

# fiber

playbook



COMPILED FOR YOU BY YULIAN Y  
AGELIKEASUPERNOVA.COM

# Contents

<b>01</b>	<b>YOUR OLDEST FRIENDS</b> A relationship spanning millions of years
<b>02</b>	<b>STANFORD'S FEFIFO STUDY</b> The surprising results
<b>03</b>	<b>ALL THAT PROTECTS YOU</b> Our delicate mucus barrier
<b>04</b>	<b>THE 3 TYPES OF FIBER</b> Fiber-rich food shortlist
<b>05</b>	<b>MICROBE MANAGEMENT</b> 1. Go 30 for 30 with fiber 2. Eat enough fermented stuff 3. Get gardening
<b>06</b>	<b>CREDITS &amp; FREE STUFF</b> Find your fellow Supernovas!

# Fiber is...

...famous for what is arguably its least amazing property. Obviously, staying “regular” is a good thing. But grandparents everywhere did fiber kind of a disservice when they dubbed it *roughage*.

Glamour: 0

Association with fusty old folks: 1

Dietary fiber is actually associated with a ton of excellent health outcomes. Lower risks of cardiovascular disease and cancer. Improved mental health. A happy gut microbiome. **A seminal study found that for every 10g increase in fiber consumed, there was a 10% reduction in risk!**

Although you could go the route of the **hunter-gatherer Hadzas of Tanzania** who often consume more than 100g of fiber per day, you don’t have to. With this playbook, you’ll learn shortcuts and strategies so you can reap the Supernova-promoting powers of fiber.

I hope you find it really helpful!



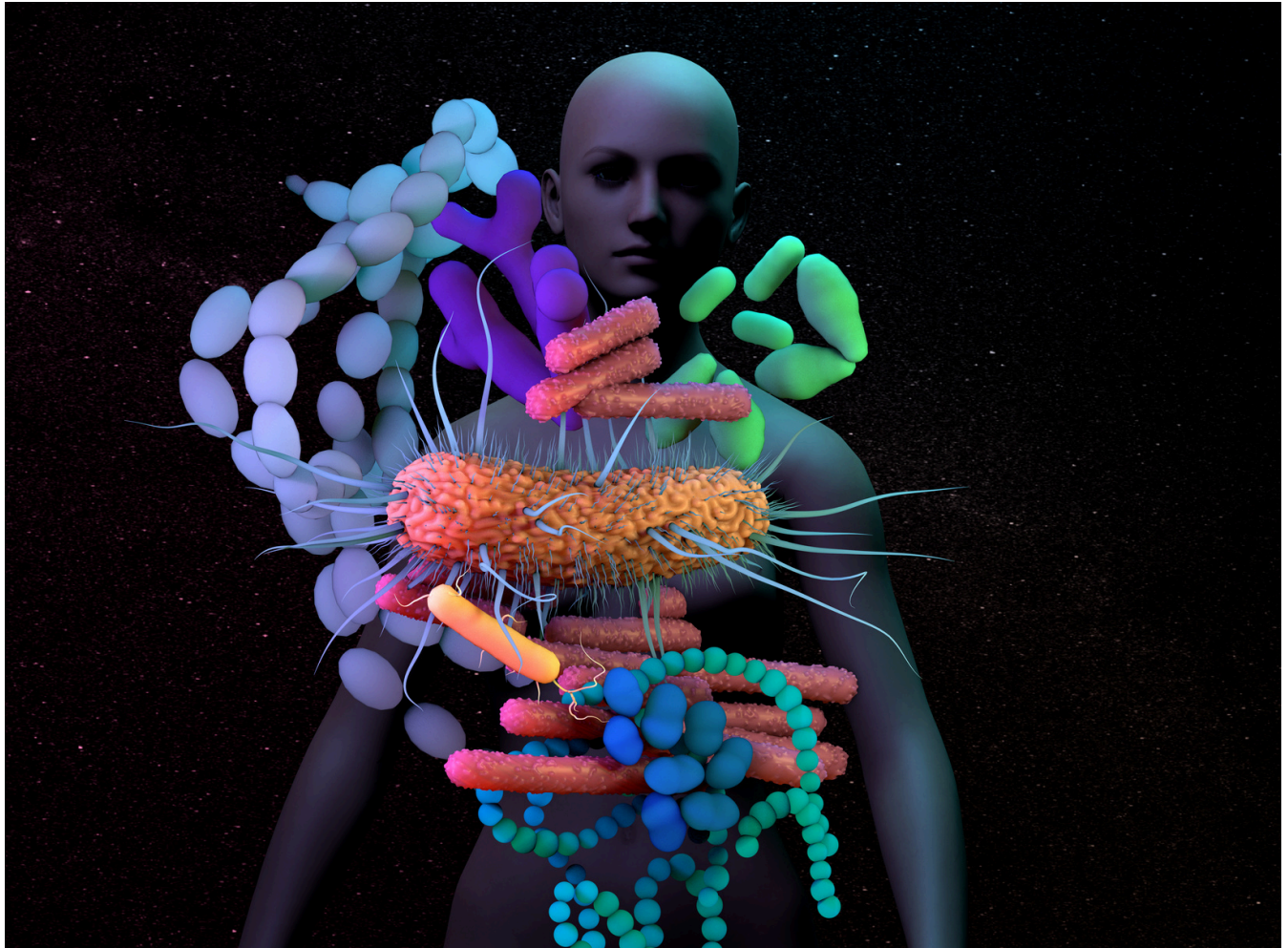
AUTHOR OF *AGE LIKE A SUPERNOVA,*  
*NOT A DYING OF THE LIGHT*



b. 1965



# FRIENDS FOR MILLIONS OF YEARS



Our gut microbes have been with us millions – if not tens of millions – of years says **microbe expert Dr. Martin Blaser**.

