Everything You Need To Know To Heal Leaky Gut In Just 30 Days

# HOW TO HEAL LEANY AND AND TO HEAL TO H

THE DEFINITIVE GUIDE

**GOODBYE LEAKY GUT** 

### DISCLAIMER

### LET'S NOT PLAY DOCTOR HOUSE IN REAL LIFE

Content in this guide is for informational purposes only and is not considered medical advice. Please see a physician before making any medical or lifestyle changes.

The statements made in this guide have not been evaluated by the FDA (U.S. Food & Drug Administration). The products recommended in this guide are not intended to diagnose, treat, cure, or prevent any disease.

### THANK YOU

I am but one person. And like all helpful books, I stood on the shoulders of giants to write this for you.

First, my sincerest thanks to my world class research team of doctors (MDs), registered dietitians (RDNs) and scientists at Essential Stacks, a health company. You live and breathe digestive health every single day and deliver the most fascinating findings and insights to me. You are my rock stars! No one understands gut health better.

Second, thank you to all you wonderful readers. With 500,000+ of you, I've received so much supplemental data and stories over the years. And it has helped me to see patterns few others can. Knowing what works and what doesn't, at such a large scale, is a true privilege.

Thanks for sharing!

Richard - Founder, Goodbye Leaky Gut

### TABLE OF CONTENTS

A Beautiful Future Awaits	1
What To Expect - 4 Main Benefits	<u>2</u>
My Leaky Gut Story	<u>3</u>
PART ONE	
THE 30-DAY LEAKY GUT PROTOCOL	
Step 1 – Eliminate The 5 Main Causes	<u>7</u>
Step 2 – Try A Bone Broth Fast - Game Changer!	<u>8</u>
Step 3 – Shop The Diet (My Definitive Leaky Gut Food List)	2
Step 4 – Cook Up Tasty Gut-Friendly Meals: 7 Sample Recipes	<u>17</u>
Step 5 – Consider My 6 Favorite Supplements	<u>19</u>
Step 6 – Add 4 Healthy Habits To Your Life	<u>20</u>
30-Day Checklist For Success (A Summary Of The Protocol)	<u>21</u>
PART TWO	
SPECIAL BONUSES	
My Leaky Gut Food Pyramid (16 Best Foods)	<u>23</u>
My Leaky Gut Drinks Pyramid (16 Favorite Drinks)	<u>24</u>
My Leaky Gut Supplements Pyramid (What I Love & Use)	<u>25</u>
The Next 3 Days - The Quick Start Guide	<u>26</u>
References	<u>28</u>

### A BEAUTIFUL **FUTURE AWAITS**

Today is a very special day!

Because you are about to discover exactly what to do to heal your leaky gut (a.k.a. intestinal hyperpermeability).

You will not only learn the major causes of leaky gut to avoid, but also specifically what to eat and drink. Plus, you'll uncover the smartest habits and supplements to help make the journey even easier. And as you'll see, all the ideas are fully referenced, with over 90 studies cited - so you can have total confidence in the protocol.

However, after you've learned these steps, it's all up to you to put them into practice. It will seem hard at times. And it will take some serious discipline. But just keep working at it with your health practitioner for the next 30 days and before you know it you'll feel like your old self again - happy, energetic, light and ready to take on life with full force.

You got this!

Richard

Your New Gut Buddy BFF

### WHAT TO EXPECT

### IF YOU DO THE PROTOCOL RIGHT, HERE'S A SNEAK PEEK AT MY **4 FAVORITE BENEFITS** YOU SHOULD SEE.

O1.
PEACEFUL
GUT

By avoiding the key causes of leaky gut, plus eating & drinking clean, and adding some healthy habits and helpful supplements in, you can usually enjoy a peaceful gut fairly soon. Most people find beautiful bowel movements (as I like to call them) start about 1 week into the protocol.

This may be THE greatest bonus benefit of this protocol!

And it happens fast if you're vigilant in following the protocol's anti-inflammatory and low carb/sugar diet, plus avoiding alcohol. Weight loss can start to occur within just 10 days of commencing the protocol. Importantly, the types of foods you can eat (e.g. healthy fats & proteins) are amazing at satiating you<sup>2</sup> and eliminating food cravings<sup>3</sup>.

O2.

EFFORTLESS

WEIGHT

LOSS

03.

BETTER
ENERGY
SKIN & MOOD

A personal favorite of mine is how well the ideas in this guide work for how you feel and look<sup>4</sup>. As you go through the 30 days it can almost feel like you are reverse aging! You're less tired when you wake up, your skin looks healthy & fresh, and you are just so much happier. Amazing!

By addressing leaky gut, many people find other health issues improve, especially those related to the autoimmune system<sup>4,5</sup>. These benefits can be truly life changing. But it is worth noting, they can also take longer to be felt than the above benefits. Working with your doctor and having patience is thus a true virtue.

O4.
OTHER
BENEFITS

### MY LEAKY GUT STORY

### HOW I **OVERCAME LEAKY GUT** AND REDISCOVERED MY FREEDOM FROM DIGESTIVE DISTRESS.

If you have Googled around for advice on how to heal your leaky gut, you've probably stumbled across 100s of ideas.

From the very sound ideas like supplementing with L-Glutamine to the 'out there' ones like bacteriotherapy (hello fecal transplants!), it can seem confusing.

### **BUT HERE'S THE THING...**

...many of the ideas out there don't really work. Well, at least not in any statistically significant way.

Worse, many of them involve expensive 'superfoods', bizarre health products and supplements with lists of unpronounceable and unresearched ingredients.

Who has the time & money to try them all out?

To help you work out what to do and what to ignore, I've compiled the best ideas on how to heal your leaky gut in this guide. And all backed by research, as you'll see from the extensive references throughout.

Meaning no more confusion. Just real ideas that work.

And in case you're wondering who I am...

### MY NAME IS RICHARD AND I USED TO SUFFER FROM LEAKY GUT, JUST LIKE YOU

It was horrible. And some of the knock on effects were even worse.

I suffered bloating, uncontrollable bowel movements, reflux, psoriasis and even acne.

Plus I woke up every morning with brain fog and sometimes even felt more tired than when I went to bed!

Worse yet, I spent years and years consuming the standard solution to leaky gut...

... hello Zantac antacid sandwiches, Pepto-Bismol by the gallon and packing dozens of blister packs of Imodium into my bag like some sorta digestive-crazed Bear Grylls heading off into a Grizzly-packed Yellowstone.

No Bueno!

### ONE NICKNAME TOO FAR

After being called 'Imodium boy' by one too many friends, I decided to investigate my health like a Columbo-Dr House lovechild. I went deep!

PubMed became my BFF.

Doctors (especially holistically-minded GI experts) became my amigos.

And naturopaths well versed in leaky gut ended up on my speed dial (which should give you an idea of how long I've been researching leaky gut for!).

I spent months studying all the latest research on leaky gut to see what was working for 1000s of other people out there, just like you and me.

And even longer trying all the ideas myself.

It was exhausting!

### BUT LITTLE BY LITTLE, MY HEALTH IMPROVED AND MY GUT STARTED SHOWING ME THE LOVE!

I started to find what worked. And just as importantly, what didn't.

My experiments in leaky gut protocols were intense. And I somehow spent a crazy \$50,000 in the first 6 months alone. From expert consultations to advanced tests to personal nutritionists, I left no stone unturned.

At times I felt like Frodo in Lord of The Rings - weighed down by my curse, but hellbent on finding the promised land...of good gut health.

And that's because I knew trapped in a world of poor digestive health was more or less prison...

...from cancelling dinners with close friends because my gut was hosting its own version of digestive Olympics, to constantly worrying about being able to make meetings (thanks to totally unpredictable bowel movements), I was sick of it all.

### FREEDOM WAS WHAT I WANTED AND WHAT I CRAVED

As I finally started experimenting with different ideas for healing leaky gut – e.g. eating a low inflammatory & low FODMAP diet, drinking L-Glutamine water and cutting most carbs – I quickly saw my symptoms disappear.

Some almost overnight, like bloating, and others more slowly, but surely, like acne.

It was one revelation after another.

