

COLIFORM BACTERIA ANALYSIS

The coliform bacteria are found naturally in the intestinal tract of humans and animals. They are of fecal and nonfecal origin and may also be found in soil, on plant material, and on many types of food materials. The presence of coliform bacteria in food may indicate fecal contamination, presence of potential pathogens, food spoilage, and unsanitary food processing conditions.

All coliform bacteria ferment lactose with the production of acid and gas. Isolation is attained by inoculating media containing lactose and placing a fermentation vial in the tube to capture the gas. Coliform bacteria of fecal origin generally produce gas when incubated at elevated temperatures while non-fecal coliform bacteria do not. Therefore, elevated incubation temperatures are used to detect fecal coliform bacteria.