

It is precisely here that strategic water management begins: with the recognition that water is not merely infrastructure, but an integral part of the production system.

The regulatory responsibility is unambiguous. Regulation (EC) No 853/2004 obliges food business operators to provide a water supply that prevents contamination (Annex II, Chapter VII). The Codex Alimentarius (CXC 1-1969) requires suitable facilities for storage, distribution and temperature control. From the handover point onwards, responsibility rests entirely with the operator.

Water management is therefore not a purely technical matter, but a core entrepreneurial task.

Where risks actually arise

In its Guidelines for Drinking-water Quality, the WHO stresses that microbiological safety requires continuous, risk-based manage-



(photo: EHEDG)

Dr. Anett Winkler, microbiologist at Cargill and Chair of the EHEDG Working Group "Water Management"

ment. What is decisive is not only the quality of the incoming water, but the stability of the system as a whole. Even compliant drinking water can undergo microbiological change within a facility if storage, distribution or temperature control are not properly managed.

In practice, risks therefore often arise within a company's own infrastructure. Winkler points out that many companies lack transparency over their own water networks. Pipe routing is not always fully documented, and modifications made over the years are not consistently updated — which makes the water system difficult to control.

One of the central sources of hazard is the formation of biofilms. These are complex microbial communities that colonise the inner surfaces of pipes, tanks or heat exchangers, embedded in a self-produced matrix of extracellular polymers. This matrix acts as a protective shield: it hinders the penetration of disinfectants and enables microorganisms to persist even under adverse conditions.

Weak points as a source of contamination

According to the WHO, biofilms are a major reason why microbiological contamination can persist in distribution systems, even when the incoming water meets drinking water requirements (WHO, Guidelines for Drinking-water Quality). Biofilms thus represent more than a general microbiological risk — they can also act as a persistence reservoir for pathogens of relevance to food safety. The ability of *Listeria monocytogenes* and *Salmonella* spp. to survive within biofilm structures and, under suitable conditions, to be released back into the surrounding water is scientifically documented (EFSA BIOHAZ Panel, 2008; WHO, Guidelines for Drinking-water Quality). Within such biofilms, opportunistic waterborne microorganisms find ideal growth conditions. Particularly relevant here are *Legionella pneumophila* and *Pseudomonas aeruginosa*. The European technical guidelines on *Legionella*

prevention (ECDC/EWGII) indicate that temperatures between 25 °C and 45 °C in particular favour the growth of *Legionella*.

Typical operational weak points are therefore stagnation zones ("dead legs"), pipe sections with insufficient flow, or lukewarm temperature zones. Poorly maintained buffer tanks can also contribute to microbiological build-up. Biofilms not only act as a reservoir; they continuously release microorganisms into the water passing through. As a result, recontamination at the point of use can occur even when the initial water quality was faultless.

The risk therefore arises less from the water source itself than from system design, operating practice and maintenance condition. This is precisely why it is not sufficient to rely on quality at the handover point. What matters is control of the entire water system — technically, organisationally and microbiologically.

Water management: essential for food safety

Strategic water management means systematically analysing internal water systems, assessing risks and prioritising measures in a traceable manner. The aim is not maximum technology, but appropriate control.

In this context, Winkler emphasises that in food safety there is no such thing as zero risk. What is decisive is rather which residual risk is acceptable and how professionally it is managed. This view corresponds to the risk-based approach of Codex, the WHO and modern management systems such as ISO 22000.

Water management thus becomes part of corporate governance:

- » Integration into HACCP systems
- » Definition of clear responsibilities
- » Systematic documentation
- » Regular verification and trend analysis

Only when transparency about the company's own system is in place can investment decisions be taken on a sound basis.

FIELD OF ACTION	STRATEGIC BENEFIT
Transparency in the system	Clear identification of critical points
Hygienic design	Reduction of biofilm and recontamination risks
Monitoring	Early detection of trends and deviations
Technology selection	Investment security through risk-based decisions
Documentation	Greater robustness in audits and regulatory checks

Tab. 1: Benefits of structured water management

EHEDG Guideline 28

At this point, EHEDG Guideline 28 (Safe and Hygienic Treatment, Storage and Distribution of Water in Food and Beverage Factories) gains strategic importance. According to EHEDG, it describes a structured approach to the treatment, storage, distribution and monitoring of water in food and beverage plants (EHEDG, Guideline 28 — Scope). The most recent revision also incorporates aspects of sustainability and water reuse (EHEDG News, 2023). The added value of the guideline lies in its holistic scope. It combines risk analysis, hygienic design, technology selection and monitoring into a coherent overall concept. Companies thus receive not an isolated list of measures, but a framework for the structured assessment of their water systems.

Winkler emphasises that the guideline covers the entire subject area — from hygienic design through to the control of specific risks such as Legionella. At the same time, she stresses that technical statements must be verifiable. Guidelines of this kind create a common language between food manufacturers, quality managers and equipment engineers. EHEDG documents are not legal requirements. In practice, however, they frequently serve as a best-practice reference for hygienic engineering and support companies in implementing regulatory requirements.

Sustainability and efficiency without compromising safety

Rising water prices, environmental requirements and corporate sustainability targets are prompting operators to examine more closely where water can be used more than once. Reuse, however, must not be considered in isolation. Winkler describes this conflict

of objectives as a balancing act: reuse must be assessed on a risk basis; sustainability must not come at the expense of product safety. Every application — whether product contact, cleaning or cooling — calls for a differentiated view of water quality.

EHEDG Guideline 28 addresses this approach by calling for an application-specific assessment. Water can thus be used efficiently without increasing hygienic risks. Strategic water management therefore combines resource conservation with risk control.

Hygienic design as a competitive factor

For the food industry, a structured approach to water management brings a number of immediate benefits (see Tab. 1). A professionally managed water system reduces unplanned production downtime, allows maintenance activities to be planned more reliably and strengthens a company's position in dealings with auditors and business partners. Such a system influences product safety, process stability, resource efficiency and investment decisions in equal measure. Companies that manage their internal water systems on a purely operational level forfeit considerable strategic potential.

EHEDG Guideline 28 provides a scientifically sound and practice-oriented framework for developing water systems in a targeted way. In conjunction with the requirements of Codex, the WHO and EU hygiene law, this creates a coherent, risk-based approach. What is decisive here is not merely control, but the deliberate steering of water systems. Companies that make internal water systems transparent and prioritise technical measures on a risk basis strengthen not only food safety but also the long-term competitiveness of their business. Water is increasingly evolving into a strategic control factor in modern food production.

SOURCES:

EFSA Panel on Biological Hazards (BIOHAZ) (2008): Request for updating the former SCVPH opinion on *Listeria monocytogenes* risk related to ready-to-eat foods and scientific advice on different levels of *Listeria monocytogenes* in ready-to-eat foods and the related risk for human illness. EFSA Journal, 6, 599. DOI: 10.2903/j.efsa.2008.599.

