

Human intestinal microbiota create a complex polymicrobial ecology. Bacteria do not form clusters and spatial structures, and the luminal contents are separated from the mucosa by a mucus layer[4]. The distal ileum is a transition zone between sparse populations of aerobic bacteria of the proximal small intestine and very dense populations of anaerobic micro-organisms in the large bowel[1–3]. The duodenum and proximal jejunum normally contain small numbers of bacteria, usually lactobacilli and enterococci, gram-positive aerobes or facultative anaerobes ( $< 10^4$  organisms per mL).