And let me tell you – that day you wake up and you can breathe easily, look great, and generally feel full of energy, is an amazing feeling!

And I hope you can enjoy that feeling too.

### THESE DAYS, I DO JUST 4 THINGS - AND I LOVE IT!

I am a co-founder of <u>Essential Stacks</u> – a world class digestive health company. And it has given me many great privileges, most of all...



### 1) THE TIME TO FOCUS ON MY MISSION

After years of searching, I finally found my purpose in life. And so now I'm on a 25-year mission to end all digestive health conditions, because I truly believe good gut health is freedom!

Although my primary focus has been leaky gut, I am very aware of the overlap with other issues such as IBS, SIBO and reflux. So helping to fix all of them simultaneously is crucial.



### 2) DELIVER RESEARCH TO HELP MILLIONS

Thanks to Essential Stacks I now have a research team of doctors (MDs), registered dietitians (RDNs) and scientists (including amazing PhDs) focused full time on digestive health. They are my rock stars! No one understands gut health better.

Best of all, with 500,000+ readers, I've received so much supplemental data and stories, that I can start to see patterns. What works and what doesn't, at a large scale.



### 3) CHANCE TO SHARE WORLD CLASS GUT HEALTH EDUCATION...FOR FREE

I am blessed to be able to take the best ideas our expert team discovers and turn them into plain English gut health resources. And best of all, I can share them with you lovely readers all for free. The way health information should be!



### 4) SUPPLEMENTS THAT ACTUALLY HELP

Our diverse & holistic team of industry-leading health professionals also have the funding to do in-depth research to formulate amazing supplements for digestive health.

For example, we were able to expend a crazy 500+ hours of professional time in creating our brand new <u>organic prebiotic fiber</u> product. Something that is almost unheard of in the supplement world.

As you can imagine, I feel like the luckiest person in the world! But I think that's enough chitter chatter about me.

Let's dive into this guide and work out exactly how you can find huge relief from leaky gut over the next 30 days and get back to feeling like your old self again – happy, energetic and ready to take on life with full force!

### PART ONE

# THE 30-DAY LEAKY GUT PROTOCOL

Say hello to my simple step-by-step plan for **getting you back to feeling great!** 

### O1 ELIMINATE THE CAUSES

A QUICK LOOK AT **THE 5 LEADING CAUSES** OF LEAKY GUT, SO YOU KNOW EXACTLY WHAT TO AVOID.

### 1) INFLAMMATORY FOODS

This is THE big one! In fact, you can eliminate all the other causes below, but if you ignore this, you'll likely never say goodbye to leaky gut. The main foods to avoid are: most grains (especially those with gluten<sup>6</sup>, like wheat<sup>7</sup>, barley and rye), sugar<sup>8</sup> (refined & natural), heavily processed foods, unhealthy 'vegetable' oils (e.g. canola oil), artificial sweeteners, plus most soy products and normal dairy<sup>9</sup>. In particular, you want to avoid gluten, as this increases zonulin levels<sup>10</sup> - a protein, that may exacerbate intestinal permeability, i.e. leaky gut<sup>10,11</sup>. To make sure you know exactly what foods to avoid I've created a detailed list on pages 13-14 below.



### 2) GUT-IRRITATING DRINKS

The big ones to avoid are those filled with alcohol<sup>12</sup>, caffeine<sup>13,14</sup>, sugar, artificial sweeteners and high FODMAP ingredients<sup>15</sup> (e.g. fructose in fruit juice). This is almost as important as avoiding inflammatory foods, so I will run through a full list of 'no' drinks on page 14. And before you despair, keep in mind, many of these drinks can come back into rotation as your gut health improves (e.g. red wine).



### 3) MEDICATIONS & OTC DRUGS

Many medications and OTC drugs can exacerbate leaky gut. While NSAIDs for example can directly weaken the gut lining<sup>16,17</sup>, others, like steroids<sup>18</sup>, antibiotics<sup>19</sup> and antacids<sup>20</sup>, can impact gut bacteria balance and stomach acid production, further hampering the system. Speak with your doctor to determine what you can remove/limit, as immediate cessation without supervision can be dangerous.



### 4) STRESS & POOR SLEEP

Chronic stress<sup>21</sup> and low quality sleep<sup>22</sup> can be as bad as gluten for your gut, since they can weaken your intestinal lining, slow your digestive capacity and throw your gut flora out of balance. I also know that the causes of them (work, family, social etc.) can be just about as hard to avoid as gluten itself! But I've got some smart management techniques, which I'll discuss later in this guide.



### 5) RELATED GUT HEALTH ISSUES

Unsurprisingly, the overlap of people with leaky gut and IBS/SIBO<sup>23,24</sup>, candida<sup>25</sup> and/or reflux<sup>32</sup>, is becoming increasingly prevalent. It is still unclear which causes which, but this protocol takes them ALL into account, including the revolutionary low FODMAP diet for IBS<sup>26</sup>. More on this later in the guide.



### DO A BONE BROTH FAST

### A **48-72 HOUR BONE BROTH FAST** IS QUITE POSSIBLY THE FASTEST WAY TO FEEL BETTER.

While your new leaky gut diet (packed with healthy fats, clean proteins & nutrient-dense vegetables) is fantastic at slowly healing the gut, it doesn't compare to a bone broth fast when it comes to rapidly making us feel better.

The fast itself (i.e. no solid foods for 2-3 days) has two benefits. First, it will give your digestive system a much needed break. Second, it will ensure no more large food particles are making their way through your leaky gut and into the bloodstream. That in turn means inflammation can cool down and the immune system will also get a chance to regroup. Think of the fast like a spa weekend for your digestive system!

Meanwhile, the bone broth itself has a huge benefit for your gut, because the collagen in it (a protein) delivers a huge serving of the types of amino acids your GI tract feeds on in order to repair itself - e.g. glycine, proline, hydroxyproline<sup>27,28,29</sup>. These 3 amino acids work great to help mend the damaged cells lining the wall of your gut. Amazing!

### HOW TO MAKE MY BONE BROTH

### **INGREDIENTS**

### 2 pounds grass-fed beef bones, including some with nice marrow / fat / meat attached

- 2 carrots, 1 celery stalk and 1 cup leek leaves or scallions (green parts only)
- 4 tbsp apple cider vinegar

Plus any herbs you like from page 11 below

### **DIRECTIONS**

- 1) Brown the beef bones/meat in a big pot.
- 2) Add rinsed vegetables in.
- 3) Add a good pinch of salt and pepper; cover with water and add the apple cider vinegar.
- 4) Bring to the boil. Then turn down the heat and simmer on low heat for 10-12 hours.
- 5) Once done, strain the broth and discard the bones & vegetables.
- 6) If fasting, consume a cup of broth every couple of hours. If not, freeze into portions and thaw as needed.

**Don't like the taste?** You can also enjoy collagen in powder form. The most absorbable & tasteless form is hydrolyzed collagen like <u>this one</u> (widely known as 'collagen peptides'). I talk more about this on page 19 below.

### O3 SHOP THE DIET





### HERE ARE **THE BEST FOODS** YOU SHOULD BE EATING OVER THE NEXT 30 DAYS.



### WHAT YOU'LL BE EATING

Over the next month, the diet you're going to eat will include:

- o Lots of nice fish, seafood, meat, healthy oils/fats and clean vegetables.
- Plus some quality nuts, eggs and a moderate amount of other carbs, like low-sugar, low-FODMAP fruit.
- As well as super tasty herbs, spices and other flavorings to make it all taste amazing!

On this diet, the vast majority of your calories will come from healthy fats and clean proteins. Meaning this leaky gut diet borrows ideas from the paleo/AIP (autoimmune protocol)<sup>30</sup>, keto<sup>31</sup> and low FODMAP diets<sup>26</sup>, and smartly blends them together.

### Finally, one diet to rule them all!

Where possible try to buy foods that are local, in-season, organic, grass-fed, wild caught and/or pastured. That's because this will reduce the toxin load on your leaky gut and deliver more nutrient-dense foods. But with that said, I know they can be expensive. So don't worry if you can't always get these foods.

