

Probiotics in Pediatric Patients

Objectives

- Review the basics of the human microbiome and probiotics
- Understand the efficacy of probiotics for prevention of antibiotic-associated diarrhea
- Understand the efficacy of probiotics for illness prevention (URI, GI infection, acute otitis media)

Human Microbiome

- Average adult human gut flora [1]
 - 10^{13} - 10^{14} total microbes
 - > 100 species
- Perform commensal functions
 - Maturation and regulation of immune system (esp. gut)
 - Breakdown otherwise indigestible compounds
 - Inhibition of pathogen binding to epithelium

