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Nutraceutical potential of N-acyl taurines in gastrointestinal diseases

The N-acyl taurines (NATs, fatty acids conjugated with taurine) are both dietary components and endogenous lipid messengers structurally related to endocannabinoids (1).

These lipids have been found in foods such as cold deep-water fishes and sea urchin (2). Recently, NATs have been identified as mediators of potential interest, as they are excellent ligands for some members of the transient receptor potential channel family and also for some G protein-coupled receptors (3).

These lipids have been shown to improve postprandial glucose regulation (4), decrease intestinal lipid uptake (5), regulate skin wound healing (6) and may also have antiproliferative effects in cancer (7). However, the nutraceutical potential of NATs in gastrointestinal diseases is still largely unknown.

The aim of this project is to investigate the effect of NATs in inflammatory bowel diseases and colorectal cancer.

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