### WHAT YOU WON'T BE EATING

As we talked about under **01**) **Eliminate The Causes** (above), any food or drink that has a high chance of causing your gut inflammation and/or autoimmune reactions is out!

Avoiding these foods is the center of the leaky gut diet and is actually more important than what you do eat! Which is why you'll find a detailed list of all the 'no' foods on pages 13-14 below.

Moreover, research continues to come out showing how people with leaky gut often also have IBS<sup>23</sup>, SIBO<sup>24</sup>, candida<sup>25</sup> and/or reflux<sup>32</sup>.

As such, I have decided to modify the leaky gut diet further, so that it can help us take on all 5 digestive issues at once, as well as related issues like bloating, diarrhea and gas<sup>33</sup>.

Not only is this super convenient, but it means the diet can work where others have failed.

So for the next 30 days you're also going to reduce / remove 2 groups of otherwise healthy foods, which I'll walk you through on the next page.





### **GROUP #1 TO REDUCE OR REMOVE**

### HEALTHY FOODS & DRINKS THAT CAN BE REACTIONARY

### 5

### The Problem

'Healthy' foods like the nightshades family, which includes tomatoes, peppers, eggplants and potatoes, can cause a reaction<sup>34</sup> primarily due to a group of substances found in them known as alkaloids.

While dairy - even lactose-free dairy - can cause a response due to the casein protein<sup>35</sup>.

So too can other healthy foods like, normal eggs, which can create issues<sup>36</sup> due to the imbalance of omega 3 v 6, as well as presence of lysozyme and particular proteins (in the whites), which can trigger an inflammatory response<sup>37</sup>.

### The Solution

You'll completely remove some of these for 90 days (e.g. peppers), others for just 30 days (e.g. lactose-free dairy) and you'll keep others in from the start, but in reduced amounts (e.g. tomatoes).

Plus you'll prepare them better for digestion, e.g. anything with skin will be peeled and anything with seeds will be deseeded.

And where possible, try to buy the best quality foods you can afford, as they are often easier to tolerate, e.g. pastured eggs have a better balance of omega 3 v 6 profiles<sup>38</sup>, making them more gut friendly.

### **GROUP #2 TO REDUCE OR REMOVE**



### HEALTHY FOODS & DRINKS THAT ARE HIGH IN FODMAPS

### The Problem

When your gut is in bad shape, FODMAPs (which are fermentable sugars) can be poorly absorbed in the gut. And this can lead to excess fermentation and water in your intestine, and then result in gas, bloating, diarrhea and all-round intestinal inflammation<sup>39,40</sup>.

### The Solution

For the next 30 days you should reduce or completely remove any healthy foods high in FODMAPs (fructans, galactans, lactose, fructose and polyols / sugar alcohols)<sup>41,42</sup>.

Unfortunately, this includes some of the old favorites like asparagus, avocado, cauliflower, garlic and even normal sauerkraut (white cabbage)<sup>43</sup>.

I will once again be sure to list them all out below, so it is very clear.



### LEAKY GUT FOOD LIST



### 01. BLUE FOODS

EAT FREELY, NOW & ALWAYS

PROTEINS & FATS	CARBS & FLAVORS
<b>Fish</b> <sup>44</sup> - anchovies, bass, cod, flounder, haddock, halibut, mackerel, salmon, smoked salmon, sardines, sole, trout, tuna	<b>Lettuce</b> <sup>49</sup> - arugula, butter, cos/romaine, iceberg, mesclun, mustard greens, spring, radicchio, watercress etc.
<b>Seafood</b> <sup>45</sup> - calamari/squid, clams, crab, mussels, oysters, shrimp, scallops	<b>Leafy</b> <sup>49</sup> - endive, chicory leaves, fennel leaves, kale, leek leaves, spinach, witlof
<b>Poultry</b> <sup>46</sup> - chicken, duck, goose, quail, turkey	<b>Greens</b> <sup>49</sup> - broccoli, Chinese broccoli, choy sum, collard greens, cucumbers, green beans, swiss chard
Meat - bacon, beef, goat, ham, lamb, pork, organs, bones (for broth); plus game - bison, boar, elk, rabbit, venison	Other - bamboo shoots, bean sprouts, carrots, radish, rhubarb, seaweed/nori
Protein powder - collagen (collagen peptides) <sup>47</sup>	Salt - capers, olives, salt (sea / iodized / Himalayan), coconut aminos (like soy sauce)
<b>Plant oils</b> <sup>44</sup> - avocado, olive (incl. extra virgin), perilla, rice bran, plus infused versions	<b>Herbs</b> <sup>50</sup> - basil, cilantro, dill, mint, parsley, oregano, rosemary, sage, scallions/spring onions (green part), tarragon, thyme
<b>Nut oils</b> <sup>48</sup> - coconut, macadamia (unheated), MCT, walnut (unheated)	
Fish oils <sup>44</sup> - cod liver, fish, krill	

### LEAKY GUT FOOD LIST



### 02. GREEN FOODS

### LIMIT SERVING SIZE & TEST FOR 30 DAYS

PROTEINS & FATS	CARBS & FLAVORS
Eggs (1-2*) - pastured egg yolks are best / most easily tolerated	Cabbage (0.5-1c*) - bok choy, Chinese / napa, common / green, kohlrabi, red, savoy
Protein powders unflavored (1 scoop*) - colostrum, hemp, whey (normal or goat's)	Heavy carbs (0.5c*) - potato, sweet potato, white rice (Jasmine); plus cassava, jicama, parsnip, pumpkin, turnips, yams, yucca
Animal fats (1-2 tbsp*) - grass-fed butter, clarified butter/ghee, dark chocolate (85%), lard, suet/tallow	Fermented/pickled veg (0.5c*) - red/purple sauerkraut, cucumbers/gherkins
<b>Nuts</b> <sup>51</sup> (10*) - almonds, brazil nuts, hazelnuts, macadamias, pecans, pine nuts, walnuts, plus coconut	Other (0.5c*) - oyster mushrooms, zucchini
Seeds <sup>52</sup> (1 tbsp*) - hemp, flaxseed	Fruit (0.25-0.5c*) - blueberries, kiwifruit, lemon, lime, raspberries, strawberries, tomatoes
Nut/seed milks (1c*) - any of above, eg almond milk. Incl. coconut milk & yogurt	Sweet (limit) - 100% stevia, vanilla bean essence, erythritol
<b>Nut/seed butters</b> (1 tbsp*) - any of above, eg almond butter	Vinegars (1 tbsp*) - apple cider, balsamic (low sugar), malt, red wine, rice wine
	<b>Spices</b> (1 tsp*) - bay leaf, cinnamon, ginger, saffron, sumac, turmeric

<sup>\* =</sup> max serving size per meal (ensures each meal is easy for you to digest)

c = cup | tsp = teaspoon | tbsp = tablespoon

### LEAKY GUT FOOD LIST



### 03. ORANGE FOODS

AVOID FOR 30 DAYS, THEN TEST

### **PROTEINS & FATS**

**CARBS & FLAVORS** 

**Nuts** - cashews, coconut (flesh/meat), pistachios, any roasted nuts

Low-Medium FODMAP fruits - banana, cantaloupe, grapes, honeydew, mandarin, orange, papayas, passionfruit, pineapple, plantain, pomegranate

Seeds - chia, pumpkin, sesame

**High FODMAP fruits**<sup>53</sup> - apple, apricots, avocado, blackberries, cherries, nectarines, peaches, pears, plums, watermelon; plus any dried fruit, cranberries, currants, dates, figs, guava, prunes, raisins, sultanas

### Special dairy

- If you can't tolerate lactose (milk sugar), try full-fat lactose-free dairy from cow, buffalo, sheep or goat, e.g. cheese, kefir, milk, yogurt
- If you can't tolerate A1 casein (protein), try A2-dairy, e.g. A2 Milk
- · If you can't tolerate either, avoid all dairy

**High FODMAP vegetables**<sup>53</sup> - artichoke, asparagus, avocado, beets, brussel sprouts, cauliflower, celery, garlic, kimchi, mushrooms, okra, onion, peas, sauerkraut (white cabbage)