EHEDG (2023): Guideline 28 — Safe and Hygienic Treatment, Storage and Distribution of Water in Food and Beverage Factories.

Codex Alimentarius (CXC 1-1969): General Principles of Food Hygiene.

WHO: Guidelines for Drinking-water Quality.

Regulation (EC) No 853/2004; Regulation (EC) No 178/2002.

ISO 22000; ISO/TS 22002-1; ISO 5667.

Interview with Dr Anett Winkler in Kraków, October 2025.

When the target profile isn't fully transparent

How to ensure sensory requirements are met on an industrial scale

In product development, sensory target profiles are usually clearly defined, agreed upon internally, and comprehensible to all departments involved. But what happens when a target flavour range needs to be defined, yet a key sensory component in the development process is not fully transparent to the entire team? We spoke to Regina Schauer, a food technology engineer at Alpenhain, a traditional Bavarian manufacturer of cheese specialities, about this unusual situation, the translation of sensory requirements into technological parameters, and the interplay between recipe development, sensory analysis, quality assurance and production

IDM: What makes innovation in the dairy industry particularly challenging at the moment?

SCHAUER: Innovation in the dairy industry is challenging primarily because new products must be integrated into a highly standardised environment. Development, quality assurance, procurement and production are closely interlinked, and this increases the demands on process-stable implementation. A new product is therefore not just a question of the recipe, but always also an interface and implementation project that must be documented clearly and be reproducible on an industrial scale. At the same time, pressure is growing in many companies to bring innovations to market faster without compromising on quality and compliance.

Regina Schauer, food technology engineer at Alpenhain
(photos: Alpenhain)



IDM: Where do you see the biggest sticking points in practice when it comes to new products?

SCHAUER: In practice, friction points often arise where information and responsibilities are handed over: with new raw materials and their entry into the system, in specifications, in labelling, as well as in internal documents and approval processes. Especially when new ingredients come into play, these handovers must be organised consistently, because otherwise ambiguities can quickly spread to downstream areas. During the development of the "Camembert Creme Mystery Edition", an additional requirement was added to this classic interface logic: the processes had to remain stable, whilst at the

same time access to information had to be deliberately controlled.

IDM: In your view, what was the particular food technology challenge of the "Camembert Creme Mystery Edition" project – and how did the development process differ from a "classic" one?

SCHAUER: The particular food technology challenge lay in integrating a new flavour profile into the Camembert Creme in such a way that it is not already 'revealed' via the ingredients list, raw material descriptions or upon opening the product – for instance, through a visible colour change. At the same time, the legal framework of the Cheese Regulation had to be adhered to; artificial fla-

avourings, for example, are not permitted. And the sensory result had to suit the product: harmonious as a classic spread, with a recognisable Camembert base and an enigmatic character that is neither too light nor too heavy. The development process differed from a traditional project in that tastings and consultations were deliberately organised within a small group.

IDM: If a target sensory profile is not fully defined from the outset or cannot be clearly described by all parties involved: how is such a starting point translated into concrete technological development parameters?

SCHAUER: If a target sensory profile is not fully defined or clearly describable at the outset, we translate it into verifiable technological guidelines – that is, parameters that function even without a ‘plain-language’ description of the flavour. In the project, these were initially specifications regarding product appearance and character: the appearance and texture were to remain on a par with the natural variant, colouring was ruled out, and the Camembert character was to remain recognisable to the senses. In addition, standard chemical parameters were defined as objective control variables and tested throughout: pH value, dry matter and fat in dry matter – based on internal guidelines as well as the legal requirements from the sales description (“double cream grade”).

At the process level, the addition of flavouring was designed so that each batch received the same standardised amount of flavouring. At the same time, potentially critical points were addressed from a technological perspective, particularly the question of how the flavouring withstands the heating process of the cream and whether there are any sensory changes over the shelf life. This was verified through best-before date testing, and corresponding risks could be ruled out.

IDM: How did you define, structure and refine the sensory targets during the project?

SCHAUER: We deliberately organised the sensory work into a clear rhythm and defined rounds. The actual formulation development and finalisation took place within a small, select group to ensure the project remained under control right up to market launch. At the same time, we integrated the whole process

Camembert Creme Mystery Edition





into our normal daily tasting routine: there were regular team tastings where current samples could always be included without their identity being revealed. This allowed us to gradually refine the profile whilst simultaneously using feedback from uninvolved staff to check whether the ‘mystery’ was plausible. Organisationally, the tasting process was designed so that the flavour could not be deduced from cup labelling or naming.

IDM: What methods and testing mechanisms were necessary to sensorily validate a flavour profile that was initially difficult to pin down, whilst at the same time ensuring it was technologically robust enough for industrial production?

SCHAUER: Sensory-wise, as just described, we worked with a phased testing approach: the formulation and finalisation took place within a small project group, accompanied by blind tastings – particularly in the early stages, when several flavour profiles were under consideration. Later, uninformed individuals were brought in for the ‘reality check’.

Technologically, the focus was simultaneously on the industrial validation of the critical component, namely the flavour-giving element in the form of a natural flavouring. Here, the legal framework had to be clarified first. The next step was to develop a dosing strategy that would work reproducibly on an industrial scale and was not prone to over- or under-dosing. An additional guideline stipulated that the Camembert cream should not

be coloured and that its appearance and texture should remain on a par with the natural version – ensuring the product remained consistent in the production process, even though the flavour was known internally only to a small group.

IDM: At what stage in a project like this does it become clear whether a concept that is convincing from a sensory perspective is also suitable for production? What requirements had to be met for the development to actually become a standardisable process?

SCHAUER: Suitability for production becomes apparent the moment the sensorily convincing sample is transformed into a process that functions stably in large-scale trials and later in a production environment without requiring special treatment. In the case of the “Camembert Creme Mystery Edition”, a decisive advantage was that the manufacturing process essentially did not differ from other varieties of Camembert Creme, so no new process logic had to be established on the production line.

