SCOOP

THE LATEST TRENDS, SERVICES & PROMOTIONS

FOOD, SGS HONG KONG MAY, 2012

NEW LAUNCH OF RAPID TESTS FOR FOOD-BORNE PATHOGEN DETECTION

WHAT IS FOOD-BORNE PATHOGEN?

Food borne pathogens are bacteria which capable to induce illness and death in humans. Pathogenic bacteria can grow and multiply rapidly in dangerous temperatures around 4-60℃. Nevertheless, most of the dishes serving in restaurants are served within this temperature range and lead to food incidences eventually. *Salmonella, Staphylococcus aureus* and *Listeria monocytogenes,* are examples of common notable pathogens.

DEFENDING THE FOOD SAFETY

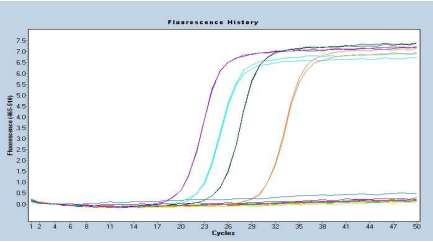
Microbiological testing is one of the key approaches to prevention, and it is the first line of defense against the intentional contamination from pathogens. By indicating the organisms and analyzing the occurrence of specific pathogens in various food commodities, the precautionary measure is applied as well as enhanced to the hygiene monitoring programs.

DIAGNOSTIC METHODS IN FOOD SAFETY

There are several traditional methods to identify a single pathogen, which include counting the growth performance of the pathogen on a certain media, examining metabolic rate of the pathogen to a given chemical compound and applying antibodies to the pathogen, the whole assessments of these methods normally take 5 to 7 days to complete. However, the long assessment time may lead to delay of diagnosis. In contrast, molecular methods offer high selectivity and rapidity results by recognition and amplification of the nucleic acids (DNA and RNA) of food-borne pathogens. Molecular methods secure the detection and save the time for urgent diagnosis as well as to support a great advantage in terms of food outbreak investigation.

SGS uses the Polymerase Chain Reaction (PCR) to amplify specific fragments of DNA, which is stable and unaffected by growth environment. The fragments are genetic sequences and unique to the respective food pathogens, thus providing a highly reliable indication that the organism is present. The real-time PCR system then uses fluorescent detection to analyze PCR product for positive or negative results.

WITH THE IMMEDIATE DETECTION, RAPID TEST ENHANCED BOTH ROUTINE HYGIENE MONITOR PROGRAM AND FAST DIAGNOSTIC FOR RISK ANALYSIS FRAMEWORK, THUS IMPROVING THE FOOD SAFETY.



SGS Hong Kong is capable to offer various food-borne pathogens detection by using the fast techniques:

RAPID TESTS FOR FOOD-BORNE PATHOGENS DETECTION	
Available Food-borne Pathogens to be detected:	- *Salmonella* species - *Listeria monocytogenes* - *Staphylococcus aureus* - *Vibrio parahaemolyticus* - *Vibrio chloerae* - *Clostridium Perfringens*
Available Food-borne virus to be detected	- Norovirus
Test Method:	Polymerase Chain Reaction (PCR)
Turnaround time:	3 -4 days

Please contact our consumer services for more technical information

FOR ENQUIRIES:

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SGS