



NUMBER 1: Probiotics

Not just any probiotics either. These bugs need to come from a host that is much like you, another human host! And a healthier human host at that! The bugs in our guts have co-evolved with humans over the millennia. They have been sharing genetic information with us and us with them since the "beginning." What's that, around 200,000 years ago? These "evolved" bugs are far more adept at living in and supporting a human host than any new plant based bugs on the block. We've been working on these relationships for hundreds of thousands of years. Imagine being married to the same person for thousands of years, you'd know one another pretty darn well by now and that commensal relationship would be second nature.

Why do we need bugs?

For many reasons, and then even more reasons that we don't yet fully appreciate. Research on the microbiome and its health as it relates to our health is cutting edge in medical literature conversation!

To name a few, here are some well known reasons we need those evolved bugs in order to get through each day in the best way.

1. The good bugs outcrowd the living space (our tissue), they use the resources for their own "families." This keeps the living space and resource pool to a minimum thereby selectively keeping around only good bugs and not allowing bad bugs (or pathogenic) the room and resource to grow. In short, they protect us from pathogenic microbes..

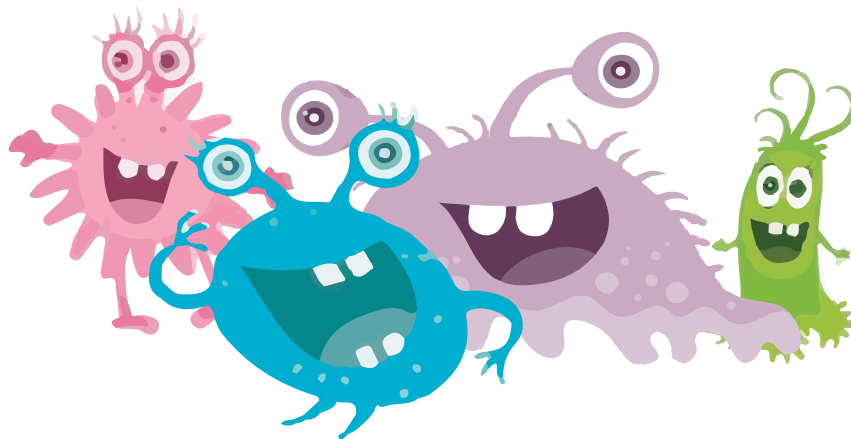
2. They actually manufacture vitamins and hormones that our body uses to maintain our weight, our cholesterol, our hormone balance.
3. They help us to keep our IMMUNE SYSTEMS in balance.

What specific bugs do I need to keep my microbiome in balance?

Well the research now shows just how diverse our ecosystem should and could be if we didn't go around over sterilizing things with antibacterial products and medicines or stressing out the colonies with inflammation by eating and drinking toxic foods and drinks.

The best probiotic products on the market not only provide "human microflora" but also different genera (plural of genus) and species of bugs to give your ecosystem the best chance of balance and commensal efficacy with diversity. Pulling from strengths, expertise, and information of many different ancient bacterial colonies.

As consumers we need to be able to rely on science backed "facts" when entrusting a substance we put in our body. Science is the "best we know right now that the scientific community et al mostly all currently agree on based on trials, many many trials, and many many arguments and counter arguments." Again, like a thousand year old marriage, understanding between the couple is only made better by trial and error and the arguments that follow.



That said, back to the bugs, what bugs are good? In short, those that have been through the clinical trials and shown to be viable, safe, and efficacious. The list is too long and boring (to most) to put here. Here is a link for those whose interest has peaked.

For those who want the gist, I've done the research, and here is my top pick of product lines: **Genestra by Seroyal**. The HMF product line series. HMF is short for Human Microflora. This indicates that these bugs have come from a human donor bacterial cell line and that ensures the proper genetic information. My top pick out of the HMF products is the "multi" product because it provides 17 different strains from two genera and that promotes the "all powerful diversity" our ecosystems thrive on.

