

B I O H M

THE ULTIMATE

GUT HEALTH

GUIDE

- THE MAGIC OF FUNGI
- GUT FRIENDLY SHOPPING LIST
- A DAY OF GUT HEALING RECIPES
- BIOHM SCIENCE

THE MAGIC OF FUNGI

The microbiome is what we call the community of microorganisms living in your gut. And when it comes to gut health, we hear about the role of bacteria all the time, but did you know that there's actually fungi in your gut, too? In fact, the fungi found in our gut is actually ten times bigger than the bacteria, meaning we definitely shouldn't ignore the important role they play in our digestion and our health.

Hippocrates said "all disease begins in the gut" and now research is showing that our overall health—from our immunity to our brain health to our metabolism—does actually depend heavily on the diversity of our gut's microbiome. There are many types of bacteria and fungi, both good and bad, and imbalances in these microorganisms can lead to all types of health and wellness issues.

**“ALL DISEASE
BEGINS IN
THE GUT.”**

— HIPPOCRATES

**Ever heard of the mycobiome?
It's like the microbiome— only fungus.**

When talking about the microbiome and how to keep it optimized, we typically spend time discussing probiotic supplements and foods that help build up good bacteria. However, we tend to overlook the reality that your gut contains both bacteria and fungi and that they work together.

Your microbiome also contains a mycobiome, which is your body's fungal community. As a result, many supplements are lacking in what they can do for your digestive health, since they only focus on maintaining bacterial balance instead of also achieving a healthy balance of fungi.

It's time to meet the fungi living in your gut.

So why does fungi get a bad rap? Well, candida overgrowth is one of the most common microbiome health problems. Candida albicans is a type of fungus that is found in small amounts in healthy gastrointestinal systems, but problems occur when it starts to run rampant in your gut, growing out of control.

Scientists have also discovered that bad bacteria and fungi in your gut protect themselves by creating digestive plaque, which acts as a protective barrier, allowing them to stick around and wreak havoc.

Despite this, it's time to recognize that we can't judge all fungi on the activities of one or two bad guys. Just like bacteria, there are plenty of friendly fungi in the gut as well. And that's where BIOHM probiotics come in.

These probiotics will give your gut exactly what it needs.

BIOHM is unique in that it is specifically designed by Dr. Ghannoum—one of the world's leading experts in medically important fungus and microbiome sequencing—to give your gut exactly what it needs in terms of good bacteria, good fungi, and a digestive enzyme developed to break down digestive plaque.

In order for probiotics to really be powerful and effective, they need to be able to break down this plaque to reach and control the bad bacteria and fungi. In addition to being soy, gluten, egg, dairy, and GMO-free—as well as being histamine neutral—BIOHM's capsules are 100 percent vegetarian and manufactured in the United States. Using the latest science and technology.*

Dr. Ghannoum formulated a probiotic that really covers all the bases, supporting both the important bacteria and fungi in your gut while breaking down digestive plaque. In other words, when combined with a gut-friendly diet and lifestyle: there's nothing else like it!

**All BIOHM products are gluten-free with the exception of Super Greens.*



DID YOU KNOW...

- Your microbiome is made up of 100 trillion living microbes.
- 80% of your immune system is located in your microbiome.
- 95% of your happy neurotransmitter serotonin is produced and stored in your microbiome.

A GUT-FRIENDLY SHOPPING GUIDE

NON-STARCHY VEGETABLES:

These plant foods feed your healthy gut bacteria and fungi and provide essential nutrients.

Expert tip: Steaming or cooking these vegetables breaks them down for your gut, making them easier for your digestion.

- Artichoke
- Asparagus
- Broccoli
- Broccoli sprouts
- Brussels sprouts
- Cabbage
- Cauliflower
- Celery
- Cucumber
- Mushrooms
- Radish
- Zucchini
- Leafy greens:
 - Dandelion
 - Endive
 - Field greens
 - Kale
 - Mustard greens
 - Spinach
 - Swiss chard
 - Watercress

HERBS & SPICES:

These food medicines calm inflammation and help support gut health.

- Dandelion tea
- DGL licorice root tea
- Ginger
- Marshmallow root tea
- Peppermint
- Turmeric

PROBIOTIC FOODS:

These probiotic foods contain healthy bacteria that promote balance in your gut.

