



# Probiotics

Do They Help to Control  
Intestinal Inflammation?



# Probiotics

- In the maintenance therapy for the inflammating bowel diseases, Crohn's diseases and ulcerative colitis
- Specific molecules modulating defined targets in the gut mucosal and systemic immune system



# (Active) Ulcerative Colitis

- **Ulcerative Colitis**: Study comparing mesalamine treatment with E.coli Nissle 1917 treatment
- relapse rate were not different between groups
- E.coli Nissle 1917 is a safe alternative for prevention of relapse in ulcerative colitis
  
- **Active Ulcerative Colitis**: Trial examining the effectiveness of the fermented milk containing Bifidobacteria strains and Lactobacillus acidophilus.
- Remission was achieved in 4 of 12 patients



# Pouchitis

- Study of the ability of VSL 3 to prevent recurrence of chronic relapsing pouchitis
  - 17 of 20 patients remained in remission
- But: Probiotics have failed to demonstrate efficacy



# Crohn's disease

- Pioneer study to examine the efficacy of E.coli Nissle 1917 in maintaining remission in Crohn's diseases
- Groups did not differ in the rate of remission regardless of disease location



# Conclusions

- More effective in preventing relapse of inflammation than suppressing diseases
- In active inflammation sufficient data are missing
- Genetically engineered bacteria delivering anti-inflammatory cytokines or other biological molecules