Role of Probiotics in Disease Prevention Part-I

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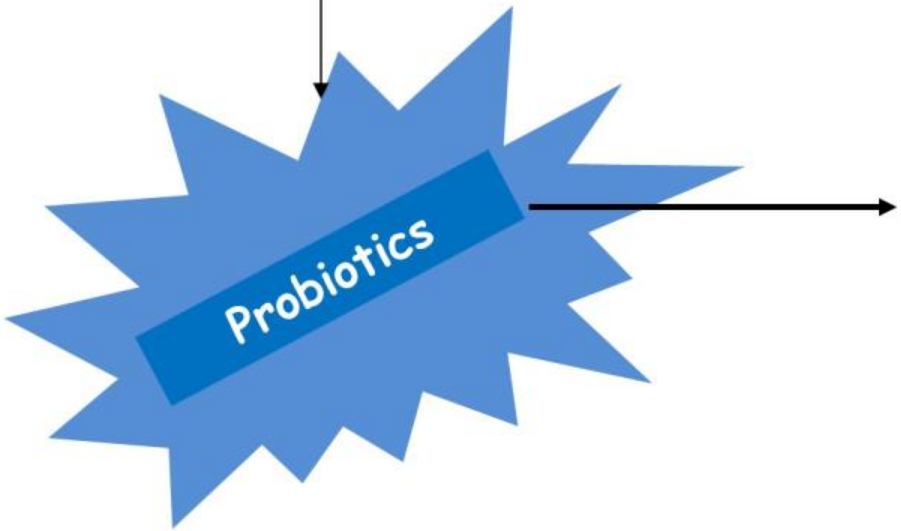
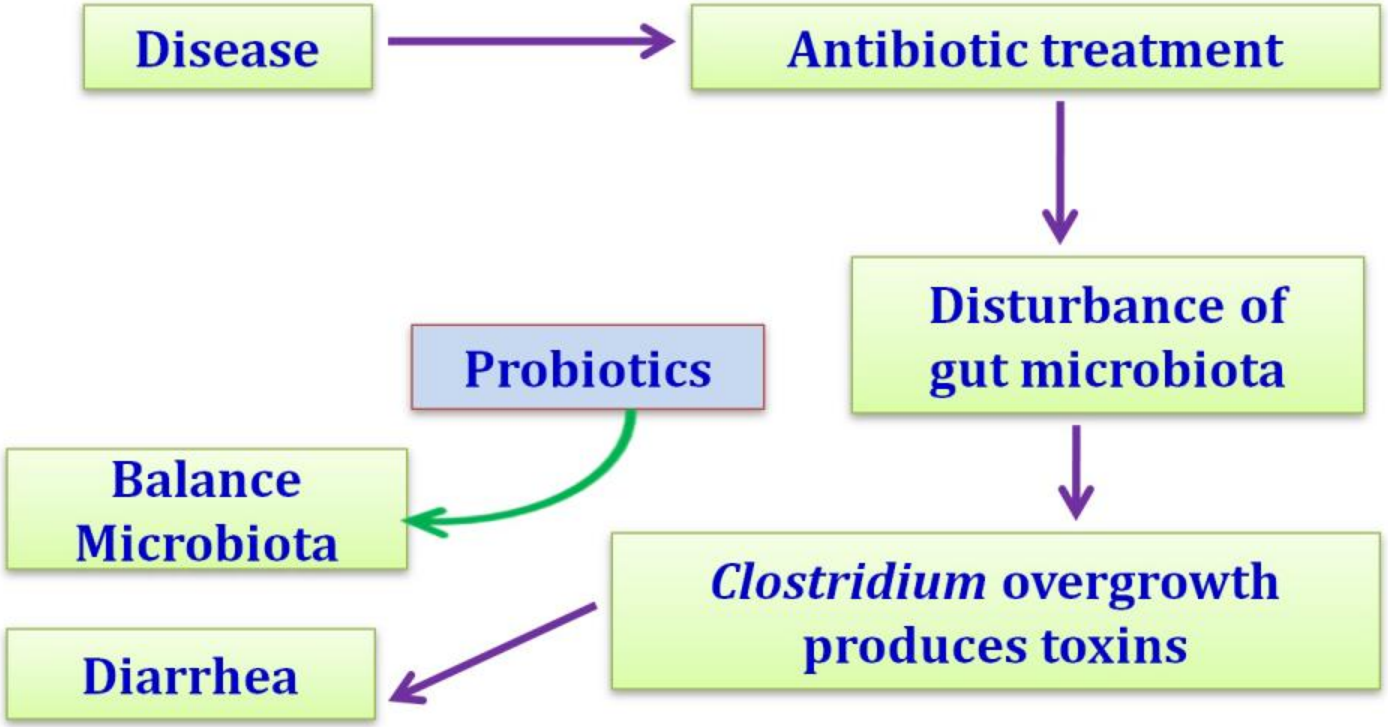
Role of probiotics in disease prevention



- Cancer
- Hepatic disease
- *Helicobacter pylori* Infections
- GIT
- Pregnancy
- Antibiotic associated diarrhoea