- Almond yogurt
- Coconut kefir
- Coconut yogurt
- Sauerkraut
- Kimchi
- Kvass
- Water kefir

HEALTHY FATS:

Healthy fats like these are needed for calming inflammation and nourishing your gut.

- Avocados
- Avocado oil
- Coconut meat
- Coconut oil
- Grass-fed ghee
- Macadamia nut oil
- Olives
- Olive oil

OMEGA FATS & PROTEIN:

These healthy fats and proteins are essential for calming inflammation and building a healthy gut.

Plants sources:

- Almonds
- Chia seeds
- Flaxseeds
- Macadamia nuts
- Walnuts

Meat and fish sources:

- Anchovies
- Grass-fed beef
- Mackerel
- Organic bone broth
- Pasture-raised eggs
- Wild-caught Salmon
- Organic chicken (not a major source of healthy fats but an option for protein)



STARCHY VEGETABLES:

Real-food fiber in the form of starchy vegetables aids your body's detox pathways and feeds your healthy gut bacteria and fungi, promoting healthy digestion and a strong immune system.

- Beets
- Carrots
- Parsnips
- Pumpkin
- Squash
- Sweet potatoes
- Turnips
- Yams

GUT-OPTIMIZING SUPPLEMENTS:

These supplements will give your body the extra support it needs for great digestion, optimal energy levels, and a healthy microbiome. BIOHM's Probiotics contain 30 billion live active cultures—including bacteria and fungi—and a powerful digestive enzyme that breaks through digestive plaque and to help you maintain optimal digestive balance.

- BIOHM Probiotics
- Collagen
- DGL
- Glutamine
- Marshmallow root

NATURAL SWEETENERS:

These natural sweeteners should be used sparingly, since excess sugar will feed inflammation and bacterial and fungal imbalances in your gut.

- Applesauce (unsweetened)
- Coconut nectar
- Monk fruit
- Pure maple syrup
- Raw honey
- Stevia
- Xylitol

GUT HEALTH AVOID LIST:

If you want to achieve optimal gut health, avoid some (or all!) of these items on your grocery list.

- Artificial sweeteners
- Alcohol
- Dairy
- Grains (gluten containing and gluten-free grains)
- Inflammatory cooking oils (canola, peanut, soy, corn, vegetables)
- Legumes (unless soaked or pressure cooked in limited amounts)
- Nightshades (tomatoes, peppers, white potatoes, eggplants)
- Processed foods
- Refined sugar

A DAY OF GUT-HEALING RECIPES

BREAKFAST:

SOOTHING SMOOTHIE

This morning smoothie will be easy on even the most sensitive gut. Plus, your digestive system will not have to work as hard to break down the ingredients since they are already blended. Collagen and L-glutamine are both important gut medicines. In fact, L-glutamine is actually fuel for the enterocytes that line your digestive tract and regenerate to heal your gut lining.

INGREDIENTS:

- 1 cup full-fat coconut milk
- 2 tablespoons grass-fed collagen powder
- 1 tablespoon coconut oil
- 1 teaspoon deglycyrrhizinated licorice (DGL)
- 1 tablespoon L-glutamine powder
- 2 cups dark leafy greens of choice (spinach, kale, chard, etc.)
- ½ cup frozen organic berries (blueberries, blackberries, etc.)

INSTRUCTIONS:

Combine all ingredients together in a blender and blend until fully mixed.



LUNCH:

PROBIOTIC STEAK SALAD

With this salad, you'll be getting in a ton of anti-inflammatory fats like CLA and omegas from the grass-fed steak, as well as good bacteria from the sauerkraut. Turkey tail adaptogenic mushrooms are very beneficial for bacterial overgrowth.

INGREDIENTS:

- ½ pound grass-fed flank steak
- 2 cups dark leafy greens of choice, or mixture
- ½ cup drained organic sauerkraut
- ¼ cup onions, chopped
- 1 garlic clove, chopped
- ½ cup turkey tail mushrooms
- 2 tablespoons coconut oil
- Balsamic vinegar + extra-virgin olive oil

INSTRUCTIONS:

1. Slice steak into desired size strips.
2. Heat one tablespoon coconut oil over medium heat and cook steak to desired temperature. Remove from pan and set aside.
3. Heat second tablespoon of coconut oil over medium heat and sauté onions, garlic, and mushrooms together until cooked through.
4. Mix together one-part balsamic vinegar and one-part oil together to make dressing. Use more balsamic for a more tangy flavor.
5. Chop up desired greens and place in large bowl. Top with steak, sauerkraut, mushroom mixture, and dressing.



