I. Bacteria! Probiotics

A. Intestinal Microflora

1. **The natural bacteria that is present in your gut. These specimens are important for the maturation of your immune system and intestinal development.**

2. **The bacteria present help prevent the attachment of unwanted microbes and allergens to the intestinal wall.**

    a) ***Lactobacillae – located in all intestines, especially in the small intestine.***

    b) ***Bifidobacterium are also located through entire tract but are abundant in the large intestine. The system's first inhabitants, these species evolve according to age, diminishing progressively towards the end of life – why it is important to supplement.***

3. **The microbes in the large intestine complete any digestion that had not taken place in the small intestine.**

    a) ***Some of the bacteria in your intestine actually produce vitamins, as well as help with their absorption, some evidence suggests that natural bacteria is anticarcinogenic!***

    b) ***The end products of their metabolism are lactic and acetic acids, lowering the pH of the intestines and making its condition unfavorable for the formation of bad bacteria colonies.***

4. **Alleviation of lactose intolerance symptoms and anti-diarrhea effects are the most profound and well-documented effects. Products now found in yogurts (live and active cultures) – found to help with Ulcerative colitis, Crohns, Irritable Bowel Disease, cancers (prevent).**

5. **Intestinal microflora concentration can have a result on obesity.**

6. **Effects of antibiotics on intestinal microflora – broad-spectrum antibiotics are manufactured to be non-specific, so many numbers of bacteria in the gut are destroyed upon taking the drug.**

    a) ***Immediate effects – decreased ability to metabolize certain carbohydrate and lipids, regulation of fat storage.***

B. What are probiotics?

1. **Dietary supplements containing bacteria. We start life with a healthy intestinal tract, due to infections, antibiotics, alcohol, stress and poor diet we devastate our healthy bacteria leading to constipation, diarrhea and more serious ailments.**

2. **There are over 400 types of beneficial bacteria found naturally in the gut. We use probiotics in connection with diarrhea, tooth decay, vaginitis, yeast infections, canker sores, Crohn's disease, eczema, food allergies, HIV support, chronic candidiasis, UTIs, RA, hormonal balance, and to prevent or reduce the severity of colds and flu. Probiotics must be alive when administered.**

C. Prebiotics

1. **Prebiotics are non-digestible carbohydrates that act as food for probiotics – found in whole grains, bananas, onions, garlic, honey, and artichokes.**

2. **They stimulate the growth of beneficial bacteria. Have been shown to moderate cholesterol + triglyceride levels, can reduce atherosclerosis by 30%. Boost white blood cells and killer T cells.**

D. Supplementing

1. **Everyone should be supplementing with probiotics, being on antibiotics can wipe out your intestinal microflora, prebiotics must be consumed to replenish them and protect immunity, even if you are not on antibiotics, it is important and healthful to supplement**