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Please take a look at the special coaching packages set up for COC.
When you purchase one of the coaching packages on the special off page you have another way
to support the Lamasery.

Welcome to cultivating microbes to nurture your gut health.

The information on these pages on the microbiome, dysbiosis, endotoxemia and cultivating the yogurts at home to get the highest bacterial counts comes from the work of Dr. William Davis, Cardiologist. He is a dedicated educator at this point. He is passionate about spreading the word about wellness and especially nurturing the gut microbiome to be the best it can be in our modern day lives to support us in living our best health.

If you want to dive deeper into his work, please see his interviews on YouTube, order his books from Amazon, and go to his website <https://drdavisinfinitehealth.com/>

Why cultivate specific microbes as yogurt?

Microbes change metabolism! Diet selects for microbes - carb feeders, protein and fat metabolizers effect all aspects of body function - thin/fat, visceral fat vs subcutaneous fat, cravings or not ...

1. Common chronic ailments that affect 80% of humans in the world are now due to disrupted microbiome - Don't fret over it, cultivate for improving your microbial environment.

Dr. Davis on dysbiosis and endotoxemia:

- Dysbiosis is a disruption of the normal gut microbiome composition
- Endotoxemia occurs when harmful bacterial components (endotoxins) enter the bloodstream
- S.I.B.O. is a severe form of dysbiosis where fecal bacteria invade the small intestine
- Endotoxemia can affect virtually every organ in the body
- It's linked to numerous chronic health conditions

A few Symptoms and conditions associated with dysbiosis and endotoxemia:

- Depression
- Anxiety
- Parkinson's disease
- Dementia & Alzheimer's
- Fibromyalgia
- Rheumatoid arthritis
- Insulin resistance
- Type 2 diabetes

- Fatty liver
- High triglycerides
- Food intolerances
- Difficulty losing weight
- Joint pain
- Skin issues (rosacea, psoriasis, eczema)
- High blood pressure
- Irritable bowel syndrome (IBS)
- Inflammatory bowel diseases (Crohn's disease, ulcerative colitis)
- Bloating and gas
- Increased risk of coronary disease
- Higher cancer risk
- Autoimmune diseases
- Asthma and allergies
- Cognitive decline
- Sleep disorders

Dr. Davis emphasizes that addressing dysbiosis and endotoxemia through the use of specific probiotic strains and fermented foods can have wide-ranging health benefits and may be a key to treating many chronic conditions.

Effects on fecal microbes that migrate up from the large intestine:

- These strains, particularly *L. gasseri* and *L. reuteri*, produce bacteriocins that suppress the growth of harmful fecal bacteria
- They help restore balance to the gut microbiome by outcompeting harmful bacteria

(Remember the petri dish in high school biology with penicilium bacteria? It killed off other microbes in a circle around it - this is what happens in your gut too when you begin to restore the good microbes.)

(Endotoxemia is a medical condition characterized by the presence of endotoxins in the bloodstream. Endotoxins, also known as lipopolysaccharides (LPS), are components of the outer membrane of certain types of bacteria, primarily gram-negative bacteria.)

2. Endotoxemia is increasingly recognized as a potential underlying factor in many chronic health conditions, highlighting the importance of maintaining a healthy gut barrier and balanced microbiome.

Key points about endotoxemia:

1. Causes:
 - Release of endotoxins as bacteria die off - they live minutes or hours
 - Increased intestinal permeability allowing endotoxins to enter the bloodstream
 - Severe infections or inflammation
 - Disruption of the gut microbiome
 - These toxic cytokines cause inflammatory responses throughout the body
3. Symptoms:

- Fever and chills
- Rapid heart rate
- Low blood pressure
- Confusion
- Chronic pain
- Depression and anxiety
- Cognitive decline
- Fatigue and sleepiness
- Reduced appetite
- 4. Associated conditions:
 - Sepsis (in severe cases)
 - Cardiovascular disease
 - Type 2 diabetes
 - Obesity
 - Inflammatory bowel disease
 - Psychiatric disorders
 - Non-alcoholic fatty liver disease

3. Benefits of each bacterial strain Specific Strains Necessary to gain benefits - not all strains have same affects! Not a cure - supporting health of microbial garden within microbes are intelligent, they communicate and can become cooperative- this is cultivation

Caution: if you have dysbiosis you may experience: start with very small amounts and work your way up to get a sense of where you are and to minimize discomfort

L. gasseri: BNR17

- Reduces visceral fat and waist circumference
- Helps prevent and treat SIBO (Small Intestinal Bacterial Overgrowth)
- Produces up to seven bacteriocins (natural antibiotics)
- Colonizes the upper GI tract
- Suppresses growth of harmful bacteria

Based on the research studies and clinical trials - key health benefits of Lactobacillus gasseri bacteria, particularly regarding visceral fat:

- Reduces visceral fat accumulation: Multiple studies show L. gasseri significantly decreases abdominal visceral fat. (Invisible internal fat that excretes degenerating toxins 24/7 - leads to chronic dis-ease)
- **Decreases waist circumference:** Consumption of L. gasseri led to significant reductions in waist measurements. Caveat - have to reduce carb intake to 45grams/day

