Market Analysis

The global food safety testing market size was estimated at USD 18.0 billion in 2018, growing at a CAGR of 7.7% from 2019 to 2025. A rise in the cases of chemical contamination in food processing industries owing to improper use of techniques in the production of ready-to-eat meals is likely to boost the product demand in the market over the forecast period. Rising demand for packaged and processed food in developed and developing economies owing to factors, such as changing lifestyle and growing popularity of quick-service restaurants, is anticipated to drive the need for safety testing of edible items. Also, the rising demand for quality tests for processed and unprocessed meats is expected to drive the food safety testing market growth.

In the U.S., the chemical and nutritional testing segment accounted for 17.5% of the revenue share in 2018. The segment is expected to witness a high growth rate on account of increasing demand by consumers to gather knowledge concerning the nutritional composition of edible products and to ensure their compliance with labeling regulations and specifications by retailers. Enhanced instrumental techniques such as nuclear magnetic resonance (NMR), infrared (IR) spectroscopy, ELISA (enzyme-linked immunosorbent assay), and mass spectroscopy are exclusively used for safety assurance. The development of advanced technologies concerning safety test procedures is expected to drive market growth over the forecast period. Factors such as lack of harmonization of food safety legislation across the globe are anticipated to hamper the overall market growth.

Food safety has often been used as a means to control trade and impose taxes and tariffs. Also, a shift in the behavior and demographics of the population across the Asia Pacific is expected to spur the consumption of packaged food, which is expected to drive the demand for the safety assessment of edible items over the forecast period. Technological improvements concerning the expansion of reliable, rapid quality, and safety check techniques such as biosensors, polymerase chain reaction (PCR), and rapid culture detection are presenting new opportunities for market development. Also, the rising use of electrical biosensors in microbiological testing to reduce analysis time is likely to drive the market for safety evaluation of edible items over the forecast period.