UNIVERSITY OF MINNESOTA
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Bifidobacteria Strain Depletes Iron-Dependent Bacteria

IP Status: Issued US Patent; **Application #:** 09/884,894

Bifidobacteria as a Probiotic

A method of identifying, producing, and using as probiotics certain Bifidobacterium longum strains that inhibit gram positive and gram negative bacteria and promote healthy GI function has been developed. These strains function in the large intestine where they secrete an iron binding molecule that depletes the iron supply for unwanted iron-dependent bacteria and therefore afford protection of the large intestine from food-borne pathogens. Bifidobacteria are generally recognized as safe and do not require FDA approval for use as a probiotic. The inhibited microbes include Lactococcus lactin, Clostridium difficile, Clostridium perfringens and many others. Additionally, this discovery also includes a B. longum strain that secretes β-galactosidase for the treatment of the symptoms of lactose intolerance.

MN-IP Try and Buy

Try

- Trial period of 12 to 18 months. $5,000/6 months.
- Fee waived if MN-based company or if sponsoring $50.000+ in research.

Buy

- Exclusive license for a $20,000 conversion payment.
- No patent costs due.
- 3% royalty after $1 million of product sales.
- Discount for MN companies.

Food-Borne Pathogens, Lactose Intolerance and Healthy GI Function

Microbes have long been used for probiotics in humans and other animals to promote resistance to GI infections from food-borne pathogens, healthy GI function, and reduction of lactose intolerance symptoms. However, there has been little scientific evidence to back these uses as there has previously been no agreed upon approaches to what traits a microbe needs to have to be able to thrive in the animal gut. A need exists for a scientifically proven probiotic for use in humans and animals.

BENEFITS OF BIFIDOBACTERIA STRAINS AS A PROBIOTIC:

- Inhibition of various types of microbes with a single strain
- Significant protection without the risks associated with multiple therapies or probiotics
- Can be brought to market rapidly and with low overhead
- Functions for the treatment of lactose intolerance

Technology ID

z00046

Category

Agriculture & Veterinary/Food Science & Nutrition

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