**Pressure-cooked legumes** - beans, chickpeas, lentils

**Sweeteners**<sup>53</sup> - coconut sugar, honey, maple syrup

### LEAKY GUT FOOD LIST



### 04. RED FOODS

### AVOID FOR 90 DAYS, THEN TEST

PROTEINS & FATS	CARBS & FLAVORS
'Vegetable' oils - canola, corn, cottonseed, flaxseed, grapeseed, peanut, safflower, soybean, sunflower, 'vegetable oil'	Grains with gluten - wheat & varieties (e.g. spelt, kamut, durum) and products (e.g. bulgur, semolina), plus barley, rye, triticale; incl. end products like bread, cereals, cookies, couscous, noodles, pasta etc
Vegetarian fats - margarine (where uses 'vegetable' oils above)	Gluten-free grains - corn, millet, rice (brown, red, wild); plus pseudo-cereals like amaranth, buckwheat, quinoa
<b>Protein powders</b> - casein, soy & most flavored protein powders	<b>Legumes</b> <sup>57</sup> - non-pressure cooked beans, chickpeas & lentils; plus peanuts, soy
Conventional dairy <sup>56</sup> - i.e. cow's milk, buttermilk, cream, custard, ice cream, milk chocolate etc., especially where flavored	<b>Soy</b> - beans, edamame, milk, protein TVP, tempeh, tofu plain/firm/silken
<b>Heavily processed foods</b> <sup>55</sup> - basically any packaged foods that contain a long list of ingredients, especially numbered ingredients	<b>Problematic nightshades</b> - eggplant, peppers (all), red spices
	Sugar - brown, cane, icing, palm, raw, white, sucrose / table sugar; incl. end products like sauces, dressings, 'low fat' foods etc
	Sweeteners - agave syrup, aspartame, high fructose corn syrup, saccharine, sucralose; plus sugar alcohols isomalt 953, maltitol 965, mannitol 421, sorbitol 420, xylitol 967
	Alcohol <sup>58</sup> - beer, cider, wine, spirits
	Coffee <sup>59</sup> - including decaf
	Sweet drinks - soda, diet soda, tonic water, fruit juice/smoothies, energy & sports drinks

### FOOD LIST EXPLAINED

### HOW TO EAT THIS DIET...THE SIMPLE WAY.



O1.
BLUE
FOODS

My absolute favorites! These are the nutrient-rich foods that can nourish your digestive tract without causing further inflammation to your gut lining or excess fermentation in your intestines. Most of the calories here come from healthy fats and proteins, which means these foods are also great at leaving you feeling satisfied.

These are generally healthy foods and suit most people, especially in smaller serving sizes. But some of them can cause issues/reactions for certain individuals initially, even at small sizes (e.g. tomatoes). So pay attention to your body when eating them, buy high quality (e.g. pastured eggs) and prepare them properly (e.g. peel & deseed tomatoes).

O2.
GREEN
FOODS





These are healthy foods that can be hard to tolerate initially when your gut health is bad. That's because most of them have fermentable sugars (FODMAPs) that can be poorly absorbed, which can lead to excess fermentation and water in your intestine. And in turn gas, bloating, diarrhea and all-round intestinal inflammation<sup>15</sup>. So you should ideally avoid them for the next 30 days while your gut health improves. Then test them one-by-one with a Registered Dietitian (RDN) using the Reintroduction Diet method.

These foods are packed with a range of anti-nutrients like lectins, sugar, gliadin etc, which can disrupt gut function and irritate your intestinal lining. Avoid them for 90 days, then once your gut is significantly stronger, test them one-by-one under the supervision of an RDN. Consider permanently avoiding vegetable oils, gluten, refined sugar & artificial sweeteners<sup>6,55</sup>.

**Note:** packaged foods, like sauces, dressings, marinades etc, usually contain one or more red foods, so inspect labels carefully.

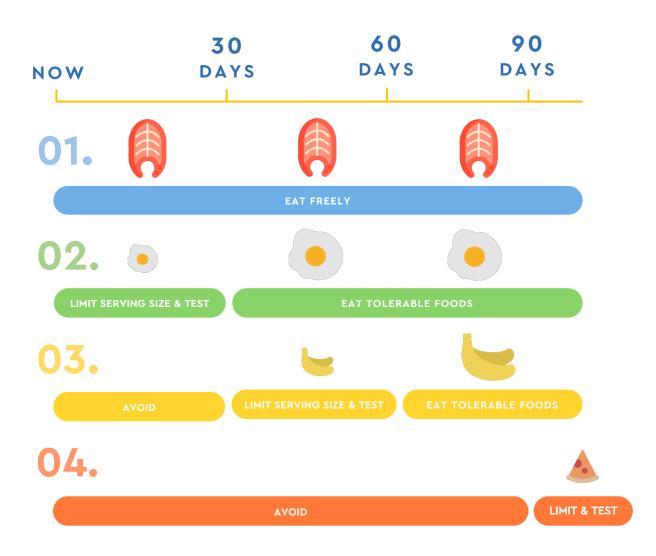
O4.
RED FOODS



### FOOD LIST TIMING

### **KNOWING WHEN TO EAT** WHICH FOODS IS CRUCIAL. HERE'S THE 90+ DAY GUIDE.

As you can see the key focus is on eating blue foods over the next 90 days, as well as green foods (first in limited serving sizes and then in larger sizes providing you don't react badly to any of them). Meanwhile, orange foods should be left alone for the first 30 days – after which time they can be tested one-by-one. Although, red foods & drinks can eventually be brought back into the fold, you should be very careful and monitor closely how your body responds to each one.



### O4 COOK THE DIET

THESE ARE MY 7 FAVORITE MEALS TO EAT DURING THE NEXT 30 DAYS. DESIGNED TO INSPIRE YOUR OWN IDEAS.

### RECIPE 1

### THE CLEAN PROTEIN SHAKE

1 SERVE

- 1) 1 handful of ice to make the other ingredients taste nice and chilled.
- 2) 10 oz / 300 ml of liquid filtered water or a combo of water and a nut-based milk if you want it to be a bit richer in flavor. My favorites are almond and macadamia milk.
- 3) 1 handful of green vegetables fresh baby spinach is best, as it doesn't taste too bad when raw. Note: I used to pre-cook my spinach to reduce presence of oxalates, but it is so inconvenient and only offers a minor benefit, so raw is fine.
- 4) ¼ cup low-sugar, low-FODMAP fruit my favorite options are either strawberries or blueberries. Frozen berries are most convenient and offer the best value.
- 5) 1 scoop protein powder unless I've just been training, this is pretty much always collagen protein, since this type of protein helps more with the gut, than the muscles. A 10g scoop is the perfect amount.
- 6) 1 tablespoon healthy fats either MCT or coconut oil or better yet pure caprylic acid (C8) oil. These fats can be great at helping balance bad vs good bacteria in your gut<sup>60</sup>. You can also use extra virgin olive oil<sup>61</sup>.

**How to make:** no rocket science here. Just grab all the ingredients above and blend away in an ice-grade blender. And of course, feel free to add a few drops of stevia to taste.











### RECIPE 2

### LAZY SOUP

2 SERVES

- 20 oz / 600 ml of water and/or bone broth. Sometimes I add ¼ cup of coconut milk (low FODMAP size)<sup>62</sup>. Delicious!
- 2) 2 handfuls of vegetables I either go with broccoli or choy sum.
- 3) 2 handfuls of seafood or meat (about 8-10 oz / 300 g) from chicken thigh to brisket to shrimp, I just pick whatever I have in the fridge. It all tastes amazing in this soup.
- 4) 2 pinches of 'flavor' e.g. sea salt, herbs and/or compliant spices (see pages 11-12).

How to make: toss it all in a pot, bring to boil and simmer till the seafood/meat is cooked.



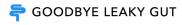
### RECIPE 3

### **BROTH OF THE GUT GODS**

8 SERVES

See page 8 for my simple bone broth recipe. And keep in mind that this freezes great. Making it super convenient to take out and enjoy any day you feel like it.