The critical point lay less in the process than in the raw materials and their “traces”: as soon as the flavour-giving component is integrated in such a way that it can be managed cleanly within purchasing, the system, specifications and internal documentation without allowing any conclusions to be drawn, the rest can largely proceed in a controlled manner. At the same time, the pro-

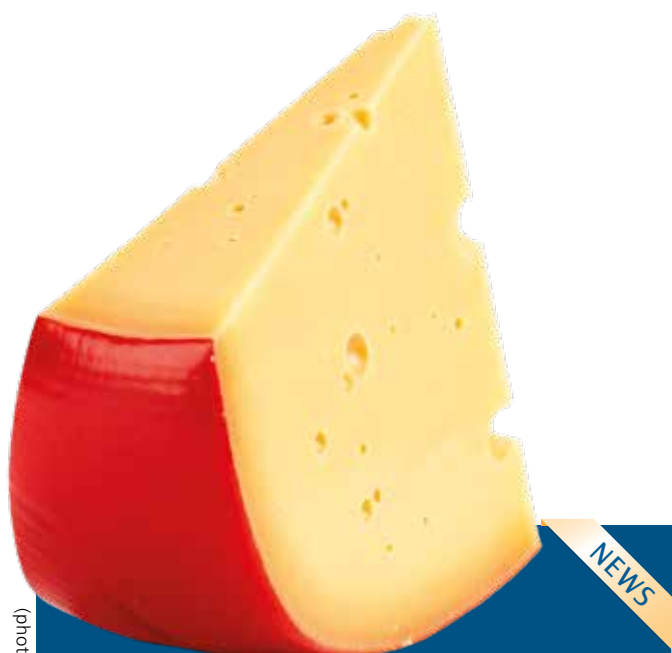
duct must reliably adhere to the defined parameters so that it remains consistent within the standard process.

IDM: Where do the greatest risks of miscommunication or unintended transparency typically arise in industrial companies?

SCHAUER: In industrial companies, the greatest risks of miscommunication or unintended transparency often arise not so much in production itself, but in systems and documents, because that is where information is permanently visible and quickly disseminated. Of particular concern are specifications, item and raw material records in the system, sample identifiers, as well as label and print data. This became very clear to us when the raw material was entered into the system earlier than expected and the designation was initially taken from the supplier’s specification – which would have made the flavour immediately recognisable. In projects with controlled information access, such points must be identified very early on and actively safeguarded.

IDM: What ‘minimum rules’ would you recommend to companies if they wish to work deliberately with small information circles?

SCHAUER: A clear role-based approach is key: it should be defined early on who absolutely needs which information to perform tasks in a legally compliant and process-stable manner, and who does not need this information. Secondly, consistent, uniform coding is recommended so that raw materials, documents and systems do not allow any conclusions to be drawn; in the project, the raw material was consistently referred to only as “Mystery”. Thirdly, typical information carriers must be actively secured: manage formulation documents in such a way that critical designations are not unambiguous, anonymise samples, and create label and print data in such a way that the source cannot be identified. In practice, a formalised “leak check” has also proven its worth – that is, a defined verification step prior to approvals, which systematically checks systems, documents and print data to ensure that no plain-text designations or clues to the product’s identity are inadvertently included. This makes information protection a repeatable process step and ensures it does not depend solely on individual people or spontaneous attention.



(photo: AI generated)

Netherlands: 62% of milk are turned into cheese

Exports remain focused on Europe

Last year, the Dutch dairy industry processed 14.1bn kg of milk, over 2 per cent more than in 2024. Of this, approximately 62 per cent was used to make cheese. The increase in the volume of available milk resulted primarily in a 4 per cent rise in cheese production and a 2 per cent rise in liquid milk and dairy products. Cheese production, including quark, exceeded 1bn kg in 2025. Of this, approximately 60% consisted of Gouda cheese. This is reported by the sector organisation ZuivelNL in its publication 'Dairy in Figures 2025'.

The value of Dutch exports in 2025 stood at €11.87bn, more than 4 per cent higher than the previous year. The European Union is by far the most important export market for Dutch dairy products. In 2025, exports to the Member States of the European Union were worth more than €9.2bn, accounting for almost 78 per cent of the total export value.

If other European countries are also taken into account, the European share of total exports stands at 81 per cent. Exports to Belgium, Germany and France alone accounted for a value of nearly €6.5bn. This represents almost 55 per cent of the total value of Dutch dairy exports.

Alfa Laval

New Food & Pharma Division

Alfa Laval's recently formed Food & Pharma Division signals a step change in ambition – not least within food. The transformation of its Food & Water Division into the Food & Pharma Division highlights a stronger focus on pharmaceutical production. But it also marks an important new chapter in relation to food.

The strategic reorganization, built around distinct route-to-market paths, enhances customer alignment while bringing R&D investment to a historic level. Food – extending from dairy, beverages, edible oils, and meat and fish processing to the frontiers of alternative proteins and fermentation-based production – is the clear and dominant core.

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Cottage cheese's second act

Driving premium innovation in high-protein dairy



Author: Paola Gamboa Moreno,
Technical Service Manager,
dsm-firmenich

Once associated primarily with low-fat diets, cottage cheese has emerged as one of the dairy sector's biggest success stories. Driven by consumer demand for high-protein nutrition, minimally processed foods, and healthier everyday eating, this traditional fresh cheese has been reinvented as a versatile, premium product with broad consumer appeal.

From breakfast bowls and snacks, to smoothies and baked goods, cottage cheese is increasingly finding its place across multiple eating occasions. Yet its resurgence is about more than changing food habits. It reflects a wider shift towards nutrient-dense dairy products that deliver both functionality and enjoyment.¹

For manufacturers, rising demand also raises expectations. Consumers are looking beyond protein content, expecting cottage cheese to offer a smooth, creamy mouthfeel, consistent curd structure, fresh dairy flavor, and good shelf life. At the same time, producers must improve process efficiency, maximize yield, and reduce waste while maintaining consistent product quality.

dsm-firmenich believes the future of cottage cheese lies in combining traditional cheesemaking with modern science. Through advanced cultures, coagulants, bioprotective solutions, and application expertise, manufacturers can optimize production while delivering the premium sensory experience consumers increasingly expect.





(photo: Vladislav Noseek/Shutterstock)

Protein may attract consumers, but taste and texture keeps them coming back

Cottage cheese has become a natural choice for consumers seeking foods that support active lifestyles, healthy ageing, and satiety. Its naturally high protein content, relatively low-fat levels, and simple ingredient profile make it an attractive alternative to many processed protein products. However, while protein may drive initial purchase, consistent texture, smooth mouthfeel, and eating quality are what encourage repeat consumption. Consumers expect tender, uniform curd particles suspended in a rich, creamy dressing, with a clean dairy flavor and fresh appearance. Even small variations in curd firmness, moisture retention, or cream distribution can significantly influence the eating experience and perceptions of quality.

Achieving this consistency begins long before the curd is formed. Pasteurization conditions influence whey protein denaturation and water-binding capacity, while fermentation kinetics determine acidification rate and ultimately curd formation. Selecting the right starter culture is therefore a critical processing decision, affecting acidification profile, flavor development, production efficiency, and final product consistency. For example, Mesophilic cultures such as *Lactococcus lactis* and *Lactococcus cremoris* are well suited to conventional cottage cheese manufacture, while blends containing *L. lactis*, *L. cremoris*, and *Streptococcus thermophilus* support production at higher fermentation temperatures.

Starter cultures also influence processing performance. Homofermentative cultures provide controlled acid production without generating carbon dioxide, helping to minimize defects such as floating curd, uneven cooking, and yield losses. Likewise, selecting strains with low agglutination potential promotes even acidification throughout the vat, supporting consistent coagulum formation and reducing product variability.