Our longtime co-inhabitants do a mindboggling amount of heavy health lifting. They...

- convert indigestible foods into important molecules
- help harvest energy from the food we eat
- manufacture neurotransmitters like serotonin
- synthesize thiamin, folate, biotin, riboflavin & vitamin K
- activate treatments like the chemotherapy drug *cyclophosphamide*
- protect us against pathogens

Our microbes produce **short-chain fatty acids** (SCFAs). The SCFAs butyrate, acetate and propionate reduce the risk of various diseases. They also help muscles create power.

Research has found that mice with gut microbiomes have stronger skeletal muscles than germ-free mice. When germ-free mice receive gut microbes from standard lab mice, their muscles start to grow and function better.

To improve your gut microbiome, it's important to consume more:

1. fermented foods – to cultivate your microbe population
2. dietary fiber – to feed your microbes



# COAXED OUT OF HIBERATION



Stanford researchers compared the impact on the gut microbiome of fermented foods vs. dietary fiber in their *Fermented and Fiber-rich Food* or **FeFiFo** Study.

The study's subjects were divided into two groups:

## #1: High fiber group:

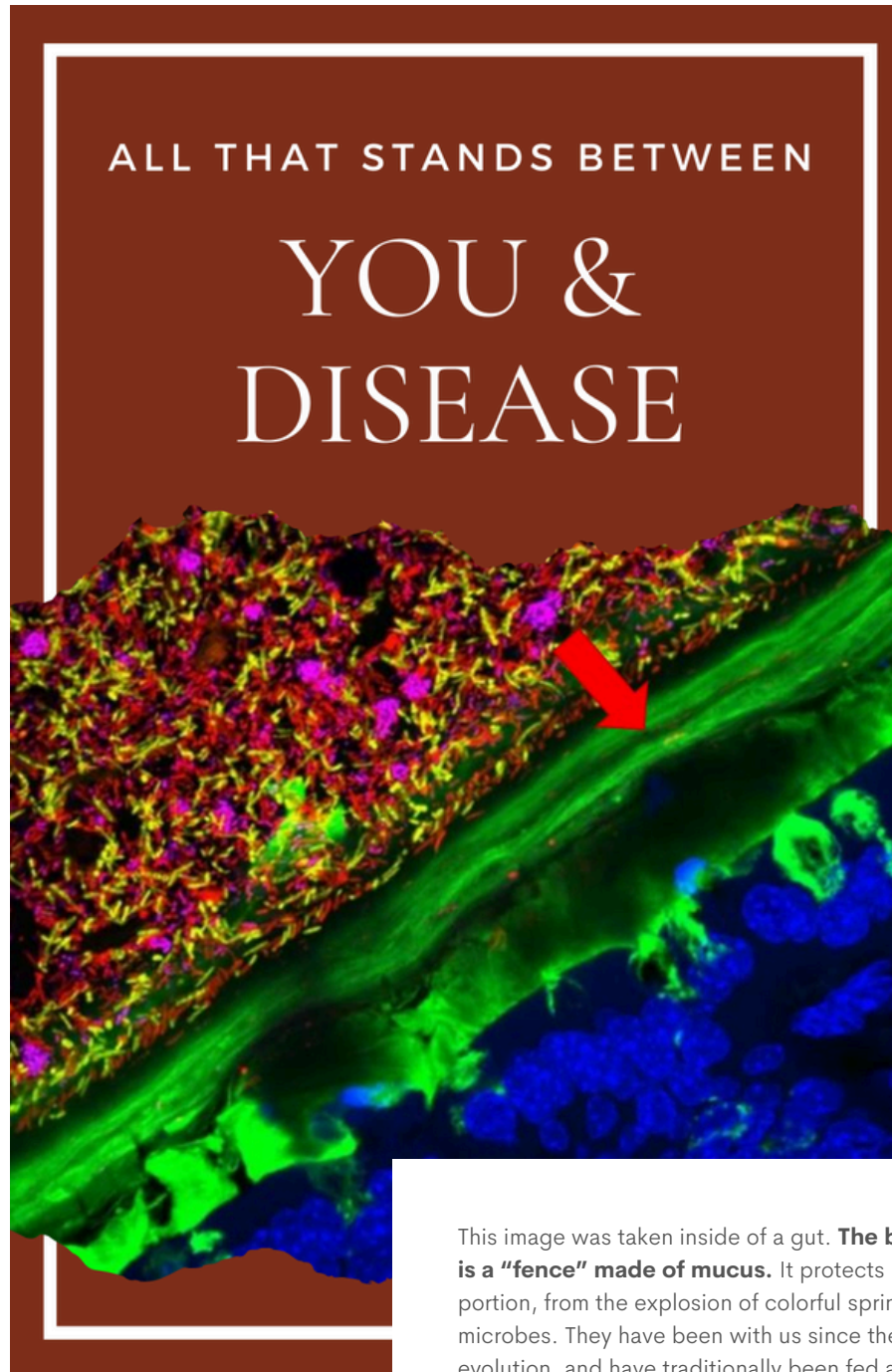
This group ate more fruit, vegetables, legumes, whole grains, nuts, and seeds. Their fiber intake increased from 21g per day to 45g. Some of the group members reacted with a little inflammation, while others had a lot. Why? A lack of microbial diversity. Many of us no longer have enough variety of microbes to properly utilize dietary fiber. But there is a solution. Before increasing your fiber intake, first **"pre-load" your gut with fiber-consuming microbes**, like the fermented foods group did.