### RECIPE 4

### **ROAST SALMON FEASTIVUS**

2 SERVES

- 1) 2 fillets of salmon (about 8-10 oz / 300 g) wild sockeye if possible.
- 2) 2 handfuls of vegetables my favorite combo is broccoli and green beans.
- 3) 1 cup (cooked) starchy veg at this serving size we'll stay low FODMAP & low carb. Normal potato or sweet potato are my go-tos.
- 4) Some flavors a bunch of dill, juice of 1 lemon, 2 tablespoons of grass-fed butter, 1-2 tablespoons of extra virgin olive oil, pinch of sea salt and 2 teaspoon of capers.

**How to make:** oven roast the salmon for 25 minutes at 350 f (180 c), steam or boil the veg and boil the potatoes. Take it all off the heat and plate up. Now simply cover with your flavors - I like to put dill & capers over the salmon, butter mashed into the potatoes and lemon, olive oil & salt over everything.

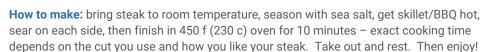
### RECIPE 5

### MY 20-MINUTE STEAK

1 SERVE



- 1) 1 steak type and size depends on you! I usually go for nice fatty rib eye, as it keeps me satiated for ages. Who misses pizza when you've got this!
- 2) 1 garden salad whatever lettuce leaves are lying around, plus half a cucumber (peeled & deseeded) and 5 cherry tomatoes (deseeded). All tossed in a simple olive oil and lemon juice dressing, with a pinch of salt.



### RECIPE 6

### THE BIG CHICKEN SALAD

2 SERVES



- 1) 2 fillets of chicken breast pastured/free range if possible.
- 2) Nice salad mix my preference is usually 2 big handfuls of arugula, ½-1 cup of sliced raw carrot, 1-2 sliced radishes, and usually some cucumber & cherry tomatoes.
- 3) Some flavors for the dressing it's usually going to be a 70:30 olive oil to balsamic vinegar mix with 1 teaspoon of Dijon and pinch of sea salt. While the X-factor here is 2 tablespoons of pan-roasted pine nuts. No wonder I can eat this weekly!

**How to make:** poach the chicken for about 15 minutes, then rest and slice. Meanwhile, wash, chop and mix all the salad together, along with ½ the dressing. Plate the salad. Top with chicken. Pour over remaining dressing. And finally, sprinkle over the pine nuts.

### RECIPE 7

### MY GUILT-FREE DESSERT

1 SERVE



- 2) 1 small tub unflavored coconut yogurt (4 oz / 120 g), with a few drops of stevia.
- 3) 1 small handful of sliced strawberries.

**How to make:** mix the yogurt & stevia together in bowl, pour nuts on top, then berries. Welcome to gut-friendly heaven!





18

### O5 TRY SUPPLEMENTS

WITH SO MANY SUPPLEMENTS PROMISING GUT HEALTH SUPPORT, WHICH ONES TRULY MATTER? JUST SIX.

SMALL INTESTINE

### BETAINE HCL, PEPSIN & BILE

### HELPS WITH INITIAL BREAK DOWN OF FOOD

These 3 ingredients help break down food so that your body can more easily absorb the nutrients<sup>62</sup> and so that less undigested food particles bombard your gut lining. I recommend you try this convenient blend of <a href="https://example.com/HCL/pepsin/bile">HCL/pepsin/bile</a><sup>63,64</sup>, as I created it with my research team at <a href="Essential Stacks">Essential Stacks</a> to meet the highest purity standards, including using pure lactose-free pepsin<sup>9</sup>.

### **Z** L-GLUTAMINE

### HELPS REGULATE OPENINGS

L-Glutamine is a remarkable amino acid, because it can directly feed the cells controlling the openings along your intestinal wall<sup>65,66</sup> and in turn make your gut less permeable, or 'leaky'<sup>67,68</sup>. As such, it's widely seen as the #1 supplement for leaky gut. Just be sure to get a pure free-form L-Glutamine powder like this one for maximum absorption.

### **PROBIOTICS**

### HELPS OUR OVERALL GUT HEALTH

Probiotics are good bacteria, which can help us digest food better<sup>72,73</sup>, support bowel movements, strengthen our immune system<sup>73,74</sup> and most of all, our intestinal wall<sup>24</sup>. Unfortunately, most probiotic supplements do very little as they are weakly dosed and use low quality strains. The key is to look for one with a sizeable 30-50 billion CFUs per serve<sup>73</sup> and 10-12 different powerful strains<sup>74</sup> like this probiotic my team and I developed after months of research & testing.

### **DIGESTIVE ENZYMES**

**HELP WITH FINAL DIGESTION OF FOOD** 

Digestive enzymes help complete the digestion process<sup>62,63</sup> after HCL, pepsin & bile have done the initial break down work. This second step of digestion can make all the difference. Consider trying these plant-based digestive enzymes, as we created them to meet the strictest criteria, including being gluten, dairy & soy free<sup>5,6</sup>.

### COLLAGEN

### **HELPS STRENGTHEN GUT WALL**

Collagen is a type of protein<sup>69</sup>, which has a wide variety of amino acids that can further support a healthy intestinal wall<sup>28,29</sup>. In fact, it is the secret ingredient in bone broth! So if you don't like the taste of bone broth or find it inconvenient to make, then an unflavored collagen supplement is the way to go. Just be sure to go with a high quality grass-fed collagen protein powder.

### **PREBIOTICS**

### HELPS FUEL THE PROBIOTICS

Prebiotics are like fertilizer for the the good bacteria (probiotics) in your gut<sup>75,76</sup>. So by taking them you maximize all the amazing benefits of the good bacteria. The problem is that most prebiotic supplements contain high FODMAP ingredients, which can cause bloating and 'bathroom issues'<sup>77</sup>. That's why we created this gentle, low FODMAP organic prebiotic fiber.

4



### O 6 HEALTHY HABITS

### HERE ARE MY 4 FAVORITE WAYS TO FIGHT LEAKY GUT THROUGH LIFESTYLE. HABITS THAT MAKE A DIFFERENCE!

I've seen people eat the strictest diets and take all the supplements under the sun, but still not feel better. Why? They still live a poor lifestyle<sup>78</sup>. One filled with low quality sleep, chronic stress & inactivity. If you get your daily habits in order, you'll likely finally solve the missing piece of the puzzle. Tip: use a habit tracking app to stay accountable.

O1.
SLEEP
8 HOURS

This might sound like a pipe dream! But here's how to do it. Simply cut all electronics<sup>79</sup> at 9pm, pop some magnesium citrate (200-400mg)<sup>80</sup>, eat 5-10 walnuts or macadamias<sup>81,82</sup>, and then just relax with a book or some music or whatever chills you out. And if you really want to sleep like a lion, go to bed by 10pm. You'll be amazed at how peaceful and long you can sleep.

02.

Have a sauna or hot shower/bath. Listen to soothing music<sup>83</sup> like Bon Iver. Go for a walk<sup>84</sup>. Drop the caffeine<sup>85</sup>. Drink herbal tea<sup>86</sup>. Block email outside work hours. Put your phone in airplane mode. Don't take things too seriously. Enter the present moment (a.k.a. the power of now). Sound a bit 'woo woo'? Certainly. But, this approach to life can have a profound impact on your gut health.

03.

BREATHE
OR MEDITATE

Both of these can greatly reduce chronic stress and help with sleep<sup>87</sup>. For breathing, try Dr Weil's <u>3 breathing exercises</u>. Meanwhile, for meditation, try <u>Headspace</u> or the Transcendental Meditation technique (<u>TM.org</u>), which I try to do most days. Best of all, the the benefits of meditation go way beyond reduced stress. I can truly say it is a genuine life changer!

O4.
EXERCISE
LIGHTLY

Just 7 minutes of daily HiiT (high intensity interval training) can get the job done. Here's what I use. But 30 minutes of yoga<sup>88</sup> can be even better for digestive health, especially since it incorporates many of the benefits of meditation. Whatever you do, just avoid hardcore steady-state cardio (over 60 minutes) or heavy weights, as they can add unnecessary stress to your system at this early stage of healing, and possibly further aggravate leaky gut.