SNACK:

SWEET POTATO CHIPS WITH GUACAMOLE

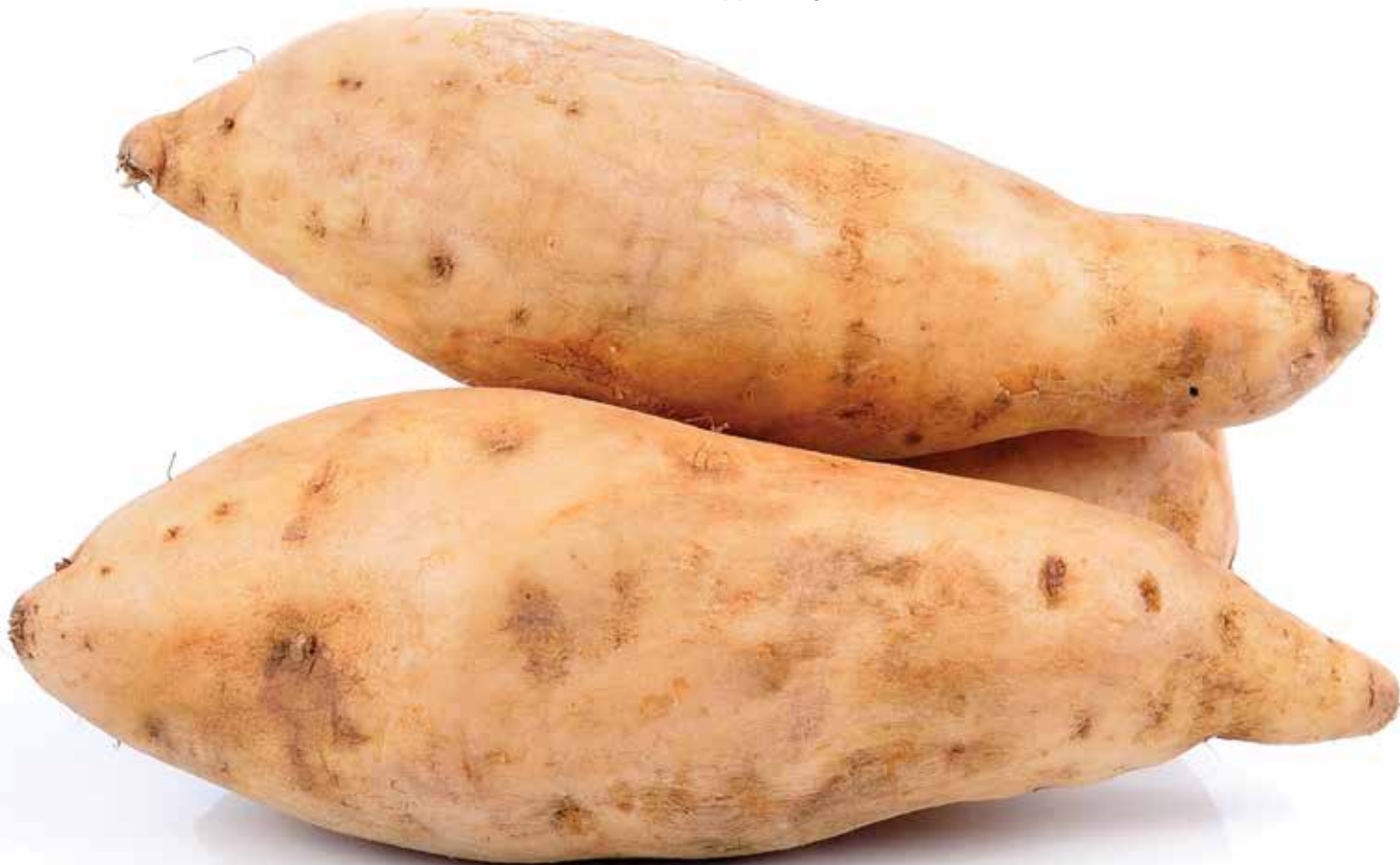
The sweet potatoes in this recipe provide your gut with important fiber that feeds your healthy gut bacteria. This fiber also helps support your body's detox pathways, accompanying the detoxifying powers of cilantro. Plus, we can't forget about the healthy fats from the avocado!