Coagulants play an equally important role. By strengthening coagulum formation, they produce a firmer gel at cutting pH, helping curd particles better withstand downstream processing while reducing the risk of shattering. Rather than considering cultures and coagulants independently, manufacturers achieve the best results by selecting them as part of an integrated production strategy.



Managing complexity in fresh cheese production

As a high-moisture fresh cheese containing around 80% water, cottage cheese presents unique manufacturing challenges. Small variations in process conditions can have a significant impact on product consistency, yield, and shelf life.

During acidification, the electrical charge carried by casein micelles gradually decreases until the proteins reach their isoelectric point and form a stable coagulum.² Reaching this point at approximately pH 4.6-4.7 is essential for developing the gel structure that determines curd quality. The timing of cutting is equally critical, with cut-pH influencing whey expulsion, moisture retention, and final body and texture. Uniform cutting also helps prevent uneven moisture loss, reducing the risk of gritty or grainy textures. Additionally, allowing the curd to heal before agitation improves its ability to withstand cooking, while gradually increasing cook temperature helps prevent case hardening, which slows syneresis and can result in inconsistent curd structure. Finally, gentle handling during draining, washing and blending further preserves curd integrity before packaging.

Extending freshness while meeting clean-label expectations

Shelf life remains one of the most important quality considerations for cottage cheese producers. Spoilage is typically linked to psychotropic Gram-negative bacteria, yeasts, and molds introduced during post-cook handling, particularly during curd washing and blending. These microorganisms can degrade proteins even under refrigerated conditions, leading to bitterness, rancidity, undesirable texture changes, and visible defects that shorten product life.³

Because contamination most commonly occurs after cooking, effective hygiene throughout downstream processing is essential. Water quality during curd washing plays a particularly important role, alongside good manufacturing practices, equipment sanitation, and air quality management. Together, these measures help minimize microbial contamination before packaging.

Historically, manufacturers have relied on modified atmosphere packaging or preservatives to improve stability. Increasingly, however, consumer demand for simpler ingredient lists is driving interest in clean-label preservation strategies. Bioprotective cultures offer a natural alternative by inhibiting spoilage microorganisms without affecting flavor or contributing to additional acidification. Integrated alongside robust process hygiene, they help manufacturers extend shelf life while maintaining the fresh, clean sensory profile consumers expect.

Innovation beyond ingredients

As cottage cheese evolves from a niche product to a premium dairy category, innovation increasingly extends beyond individual ingredients. Achieving the wide range of objectives for cottage cheese requires a holistic approach that integrates cultures, coagulants, process optimization, and bioprotection rather than treating each element independently. This approach enables manufacturers to respond more effectively to changing market demands while producing differentiated products with consistent texture, flavor, and shelf life.

Partnering for the next generation of cottage cheese

Meeting expectations from the renewed popularity of cottage cheese requires manufacturers to balance traditional cheesemaking expertise with innovative dairy science and scientific expertise. Success depends on understanding how every stage of production – from culture selection and coagulum formation to shelf-life management and process optimization – contributes to the final product.

dsm-firmenich works alongside dairy manufacturers to address these formulation and processing challenges. By combining advanced portfolio of solutions with application expertise, dsm-firmenich helps

producers improve consistency, optimize efficiency, and develop premium cottage cheese products that meet evolving consumer expectations for nutrition, quality, and outstanding eating experiences.

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Hébert Group established a dedicated Dry Molded Fiber business unit, Herpulp (photo: ANDRITZ)

Hébert Group expands Dry Molded Fiber production Fiber-based packaging

NEWS

French packaging specialist Hébert Group has expanded its activities in Dry Molded Fiber (DMF) through a partnership with technology supplier ANDRITZ. The company, which develops packaging solutions for the food, dairy and cosmetics industries, is investing in fiber-based alternatives as demand for sustainable packaging continues to grow. Following a market assessment in 2020, Hébert Group established a dedicated Dry Molded Fiber business unit, Herpulp, and commissioned its first production line in 2023. The technology uses natural cellulose fibers to produce molded packaging while aiming to reduce water and energy consumption compared with conventional fiber-forming processes.

Since 2024, ANDRITZ has supported the project with process optimisation, commissioning and technical services. To further accelerate industrialisation, the company has also established an Airlaid Dry Molded Fiber Technical Center in Grenoble, France. The facility supports the development and validation of fiber formulations, forming processes, moulds and end-product applications in close collaboration with industry partners. The company currently manufactures trays and lids using the technology and is evaluating additional applications, including deep-drawn packaging. According to the partners, further industrial development of Dry Molded Fiber will depend on continued technological advances, cost reductions and collaboration across the value chain.

New production plant in the Allgäu

MULTIVAC Group continues to invest at its headquarters

The MULTIVAC Group has invested around 100 million euros in building a second state-of-the-art production site at its headquarters. The plant for parts manufacturing and spare parts logistics was finished at the end of 2025 and is already being put into operation stage by stage. By embarking on this expansion, the globally operational company is pointing the way for the future.

Founded in 1961 in the Lower Allgäu, the MULTIVAC Group has established itself as an innovative and leading global supplier of packaging and processing technology, and it employs around 7,800 staff at its production sites and over 80 subsidiaries around the world. To maintain its continuing growth, the

company is once again expanding at its Wolfertschwenden headquarters in the Allgäu, and has built a second state-of-the-art production plant about 800 m from its main site.

State-of-the-art manufacturing and automation technology

"This investment is not only a strategic step in preparation for the future, but also an affirmation of our commitment to promoting and developing the Allgäu region as a commercial location," says Dr Christian Lau, group president (CTO) at MULTIVAC Group.

With a floor space of 35,000 m² the new plant offers state-of-the-art manufacturing

and automation technology and includes a production facility and a spare parts depot as well as office space, social areas and a canteen. The investment of around 60 million euros in the building, together with a further 40 million in equipment and technology, underlines the MULTIVAC Group's commitment to its future and that of the Allgäu region.

In order to be faithful to its sustainability strategy, the company is also planning a wide range of measures for the new production site, which will contribute to reducing greenhouse gas emissions. These will include the use of regenerative energy sources, such as ground water for cooling the building, as well as geothermal heating systems, bio district heating,



(photos: MULTIVAC)

The MULTIVAC Group is investing around €100 million in the construction of a second state-of-the-art production facility at its headquarters



“Against the backdrop of demographic change, which will further intensify the shortage of skilled workers in the coming years, automation is no longer merely an option but a necessity,”

says Dr. Christian Lau, Managing Director (COO/CTO) of the MULTIVAC Group.

and the company's own photovoltaic equipment. The new plant's energy supply will therefore be completely climate neutral.