## #2 Fermented-foods group:

The members of this group started the study consuming less than half a serving per day of fermented foods. They ramped up their intake gradually (important tip!). Then, they spent ten weeks consuming six servings or more per day of fermented foods like:

- cottage cheese
- kombucha, yogurt, kefir, buttermilk, and/or kvass
- kimchi, sauerkraut, fermented veggies & vegetable brine

The more servings they consumed, the more diverse their gut microbiomes became. The greater their microbial diversity, the more their markers of inflammation were reduced. Interestingly, their increase in microbial diversity didn't come from what they consumed but from **microbes that were already present in their guts, but hibernating**. They were coaxed out of hibernation by being fed fermented stuff.



This image was taken inside of a gut. **The bright green line is a "fence" made of mucus.** It protects us, the blue portion, from the explosion of colorful sprinkles – gut microbes. They have been with us since the dawn of evolution, and have traditionally been fed a lot of fermented items and foods high in fiber.

Modern day hunter-gatherers living a traditional lifestyle in Papua New Guinea, South America, and Africa all consume a variety of fiber-rich foods. And all have common gut microbes. Microbes that people eating an industrialized diet lack. **The industrialized diet is dangerously low in fiber – often less than 20g per day – and favors microbes that eat away at the protective mucus barrier.** The thinner it gets, the more bacteria, viruses, protozoa (including giardia), and fungi access the bloodstream. Permeable (leaky) gut invites in inflammation, cardiovascular disease, chronic respiratory disease, diabetes, and cancer.



**"THE FINDING SUPPORTS THE IDEA THAT, DEPENDING ON DIET, THE MICROBIOME IS PLASTIC."**

**DR. LAWRENCE DAVID  
PROFESSOR OF MOLECULAR  
GENETICS & MICROBIOLOGY**

**With the right foods, even the most depleted microbiome can flourish again.**



The changes to our industrialized gut microbiomes are pretty difficult to reverse.

But not impossible.

The Hadza have certain bacterial species that disappear to the point that they are undetectable during the dry season, when they eat far fewer plants and more meat. But when the wet season returns and their dietary patterns shift back to an abundance of plants, tubers, greens, gourds and wild berries – the microbes return. This microbiome flexibility bodes well for the rest of us, says Duke University's Lawrence David. **"It suggests the shifts in the microbiome seen in industrialized nations might not be permanent, and that they might be reversible by changes in people's diets."**





# FIBER & RESISTANT STARCH 101







### #1 INSOLUBLE FIBER

What grandma meant by *roughage*. It doesn't dissolve in water. It helps with regularity, lowers cholesterol, and lessens the risk of various cancers.

It is found in:

- wheat bran
- whole grains
- most veggies
- leafy greens
- unpeeled apples

### #2 SOLUBLE FIBER

Dissolves in water into a gooey gel. Not only does it help stabilize blood sugar, but it also lowers your risk of cardiovascular disease.

Found in:

- beans
- oats, whole wheat & barley
- sweet potatoes & nuts
- fruit
- root veggies like turnips

### #3 RESISTANT STARCH

Not technically a fiber but a carbohydrate that resists being digested in the small intestine. It ferments in the large intestine, and feeds beneficial gut bacteria. It helps lower cholesterol and lessens your risk of various cancers. Found in:

- white beans & lentils
- peas
- oats
- barley
- **potatoes & rice that have been cooked and then cooled**

**THERE ARE 3 TYPES OF DIETARY FIBER,  
ALL OF WHICH CONTRIBUTE TO YOUR GUT  
MICROBIOME HEALTH & OVERALL WELLNESS.**

## FRUIT IS AWESOME!

---

Fruit has fallen victim to the produce equivalent of identity theft and slander. *Fruit is fattening! It's sugar! It's unhealthy!*

The research - which is voluminous to the point of being overwhelming - continues to conclude just the opposite. The cell walls in fruit fiber contain the prebiotic pectin, which increases levels of beneficial SCFAs. Study after study, meta-analysis after meta-analysis, review after review upon review all agree: there are “no adverse relationships between fruit intake and health outcomes.” The consensus is squarely in support of Team *Fresh Fruit*:

- more fruit → lower risk of colon cancer, depression & pancreatic diseases
- an additional serving of fruit daily is associated with less risk of cardiovascular disease & oral cancer
- having an extra 200g (6oz) of fruit → lower risk of breast cancer
- an additional 100-500g (3.5oz to over a pound) of fruit every day is associated with significantly less risk of type 2 diabetes

Eating more fresh fruit is also correlated with better mood, more vitality, and flourishing behaviors like curiosity, creativity and motivation.





# SOME SOURCES OF SOLUBLE & INSOLUBLE FIBER



## 10-12G OF FIBER

- a serving of *All-Bran*
- 2 Tbsp chia seeds
- 100g of oats

## 8-9G OF FIBER

- ½ cup of cooked lentils
- 125g raspberries or blackberries
- 1 cup edamame
- 1 cup sweet potato
- ½ cup cooked red kidney beans

## 6-7G OF FIBER

- 1 cup cooked pearl barley
- ½ avocado
- 2 Tbsp flax seeds
- ½ cup cooked pinto beans

## 4-5G OF FIBER

- 1 cup cooked kale
- 1 artichoke
- 1 cup cooked quinoa
- 1 cup chopped broccoli
- ½ cup of cooked turnip
- ½ cup cooked peas, chickpeas or okra

## 2-3 G OF FIBER

- a psyllium husk supplement like *Metamucil*
- one slice of pumpernickel bread
- a small apple
- ½ cup cooked broccoli
- 2 cups air-popped popcorn

This list is a short jump-starter. I hope it inspires you to become a fiber enthusiast & aficionado!

