

Function and therapeutic potential of N-acyl taurines in gastrointestinal diseases

Recently, N-acyl taurines (NATs, fatty acids conjugated with taurine), a new group of endogenous lipid messengers structurally related to endocannabinoids, have been identified as mediators of potential therapeutic interest. NATs may act as excellent ligands for some members of the transient receptor potential channel family and also for some G protein-coupled receptors (2). NATs have been shown to improve postprandial glucose regulation (3), reduce intestinal lipid uptake (4), regulate skin wound healing (5) and may also have antiproliferative effects in cancer (6). However, the pharmacological potential of NATs in gastrointestinal diseases is still in its infancy and their biochemical functions are also largely unknown.

The aim of this project is to investigate the role of NATs and their therapeutic potential in gastrointestinal diseases, including inflammatory bowel disease and colorectal cancer.