### 30 DAY CHECKLIST

TO FIX YOUR GUT HEALTH, YOU NEED DO THE 6 STEPS CONSISTENTLY OVER **30 DAYS**. SO 1 MONTH FROM NOW ASK:

HAVE YOU ELIMINATED THE CAUSES?  Yes, I have cut the 5 main causes of leaky gut out of my lifestyle, including inflammatory foods, gut-irritating drinks, unnecessary medications/OTC drugs (under doctor supervision), stress & poor sleep, plus related gut health issues.
HAVE YOU FASTED?  Yes, I have fasted for 48-72 hours, consuming only bone broth (or collagen) and I have done 3 subsequent 24-hour fasts.
HAVE YOU BEEN SHOPPING?  Yes, I have bought all my favorites foods from the Leaky Gut Food List (pages 11-12), and ditched all the other foods (pages 13-14).
HAVE YOU EATEN CLEAN?  Yes, I have cooked up meals using blue and green foods (pages 11-12), while also adhering to serving size recommendations for green foods.
HAVE YOU SUPPLEMENTED SMARTLY?  Yes, I have tried daily servings of L-Glutamine, probiotics and prebiotics, plus taken Betaine HCL and digestive enzymes with meals.
HAVE YOU PRACTICED HEALTHY HABITS?  Yes, I have managed to stick to my 4 new habits (sleep, daily relaxation, breathing/meditation and light exercise) during at least 20 of the last 30 days.

### WHAT IF YOU'RE **STILL STRUGGLING** WITH LEAKY GUT AFTER TICKING THE ABOVE BOXES FOR 30 DAYS?

Although most readers will find amazing relief over the next month, some may need more time to heal (approx. 3-6 months) and possibly an even stricter diet (i.e. eat blue foods ONLY) to get back to their best. This is especially the case if you're tackling multiple issues at once, e.g. SIBO (small intestinal bacterial overgrowth). So the best idea is to continue ticking the boxes above – with the supervision of your health practitioner – and maintaining patience. A true virtue in this journey.

### PART TWO

## SUMMARY PYRAMIDS & ACTION GUIDE

The easiest way to see what to eat, drink and supplement with **over the**long term. Plus exactly what you should focus on over the next 3 days.

### WHAT TO

### **EAT**

**TERM** 

OVER THE LONG

### **Borderliners**

e.g. beans, chickpeas, lentils, oats, quinoa, rice

LEVEL 4 - TRY WHEN BETTER A



### **FODMAP** vegetables

e.g. asparagus, cauliflower, garlic, mushrooms, onion, peas

**Potential allergens** 

e.g. dairy incl. grass fed

butter, pastured eggs



### **FODMAP fruits**

e.g. apples, blackberries, mangoes, peaches, pears, plums, watermelon



### Problematic nightshades

e.g. bell peppers / capsicum, eggplant



### Starchy veg

e.g. cassava, parsnips, potatoes, sweet potatoes, turnips, yams



### In-season low sugar fruit

e.g. blueberries, kiwifruit, lemon, lime, raspberries, strawberries



### **Nuts & byproducts**

e.g. almonds, hazelnuts, macadamias, walnuts, plus their butters, flours, milks, oils



### **Prebiotic foods**

e.g. green banana, nuts like almonds or a prebiotic powder



### **Probiotic foods**

e.g. gherkins, red/purple cabbage sauerkraut or a probiotic supplement



### Wild fish & seafood

e.g. anchovies, bass, calamari, flounder, haddock, salmon, sardines, shrimp, tuna



### **Grass-fed meat**

e.g. beef, bison, elk, goat, lamb, pork (humane), rabbit, venison



### Pastured poultry

e.g. chicken, duck, goose, pheasant, quail, turkey



### Non-starchy vegetables

e.g. broccoli, choy sum, cucumber\*, green beans, radishes - \*Peel & deseed



### Leafy greens

e.g. arugula, chard, collard greens, kale, lettuce (all types), spinach, watercress



### **Healthy fats**

e.g. coconut oil, extra virgin olive oil, fish oil, macadamia oil. MCT oil

LEVEL 1 - EAT LIKE CRAZY



### WHAT TO DRINK



### **Borderliners**

e.g. diet soda, GF beer, spirits with sugar-free mixers

### LEVEL 4 - TRY WHEN BETTER A

OVER THE LONG TERM



### Coffee



### Dry wines

Organic coffee or decaffeinated coffee (small cup)

e.g. brut champagne, cab sav, chardonnay, merlot, pinot noir, sauvignon blanc, shiraz



### **Caffeinated teas**

Black, green, oolong, white, e.g. jasmine, matcha, pu-erh

### Fizzy water

Mineral/soda water - can cause bloating, so be careful

### LEVEL 3 - DRINK IF TOLERABLE



### Kombucha

Low sugar or stevia-flavored (max 1 cup due to FODMAPs)



### Nut milks

Almond, coconut, hazelnut or macadamia milk



### Green juice

Cold pressed with low FODMAP green vegetables and no fruit



### **Prebiotic water**

With green banana flour, acacia fiber, guar gum (PHGG) or a prebiotic powder



### **Herbal teas**

e.g. ginger, licorice, marshmallow root, peppermint, slippery elm



### Flavored water

With ACV, berries, cucumber, ginger, lime, lemon, mint and/or stevia



### Green shake

A blend of gut-friendly vegetables, healthy fats & protein



### Kefir

Almond, coconut, goat's milk, or grass-fed cow's milk kefir (if tolerable)

### LEVEL 2 - DRINK OFTEN



### Filtered tap water

Use a BRITA jug or install a filter on your tap to minimize gut-irritating toxins like chlorine



### L-Glutamine water

Mix 5g of pure L-Glutamine powder (<u>like this one</u>), with 8 oz / 240ml of water



### Bone broth

Homemade beef bone broth or try flavorless <u>collagen</u> <u>protein powder</u>

LEVEL 1 - DRINK LIKE CRAZY



### WHAT TO



### **Borderliners**

e.g. anti parasite (e.g. wormwood)

### LEVEL 4 - SPECIFIC ISSUES

### OVER THE LONG **TERM**

**TAKE** 



### Curcumin

500-1,000 mg of curcuminoids



### N-Acetyl-Glucosamine

200-500 mg NAG (derived from shellfish)

### **Ouercetin**

100-200 mg, preferably in dihydrate form



### Colostrum

1-3 g between meals (start small)



### Demulcent plants

My favorites - 500 mg DGL, 200 mg slippery elm, 100 mg aloe vera



### Zinc & magnesium

10-20 mg of zinc and 200-400 mg of magnesium



### Omega 3 fatty acids

1,000-2,000 mg of omega 3s (EPA & DHA), e.g. 2 capsules of triple strength fish oil



### Vitamin D with K

2.000-5.000 iu vitamin D3 with 50-100 mcg vitamin K2 (MK7)



### **Betaine HCI with pepsin**

500-1,000 mg of HCl with 10-20 mg pepsin, plus ox bile with main meals



### Collagen protein

10 g of hydrolyzed collagen peptides (high quality grassfed collagen is best)



### **Prebiotic powder**

2.5-10 g low FODMAP prebiotics, e.g. acacia fiber (start small ~ 2.5 g)

### LEVEL 2 - GOOD IF BUDGET ALLOWS



### L-Glutamine powder

5 g with 8 oz (240 ml) water, taken 1-3 times a day between meals



### **Digestive enzymes**

1 capsule of a powerful, plantbased, broad spectrum enzyme complex with each main meal



### **Probiotics**

30-50 billion CFUs with 10-12 quality strains, and delayed release capsules, per day



### THE NEXT 3 DAYS

IF YOU GET OFF TO A GOOD START AND BUILD MOMENTUM, YOU'LL BE UNSTOPPABLE. HERE'S HOW TO DO THAT...



### TODAY

First things first. Write down 3-5 specific reasons why you want to fix your gut health. For example, for me it was all about getting rid of the endless bloating, crazy bowel movements, various food intolerances and reflux. So get honest here, as this will motivate you to stick to the protocol for 30 days.

Now, go through your cupboard and fridge, and ditch (don't just hide) all the 'red' food & drinks that appear on page 14. Goodbye bread, cookies, pasta, vegetable oils, sugary sauces, beer, soda etc..