How much should I take? What is a CFU?

CFU stands for colony forming unit. Meaning how many colonies the product promises to be able to promote when consumed by the average consumer. 15 billion CFU per dose is my preferred CFU starting dose for maintenance.

What is SIBO?

Too much bacterial growth in the small intestines. Want to find out if you have Small Intestinal Bacteria Overgrowth (SIBO)? Take our questionnaire on our website at nuhealthclinic.com/gut-health/



What is SIFO?

Too much fungal growth in the small intestines.

What is GOS or FOS?

Galactooligosaccharides (GOS). Fructooligosaccharides (FOS).

In short, these are bug food, immediate sustenance, a prebiotic that gives probiotics food to live upon arrival so they have enough sustenance to allow colonization.

What is normal flora?

The bugs (also known as microbes) that we live with in harmony (or in a commensal relationship).

What is Dysbiosis?

Let's break down the latin:

- Dys** = Imbalance of.
- Bio** = Life.
- Osis** = A condition of.

/disbiōsəs/

noun: An imbalance in normal flora.

What is the microbiome?

It is a broad term used to describe all the bugs (viral, bacterial, fungal, protozoan, etc.) that we coexist with, meaning they live on our body and we provide them room and board in return for their support and protection.

What about prebiotics? Do I need those? Do I want a probiotic that has prebiotic? Or do I want only prebiotic products?

In some cases we want prebiotic, in others we do not. In the case of pre-existing dysbiosis, ie. SIBO or SIFO, FOS or GOS can aggravate symptoms by promoting pre-existing dysbiosis. As a general rule of thumb when initiating a probiotic product I prescribe products that do not contain FOS or GOS to avoid aggravation.

Do I take my probiotics on an empty stomach?

I encourage that all probiotics be consumed with food as it's best to have some type of soluble fiber alongside taking your probiotics. Soluble fiber is nature's "prebiotic." Taking probiotics with foods help to allow them to "grab" onto the intestinal tissue to compromise.

NUMBER 2: Multiminerals Complex

Minerals act much like money does in the world. Minerals are used transactionally in the body. As an example, one substrate (beginning material) needs to be catalyzed (initiated) by an enzyme which converts it into an end product. If the substrate is present and the enzyme is present you'd assume the transaction can be accomplished and the end product made.

Nope! It's never that easy, enzymes often require "cofactors" to unlock or catalyze the action. If the cofactor isn't present, the transaction will not proceed. You may have guessed it, minerals often play a role as cofactors. Their importance in the biochemistry of our body cannot be overstated!

The best multiminerals product I have found is essentially ancient earthworm poop (decomposed plant matter) in liquid suspended form.

What do earthworms make as a by-product of plant and manure consumption?

Worms feed on plant debris (dead roots, leaves, grasses, manure) and soil. Their digestive system concentrates the organic and mineral constituents in the food they eat, so their casts are richer in available nutrients than the soil around them. Nitrogen in the casts is readily available to plants. Worm bodies decompose rapidly, further contributing to the nitrogen content of soil.

What is the most coveted soil for growing nutrient dense vegetables in organic gardens?

Worm composted soil from organic plant matter. In an ideal world we'd get enough minerals from our vegetables, the plants that have assimilated the earthworm poop (mineral dense or decomposed plant matter or manure) into an edible food for homosapiens. However not much of our food is grown in earthworm poop AND not to mention humans have grown to dislike vegetables! Huh? Yup, you better believe it.

SO now instead of doing it the long and anciently ideal way, we can just bottle up ancient earthworm poop and drink it down. This is called Fulvic and Humic material. Humic powder (humate) can be harvested from the New Mexico San Juan Basin. Both Humic minerals and Fulvic minerals have specific actions in the body. Fulvic minerals support cellular transport, i.e. getting nutrition into the tissue cell. That's BIG NEWS in the body. Humic minerals support lower digestive tract health and flora and support detoxification pathways of elimination. Also BIG NEWS in the body. All Humic materials contain some amount of Fulvic naturally. Fulvic is further extracted from Humic.