INGREDIENTS:

- 1 to 2 tablespoons melted coconut oil
- 1 large sweet potato
- 1 medium avocado
- ½ lime, juiced
- ½ teaspoon garlic powder
- Very small bunch cilantro, chopped (optional)
- Sea salt and pepper to taste

INSTRUCTIONS:

1. Preheat oven to 375 degrees°.
2. Peel sweet potato and thinly slice into chips.
3. Line baking sheet with foil.
4. Toss sweet potato chips with melted coconut oil, sea salt, and pepper.
5. Spread out on baking sheet and cook for 10 minutes. Flip and cook for another 10. The thinner your chips are the quicker they will cook. Check after the first 5 minutes.
6. While chips are cooking, slice open, remove pit, and spoon out avocado into large bowl.
7. Mix together with sea salt, pepper, garlic, lime juice, and optional cilantro.
8. Remove chips from oven and enjoy them dipped in guac.



DINNER:

TURMERIC AND GINGER CHICKEN SOUP

The natural blend of glucosamine, gelatin, glycine, and other minerals found in bone broth can help alleviate digestive issues. If you have histamine intolerance I recommend cooking the bones for a shorter amount of time. The turmeric has intensive anti-inflammatory properties that are increased by the piperine found in black pepper, which will also work to calm your gut.

BONE BROTH INGREDIENTS:

- Whole organic chicken
- 6 cloves garlic
- 1 onion, chopped
- 1 inch of ginger root, chopped

BONE BROTH INSTRUCTIONS:

1. Clean chicken and place in crockpot.
2. Fill crockpot $\frac{3}{4}$ full with water and add in vegetables, ginger, and garlic.
3. Cook on low for 8 hours or until chicken is cooked through.
4. Remove chicken from crockpot, remove meat from the bones and return bones to the crockpot.
5. Continue to cook on low between 8 and 48 hours.
6. Allow to cool, then pour through a strainer.



SOUP INGREDIENTS:

- 6 cups chicken bone broth
- 2 tablespoons coconut oil
- 1 onion, chopped
- 2 cups carrots, chopped
- 1 cup celery, chopped
- 2 cups shredded chicken (leftover from broth)
- 2 garlic cloves, diced
- 1 tablespoon turmeric
- 1 teaspoon ginger
- $\frac{1}{2}$ teaspoon black pepper
- Sea salt to taste

INSTRUCTIONS:

1. In a big pot, sauté the onions, garlic, carrots, and celery together with coconut oil until soft.
2. Add in bone broth and bring to a boil.
3. Reduce heat and add in vegetables, chicken, and seasonings. Simmer for 15 to 20 minutes.

BIOHM is a company founded on science. It's our goal share our scientific journey, and research discoveries with you and help everyone achieve gut health.

OUR SCIENCE

BIOHM uses a whole microbiome approach to gently maintain balance in your digestive system— helping support your journey to achieve optimal health and wellness from within.

“YOU ARE WHAT YOU EAT.”

But did you know you aren't what you eat? You're actually made up of mostly bacteria, fungi, and viruses!

That's right! Only 25% of our bodies are made up of human cells, the rest are organisms that live inside us.

We get these microbes from being in contact with the world, which is also made up of several kinds of microbial species.

Despite their negative reputation, not all bacteria, fungi, and viruses bring harm to the body. In fact, they help keep our bodies balanced and working properly!

So what exactly is the microbiome and how important is it to our health and well-being? Let's find out more about this community of organisms inside the human body below!

WHAT IS A MICROBIOME?

The body's community of organisms or microbes is called the microbiome. There are several microbiomes inside the body. They can be found in the mouth, digestive system, lungs, and skin, to name a few.

Keeping your gut microbiome well-balanced also helps improve your immune response, allowing you to fight off infectious diseases and other illnesses.

WHAT AFFECTS THE MICROBIOME COMPOSITION?

Each microbiome changes over time and can be affected by diet, genetics, stress, and alcohol.

The human microbiome starts developing and evolving from birth. Mothers do not just pass on genes to their babies, they also transfer their own bacteria and a host of other microorganisms when they give birth.

Meanwhile, a baby develops gut bacteria and other microbes in the digestive tract by drinking breast milk. That's why it's important for newborn babies to drink their mother's milk as soon as they're born.

As the baby grows into an adult, the environment it lives in also plays a major role in its microbial diversity.