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Bacillus coagulans (specifically strain GBI-30,6086): Digestive Advantage

- Reduces inflammation
- Reduces arthritis pain
- Reduces symptoms of irritable bowel syndrome
- Reduces muscle soreness after strenuous exercise or work

- May reduce disruption of gastrointestinal lining caused by lead ingestion
- Introduces favorable shifts in GI microbial composition (e.g., reduction in fecal species)
- Helps combat S.I.B.O. (small intestinal bacterial overgrowth)

L. reuteri (specifically strains ATCC PTA 6475 and DSM 17938):

- Increases oxytocin release - love hormone
- Improves skin health (increases skin thickness, increases dermal collagen)
- Enhances muscle strength and bone density
- Deepens sleep
- Boosts libido
- Improves emotional bonding and empathy
- Reduces acid reflux and infantile colic
- Suppresses H. pylori (stomach ulcer-causing bacteria)
- Suppresses C. difficile
- Reduces antibiotic-associated diarrhea
- Protects against some intestinal infections (E. coli, Salmonella, Shigella)
- Protects against gastric cancer
- Reduces chronic diarrhea
- Immunomodulation via stimulation of CD4 lymphocytes
- Colonizes the stomach, duodenum, and upper small intestine
- They may colonize areas of the GI tract typically not inhabited by beneficial bacteria, preventing overgrowth of harmful bacteria - depends on one's microbiome

How to incorporate the 'yogurts' into your diet?

- Start slow, make a small batch of each - this way if you experience die off it will be more mild and you can gradually increase the amount until you consume 1/2 to 1 cup 3-5 days a week.
- Don't put it in the blender - that kills the microbes, if adding to a smoothie, add at the very end.
- Can make creamsicles, yogurt and berries - ok to freeze microbes
- I put it in a bowl, stir in marine collagen, add some berries, or
- A version of chocolate pudding sort of: cacao powder, add some monk fruit or allulose (research shows it lowers blood sugar for two hours) cacao nibs, chopped nuts and enjoy
- Can add a little cold brew coffee as the dairy proteins help microbes absorb more of the polyphenols from the coffee

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Benefits to skin: According to Dr. William Davis, combining marine collagen, astaxanthin, hyaluronic acid, and L. reuteri yogurt provides synergistic benefits for skin health and overall well-being:

Marine Collagen

- Stimulates deposition of collagen in the dermal layer of skin
- Enriched in di- and tri-peptides that exert skin benefits
- Effective at lower doses (500-2500 mg) compared to other collagen sources (20g)
- Contributes to increased dermal thickness and reduced wrinkle depth

Astaxanthin

- Potent antioxidant with anti-inflammatory properties
- Protects skin from UV damage and premature aging
- Supports cardiovascular health
- Reduces waist circumference by several centimeters
- Improves muscle endurance and exercise performance

Hyaluronic Acid

- Increases moisture in the dermal layer of skin
- Acts as a prebiotic fiber in the GI tract
- Supports joint health by improving lubrication
- Enhances wound healing
- May increase vaginal moisture in older women
- Contributes to arterial and heart valve health

L. reuteri Yogurt

Stimulates oxytocin release, leading to improved emotional bonding and empathy

- Increases dermal collagen production
- Improves skin smoothness and reduces wrinkles
- Enhances muscle strength and bone density
- Boosts libido and testosterone in men
- Deepens sleep and extends REM sleep
- Accelerates healing
- Produces bacteriocins that fight SIBO (Small Intestinal Bacterial Overgrowth)

Dr. Davis emphasizes that combining these components creates a synergistic effect, potentially amplifying their individual benefits. In a 90-day trial of a supplement containing these ingredients (Gut to Glow), participants experienced a 15% increase in dermal thickness and significant reductions in abdominal fat.

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Here is Dr. William Davis' recipe for SIBO yogurt:

Ingredients:

- 1 quart (4 cups) of organic half-and-half
- 2 tablespoons of inulin powder (prebiotic fiber)
- 2-10 billion count ea type. Lactobacillus reuteri6475

<https://www.oxiceutics.com/products/myreuteri> you want this one
Lactobacillus reuteri LRDR™

- 1 capsule of Lactobacillus gasseri BNR17
- 1 capsule of Bacillus coagulans GBI-30,6086 (product is

Digestive Advantage)

Instructions:

1. In a glass jar, mix the prebiotic fiber (inulin) with the L. reuteri, and the contents of the L. gasseri and B. coagulans capsules.
2. Add a small amount of half-and-half (about 2 tablespoons) and mix to create a smooth slurry.

3. Add the remaining half-and-half and mix well.
4. Cover the jar loosely with a lid
5. Incubate at 100°F (37°C) for 36 hours in a yogurt maker or other device that can maintain a constant temperature.
6. After 36 hours, immediately refrigerate the yogurt.
7. Consume 1/2 to 1 cup daily. BUT - start and go slow until you

I use the luvele.com yogurt maker as it can be set for 36 hours and with the exact temperatures that you need for each strain of bacteria.

For subsequent batches, use 2-3 tablespoons of the previous batch as a starter culture along with fresh prebiotic fiber and organic half-and-half.

