Conquering Cancer™

How To

CHOOSE AND USE PROBIOTICS

WHAT'S INSIDE

01

Gut Health 101

We have learned some amazing things about the impact of our gut microbiome on our health and wellbeing in the last decade.

Gut health may prove to hold the key to so many physical and emotional issues that are relevant to us as cancer warriors. Issues like:

Inflammation
Immune function
Cognitive function (memory)
Stress and anxiety management
Mood
Energy level
Ability to digest and absorb nutrients

90% of the cells found in our bodies are not human cells but in reality are microbes, like bacteria, fungi, and viruses. That means only 10% of cells in our body are human cells.

There is a delicate balance between bacterial microbes that actively support our health in the above key areas and those that don't.

When our gut is out of balance, we are vulnerable to increased inflammation, poor immune function, brain fog, increased stress and anxiety, low mood, fatigue and poor digestion.

To maintain good gut health, we must ensure we have enough good bacteria. This is where probiotics are useful.

02

What do gut bacteria do?

To understand why probiotics are important, we first need to understand how valuable beneficial bacteria are to our health, and how prevalent they are in our bodies.

In our gut, good bacteria can displace bad bacteria and influence our overall health, metabolism, digestion, and body composition.

Gut bacteria are involved in immunity and help to ensure our immune system doesn't have an itchy trigger finger (think food sensitivities).

Gut bacteria also:

- help synthesize B and K vitamins
- enhance gastrointestinal motility and function
- enhance digestion and nutrient absorption
- obstruct the growth of "bad bacteria" and other pathogens
- help metabolize other plant compounds/drugs
- produce short-chain fatty acids (SCFAs) and polyamines
- produce coagulation and growth factors
- produce cytokines (cell signaling molecules)
- help regulate intestinal mucus secretion
- help regulate blood flow to the viscera

Probiotics can help replenish and nourish this internal supply of good bacteria.

Adequate consumption of probiotics can help to eliminate abdominal pain, gas, bloating, reflux, allergies, nausea, food poisoning and vomiting. Probiotics may even alleviate irritable bowel syndrome (IBS), inflammatory bowel disease (IBD) and dermatitis. Ultimately, all this boils down to they are anti-inflammatory.

03

6 ways you may be damaging your gut health

01

Too little fibre
Fiber feeds good bacteria. Without it, microbes feed on your gut's mucous lining, allowing dangerous bacteria to escape into your body.

02

City pollution
Urban airborne particles matter enters our bodies through the air we breathe and the food we eat and damages our microbiome

03

Antibiotics
Antibiotics kill off bad bacteria, and at the same time kill off helpful bacteria.

04

Poor diet
Processed sugars and alcohol – you know the stuff you eat and drink that you know are bad for you – can alter your microbial balance and feed unhealthy bacteria

05

Stress
Stress reduces gut flora diversity and increases potentially harmful bacteria

06

Cancer treatments
Chemotherapy, especially, may wreak havoc on the gut. Treatments may kill bacteria that aids digestion, often leading to diarrhea, which further depletes good bacteria.

04

What are probiotics?

The term probiotic comes from the Latin or Gree pro, “before, forward”, and bios, or “life” — thus probiotics are life-promoting.

In this case, we use the term probiotics to refer to beneficial bacteria.

We have billions of friendly bacteria living in our digestive tract. If you extracted all of the microbes that live in your body, you’d have over a quart of sludge. Each person’s bacterial flora may be as unique as fingerprints.

Friendly bacteria help us digest our food and absorb nutrients effectively. In a sense, we don’t actually digest many components of our food — the bacteria digest it.

The probiotic bacteria used in commercial products today are largely members of the genera Lactobacillus and Bifidobacterium.

Check out a food or supplement with probiotics and the label might say something like “Lactobacillus rhamnosus GG.”

The first name that appears is the genus (Lactobacillus).

The second name designates the species within the genus (rhamnosus).

The third name or number that appears is the specific strain within the species (GG).

source - Precision Nutrition

05

How can we get probiotics naturally?

Most often, probiotics are created via fermentation. So foods that are fermented are a good natural source of probiotics.

The fermentation process involves organisms that produce alcohol, lactic acid, and acetic acid. These are natural preservatives that retain nutrients and prevent spoilage.

Fermentation not only bumps up good bacteria but helps eliminate anti-nutrients. When grains, seeds and tubers are soaked, sprouted and/or fermented, we disable anti-nutrients. This is good. It means:

- The food is more digestible (think tempeh instead of soybeans or yogurt instead of milk)
- The food has more minerals (thanks to less phytates)
- The food has more protein (thanks to less protease inhibitors)

Foods that contain natural probiotics (those starred are preferred). Aim for 1-2 servings per day

- Certain yogurts including dairy/coconut*/soy
- Kefir including dairy/non-dairy*
- Buttermilk
- Bacterially fermented cheese
- Kimchi*
- Soy sauce*
- Tempeh*
- Miso*
- Sauerkraut* (make sure it's fermented and not just soaked in vinegar)
- Pickles* (make sure they are fermented and not just soaked in vinegar)
- Yeasts, molds, and fungi
- Wine
- Mould-enhanced cheese (e.g. blue cheese)

06

How do you choose a good quality probiotic?

Not all probiotics are created equal. The kind of bacterial strains, diversity of strains, and potency can make all the difference when it comes to results. Here is what to look for:

01

of strains

Clinical studies have shown that specific probiotic strains can help with particular health concerns. While the microbiome contains thousands of different bacterial strains, most probiotics only include a few generic Lactobacillus or Bifidobacterium strains. Look for a probiotic that has at least 12 unique strains to support proper microbiome balance.

02

of CFUs

The microbiome contains trillions of bacteria, and so a probiotic dose needs to be potent enough to be effective. A probiotic's potency is measured in billions of CFUs. Look for a formula that contains at least 50 billion CFUs.

03

Listed substrains

The use of clinically studied probiotic strains can help increase the effectiveness of balancing the complex microbiome. A quality brand will indicate their use of clinically studied strains by listing the trademarked substrain. Avoid probiotics that don't list substrains as that could be a warning sign that low-quality, generic, and possibly ineffective strains make up the formula.

Probiotics are live bacterial strains, and so they are very sensitive to moisture, light, and oxygen. A plastic bottle is permeable and allows harmful elements to enter the bottle during storage and shipping, which destroys the probiotics. Look for a probiotic that comes in a dark amber glass bottle as only these can keep out harmful moisture and light.

07

What are prebiotics?

Prebiotics help keep probiotics alive. We don't digest prebiotics, which come mainly from oligosaccharides (complex starches), but probiotics love them.

I like to think of probiotics as pets that are house trained and prebiotics as pet food.

Inulin and fructo-oligosaccharides (FOS) are common prebiotics. You'll get them from legumes, fruits and whole grains. They are abundant in the food supply (assuming you eat real food).

You must make sure that you are eating prebiotics otherwise any efforts to boost probiotics is wasted.

Prebiotics can be found in (those preferred are starred):

- Grains like Barley*, Oats and Rye
- Quinoa*
- Wheat
- Onions*
- Bananas*
- Berries*
- Flax*
- Garlic*
- Honey and agave*
- Leeks*
- Artichokes*
- Yams*
- Jicama*
- Beans*