For food today, try to just eat fish or meat, with a nice big salad dressed in lemon juice, salt and olive oil. i.e. keep things nice and light.

And finally, try to get in a 20 minute walk at some point, and then prepare for an early night, by shutting screens off around 8pm (phone, TV, computer) and hitting the sheets around 9pm. Hello 8-9 hour sleep!



### **TOMORROW**

Go shopping! Pickup your favorite foods from the 'Leaky Gut Food List' (pages 11-12), as well as a few of the supplements that sound best to you (page 19).

When you get home, cook up a gut-friendly meal that sounds hearty & delicious - maybe even try one of my sample recipes (pages 17-18). Or, if you like, cook up the bone broth (page 8) and consider trying a 48-72 hour bone broth fast.

Plus, get some light exercise in and go to bed early again.



### **NEXT DAY**

Write out a daily habit checklist for good gut health. Even just 3 habits you'll promise to do each day for the next 30 days, will be awesome.

For example, you could promise to yourself to simply 1) eat no gluten or sugar, 2) limit alcohol to max 1 glass per day and 3) take L-Glutamine when you first wake up each morning. But if you're feeling ambitious and really want to see a change, try picking 5-7 small daily habits to track over the next 30 days.

If you can get all of the above done over the next 3 days, you'll be well on your way to feeling insanely amazing again!

### YOU'VE GOT THIS

You know exactly what to do. Now you just need to start doing it! And before you know it, you'll be feeling like your old self.

In fact, when you're feeling amazing in 30, 60 or maybe 90 days from now, let me know!

I've received 1000s of success stories over the years and they are why I get up every single day. So don't be shy, I'd love to hear from you. You can write to me at richard@goodbyeleakygut.com.

Good luck my friend! I can't wait to hear all about your success.



### REFERENCES

- 1. Obrenovich ME. Leaky gut, leaky brain?. Microorganisms. 2018 Dec;6(4):107.
- 2. Cuenca-Sánchez M, Navas-Carrillo D, Orenes-Piñero E. Controversies surrounding high-protein diet intake: satiating effect and kidney and bone health. Advances in nutrition. 2015 May;6(3):260-6.
- 3. Gilhooly CH, Das SK, Golden JK, McCrory MA, Dallal GE, Saltzman E, Kramer FM, Roberts SB. Food cravings and energy regulation: the characteristics of craved foods and their relationship with eating behaviors and weight change during 6 months of dietary energy restriction. International Journal of Obesity. 2007 Dec;31(12):1849-58.
- 4. Leech B, Schloss J, Steel A. Investigation into complementary and integrative medicine practitioners' clinical experience of intestinal permeability: A cross-sectional survey. Complementary therapies in clinical practice. 2018 May 1;31:200-9.
- 5. Yu LC. Intestinal epithelial barrier dysfunction in food hypersensitivity. Journal of allergy. 2012;2012.
- 6. Marsh MN, Crowe PT. 5 Morphology of the mucosal lesion in gluten sensitivity. Bailliere's clinical gastroenterology. 1995 Jun 1;9(2):273-93.
- 7. Gearry RB, Irving PM, Barrett JS, Nathan DM, Shepherd SJ, Gibson PR. Reduction of dietary poorly absorbed short-chain carbohydrates (FODMAPs) improves abdominal symptoms in patients with inflammatory bowel disease—a pilot study. Journal of Crohn's and Colitis. 2009 Feb 1;3(1):8-14.
- 8. Rinninella E, Cintoni M, Raoul P, Lopetuso LR, Scaldaferri F, Pulcini G, Miggiano GA, Gasbarrini A, Mele MC. Food components and dietary habits: Keys for a healthy gut microbiota composition. Nutrients. 2019 Oct;11(10):2393.
- 9. Lomer MC, Parkes GC, Sanderson JD. lactose intolerance in clinical practice—myths and realities. Alimentary pharmacology & therapeutics. 2008 Jan;27(2):93-103.
- 10. Drago S, El Asmar R, Di Pierro M, Grazia Clemente M, Sapone AT, Thakar M, Iacono G, Carroccio A, D'Agate C, Not T, Zampini L. Gliadin, zonulin and gut permeability: Effects on celiac and non-celiac intestinal mucosa and intestinal cell lines. Scandinavian journal of gastroenterology. 2006 Jan 1;41(4):408-19.
- 11. Hałasa M, Maciejewska D, Ryterska K, Baśkiewicz-Hałasa M, Safranow K, Stachowska E. Assessing the Association of Elevated Zonulin Concentration in Stool with Increased Intestinal Permeability in Active Professional Athletes. Medicina. 2019 Oct;55(10):710.
- 12. Shukla PK, Meena AS, Manda B, Gomes-Solecki M, Dietrich P, Dragatsis I, Rao R. Lactobacillus plantarum prevents and mitigates alcohol-induced disruption of colonic epithelial tight junctions, endotoxemia, and liver damage by an EGF receptor—dependent mechanism. The FASEB Journal. 2018 Nov;32(11):6274-92
- 13. Nishitsuji K, Watanabe S, Xiao J, Nagatomo R, Ogawa H, Tsunematsu T, Umemoto H, Morimoto Y, Akatsu H, Inoue K, Tsuneyama K. Effect of coffee or coffee components on gut microbiome and short-chain fatty acids in a mouse model of metabolic syndrome. Scientific reports. 2018 Nov 1;8(1):1-0.
- 14. Vojdani A, Tarash I. Cross-reaction between gliadin and different food and tissue antigens.
- 15. Gearry RB, Irving PM, Barrett JS, Nathan DM, Shepherd SJ, Gibson PR. Reduction of dietary poorly absorbed short-chain carbohydrates (FODMAPs) improves abdominal symptoms in patients with inflammatory bowel disease—a pilot study. Journal of Crohn's and Colitis. 2009 Feb 1;3(1):8-14.
- 16. Bhatt AP, Gunasekara DB, Speer J, Reed MI, Peña AN, Midkiff BR, Magness ST, Bultman SJ, Allbritton NL, Redinbo MR. Nonsteroidal anti-inflammatory drug-induced leaky gut modeled using polarized monolayers of primary human intestinal epithelial cells. ACS infectious diseases. 2018 Jan 12;4(1):46-52.
- 17. Camilleri M. Leaky gut: mechanisms, measurement and clinical implications in humans. Gut. 2019 Aug 1;68(8):1516-26.
- 18. Tetel MJ, De Vries GJ, Melcangi RC, Panzica G, O'Mahony SM. Steroids, stress and the gut microbiome-brain axis. Journal of neuroendocrinology. 2018 Feb;30(2):e12548.
- 19. Holota Y, Dovbynchuk T, Kaji I, Vareniuk I, Dzyubenko N, Chervinska T, Zakordonets L, Stetska V, Ostapchenko L, Serhiychuk T, Tolstanova G. The long-term consequences of antibiotic therapy: Role of colonic short-chain fatty acids (SCFA) system and intestinal barrier integrity. PloS one. 2019;14(8).
- 20. Jimenez J, Drees M, Loveridge-Lenza B, Eppes S. Exposure to Gastric Acid-Suppression Therapy Is Associated With Health Care-and Community-Associated Clostridium difficile Infection in Children. Journal of pediatric gastroenterology and nutrition. 2015 Aug 1;61(2):208-11.