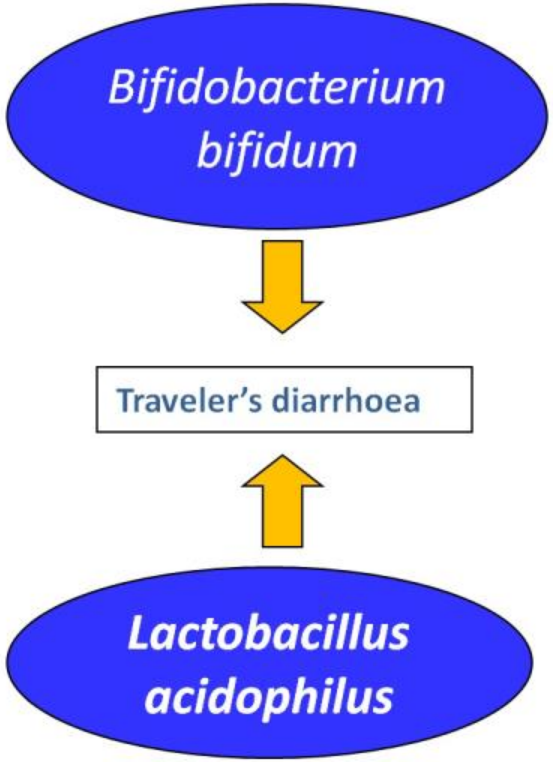
Antibiotic Associated Diarrhea



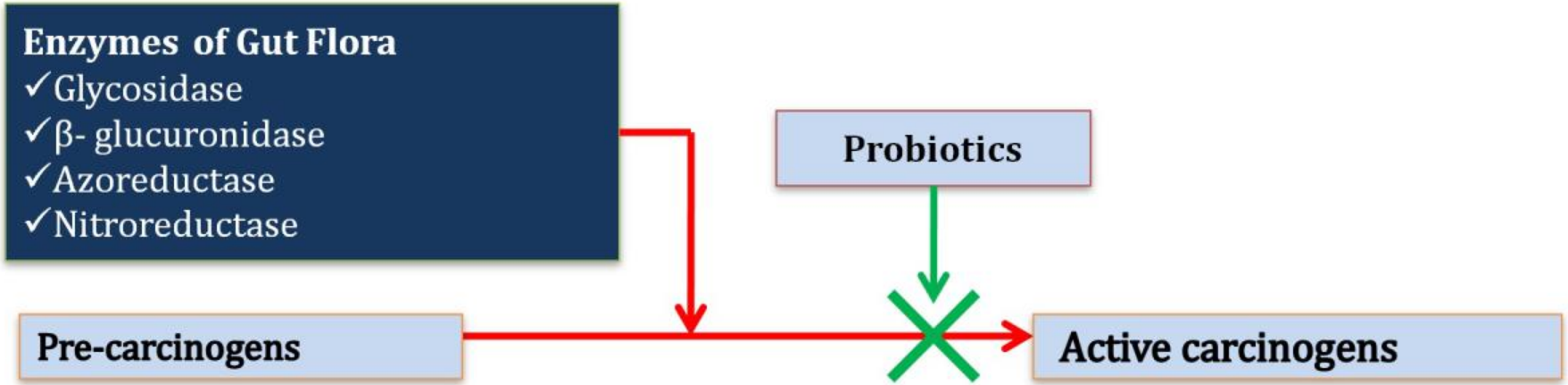
Case StudyTraveler's Diarrhoea

In clinical studies (12), a mixture of *Lactobacillus acidophilus and Bifidobacterium bifidum worked the best to prevent* and reduce the severity of Traveler's diarrhoea. No serious adverse reactions to the probiotics were reported in the trials.

McFarland, 2007



Role of probiotics in Cancer prevention



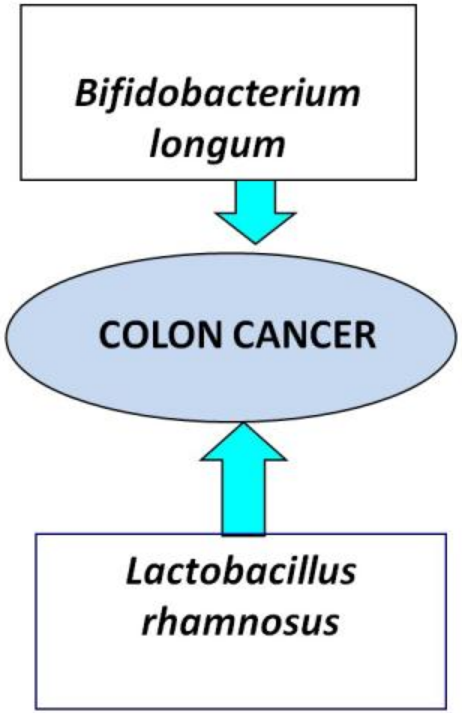
Synbiotic: Oligofructose + (***L.acidophilus*** and ***L.casei***) supplementation in humans helped to decrease levels of these gut flora enzymes

Probiotics

- Binding/inactivation of mutagenic compounds
- Production of anti-mutagenic compounds
- Suppression of growth of pro-carcinogenic bacteria
- Reduction of the absorption of carcinogens
- Enhancement of immune function
- Influence on bile salt concentrations

Prevents Cancer Growth

Case Study



80 people who had either colon cancer or benign polyps were randomly selected *Lactobacillus rhamnosus and Bifidobacterium longum*

Effects on their tumors, growths, and intestines.
Placebo was an inactive pill.

After 12 weeks, the patients who received the probiotics showed decreased DNA damage in the lining of the colon and decreased growth and reproduction of colon cells.

Rafter et al. 2007

Role of Probotics in Heart Diseases Prevention

- Assimilation of cholesterol by bacterial cells
- Deconjugation of bile acids by bacterial acid hydrolases
- Cholesterol-binding to bacterial cell walls
- Reduction of hepatic cholesterol synthesis
- Redistribution of cholesterol from plasma to liver
- Bacterial production of short-chain fatty acids

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Reduction of blood cholesterol level