MANAGE YOUR MICROBIOME BACK  
TO MAGNIFICENCE!



# THE 3 STEPS TO MICROBE MANAGEMENT

---

1. Go 30 for 30 with fiber
2. Consume enough fermented stuff
3. Get gardening







# AROUND THE WORLD IN 80 FIBERS

To level up your produce and fiber game, look beyond your borders. In Beijing, I discovered dried wood ear mushrooms, dehydrated goji berries, and dried snow fungus. During a stint in Romania, my landlady fed me a chilled summer salad with boiled rutabaga, turnips and beets (you'll recall that roots are rich in soluble fiber). And in Latvia, Rye Bread Soup (*Rupjmaizes Zupa*) made with a hearty, fiber-loaded black bread proved delicious.

Embark on your own global tasting tour with some of these:



- [Myers+chang At Home](#): Recipes from the Beloved Boston Eatery
- [Every Grain of Rice](#): Simple Chinese Home Cooking
- [Ethiopia: Recipes and Traditions from the Horn of Africa](#)
- [Vegetarian India: A Journey Through the Best of Indian Home Cooking](#) by Madhur Jaffrey
- [Tibetan Home Cooking](#)
- [Scandinavian Recipes You Can Cook in an Hour](#)
- [Oklava: Recipes from a Turkish-Cypriot Kitchen](#)
- [Traditional South African Cooking](#)
- [Simply West African](#): Easy, Joyful Recipes for Every Kitchen
- [Africa: The Home Cookbook](#): The most delicious and important recipes from Morocco, Senegal, Ethiopia, South Africa, Ghana, Somalia, Congo, Algeria, Libya, Eritrea & oh so many more
- [Latinísimo](#): Home Recipes from the 21 Countries of Latin America
- [Ukrainian Cookbook - Cooking with Love](#): 300+ Recipes from a Ukrainian Family
- [From Dill to Dracula](#): A Romanian Food & Folklore Cookbook
- [Balkan Food](#): 13-Book Series featuring Greek, Turkish, Albanian, Mediterranean, Bosnian, Croatian, Macedonian & more (under \$40)
- [Around the World in Tasty Ways](#): 7-book series for under \$30. Includes Spanish, Indian, Cali, Chinese, etc.
- [World Cuisines - 72 book series](#) (under \$150!) featuring Armenian, Georgian, European, Persian, Syrian, Polish, Moroccan, Hungarian, Korean, Portuguese, Israeli, Egyptian, Algerian...



## #2 HAVE 6+ SERVINGS OF FERMENTED FOOD EVERY DAY

*Six servings?! Don't stress. A serving isn't that sizeable. Each of these constitutes a serving:*

- ½ cup cottage cheese
- some camembert, edam or gouda cheese
- 6oz of kombucha – made with tea, yerba mate, or even coffee!
- a cup of yogurt, kefir, buttermilk, or kvass
- ¼ cup of kimchi, sauerkraut, tempeh, gundruk, khalpi or sinki
- a shot of vegetable brine drink or Turkish shalgam

Although it might be tempting to pop a probiotic pill, taking one outcome or endpoint of a system is not the same thing as activating the *entire* system.

Also, any bacteria in the pill that duplicate microbes already living in the gut will be prevented from taking hold, called *colonization resistance*...aka **expensive pee**.

Instead, consume actual fermented items. Your gut microbiome and overall health will thank you. Fermenting stuff yourself is pretty easy.

- A go-to guide is [WILD FERMENTATION: The Flavor, Nutrition & Craft of Live Culture Foods](#)
- Another good resource is [the YouTube channel Mary's Nest](#)



## #3 GET GARDENING

The microbiomes of people who garden are loaded with an abundance of good” bacteria, especially fiber-fermenting ones. Their guts also house more unidentified microbes, demonstrating diversity.

Consider what happened when a 28-day “biodiversity intervention” was given to children in Finland. Daycare centers received heathers, wild berries and mosses from the forest floor, sod and meadow grasses, peat blocks for climbing and digging, and planters for growing annuals. The kids then crafted natural materials, planted stuff, and interacted with green materials during outdoor playtime for an average of 90 minutes a day. **Their skin and gut microbiota changed for the better, as did their immune function, with decreased cytokine levels and Treg cell frequencies.** All in a month! And all from “letting urban children play in microbiologically diverse dirt and vegetation.”