Best place to purchase Lactobacillus reuteri LRDR™ 6475
<https://www.oxiceutics.com/products/myreuteri>

Our proprietary LRDR™ strain of Lactobacillus reuteri provides an important microbe that the great majority are missing in their gut. This super microbe not only resides in the colon but also the upper GI tract. Daily incorporation of L. reuteri LRDR™ helps you support gut health and gut balance.*

Why have modern people lost L. reuteri 6475, the microbial species contained in MyReuteri?

Modern people have been overexposed to antibiotics such as amoxicillin, cefazolin, and gentamicin. L. reuteri, the microbial species contained in MyReuteri, is very susceptible to common antibiotics and has therefore been eradicated from the gastrointestinal microbiomes of most people.

There may be other factors that contribute to its disappearance such as herbicide and pesticide residues in food, food additives with antimicrobial properties such as food preservatives and emulsifying (mixing) agents, and various pharmaceuticals.

How to support the gut microbiome:

1. Return to whole, single ingredient foods:
 - Eat real foods like avocados, eggs, and meat with fat - not marbled!
 - Never buy lean meats; include fat in your diet - see Dr William Davis
3. Incorporate a wide spectrum of fermented foods in small quantities:
 - Consume kimchi, kombucha, kefir, and homemade yogurts, ferment juice, applesauce, hummus, coconut milk, fermented cashews, creme' fraiche- it's fermented
4. Use prebiotic fibers:
 - Inulin is considered the most important prebiotic fiber

- Include a variety of prebiotic fibers like galactooligosaccharides, pectin, and polysaccharides from mushrooms
- 5. Make homemade yogurt:
 - Use specific bacterial strains with researched known benefits!
 - Home cultivation provides higher probiotic counts than commercial products 300 Billion in 36 hours

7. Increase microbial diversity: lots of ferments

- Focus on variety in both prebiotic fibers and probiotic sources

By following these guidelines, Dr. Davis suggests that people can restore a healthy gut microbiome and potentially address numerous health issues related to microbiome disruption.

How can we protect the health of our microbiome

According to Dr. William Davis, to protect and support the gut microbiome, you should avoid:

1. Antibiotics, except when absolutely necessary
2. Stomach acid-blocking drugs
3. Statin cholesterol drugs
4. Non-steroidal anti-inflammatory drugs (NSAIDs)
5. Chlorine and fluoride in drinking water. -restaurant water
6. Processed foods with preservatives and emulsifying agents like:
 - Polysorbate 80
 - Carboxymethylcellulose
 - Carrageenan
7. Synthetic sweeteners like aspartame and sucralose - this replicates in the gut harms

microbiome

8. Gluten-free foods made with corn starch, rice flour, tapioca starch, or potato flour
9. All grains, including wheat, barley, rye, spelt, and certain oats
10. High-fructose corn syrup and sucrose
11. Sugary foods and beverages
12. Rice and potatoes
13. Fruit juices and dried fruits

8-13 all turn into sugar, overwhelm liver, often gets stored as visceral fat - depends on health and diversity of the individual microbiome

14. Trans fats and fried foods
15. Cured meats

Dr. William Davis emphasizes returning to unprocessed, minimally processed whole, natural foods and minimizing exposure to factors that disrupt the microbiome to maintain gut health.

Here are a few options for purchasing L. gasseri BNR17:

1. Cultured Food Life: Their L. Gasseri Superfood Starter uses the BNR17 strain recommended by Dr. Davis in his book Super Gut.

2. Dr. Mercola's Biothin Probiotic: This product contains *L. gasseri* BNR17 and was previously available on Dr. Mercola's website. However, as of January 2025, it redirects to Amazon.
3. Amazon: The AceBiome brand on Amazon appears to be selling *L. gasseri* BNR17, shipping from Korea.

Best place to purchase *Lactobacillus reuteri* LRDR™ 6475

<https://www.oxiceutics.com/products/myreuteri>

Digestive Advantage can be purchased at the grocery or drug store - this is the right strain of *Bacillus coagulans*

Dr. Davis emphasizes the importance of using the specific BNR17 strain for optimal benefits, particularly when making fermented foods like yogurt. He recommends using these commercial sources to create fermented foods with high bacterial counts for more significant biological effects.

Disclaimer

The information provided in this document is for educational purposes only. It is not intended to be a substitute for professional medical advice, diagnosis, or treatment. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition or before starting any new diet, exercise, or health regimen.

The content presented here, including information about gut microbiome, fermentation, bacterial strains, and their potential health benefits, is based on current research and expert opinions. However, individual results may vary, and what works for one person may not work for another.

Please consult with your healthcare provider before making any significant changes to your diet or lifestyle, especially if you have pre-existing health conditions, are pregnant, nursing, or taking medications. Your doctor can provide personalized advice based on your individual health status and needs.

Remember that fermentation and the use of probiotics can have different effects on different individuals. If you experience any adverse reactions or persistent discomfort, discontinue use and consult your healthcare provider immediately.

This information should not be used to diagnose, treat, cure, or prevent any disease without professional medical oversight. Your health and safety should always be your top priority.