Food safety essential role in today's food and drink industry

The food and beverage industry is constantly in flux. New consumer trends, emerging process and information technologies, and changing economic market forces mean that this industry has to continuously evolve and adapt to keep its mission of protecting the consumers and constantly improve itself along its supply chain. **Dominique Huret** interviews **Jean Schrurs**, expert in food & beverage and auditor for leading certification bodies

What are the three main challenges currently facing the food and beverage industry?

The first one is the ongoing energy crisis. Like all businesses, companies in the food and beverage sector have been affected by the rise in energy prices. In March 2022, the UK Office for National Statistics stated that 60% of the E&D companies were affected by the rise in energy prices, compared with 38% across all sectors. While most businesses can manage rising energy costs by optimising their industrial space, there are several additional challenges in the food and drink industry. Indeed, temperature regulations are key. The second challenge is food integrity, with issues of food contamination, cross-contamination and quality control. This impacts all parts of the supply chain, especially food processing and manufacturing facilities. Within food manufacturing facilities, temperature and humidity controls are crucial. When the facility is creating more than one type of product, crosscontamination remains a major worry and can pose a threat to product integrity if not properly addressed with the right equipment. Outside the factories, product contamination challenges are also present. Factory storages, loading and open docks can also lead to contaminants: insects, crawling pests, dust and bacteria can bring food-borne pathogens. The EU Rapid Alert System for Food and Feed website (food.ec.europa. eu/safety/rasff_en) provides a good source of public information on food safety hazards. Then, material substitution and plastic elimination constitutes the third big challenge. With a major



Temperature and humidity controls are crucial in food manufacturing. Image credit: GEA

focus to make business practices more environmentally friendly, limiting excess consumption and improper disposal, plastic has come up as one of the big challenges faced by food and beverage managers today. It brings its toll of adaptations for companies, with drastic EU regulations to adopt in a short time span. The packaging downgauging and lightweighting trends combined with the environmental-friendly mono-material push makes it a tough mission to protect products along the supply chains.

Specifically in Food safety, what are the main issues that you witness while auditing food and beverage companies across Europe?

In November 2022, a reader poll conducted by Quality Assurance &

Food Safety Magazine identified the 2023 top food safety concerns: 25% recalls, 25% traceability, 25% supplier/ supply chain issues, 12% labor shortages. This summarizes well my international experience in food, beverage and packaging. Whether

voluntary or forced, products recalls are catastrophic in term of cost and image for companies. Yet, several happen every year for a variety of reason: external foreign bodies, health/allergy claims, bacterial presence or faulty allegations. Establishing recall initiation procedures, precise and complete documentation to minimise delays and uncertainty when/if a voluntary recall becomes necessary. And hard to believe but proven, if well managed, a recall can boost brand awareness.

Another hot topic is food traceability with food fraud on the rise since the

global pandemic. The main reasons behind this are growing financial pressures, less frequent monitoring and supply chain disruptions. It is not surprising that retailers and manufacturers faced more pressure to keep shelves stocked with consumers piled up supplies while restaurant closures led to a build-up of expired products that were sometimes repackaged and sold as fresh. The situation has improved now but in many places physical facility checks were scaled back and replaced with paperonly processes, which allowed for more fraudulent products and imports.

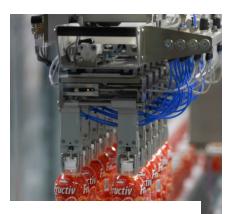
It is interesting to note that in the European Union, food fraud was already on the rise pre-pandemic, up 85% from 2016 to 2019, according to EIT Food, the world's largest food innovation community supported by the EU. EIT Food suspects that Covid-19 has increased the presence of illicit products still further. In an annual operation against food fraud coordinated by Interpol and Europol, between December 2020 to June 2021, 15,451 tonnes of illegal products were confiscated across 72 countries with an estimated value of €53.8 million. That is massive.

Which are the products the most likely for fraudsters?

Tea, vegetable oils, honey, seafood and meats have been among the most targeted foods for fraudsters, due to the fact that certain origins and quality marks attract premium prices. These products have seen the greatest increase in fraud as per figures from Safety HUD, the database run by French Mérieux NutriSciences. The company has seven analytical sites (chemistry, microbiology) in France, plus four sensory evaluation centres. The centre reported a 500% increased incidence of vegetable oil fraud and a 167% increased incidence of honey fraud in the first months of the pandemic.

What is the status of cannabis in Europe?

The situation in Europe is different than in the US where the FDA is watching carefully. The US agency issued a number of warnings to companies that sell CBD-infused food and beverages



Manufacturers are facing increased pressure to keep shelves stocked. Image credit: iPack 14

and seems particularly concerned about food products that may appeal to children (cookies, gummies, etc). While the regulatory framework for managing cannabis production is still unclear, several organisations have launched cannabis standards and certifications — often based on GFSI and GMPs — to improve the safety and quality of cannabis and cannabis-infused products in the market. This prepares for potential regulatory action and/or certification opportunities, and implements solutions to eliminate risks in Europe.

What are today's environmental challenges?

Nowadays, food companies continue to see regulatory bodies taking much more interest in them, like EFSA in Europe and FDA and USDA for the American companies. Large penalties for violations persist. When a few years ago, the issues were mineral/vegetal oil and ink migrations issues in packaging, today facilities that use anhydrous ammonia as refrigerant, per- and polyfluoroalkyl substances (PFAS) contamination are being on the legislator's radar.

How do you see the industry take ownership of these issues?

In general, the industry is expected to see stricter food safety regulations brought about by the effects of the pandemic. The industry is also expected to shift towards a more digitally oriented approach to food safety. To help your food business adapt a digital solution can help handle the transition. In an average of 15 minutes, you can get a comprehensive digital Food Safety Management System powered by artificial intelligence. Easily streamlining of processes can help teams get food safety tasks done accurately. But all that under a regular, close and independent supervision of a robust certification body.

Nothing beats the external critical review by another pair of eyes. Indeed, professional certification bodies not only know the hazards and risks involved in doing business. In addition, their experienced auditors have a detailed and practical knowledge of constantly evolving global standards representing a real concentrate of best industry practices in quality and food safety, which is very often not available in the industry. Last but not least, the value of their input is nothing compared to the risks and (lack of) decision a company might take when being too familiar to its own business and processes.



Regulatory bodies have an increasing influence on production. Image credit: iPack 14