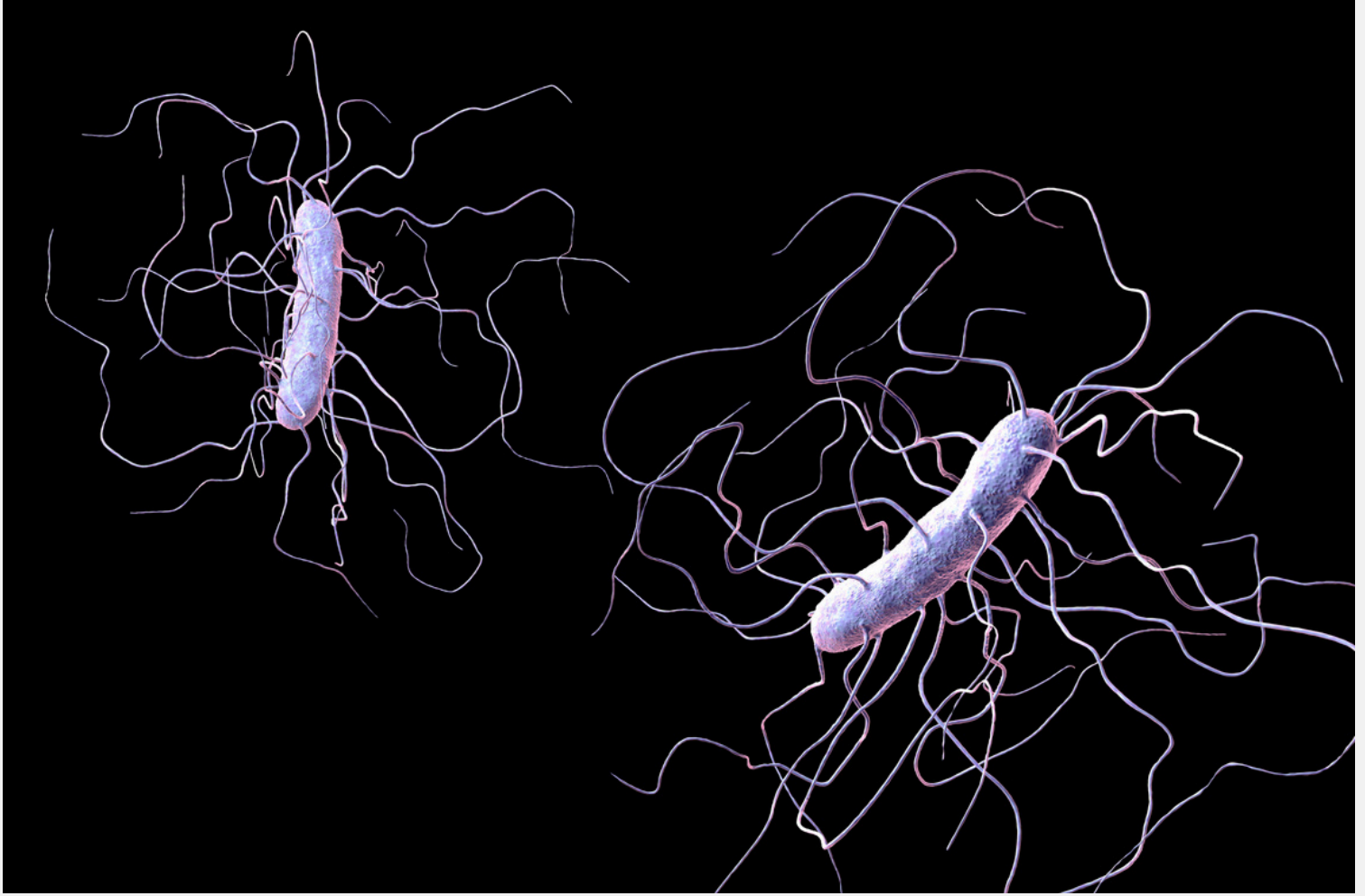
We evolved with the soil, and it played an essential role in the evolution of the human gut microbiome. **From the perspective of the entire ecological system in which we exist, the microbes – both in us and in the soil – comprise our “extended” genome.**

If you don't yet garden, it's time to start digging in the soil. You might join a community garden or even start your own container garden.

- [THE VEGETABLE GARDENER'S CONTAINER BIBLE: How to Grow a Bounty of Food in Pots, Tubs, and Other Containers](#)
- On YouTube, [Epic Gardening](#) has you covered







# CREDITS & SOURCES

---

01

# your oldest friends

## FIBER STUDY & HADZA DAILY FIBER CONSUMPTION

*There was a 10% reduction in risk for per each 10-g/day increase in fiber intake. Association Between Dietary Fiber and Lower Risk of All-Cause Mortality: a Meta-Analysis of Cohort Studies, Am J Epidemiol (2015)*  
<https://pubmed.ncbi.nlm.nih.gov/25552267/>

"The Hadza get 100 or more grams of fiber a day in their food, on average," says **Justin Sonnenburg, PhD**, professor at Stanford University. "We average 15 grams per day." Hunter-Gatherers' Seasonal Gut-Microbe Diversity Loss Echoes our Permanent One, *Eurekalert* (2017), <https://www.eurekalert.org/news-releases/527923>

## DR. MARTIN BLASER

"Such a long period of cohabitation suggests that there are important adaptations of the microbes to their obligate primate hosts," observes microbiologist *Martin Blaser, MD*, in Hypothesis: The Changing Relationship of *Helicobacter pylori* and Humans - Implications for Health and Disease, *The Journal of Infectious Diseases* (1999). I remember originally hearing this bit o' wisdom from Brendon Burchard. <https://minimalistquotes.com/brendon-burchard-quote-151774/>. Blaser is also the author of *MISSING MICROBES: How the Overuse of Antibiotics Is Fueling Our Modern Plagues* (2014).

