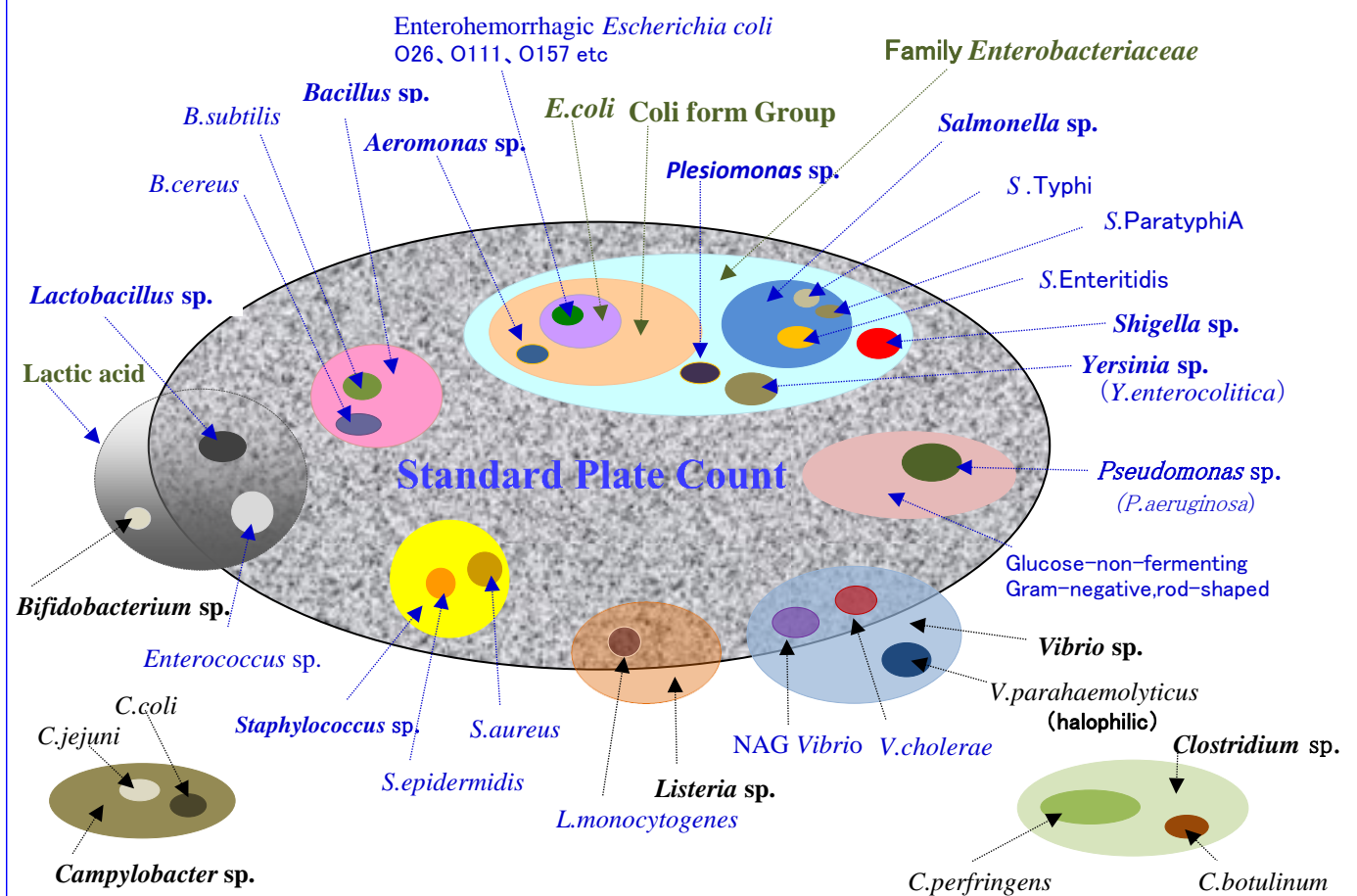


Standard Plate Count

The Standard Plate Count (SPC) means the colony count of the mesophilic bacteria growing under aerobic condition on standard methods agar (Plate Count Agar), and SPC becomes the representative index indicating the degree of the microbial contamination of the food. In addition, SPC can be used to gauge the general evaluation and judgments such as safety, preservation and sanitary quality of the foods. Generally, the standard methods agar is used for SPC. SPC is the number of the colonies on the standard methods agar after 48 ± 3 hours at $35^\circ\text{C} \pm 1.0^\circ\text{C}$ incubation under an aerobic condition. Therefore, SPC does not include the entire living bacterial population. For example, anaerobic bacteria such as *Clostridium perfringens*, microaerobic bacteria such as *Campylobacter*, halophilic bacteria such as *Vibrio parahaemolyticus* cannot grow on the standard methods agar.

Conception diagram of Standard Plate Count



Note

- : Incubation time may be 24 ± 2 hours depending on the food inspected.
- : In this figure mentioned above, important kinds of bacteria for the food hygiene are listed, such as representative bacteria related to ingredient standard and food poisoning in Japanese Food Sanitation Act.
- : The figure mentioned above is a general concept, and, it is thought some cases does not apply because of the different inspection procedure.
For example, in spite of "negative" for E.coli by inspection result, enterohemorrhagic *E. coli* O157 may not be "negative", because of the different inspection procedure from E.coli and enterohemorrhagic *E. coli* O157. In addition, coliform bacteria and E.coli according to Japanese Food Sanitation Act, ferment lactose in biochemical characteristic. Nevertheless some of the enterohemorrhagic *E. coli* strains do not ferment lactose.
- : Some of the bacteria (such as genus *Aeromonas*) which do not belong to family *Enterobacteriaceae*, include the coliform bacteria in Japanese Food Sanitation Act.