Why use ancient earthworm poop over newly produced earthworm poop?

Well, what does ancient plant matter have in common with modern plant matter? Sadly, not enough! Oy, we've greatly altered the nutritional content of our food and soil, and NOT for the better.



Who makes "ancient earthworm poop in liquid" products?

I've only found a couple companies that harvest ancient decomposed plant matter and suspend it in liquid form. I look for all the manufacturing quality assurance and quality control stamps on products: DNA tested, non-GMO, non-BPA, gluten free, pesticide free, sugar free, soy free, dairy free, yeast free, etc. My top pick is **Humic and Fulvic minerals**, which provides over 70 trace minerals, as well

as some B vitamins and amino acids, is by **Vital Earth Nutrients**. It's a company out of Golden, CO.

NUMBER 3: Vitamin C

I could write a thesis on the beneficial functions of vitamin C.

Did you know that at one point in time ancient Humans could make their own vitamin C?

We lost that function over time and that makes vitamin C now an "essential nutrient" meaning it is essential that we obtain vitamin C from our food since our bodies do not produce it endogenously (inside our body). If only we could selectively turn back on our GLO genes!

Since I cannot list all of the reasons I'd recommend you to take hearty doses of Vitamin C per day in this short blog I will list the top 6.

1. Vitamin C is found in high concentrations in the Adrenal Glands (stress responders), they produce a hormone called cortisol. Too much cortisol (or stress) can eat up and deplete Vitamin C stores AND suppress immune function.
2. Vitamin C is a POTENT antioxidant (free radical scavenger), antioxidants are basically the trash collectors in the body.
3. Supports various functions of both innate and adaptive immunity.
4. Endothelial barrier. Vitamin C makes your blood vessels and lymphatic vessels less vulnerable to infection.
5. Enhances chemotaxis, phagocytosis, and can generate reactive oxygen species, apoptosis, and clearing of spent neutrophils which decreases cell death/tissue damage.
6. It can both prevent and treat respiratory and systemic infections.

Does vitamin C require other nutrients for best use in the body?

Vitamin C like many (if not all) nutrient elements work synergistically with other nutrient elements, some commonly understood known pairs of synergistic nutrient elements include: Calcium with Vitamin D or Zinc with Copper, etc. Vitamin C has synergy with nutrients including, but not limited to: zinc, B vitamins, vitamin E, vitamin A, potassium, calcium, magnesium.

How often should I dose vitamin C? Is once a day sufficient?

No, once a day isn't sufficient. Vitamin C has a relatively short "half-life" meaning it doesn't stick around too long after consumed and brought into the blood. Regular dosing, ideally, every 4-6 hours ensures adequate saturation of Vitamin C all-the-metabolic-day-long.

What dose is good for me?

The best way to determine the dose of Vitamin C you need is through calibration. I'll let Dr. Russell Jaffe MD, PhD (had dinner with him a couple years back, a really nice person, a talker, loves being asked good questions) explain Vitamin C calibration.

Which products do I recommend for Vitamin C supplementation?



I recommend **Perque** products by Dr. Russell Jaffe for "pharmacological" uses of Vitamin C.

I recommend **Cataplex ACP by Standard Process** (Dr. Royal Lee) for everyday and maintenance needs.

What's the difference between Dr. Jaffe's product and Dr. Lee's product?

Dr. Lee's product contains all of the naturally occurring "parts" of the complete Vitamin C molecule (there are 8 parts!). Dr. Jaffe's product is a concentrated form of one part of Vitamin C (albeit a very biochemically active part).

Want to learn more about more natural healthy solutions? Call and make an appointment with Dr. Neale now 360-836-5730!

Heal With Dr. Neale
Dr. Nadene Neale, ND