## THE MANY THINGS THAT MICROBES DO

*THE GOOD GUT: Taking Control of Your Weight, Your Mood, and Your Long-term Health* (2016) by Justin & Erica Sonnenburg, PhDs

Contributions of Intestinal Bacteria to Nutrition and Metabolism in the Critically Ill, *Surgical Clinics of North America* (2011) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3144392/>

*The healthier the gut, the better the chance of fighting off cancer with this drug.*

*FIBER FUELED: The Plant-Based Gut Health Program for Losing Weight, Restoring Your Health, and Optimizing Your Microbiome* (2020) by Will Bulsiewicz, MD, MSCI

*Chemical substances foreign to animal life, including drugs, pesticides, cosmetics, flavorings, fragrances, food additives, industrial chemicals & environmental pollutants. Xenobiotic Metabolism – A View Through the Metabolometer, Chemical Research in Toxicology* (2010)  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2872059/>

Carbohydrate Quality and Human Health: A Series of Systematic Reviews and Meta-Analyses, *The Lancet* (2019) [https://www.thelancet.com/article/S0140-6736\(18\)31809-9/fulltext](https://www.thelancet.com/article/S0140-6736(18)31809-9/fulltext)





# 01

# your oldest friends

## **SCFAs & MUSCLE POWER**

Health Benefits and Side Effects of Short-Chain Fatty Acids, *Foods* (2022)

<https://pubmed.ncbi.nlm.nih.gov/36140990/>


*Aging muscle benefits strongly from supplementing with protein and resistance exercise, but additionally targeting the gut microbiota could help overcome anabolic resistance. The Ancestral and Industrialized Gut Microbiota and Implications for Human Health, Nature Reviews Microbiology* (2019) <https://www.mdpi.com/2072-6643/10/7/929><https://pubmed.ncbi.nlm.nih.gov/30036990/>

Link Between Gut Microbes and Muscle Growth Suggests Future Approach to Tackle Muscle Loss, *Science Daily* (2019) <https://www.sciencedaily.com/releases/2019/09/190910095415.htm>

## **THE NEED TO CONSUME MORE FERMENTED ITEMS & FIBER**

*This review clearly shows that fermented foods can affect the gut microbiome in both the short and long term, and should be considered an important element of the human diet. Fermented Foods, Health and the Gut Microbiome, Nutrients* (2022) <https://pubmed.ncbi.nlm.nih.gov/35406140/>

*Given the plethora of scientific evidence that corroborate the multiple and varied health benefits of dietary fibre, and the risks associated with a diet that lacks fibre, the optimization of fibre within our diets represents an important public health strategy to improve both metabolic and overall health. The Health Benefits of Dietary Fibre, Nutrients* (2022) <https://pubmed.ncbi.nlm.nih.gov/33096647/>





# 02


# the fefifo study

## STANFORD STUDY:

*These data suggest that the increase in microbiota diversity in the high-fermented food diet arm was not primarily due to consumed microbes, but rather a result of shifts in or new acquisitions to the resident community. **These data support that fermented food consumption has an indirect effect on microbiota diversity, rendering the microbiota receptive to the incorporation or increased representation of previously undetected strains within the gut.***

The Stanford University Fermented & Fiber-Rich Food or FeFiFo Study, Randomized Controlled Trial, *Cell* (2021) <https://pubmed.ncbi.nlm.nih.gov/34256014/>

Gut-Microbiota-Targeted Diets Modulate Human Immune Status: Fe-Fi-Fo Study, <https://med.stanford.edu/nutrition/research/completed-studies/fefifo.html>







# 03

## the mucus barrier

The award-winning image of the mucus layer and microbes was taken by the Sonnenburg Lab at Stanford University Medical School in the Microbiology + Immunology Department.

<https://sonnenburglab.stanford.edu/>

Vulnerability of the Industrialized Microbiota, *Science* (2019)

<https://www.science.org/doi/10.1126/science.aaw9255>

Gut Microbiome of the Hadza Hunter-Gatherers, *Nature Communications* (2014)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3996546/> |

<https://www.npr.org/sections/goatsandsoda/2017/08/24/545631521/is-the-secret-to-a-healthier-microbiome-hidden-in-the-hadza-diet> | <https://www.science.org/doi/10.1126/science.aan4834>

Is the Secret to a Healthier Microbiome Hidden in the Hadza Diet? (2017)

<https://www.npr.org/sections/goatsandsoda/2017/08/24/545631521/is-the-secret-to-a-healthier-microbiome-hidden-in-the-hadza-diet>

Fibre Intake for Optimal Health: How Can Healthcare Professionals Support People to Reach Dietary Recommendations? *BMJ* (2022) PMID: 35858693

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9298262/>



# 03

## the mucus barrier

*People who consume the same 10 or fewer sources of plant fiber fare significantly worse. Diet, Antibiotics and Geography Can Influence the Microbial Make-Up of the Gut.* Discussion with Rob Knight on World Microbiome Day <https://www.gutmicrobiotaforhealth.com/diet-antibiotics-and-geography-can-influence-the-microbial-make-up-of-the-gut-discussion-with-rob-knight-on-the-world-microbiome-day-2019/>

*Starving mice of fiber also made them more susceptible to the bacterial pathogen *Citrobacter rhodentium* - a mouse-specific pathogen used to model infections in humans - highlighting the importance of the mucus layer as a mechanical barrier against bacterial invasion.* The Gut Microbiome: Connecting Spatial Organization to Function, *Cell Host & Microbe* (2017) <https://pubmed.ncbi.nlm.nih.gov/28407481/>

The Ancestral and Industrialized Gut Microbiota and Implications for Human Health, *Nature Reviews Microbiology* (2019) <https://pubmed.ncbi.nlm.nih.gov/31089293/>

Diet, Microbiota, and the Mucus Layer: The Guardians of Our Health, *Frontiers in Immunology* (2022) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9513540/>

