



**National Conference on Recent Advances in Engineering,  
Technology, Science, Management and Humanities  
(NCRAETSMH – 2025)**

**23<sup>rd</sup> February, 2025, Nagpur, Maharashtra, India.**

**CERTIFICATE NO : NCRAETSMH /2025/C0225101**

**A Study of The Occurrence of Toxin Genes Among Staphylococcal  
Isolates from Foods**

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**ABSTRACT**

The occurrence of toxin genes among staphylococcal isolates from foods highlights a critical aspect of food safety and public health. *Staphylococcus aureus* is capable of producing a variety of toxins, including staphylococcal enterotoxins (SEs) that cause foodborne illnesses. The genes encoding these toxins, such as *sea*, *seb*, *sec*, *sed*, and *see*, are frequently identified in isolates from contaminated food products. These genes enable the bacterium to produce heat-stable enterotoxins, which remain active even after cooking or pasteurization, posing a persistent risk to consumers. Foods such as dairy products, meat, poultry, and baked goods are common reservoirs for toxin-producing *S. aureus*, often due to improper handling or inadequate hygiene practices. The prevalence of toxin genes varies depending on the food type, geographic location, and environmental conditions. Molecular studies have revealed that certain isolates also carry genes for toxic shock syndrome toxin-1 (TSST-1) and other virulence factors, further complicating their pathogenic potential. Advanced techniques like polymerase chain reaction (PCR) are commonly used to detect these toxin genes and monitor their distribution. Addressing the risks posed by toxin-producing staphylococcal strains requires stringent food safety practices, routine surveillance, and education to prevent foodborne outbreaks and safeguard public health.