The microbes from the soil and water source of the food a person eats also contribute to their gut microbiome. The same applies to the pets they take care of and the different people they meet throughout their life.

Not taking care of your microbiome may result in gut-related diseases and other digestive problems.

HOW DO I KNOW IF THE MICROBIOME IS UNBALANCED?

All microbes, fungi, and bacteria you allow into your gut and body may help or ruin the microbiome's balance. Being exposed to too much bad bacteria species may cause digestive issues ranging from mild to fatal.

IF YOU FEEL ANY OF THE FOLLOWING CONDITIONS, YOUR GUT MAY NOT BE DOING WELL:

- **Constant abdominal pain**
- **Frequent diarrhea**
- **Chronic constipation**
- **Acid reflux**
- **Smelly gas**
- **Unusual colored stool**

Happiness begins within.

BIOHM® offers the ultimate approach to achieving gut optimization through prebiotics, probiotics, colon cleansers, and super greens.

We also offer cutting-edge microbiome testing. Depending on your needs, your journey towards gut optimization is guided each step along the way.

YOU'RE **75%** BACTERIA, FUNGUS, & VIRUSES

You can also find out how your gut is doing by using the BIOHM Gut Test. Your gut health will be checked and compared to all 6 major bacterial communities and 4 major fungal communities.

BIOHM's team of registered nutritionists will also help you create a dietary, supplemental, and lifestyle plan designed to help heal your gut. Reach out to us at BIOHM!

WHAT IS THE RELATION BETWEEN THE GUT MICROBIOME AND COLORECTAL CANCER?

A balanced gut microbiome prevents digestive tract-related issues like Crohn's Disease, ulcerative colitis, and leaky gut syndrome. However, recent microbiome studies found a significant role the gut microbiome plays with colon cancer.

According to the research, the microbiome interacts with colon cancer host microRNAs. This is an important discovery because past microRNAs are known to regulate colon cancer tumor cell growth.

MicroRNA Definition:

These are non-coding RNAs that can stick to messenger RNAs to block protein creation. They are being studied for cancer treatment.

This means the microbiome can possibly play a role in colon cancer therapy and a patient's survival outcome.

HOW DO I MAINTAIN BALANCE WITHIN THE MICROBIOME?

TO BALANCE THE GUT MICROBIOME AND FREE YOUR GASTROINTESTINAL TRACT FROM TOXINS, TRY THE FOLLOWING TIPS BELOW:

- **Quit smoking.**
- **Avoid taking antibiotics unless absolutely necessary.**
- **Eliminate added sugar and artificial sweeteners.**
- **Eat plant-based foods.**
- **Try an Omega-3 or fish oil supplement.**
- **Sleep for at least 6 hours daily.**
- **Exercise at least three times a week.**
- **Maintain a healthy body weight.**
- **Add a prebiotic and probiotic supplement with both bacterial and fungal strains.**
- **Eat fermented foods like sauerkraut, kimchi, kombucha, natto, and yogurt.**
- **Avoid stress.**
- **Follow breathing exercises or join a yoga class to help you with meditation and deep breathing.**

BIOHM - WELLNESS FROM WITHIN.

For the gut microbiome to stay healthy and free from diseases like inflammatory bowel disease, incorporate BIOHM's Probiotics and Prebiotic supplements into your daily diet.

BIOHM is the first probiotic engineered to combine both good bacteria and good fungi, along with a powerful digestive enzyme to break through the plaque-like protective wall formed by bad bacteria and bad fungi deep within your gut.

BIOHM uses a whole microbiome approach to gently maintain balance in your digestive system— helping support your journey to achieve optimal health and wellness from within.



In Simple Terms:

Your gut is made up of a community of microorganisms, both good and bad. These microorganisms are a natural part of the ecosystem known as the microbiome. Usually the residents of the microbiome do a good job of keeping each other in check, or "in balance."

However, your gut's balance can easily be disrupted by a number of factors — even ones we encounter on a daily basis. Diet, stress, lack of sleep and even your genetics impact your gut's balance, which can lead to digestive issues.

Science has proven that a balanced gut goes hand-in-hand with optimized digestive health and overall wellness.

Probiotics help you maintain digestive balance by populating your gut with good organisms that can control the bad organisms lurking in your gut.

WELCOME TO YOUR MICROBIOME



BIOHM

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