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COMMODITIES, FOOD & AGRI

Food tech: Technology in the food industry

Technology is increasingly contributing to food's journey from the farm to the fork. In this report, we look at the driving forces behind 'food tech' and the most promising food tech applications, robotics, data technology and novel processing techniques

Source: iStock

Executive summary

- **More and better food through food tech**

Technology helps food manufacturers to produce more efficiently for a growing world population. Improving shelf life and food safety revolves around technology, and greater use of machines and software ensures affordability and consistent quality. The importance of technology for manufacturers continues to grow.

- **Demanding customers, consumers and society**

Food industry customers, like retailers, set stricter product requirements and require larger volumes at low prices. Higher efficiency and labour productivity are essential to remaining competitive. At the same time, consumers and society are demanding in terms of health and sustainability. Robotisation, digitalisation and novel processing methods enable companies to respond to this demand.

- **Food industry embraces robotics**

The rise of robotics in the food industry is a tangible example of food tech. The number of robots in the European food industry is well over 30,000, while the number of robots per 10,000 employees rose from 62 in 2013 to 84 in 2017. Although Germany is the largest market, robot density is relatively highest in Sweden, Denmark, the Netherlands and Italy.

- **Impact of technology on the labour market**

Robotisation and digitalisation increase the complexity of production processes and this impacts the labour market. Employees' duties change and the required level of education increases. Applying food tech, therefore, requires both investments in capital goods and attention to training current staff and recruiting new staff.

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