### **IS MICROBIOME DAMAGE REVERSIBLE?**

Vulnerability of the Industrialized Microbiota, *Science* (2019) <https://www.science.org/doi/10.1126/science.aaw9255>

Is the Secret to a Healthier Microbiome Hidden in the Hadza Diet? (2017) <https://www.npr.org/sections/goatsandsoda/2017/08/24/545631521/is-the-secret-to-a-healthier-microbiome-hidden-in-the-hadza-diet>

Seasonal Cycling in the Gut Microbiome of the Hadza Hunter-Gatherers of Tanzania, *Science* (2017) <https://www.science.org/doi/10.1126/science.aan4834>



04

# 3 types of fiber

Associations between Dietary Fiber Intake and Mortality from All Causes, Cardiovascular Disease and Cancer: A Prospective Study, *Journal of Translational Medicine* (2022)

<https://pubmed.ncbi.nlm.nih.gov/35918724/>

<https://www.medicalnewstoday.com/articles/319176#what-are-the-benefits-of-fiber>

Therapeutic Benefits and Dietary Restrictions of Fiber Intake: A State of the Art Review, *Nutrients* (2022) PMID: 35807822 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9268622/>

What is Resistant Starch? <https://hopkinsdiabetesinfo.org/what-is-resistant-starch/>

## SOURCES OF SOLUBLE & INSOLUBLE FIBER

The Chemical Composition and Nutritional Value of Chia Seeds—Current State of Knowledge, *Nutrients* (2019) PMID: 31159190 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6627181/>

<https://www.lentils.org/health-nutrition/nutritional-information/>

<https://parade.com/1381821/emily-laurence/edamame-nutrition/>;

<https://reeis.usda.gov/web/crisprojectpages/0232322-soybean-dietary-fiber-a-functional-ingredient-for-prevention-of-childhood-obesity.html>

<https://www.weekand.com/healthy-living/article/fiber-content-sweet-potatoes-18009636.php>

<https://www.greenmatters.com/p/foods-high-in-soluble-fiber>

<https://www.weekand.com/healthy-living/article/insoluble-fiber-oats-18014010.php>

<https://cookwithkathy.files.wordpress.com/2014/05/sifibre.pdf>

<https://www.metamucil.com.au/en-au/articles/metamucil/metamucil-for-healthcare-professionals-faqs>;

*Psyllium comes from the shrub-like herb Plantago psyllium. The outer coating, or husk, of the psyllium seed is the source of the fiber.* <https://www.hollandandbarrett.com/the-health-hub/vitamins-and-supplements/supplements/psyllium-husk-benefits/>

<https://www.popcorn.org/All-About-Popcorn/Nutrition>; <https://www.livestrong.com/article/370725-is-popcorn-a-good-source-of-fiber/>

04

# 3 types of fiber

## FRUIT CONSUMPTION & HEALTH OUTCOMES

Fruit Consumption and Multiple Health Outcomes: An Umbrella Review, *Trends in Food Science & Technology* (2021)

[https://www.researchgate.net/publication/355004339\\_Fruit\\_consumption\\_and\\_multiple\\_health\\_outcomes\\_An\\_umbrella\\_review](https://www.researchgate.net/publication/355004339_Fruit_consumption_and_multiple_health_outcomes_An_umbrella_review)

Let Them Eat Fruit! The Effect of Fruit and Vegetable Consumption on Psychological Well-Being in Young Adults: A Randomized Controlled Trial, *PLoS One* (2017)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5291486/>

*Fruit and vegetable consumption lowers the risk of cardiovascular disease, colon cancer, depression, pancreatic diseases, colon and rectal cancer, hip fracture & stroke.*

Fruit and Vegetable Consumption and Health Outcomes: an Umbrella Review of Observational Studies, *Int J Food Sci Nutr* (2019) <https://pubmed.ncbi.nlm.nih.gov/30764679/>

*Various reviews have associated **low intake of fruits and vegetables with chronic diseases** such as cardiovascular diseases, blood pressure, hypercholesterolemia, osteoporosis, many cancers, chronic obstructive pulmonary diseases, respiratory problems as well as mental health....Berries, grapes and pomegranate are effective at decreasing cardiovascular risk, while citrus fruits and apples had a moderate effect on BP and blood lipid level....An increased consumption of carotenoid-rich fruit and vegetables maintains the cholesterol level in blood since they reduce oxidative damage and cause an increase in LDL oxidation resistance. An increased consumption of cruciferous vegetables was also reported to cause a decrease in the risk of intestinal, bowel, thyroid, pancreatic and lung cancer.*

Fruit and Vegetable Intake: Benefits and Progress of Nutrition Education Interventions- Narrative Review Article, *Iran J Public Health* (2015) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4644575/>

*The most extensively studied fruit fiber prebiotic component is pectin, which comprises on average 35% of fruit fiber cell wall content. Whole Fruits and Fruit Fiber Emerging Health Effects, *Nutrients* (2018) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6315720/>*



05

# microbe management

## #1: GO 30 FOR 30 WITH FIBER

The Need to Reassess Dietary Fiber Requirements in Healthy and Critically Ill Patients, *Gastroenterology Clinics of North America* (2018) PMID: 29413014  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6312100/>

Fibre Intake for Optimal Health: How Can Healthcare Professionals Support People to Reach Dietary Recommendations? *BMJ* (2022) PMID: 35858693  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9298262/>

Association Between Dietary Fiber and Lower Risk of All-Cause Mortality: a Meta-Analysis of Cohort Studies, *American Journal of Epidemiology* (2015) <https://pubmed.ncbi.nlm.nih.gov/25552267/>