Expanding capacities and new logistical solutions

Evolving customer requirements are among the main drivers of the current expansion plans. The demand for tailored turnkey line solutions from one source, instead of stand-alone machines, is growing strongly, since these line solutions encompass all the stages from processing through to packaging of food, medical or pharmaceutical products. These complete solutions, which often include product slicing, packaging, inspection, labelling and end-of-line handling, are not only very complex, but they also require a large assembly area, since the lines are frequently

more than 20 metres long. Despite its floor space of 90,000 m², the existing factory in Wolfertschwenden is now reaching the limits of its capacity. As a result, the manufacturing of machine components, which up-to-now has taken place in the main factory, is to be moved into the new building complex with immediate effect. This will create space in the main factory for the expansion of the slicer and line business, which is seeing continual growth. In addition to this, the new building includes a logistics centre for spare parts, which will continue to improve global delivery times: “The new logistics centre is so much more than just a modern building with automated processes – it is not only the next step in our supply chain, but also a strategic intersection for the entire company group. It enables us to make spare parts available to our customers quicker and ensures a more stable supply of spare parts to our plants as well as greater transparency in the flow of materials. This helps us to significantly improve the delivery performance to our customers worldwide,” says Lau. “50,000-60,000 spare parts for machines across the entire company group, so MULTIVAC, TVI and, in future, FRITSCH will be stored there. And spare parts ordered via the Webshop can be dispatched from there on the same day,” explains Lau.

Automation to meet demographic changes

Automation will also play a central role in the new factory: Fully automated process chains are planned for the warehouse, dispatch area and parts of the manufacturing operation. The latest technology, such as driverless transport systems and industrial robots, will serve

the CNC milling machines, not only to increase production efficiency and precision, but also to counter the increasing shortage of manpower.

“Against a backdrop of demographic change from which the shortage of skilled workers will become even more acute in the coming years, automation is no longer just an option, but also a necessity,” explains Lau. “Just as with our customers, we too have to prepare ourselves for the consequences of this demographic development. It is for this reason therefore, that we are using the latest automation technology in the new factory, so that we can increase productivity and use our capacity more efficiently.”

Global reach combined with local anchoring

By building its new production site, the MULTIVAC Group is also pointing the way for the future: “Building our new plant is about much more than just expanding our facilities. It underlines our commitment to innovation, sustainability and a strong economy in the Allgäu region,” emphasises Lau. “Despite the current industrial challenges Germany currently faces, our faith in the region remains steadfast. We have our roots here and benefit from excellent training standards and highly qualified personnel. We see our combination of global reach and local anchoring not as a contradiction, but as a strength. This new building is not only an investment in sustainably successful relationships with our customers, and therefore also the future viability of the MULTIVAC Group, but also an expression of our faith in the long-term prospects here in the Allgäu.”

Consumers are choosing balance over restriction

Balancing Indulgence with changing wellness expectations in ice cream



Author:

Aaliyah Jahangeer, Content and Marketing Executive at FMCG Gurus

As consumers become more health conscious, many food and beverage categories are evolving to meet growing demand for healthier options. Ice cream, however, continues to occupy a unique position. Rather than being viewed as

a functional product, it remains closely associated with enjoyment, comfort, and moments of reward.

FMCG Gurus' research shows that 39% of consumers describe ice cream as unhealth-

thy, compared to 21% who view it as healthy. This reinforces the category's long-established role as an occasional indulgence rather than an everyday wellness product. Instead of attempting to redefine this perception, brands should focus on elevating the qualities consumers already value through premium ingredients, exciting flavors, and memorable eating experiences.

Consumers are choosing balance over restriction

Today's consumers are taking a more balanced approach to healthy living. Rather than avoiding indulgent foods altogether, they believe treats have a place within an overall healthy lifestyle.

This is reflected in FMCG Gurus' research, where 48% of consumers agree and a further 20% strongly agree that treating themselves occasionally aligns with maintaining a healthy diet. For ice cream brands, this reduces the pressure to justify indulgence through extensive health claims. Instead, brands can position products as part of a realistic, balanced lifestyle that embraces moderation rather than restriction.



(photo: AdobeStock/papan saenkuttrueang)

Indulgence still outweighs health claims

Although consumers continue to express interest in healthier eating, these aspirations do not always translate into purchasing behavior when buying treats. Research from FMCG Gurus shows that 56% of consumers prefer traditional indulgent snacks such as chocolate and confectionery, compared to 44% who opt for high-protein or low-sugar alternatives. This demonstrates that enjoyment remains the priority when consumers are looking to indulge. Functional ingredients can add value, but they are unlikely to succeed if they compromise the taste, texture, or sensory experience that consumers expect from ice cream.

Emotional value is becoming increasingly important

Ice cream is more than just a dessert. It is often associated with relaxation, comfort, and small moments of reward throughout the day, making its emotional appeal just as important as its flavor.

Among consumers who eat ice cream in the evening, 68% say it makes them feel happier, while the same proportion value its convenience as a quick snack. These findings highlight an opportunity for brands to build stronger emotional connections by celebrating everyday moments of enjoyment rather than relying on nutritional messaging alone.

Taste will continue to define success

As wellness trends continue to evolve, taste remains the foundation of the category. According to FMCG Gurus' research, 87% of consumers say taste is one of the main factors influencing their purchase, ahead of the 79% who prioritize price. Whilst consumers expect products to support healthier lifestyles, they remain unwilling to sacrifice sensory enjoyment for additional functional benefits.

Looking ahead, the strongest opportunities for ice cream brands will come from enhancing indulgence rather than replacing it. Brands that combine taste with premium quality, authentic ingredients, and messaging centered on balance and permissible indulgence will be best placed to meet changing consumer expectations.

This article is based on FMCG Gurus:
Weighing Up Indulgence vs Wellbeing Claims
in Ice Cream – Trend Report 2026.

(photo: AdobeStock/Arina Habich)

Sustainability – Recycling – Upcycling with centrifuges

Three words that the manufacturing industry should keep questioning

What does sustainable mean? To handle resources sustainably and responsibly and to adopt an ethical attitude, both economically and ecologically. It means the most long-term possible use of economic assets. One of these assets is centrifugal separation technology. Hardly any other unit is used as multifunctionally in the entire process industry. No other appara-

tus simultaneously offers so many options for implementing sustainability, recycling and upcycling.

The company Centrimax Winkelhorst Trenntechnik GmbH has been committed to sustainability in its field for more than 40 years and is now one of the world's leading suppliers of used



but fully reconditioned centrifuges, in particular separators and decanters.

Centrifuges are both material- and labor-intensive to manufacture. The high centrifugal forces place high demands on the strength of the materials. The loadbearing parts of the bowls are therefore usually forged from largely corrosionresistant materials or cast using the spincasting process. This requires high temperatures and therefore high energy costs as well as highgrade materials containing, among others, chromium, nickel and molybdenum, whose occurrence in nature is finite and therefore calls for sustainable use. The further machining of the blanks into precise individual parts requires special machine tools and thus again high costs and a high energy input. Consequently, the longest possible use of these valuable centrifuges is desirable.

