

The intestinal tract comes into direct contact with the external environment despite being inside the body. Intestinal epithelial cells, which line the inner face of the intestinal tract, have various important functions, including absorption of food substances, immune functions such as cytokine secretion, and barrier function against xenobiotics by means of detoxification enzymes. It is likely that the functions of intestinal epithelial cells are regulated or modulated by these components because they are frequently exposed to food components at high concentrations. This review summarizes our research on the interaction between intestinal epithelial cells and food components at cellular and molecular levels. The influence of xenobiotic contamination in foods on the cellular function of intestinal epithelial cells is also described in this review.

Relationship between various food components and intestinal epithelial cells.

