



## Microbiome Management: Natural Sources of Probiotics

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It's hard to pick up a medical journal or news article these days without reading something about the gut microbiome. Thanks to the [NIH Human Microbiome Project](#) established in 2008, health professionals and the general public have learned much about the link between the condition of our gut microbiome and the state of our health.

It's an exciting time because it lets us know that there is a lot we can do to take charge of our health. Unfortunately, what we've also learned is that Western cultures and lifestyle habits cause a lot of imbalance to the gut microbiome thereby threatening our health and wellbeing.

### Symbiosis versus Dysbiosis

The gut contains good and bad bacteria that live commensally. Both good and bad bacteria play key roles in our health and are intended to live in balance and harmony. A good balance of the gut bacteria is called "Symbiosis." An imbalance of gut bacteria is dys-symbiosis or "Dysbiosis."

According to Neurologist David Perlmutter, MD, untreated dysbiosis can lead to gut permeability (damage to the lining of the intestines) and inflammation which puts us at risk for many health conditions like heart disease, autoimmune conditions, brain disorders and even cancers.

### Things that Promote Dysbiosis

#### Diet High in Processed Carbohydrates

bread, pasta, chips, bakery items

#### High Intake of Sugar

>25 grams of Added Sugar daily

#### Low Intake of Fiber

diet low in plant-based foods

#### Excess Alcohol Consumption

i.e. 1-2 drinks per day

#### High Levels of Stress

causing high levels of cortisol

#### Over Use of Antibiotics

either taken orally or consumed in animal products

#### Gut Infections and Pathogens

food poisoning, candida, SIBO, E. coli

#### Certain Medications

acid blockers, NSAIDs

#### Xenobiotics

toxins in the environment like glyphosate in the weed killer Round Up®

### Things that Promote Symbiosis

#### Diet High in Fiber

from vegetables, fruits and intact grains

#### Low Sugar Intake

<25 grams of Added Sugar daily

#### Good Stress Management

meditation, biofeedback, exercise, adequate sleep

### Daily Intake of Natural Probiotic and Prebiotic Foods

## Natural Probiotics

Probiotics are a new frontier and the climate for best practices with probiotics keeps changing. The increase in knowledge about the gut and microbiome health has led to a boom in the sales of probiotic supplements. On the one hand, this is good news because it indicates that health care providers and the public are heeding the advice to increase and support good bacteria in the gut.

On the other hand, taking probiotic supplements is only helpful to a point because according to some experts we are creating a “micro-monocropping” situation. With oral probiotic supplements, we consistently take 1 – 10 probiotic strains daily but we are not replacing tens of thousands of other strains of bacteria that reside in the gut. According to integrative medicine practitioner, Zach Bush, MD, this is “doing on a microscopic level what crop monoculture is doing in agriculture: favoring a relatively small number of species at the expense of ecosystem diversity.”

In addition, Johns Hopkins gastroenterologist, Gerard Mullin, MD, states recent research has shown that within 3 weeks of stopping an oral probiotic, the benefit gained from it disappears. Probiotic supplements do not take root in the gut. They simply populate the gut in real time.

## Start Eating Diversity Every Day

So, as the probiotic frontier continues to evolve, gut health experts are recommending, in addition to taking oral probiotic supplements, we add natural probiotics, or “**fermented foods**,” to our diets every day. According to Dr. Perlmutter and others, fermented foods are “naturally full of gut healing, inflammation reducing, immune balancing bacteria.” The best way to keep your gut populated with an abundance of healthy bacteria is to eat fermented foods daily.

Fermented foods can be bought at your local health food store or made in your own kitchen.

### Examples of Natural Probiotic, Fermented Foods

- Kimchi**  
sold in the refrigerated section
- Probiotic Sauerkraut**  
labeled as probiotic,  
sold in the refrigerated section (not the canned stuff on the shelf)
- Natto**  
fermented soy beans
- Probiotic Dill Pickles**  
labeled as containing live cultures,  
sold in the refrigerated section
- Kefir (fermented probiotic milk) and Live-Culture Yogurt**
- Homemade Fermented Vegetables**  
see recipe below

It is common to see Kombucha (a fermented tea) on the lists of recommended fermented foods, however, since it can be high in sugar and caffeine, it's addictive nature causes many gut health experts to omit it from their recommended lists.

**It is important to note that probiotic bacteria is destroyed by heat so to get the probiotic benefits from fermented foods you should eat them cold.**

### **A Word about Prebiotics**

The term Probiotic is a household word these days but another important term is not quite as mainstream – “Prebiotic.” Prebiotics are food for the good bacteria or probiotics in our gut. To help insure that the good gut bacteria are nurtured and fed, we need to eat prebiotics foods daily as well.

<b>Examples of Prebiotic Foods</b>		
<b>Jicama or Mexican Yam</b>	<b>Dandelion Greens</b>	<b>Jerusalem Artichoke</b>
<b>Regular Artichoke</b>	<b>Spring Onion</b>	<b>Onions</b>
<b>Garlic</b>	<b>Leeks</b>	<b>Radicchio</b>
<b>Shallots</b>	<b>Asparagus</b>	<b>Beets</b>

### **Important Note for IBS sufferers**

Some probiotic and prebiotic foods can cause gas and bloating if your gut is imbalanced. It is important to work with a Registered Dietitian Nutritionist (RDN) who specializes in gut health to slowly rebuild your microbiome which may eventually help decrease your IBS symptoms.