The first centrifuge was the milk centrifuge. This was at the same time the first product of centrifugal separation technology. The composition of milk has not changed since the introduction of the first handdriven centrifuge, and the task has remained the same to this day, i.e. skimming whole milk. What has changed is the structure of the dairies, and an end to this development is still not in sight. From the handdriven centrifuge with an hourly capacity of approx. 20 l, the largest milk centrifuge now has an hourly capacity of up to 80,000 l. The small village dairy has turned into a milk factory built on a greenfield site. In the course of this structural change, centrifuges are becoming available whose sustainable continued use is called for.

This is where Centrimax is challenged in the truest sense of its logo, i.e. the maximum use of centrifugal force. After the purchase of a centrifuge that has been shut down, in this case due to a merger, a general overhaul (recycling) is carried out before it is put back into service, as well as an upcycling with the latest control technology. Commissioning at the customer's site by Centrimax and the aftersales service are the final steps in achieving sustainability.

If the centrifuge "no longer likes milk", Centrimax is called upon to look for a product with a similar task or an operator with a similar requirement. After milk, for example, peel oil from lemons can be a demanding application for a machine that was originally launched on the market as a milk centrifuge, and for the new operator it can be a very sustainable and particularly costeffective solution.

There are many possibilities within the portfolio of application areas. This applies especially to centrifuges that have been used in the food chain or in the pharmaceutical or chemical sector.

Centrimax has a stock of more than 700 centrifuges of various types and sizes. This range, combined with more than 60 years of knowhow, repeatedly leads to success stories, both for new applications and for standard applications that have existed for over 100 years, such as in the dairy industry, and the sustainability-recycling-upcycling triple truly takes place here every day. Both global market leaders and startups find an Eldorado of centrifugal separation technology here.

IFF

Cultures for high-protein yogurt

To support yogurt producers, IFF has launched YO-MIX FORTIS cultures which are designed specifically for high-protein yogurt – from 8% protein to 15% and beyond. Compared to pre-existing solutions, YO-MIX FORTIS enables faster fermentation times and good acidification control. It's available in two versions to enable the production of both spoonable and drinkable yogurt formats.



(Photo: AI generated)

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Theory and practice at Hannover University of Applied Sciences and Arts

Education seminars “Milk Drying Technologies” and “Cheese Technology”



Author:

Christian Zscherpe, Hochschule Hannover University of Applied Sciences and Arts

Skim milk powder was produced using a spray dryer and drum dryer after the milk had been evaporated



From January 12 to January 23, 2026, Hannover University of Applied Sciences and Arts (HsH), in cooperation with the German Dairy Academy (Deutsche Molkerei Akademie, DMA), hosted two intensive continuing education seminars on Milk Drying Technologies and Cheese Technology. Designed for professionals from the dairy and food industries as well as related sectors, the three- and five-day programs combined theoretical instruction, hands-on laboratory sessions, and presentations by industry experts to provide participants with up-to-date knowledge of the latest technological developments and industrial practices.

The seminars were organized by the HsH Academy, the university's continuing education division, which offers a broad portfolio of professional training programs in addition to specialized courses for the dairy industry, including project management, information technology, engineering, and other technical disciplines.

Cheese technology

The three-day cheese seminar opened with an introduction to cheese milk preparation, the technological fundamentals of cheese manufacturing, and an overview of whey processing presented by Prof. Dr. Saskia Schwermann and Christian Zscherpe.



Seminar participants learned about dairy technology through hands-on experiments

The second day began with a presentation by Dr. Hendrik Buschen-dorf of Novonesis, who discussed the use of starter and ripening cultures, which are one of the most critical factors in producing high-quality cheese. Participants also received an overview of the application of different types of rennet enzymes. Harrie Spijkerman and Dirk Kruse of Tetra Pak GmbH introduced the design and operation of key processing equipment, including cheese vats, buffer tanks, and the Casomatic system. Ursula Schweiger of the Bavarian State Research Center for Agriculture provided an in-depth overview of the diverse roles of salt in cheese production.

The afternoon focused on practical training. Participants learned the fundamentals of acid and rennet coagulation, examined the effects of high-heat treatment on milk coagulation and gained hands-on experience in cheese manufacture. The final day concluded with an overview of current market trends in the cheese sector presented by Prof. Dr. Corina Jantke. The seminar concluded with presentations by Marius Herr of ppg > flexofilm and Jens Welzel of DMK GmbH, who covered the fundamentals of cheese packaging.

Milk drying technologies

The five-day seminar began with comprehensive introductions to dairy processing technology by Schwermann, evaporation processes by Prof. Dr. Britta Rademacher, and drying technologies, including specific challenges associated with infant formula production, by Zscherpe. A lecture on life cycle assessment of milk drying processes completed the theoretical portion of the program. Practical sessions included the evaporation of skim milk and the spray drying and roller drying of the resulting concentrates, enabling participants to apply learned theoretical concepts and gain a deeper understanding of the relationships between processing conditions and product quality.

Participants subsequently evaluated the functionality of the powders produced. Measurements of bulk density, tapped density, and angle of repose were used to assess powder flowability. Additional quality parameters including solubility, color, residual moisture, and scorched particles provided further insight into powder quality. The analyses

revealed how varying temperatures during spray and roller drying affect the functional properties of milk powders. Particle size distribution, another key attribute of milk powders, was investigated by examining the influence of different atomization parameters. Particle size was determined using sieve analysis and laser diffraction spectroscopy. Practical exercises also included rheological measurements to determine the viscosity of milk concentrates, a parameter that plays a crucial role during atomization in the spray drying chamber. Current industry developments have also formed a central part of the seminar. Dr. Felix Wagner of corosys food technology discussed the specific challenges associated with the evaporation of acid whey and other difficult-to-process whey streams. Drawing on numerous industrial commissioning projects, he presented practical case studies illustrating process optimization strategies.

Nils Buttler of GEA Liquid Technologies Germany GmbH presented efficient technologies for reducing energy consumption during milk and whey concentration. His presentation highlighted the application of reverse osmosis and evaporation processes and discussed the operating conditions under which each technology provides the greatest benefit. On the final day, Thomas Bühl of BSP Consulting GmbH presented current applications of gas injection and discussed practical implementation strategies. He also addressed safety aspects of spray drying towers and other drying systems, providing participants with an overview of explosion prevention and protection measures. The seminar concluded with a presentation by Jens Welzel of DMK on the conveying and packaging of dried dairy products.