Diet, Antibiotics & Geography Can Influence the Microbial Make-Up of the Gut. Rob Knight on World Microbiome Day <https://www.gutmicrobiotaforhealth.com/diet-antibiotics-and-geography-can-influence-the-microbial-make-up-of-the-gut-discussion-with-rob-knight-on-the-world-microbiome-day-2019/> & <https://www.gutmicrobiotaforhealth.com/diet-antibiotics-and-geography-can-influence-the-microbial-make-up-of-the-gut-discussion-with-rob-knight-on-the-world-microbiome-day-2019/>

*THE FIBER FUELED COOKBOOK: Inspiring Plant-Based Recipes to Turbocharge Your Health* (2022) by Will Bulsiewicz, MD

Phytonutrients: Paint your Plate with the Colors of the Rainbow, *Harvard Health Publishing* (2019) <https://www.health.harvard.edu/blog/phytonutrients-paint-your-plate-with-the-colors-of-the-rainbow-2019042516501>

Carbohydrate Quality and Human Health: A Series of Systematic Reviews and Meta-Analyses, *The Lancet* (2019) [https://www.thelancet.com/article/S0140-6736\(18\)31809-9/fulltext](https://www.thelancet.com/article/S0140-6736(18)31809-9/fulltext)

Interactions Between Dietary Fibre and the Gut Microbiota, *Proceedings of the Nutrition Society* (2021) <https://www.cambridge.org/core/journals/proceedings-of-the-nutrition-society/article/interactions-between-dietary-fibre-and-the-gut-microbiota/0BEF28B809F38D02AC0B1D4E4990210C>

05

# microbe management

## #2: CONSUME 6+ SERVINGS OF FERMENTED STUFF DAILY

Health-Promoting Components in Fermented Foods: An Up-to-Date Systematic Review, *Nutrients* (2019), PMID: 31137859 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6567126/>

*Shalgam is a fermented beverage made of black carrots and turnips that is rich in vitamins, minerals and polyphenols.* Fermented Foods, Health and the Gut Microbiome, *Nutrients* (2022), PMID: 35406140 <https://pubmed.ncbi.nlm.nih.gov/35406140/>

Interview with Raja Dhir, co-CEO of Seed Health: <https://www.youtube.com/watch?v=1DP8RaQVDKc>

Probiotic Gastrointestinal Transit and Colonization After Oral Administration: a Long Journey, *Frontiers in Cellular and Infection Microbiology* (2011) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8006270/>

*VSL#3 costs over \$7/serving & takes an average of 90 days to effect any noticeable difference.* <https://www.vsl3.com/collections/vsl-3-collection> via *THE MICROBIOME SOLUTION: A Radical New Way to Heal Your Body from the Inside Out* (2016) by Robynne Chutkan, MD.

*VSL#3 doesn't actually affect the microbiota; rather, it works through the satiety pathway.* Gut Microbiota is Not Modified by Randomised, Double-Blind Placebo-Controlled Trial of VSL#3 in Diarrhea-Predominant Irritable Bowel Syndrome, *Probiotics Antimicrob. Proteins* (2011) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3255476/> Interestingly, VSL#3 has also been found to be correlated with morning melatonin levels. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9686962/>





# 05

# microbe management

## #3: GET GARDENING

Fecal and Soil Microbiota Composition of Gardening and Non-Gardening Families, *Scientific Reports* (2022) [Health-Promoting Components in Fermented Foods: An Up-to-Date Systematic Review](#).

Biodiversity Intervention Enhances Immune Regulation and Health-associated Commensal Microbiota among Daycare Children, *Science Advances* (2020) [Health-Promoting Components in Fermented Foods: An Up-to-Date Systematic Review](#)

Does Soil Contribute to the Human Gut Microbiome? *Microorganisms* (2019)  
<https://www.mdpi.com/2076-2607/7/9/287>

A list of recommended books about container-gardening:  
<https://www.urbanabroad.com/container-gardening-books/>

ANTI-AGING FOR BADASS CHICKS

# AGE LIKE A SUPERNOVA

...NOT A DYING OF THE LIGHT



YULIAN Y

*"It turned back the clock!"  
-Your Muscles*

# Come join your fellow Supernovas!

## COMMUNITY & CONTACT

- SUBSTACK:  
<https://agelikeasupernova.substack.com/>
- FACEBOOK: @ Ninja Supernovas
- X: @SupernovaYulian
- EMAIL ME!  
[SuchaSecretStrongman@gmail.com](mailto:SuchaSecretStrongman@gmail.com)

## FREE STUFF

BECOME UN-INVISIBLE – the OG Supernova Playbook  
[AgeLikeaSupernova.com/Uninvisible](https://AgeLikeaSupernova.com/Uninvisible)  
PROTEIN POWDER Playbook: [AgeLikeaSupernova.com/Protein](https://AgeLikeaSupernova.com/Protein)  
WEIGHT LOSS Playbook: [AgeLikeaSupernova.com/WeightLoss](https://AgeLikeaSupernova.com/WeightLoss)



THE POST-MENOPAUSAL WOMAN'S GUIDE

# BECOME UN-INVISIBLE

*Eat, Train & Recover Like a Ninja*

*Supernova & Make Your Mark on the World*



by YULIAN Y  
Get Un-Invisible



DOWNLOAD YOUR

**FREE** COPY TODAY!

[AGELIKEASUPERNOVA.COM](http://AGELIKEASUPERNOVA.COM)