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How innovation and disruptive technologies should drive safety along the food supply chain

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With the population set to reach 8.5 billion by 2030, food organizations are exploring new technologies to ensure safe and sustainable supply chains. Lack of offer could not only spark strong social tensions across the world, but could result in corruption and spiraling costs for the most simple of food stuffs, meaning that only the wealthy could afford to put food in their mouths. To meet client requirements, food industry will have to blend conventional assessment with digital monitoring and audit solutions that will enable the delivery of real-time assurance and insight, but also researching alternative food sources to feed the expanding population. The presentation explores blockchains, NGS (Next-Generation Sequencing), drones, remote audits, and others to look at how the recent innovation in data and life science will impact the risks in the food safety and sustainability. The food supply chain is very fragmented with billions of operators meaning that the risk associated with the supply chain is traditionally high. Through this lack of transparency, there is ultimately a strong risk to completely disconnect people from their food. Resilience implies flexibility and agility and the establishment of more collaborative supply chain relationships based on a far greater transparency of information. New IT tools and platforms, notably the emergence of distributed ledgers (blockchains) mean that collaborative working is becoming possible. Today's consumers are savvy; they know what they want to eat and what is good for them. What they choose to buy, their decisions have a direct impact on their health, their society, the planet, local communities, forest, farming, water and our climate - both tomorrow and in the future. The convergence of very demanding and educated customers with disruptive technologies including both data and life sciences will totally revolution the food industry in order to enable a more sustainable and safer.