Continuing education for the dairy industry

Together, the continuing education seminars Milk Drying Technologies and Cheese Technology offered a comprehensive, practice-oriented training program for professionals in the dairy and food industries. By combining scientific fundamentals, laboratory-based practical exercises, and presentations from leading industry experts, participants were able to deepen their technical expertise while gaining valuable insights into current developments and emerging trends within the global dairy sector. Both seminars were developed as part of the Erasmus+ funded CoVE (Center of Vocational Excellence) project. The initiative aims to establish a regional Center of Vocational Excellence for Northern Germany, strengthening vocational education and supporting the long-term competitiveness of the European dairy industry in the global marketplace.

Further information on continuing education programs for the dairy industry offered by the HsH Academy, the German Dairy Academy and their European partners is available online on the Dairy Learning Hub.



AEDIL



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From pilot to full production

Tetra Pak launches industrial bioreactor

Tetra Pak announces the launch of the Tetra Pak® Bioreactor RF, its first industrial bioreactor. The launch follows Tetra Pak's acquisition of Bioreactors.net in December 2025 and marks a significant step in expanding the company's offering for industrial fermentation and New Food production.

New Food fermentation, where microorganisms such as yeast, bacteria and fungi convert raw materials into valuable food ingredients, is becoming an increasingly important capability for food and ingredient producers. As the industry looks to diversify ingredient sourcing and improve resource efficiency, producers are moving rapidly from pilot testing to industrial-scale production.

Tetra Pak Bioreactor RF is a fermentation vessel designed to maintain stable conditions while providing operators with actionable process insight. From pilot validation and first industrial runs through to full-scale production, the system delivers repeatable performance without increasing operational complexity. "Industrial fermentation succeeds when performance is repeatable, day after day," says Rafael Barros, Director of the New Food Business Stream at Tetra Pak.

The Bioreactor RF is pre-assembled and factory-tested, enabling faster installation and commissioning, while reducing disruption to production planning. Its integrated platform design removes the need for separate support structures, lowering installation costs and complexity. These features can help reduce investment costs by up to 8% compared with conventional industrial bioreactors.

At the core of Bioreactor RF is a patented magnetic agitation system that removes the



(photo: Tetra Pak)

need for mechanical seals, a common source of contamination risk and process instability in conventional designs. Unlike traditional magnetic agitators, which can struggle to maintain power as vessel size increases, Tetra Pak's patented system is designed to maintain power and oxygen transfer across the full size range. This helps maintain stable process conditions and reduce the risk of batch loss, typically valued at around €1,000 per m³.

High levels of automation further simplify operation. Self-adjusting control functions help stabilise conditions as processes evolve, reducing the need for manual intervention. Combined with predefined operating strategies and integrated data monitoring,

this enables operators to run processes more efficiently and with greater visibility.

Overall, the combination of simplified operation, reduced contamination risk and improved process stability can help producers lower operational costs by up to 12%.

Available in sizes from 10 to 50,000 litres, all Tetra Pak Bioreactor RF units use the same design platform, control logic and operating philosophy. This consistency simplifies operator training and day-to-day operation across sites and production scales. The modular configuration also allows producers to adapt alarm thresholds, impellers and configurations as process needs evolve, without adding unnecessary system complexity.

Döhler inaugurates new plant in Mexico

Growth strategy in Latin America

The Döhler Group has officially opened its new production plant in the State of Mexico, marking the next chapter in its growth strategy in Latin America. The inauguration ceremony brought together government authorities, industry representatives and employees to celebrate the launch of the Group's latest investment in the region.

The first phase of the project includes a state-of-the-art facility in the Arco 57 Industrial Park in San Francisco Soyaniquilpan de Juárez, State of Mexico. The new plant is designed to serve as a strategic hub for innovation in science and technology as well as the production of natural ingredients and integrated solutions, including flavours and ingredient systems, for the food, beverage and life science & nutrition industries.

Döhler is also progressing plans for a second phase of expansion, including the construction of new facilities dedicated to the production of natural colours. This will further expand the company's industrial capabilities in Mexico.

Demand is growing for food and beverages with cleaner labels and, consequently, for ingredients derived from natural sources. At the same time, evolving regulatory frameworks across the Americas are placing greater emphasis on healthier nutritional profiles, ingredient transparency, and more informed consumer choices. The new facility strengthens Döhler's capabilities to develop and manufacture ingredients and integrated solutions, enabling customers to create innovative, natural and nutrition-focused products for the markets of tomorrow.



(photo: Döhler)

With this investment, Döhler reinforces Mexico's role as a strategic market within the Group's long-term vision and strengthens its ability to support the food, beverage and life science & nutrition industries across Latin America.

The inauguration ceremony brought together government authorities, industry representatives and employees to celebrate the launch of the Group's latest investment in the region

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Fonterra

New division leaders

Fonterra has made three leadership appointments: **Teh-han Chow** will as CEO Greater China head the ingredients and foodservice business in Greater China. **Elisa Giusti** as Chief Growth and Strategy Officer will be responsible for developing product and group strategies, innovation and new business development. **Gaby Amade** as President Global Markets will lead the ingredients and foodservice business in Oceania, the Americas, Southeast Asia, Japan, Mid East and Europe.

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The EU Livestock Strategy and Protein Action Plan

A strong vision for Europe's dairy sector



Author:
Alberto Babolin

On 7 July, the European Commission unveiled its long-awaited Livestock Strategy and Protein Action Plan. EDA welcomes both initiatives, which together recognise the essential role of Europe's diverse livestock sectors and the importance of strengthening domestic protein production to build a more resilient, circular and sustainable agri-food system.

"The EU Livestock Strategy sends an important signal from the Commission: a strong livestock sector is indispensable for food security, resilient rural areas and for the competitiveness of our agri-food chain. EU Commissioner Christophe Hansen and his services have not only listened carefully to the agri-food sector, but have well understood its realities and needs, incorporating them into a comprehensive strategy in a short timeframe. As European dairy, we are particularly pleased to see many of the principles that have guided our sector reflected in the Strategy. It is good to see that many of the solutions already developed within dairy are taken as examples for shaping a futureproof livestock sector," stated EDA secretary general Alexander Anton in our press release of 7 July.

The Livestock Strategy recognises that Europe's livestock sector is characterised by a broad diversity of production systems and territorial realities. This is especially true for dairy, which encompasses the widest range of farm management systems across Europe. It also rightly identifies economic sustainability and profitability as prerequisites for environmental and social sustainability, placing competitiveness at the heart of the sector's future development. As the largest agricultural sector in the European Union, dairy remains the economic backbone of rural Europe. In this context, a

strong Common Agricultural Policy (CAP) is essential to support farmers' incomes, strengthen resilience and facilitate the transition towards increasingly sustainable production systems.

The complementary Protein Action Plan reinforces Europe's strategic autonomy by promoting greater protein self-sufficiency and recognising the contribution of roughage to sustainable ruminant production. Roughage is a sustainable, locally produced feed source, grown directly on dairy farms, which strengthens farm resilience, reduces dependence on imported feed and underpins the circularity of European dairy production. In the dairy sector, almost 70% of the protein intake of European dairy cows comes from roughage, such as pasture, green forage and silage, and it represents the largest sources of feed protein in the European Union. The Plan also recognises the role of permanent grasslands in carbon sequestration, biodiversity and landscape management, while promoting nutrient circularity, the sustainable use of organic fertilisers and a more resource-efficient European bioeconomy.

Together, the two initiatives recognise dairy's contribution to competitiveness, circularity, biodiversity, climate action and animal welfare, while acknowledging that ruminant systems have an important role to play in Europe's future food system.

Following the publication of the two initiatives, the EDA Board held a constructive meeting with EU Commissioner Christophe Hansen on 10 July to discuss current market situation, dairy trade, Unfair Trading Practices (UTP), the EU Livestock Strategy, the future Common Agricultural Policy (CAP), and the broader competitiveness agenda for Europe's Agri-Food sector.



EU Commissioner Christophe Hansen with EDA Vice-President Gilles Gérard, EWPA President Benno van Mersbergen and the members of the EDA Board at the Berlaymont building on 10 July

EDA looks forward to continuing its constructive cooperation with the European Commission and stakeholders throughout the implementation of both strategies, ensuring that future actions

remain economically viable and adapted to the diversity of livestock production systems in Europe, while promoting excellence across the European livestock sector.

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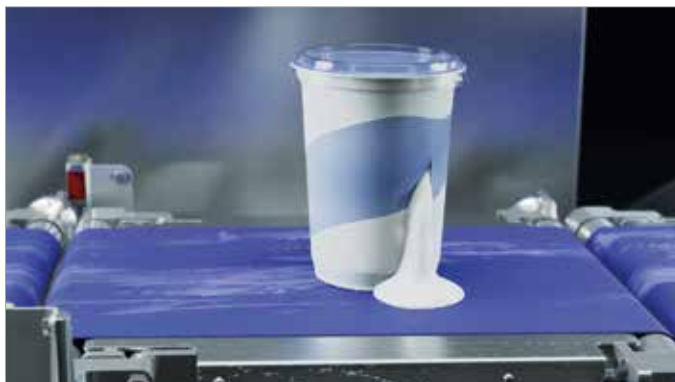


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Checkweighing strategies to help dairy producers reduce giveaway
Technology/IT



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Imprint

Publisher:

B&L MedienGesellschaft mbH & Co. KG, Hilden,
Max-Volmer-Straße 28, D-40724 Hilden, Germany

Postal Address:

P.O. Box 13 63, D-53492 Bad Breisig, Germany
Phone: +49 (0) 2633 4540-0, Fax: +49 (0) 2633 4540-99
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B&L MedienGesellschaft mbH & Co. KG, Office Munich,
Garmischer Straße 7, D-80339 Munich, Germany

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Email: r.ertl@blmedien.de

Volume Frequency:

IDM International Dairy Magazine is published six times a year
(February, April, June, August, September, November).

Annual subscription rate:

€94.00 incl. postage. Subscr. in Germany: €82.00 incl. postage + VAT

Single copy:

€16.00 incl. postage. Orders from Germany add VAT

Bank details:

Commerzbank AG, Hilden;
IBAN: DE58 3004 0000 0652 2007 00; SWIFT-BIC.: COBADEFFXXX

Cover page:

dsm-firmenich

Print:

Ortmaier-Druck GmbH, Birnbachstraße 2, 84160 Frontenhausen, Germany
The magazine is printed on chlorine-free paper.

Economically involved in the legal sense of § 9 Abs. 4 LMG Rh.-Pf.:

B&L MedienGesellschaft mbH & Co. KG, Verlagsniederlassung Bad Breisig,
P.O. Box 13 63, D-53492 Bad Breisig, Germany

Dairy-Technology-Award

Award ceremony: February 2027 at Anuga FoodTec



Supported by the dairy trade publications **IDM International Dairy Magazine** and **molkerei-industrie** and the Society of German Dairy Engineers (Ahlemer Ingenieure), the Dairy Technology Award aims at highlighting successful innovations in dairy and food technology. The prize has been awarded since 2009 to companies in the dairy and supplying industry and relevant service providers.

The Dairy Technology Award focuses on processes, equipment, complete production units and problem solutions that are of benefit to the overall dairy industry.

JURY

Applications will be judged and awardees will be selected by a jury consisting of these renowned experts:

- » Prof. Dr.-Ing. Jörg Hinrichs, Dep. Soft Matter Science and Dairy Technology, University of Hohenheim
- » Dipl.-Ing. Klaus Schleiminger, KSI Engineering, Krefeld
- » Prof. Dr.-Ing. Saskia Schwermann, University of Applied Sciences and Arts Hannover, Faculty of Mechanical and Bioprocess Engineering
- » Prof. Dr.-Ing. Matthias Weiß, University of Applied Sciences and Arts Hannover, Faculty of Mechanical and Bioprocess Engineering

CALL FOR ENTRIES

The call for entries for the Dairy Technology Prize is now open and ends on September 30, 2026.

Awards will be made in these field

- » Process & Automation Technology
- » Packaging & Filling Technology
- » Environment & Sustainability Improvement (saving of energy and resources)
- » Process Management & IT
- » Logistics
- » Food Safety

HOW TO APPLY

Only in digital form, a condensed application is requested first. It should include:

- a) Reason for application
- b) Description of company/innovator with a short portray of the applicant and is professional background.
- c) Title of the application and area of development
- d) Description of the innovative project/the innovation on max. 3 pages A4 incl. illustration (photos, graphs, tables, sketches) centering on the special innovative development and, if applicable, quoting sources. (After checking, the jury might ask for further documentation or an on-site inspection)

Send applications to:

Anja Hoffrichter, Editor molkerei-industrie/IDM International Dairy Magazine, Email: ah@blmedien.de. Questions will be answered by email or phone: +49 178 23300474.

AWARDING

The prize winning developments will be presented at the trade show Anuga FoodTec in February 2027.

Awardees will receive a certificate, the winning developments will be presented to an international readership in the magazines **IDM International Dairy Magazine** and **molkerei-industrie** as well as on the websites **international-dairy.com** and **moproweb.de**.

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General overview, divided into definition, processing scheme, history, significance of the various groups of cheese concerning nutrition Raw material and additives for the production for various groups of cheese Varieties of the respective groups of cheese as well as their manufacturing processes and evaluation (quality, shelf life, etc.) Packaging of the various cheese groups Influences on quality, checking and quality assurance Description of defects and notes for improving quality issues.

This book addresses above all cheese makers but also trainees as well as students, graduates of food technology and scientists. For special instructors, this book is a solid base for courses or lectures. It is an extremely valuable help as reference book for dairy specialists and the cheese industry as well as for technical advisers and suppliers. CHEESE TECHNOLOGY makes an invaluable contribution to the preservation and documentation of accumulated know-how of cheese technology across decades.

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