- 21. Slyepchenko, A., Maes, M., Jacka, F.N., Köhler, C.A., Barichello, T., McIntyre, R.S., Berk, M., Grande, I., Foster, J.A., Vieta, E. and Carvalho, A.F., 2017. Gut microbiota, bacterial translocation, and interactions with diet: pathophysiological links between major depressive disorder and non-communicable medical comorbidities. Psychotherapy and psychosomatics, 86(1), pp.31-46.
- 22. Yu L, Han X, Cen S, Duan H, Feng S, Xue Y, Tian F, Zhao J, Zhang H, Zhai Q, Chen W. Beneficial effect of GABA-rich fermented milk on insomnia involving regulation of gut microbiota. Microbiological Research. 2020 Jan 7:126409.
- 23. Gecse K, Róka R, Séra T, Rosztóczy A, Annaházi A, Izbéki F, Nagy F, Molnár T, Szepes Z, Pávics L, Bueno L. Leaky gut in patients with diarrhea-predominant irritable bowel syndrome and inactive ulcerative colitis. Digestion. 2012;85(1):40-6.
- 24. Zhong C, Qu C, Wang B, Liang S, Zeng B. Probiotics for Preventing and Treating Small Intestinal Bacterial Overgrowth. Journal of clinical gastroenterology. 2017 Apr 1;51(4):300-11.
- 25. Panpetch W, Hiengrach P, Nilgate S, Tumwasorn S, Somboonna N, Wilantho A, Chatthanathon P, Prueksapanich P, Leelahavanichkul A. Additional Candida albicans administration enhances the severity of dextran sulfate solution induced colitis mouse model through leaky gut-enhanced systemic inflammation and gut-dysbiosis but attenuated by Lactobacillus rhamnosus L34. Gut microbes. 2019 Sep 19:1-6.
- 26. Staudacher HM, Whelan K. The low FODMAP diet: recent advances in understanding its mechanisms and efficacy in IBS. Gut. 2017 Aug 1;66(8):1517-27.
- 27. Li P, Wu G. Roles of dietary glycine, proline, and hydroxyproline in collagen synthesis and animal growth. Amino acids. 2018 Jan 1;50(1):29-38.
- 28. Sachs N, Tsukamoto Y, Kujala P, Peters PJ, Clevers H. Intestinal epithelial organoids fuse to form self-organizing tubes in floating collagen gels. Development. 2017 Mar 15;144(6):1107-12.
- 29. Chen Q, Chen O, Martins IM, Hou H, Zhao X, Blumberg JB, Li B. Collagen peptides ameliorate intestinal epithelial barrier dysfunction in immunostimulatory Caco-2 cell monolayers via enhancing tight junctions. Food & function. 2017;8(3):1144-51.
- 30. Kowalski LM, Bujko J. Evaluation of biological and clinical potential of paleolithic diet. Roczniki Panstwowego Zakladu Higieny. 2012;63(1):9-15.-67.
- 31. Tuck CJ, Staudacher HM. The keto diet and the gut: cause for concern?. The Lancet Gastroenterology & Hepatology. 2019 Dec 1;4(12):908-9.
- 32. Neilan NA, Garg UC, Schurman JV, Friesen CA. Intestinal permeability in children/adolescents with functional dyspepsia. BMC research notes. 2014 Dec 1;7(1):275.
- 33. Madisch A, Andresen V, Enck P, Labenz J, Frieling T, Schemann M. The diagnosis and treatment of functional dyspepsia. Deutsches Ärzteblatt International. 2018 Mar;115(13):222.
- 34. Tomás-Pérez M, Hernández-Martín I, Fernández DA, Pagola MJ, Carretero P, Domínguez-Ortega J, Lluch-Bernal MM, Caballero ML, Quirce S. Allergy to vegetables belonging to the Solanaceae family. Revista alergia Mexico (Tecamachalco, Puebla, Mexico: 1993). 2019;66(3):322-8.
- 35. Caubet JC, Bencharitiwong R, Ross A, Sampson HA, Berin MC, Nowak-Węgrzyn A. Humoral and cellular responses to casein in patients with food protein–induced enterocolitis to cow's milk. Journal of Allergy and Clinical Immunology. 2017 Feb 1;139(2):572-83.
- 36. Caubet JC, Wang J. Current understanding of egg allergy. Pediatric Clinics. 2011 Apr 1;58(2):427-43.
- 37. Martorell A, Alonso E, Boné J, Echeverría L, López MC, Martín F, Nevot S, Plaza AM. Position document: IgE-mediated allergy to egg protein. Allergologia et immunopathologia. 2013 Sep 1;41(5):320-36.
- 38. Karsten HD, Patterson PH, Stout R, Crews G. Vitamins A, E and fatty acid composition of the eggs of caged hens and pastured hens. Renewable Agriculture and Food Systems. 2010 Mar;25(1):45-54.
- 39. Teahon K, Smethurst P, Pearson M, Levi AJ, Bjarnason I. The effect of elemental diet on intestinal permeability and inflammation in Crohn's disease. Gastroenterology. 1991 Jul 1;101(1):84-9.
- 40. Bach Knudsen KE, Lærke HN, Hedemann MS, Nielsen TS, Ingerslev AK, Nielsen G, Søvsø D, Theil PK, Purup S, Hald S, Schioldan AG. Impact of diet-modulated butyrate production on intestinal barrier function and inflammation. Nutrients. 2018 Oct;10(10):1499.
- 41. Fedewa A, Rao SS. Dietary fructose intolerance, fructan intolerance and FODMAPs. Current gastroenterology reports. 2014 Jan 1;16(1):370.
- 42. Marum AP, Moreira C, Saraiva F, Tomas-Carus P, Sousa-Guerreiro C. A low fermentable oligo-di-mono saccharides and polyols (FODMAP) diet reduced pain and improved daily life in fibromyalgia patients. Scandinavian journal of pain. 2016 Oct 1;13(1):166-72.
- 43. Marcason W. What is the FODMAP diet?. Journal of the Academy of Nutrition and Dietetics. 2012 Oct

- 44. Sala-Vila A, Guasch-Ferré M, Hu FB, Sánchez-Tainta A, Bulló M, Serra-Mir M, López-Sabater C, Sorlí JV, Arós F, Fiol M, Muñoz MA. PREDIMED Investigators: Dietary  $\alpha$ -linolenic acid, marine  $\omega$ -3 fatty acids, and mortality in a population with high fish consumption: Findings from the PREvención con Dleta MEDiterránea (PREDIMED) Study. J Am Heart Assoc. 2016;5:e002543.
- 45. Hosomi R, Yoshida M, Fukunaga K. Seafood consumption and components for health. Global journal of health science. 2012 May;4(3):72.
- 46. Farrell D. The role of poultry in human nutrition 2013:2.
- 47. Chen Q, Chen O, Martins IM, Hou H, Zhao X, Blumberg JB, Li B. Collagen peptides ameliorate intestinal epithelial barrier dysfunction in immunostimulatory Caco-2 cell monolayers via enhancing tight junctions. Food & function. 2017;8(3):1144-51
- 48. Monika M, Anna KD. Nut Oils and their Dietetic and Cosmetic Significance: a Review. Journal of oleo science. 2019 Feb 1;68(2):111-20.
- 49. Slavin JL, Lloyd B. Health benefits of fruits and vegetables. Advances in nutrition. 2012 Jul;3(4):506-16.
- 50. Jiang TA. Health Benefits of Culinary Herbs and Spices. Journal of AOAC International. 2019 Mar 1;102(2):395-411.
- 51. De Souza RG, Schincaglia RM, Pimentel GD, Mota JF. Nuts and human health outcomes: A systematic review. Nutrients. 2017 Dec;9(12):1311.
- 52. Wang H, Wang J, Qiu C, Ye Y, Guo X, Chen G, Li T, Wang Y, Fu X, Liu RH. Comparison of phytochemical profiles and health benefits in fiber and oil flaxseeds (Linum usitatissimum L.). Food chemistry. 2017 Jan 1;214:227-33.
- 53. Roncoroni L, Elli L, Doneda L, Bascuñán KA, Vecchi M, Morreale F, Scricciolo A, Lombardo V, Pellegrini N. A retrospective study on dietary FODMAP intake in celiac patients following a gluten-free diet. Nutrients. 2018 Nov;10(11):1769.
- 54. Pittschieler K, Ladinser B, Petell JK. Reactivity of Gliadin and Lectins with Celiac Intestinal Mucosa 1. Pediatric research. 1994 Nov;36(5):635-41.
- 55. Myles IA. Fast food fever: reviewing the impacts of the Western diet on immunity. Nutrition journal. 2014 Dec;13(1):61.
- 56. Mie A, Andersen HR, Gunnarsson S, Kahl J, Kesse-Guyot E, Rembiałkowska E, Quaglio G, Grandjean P. Human health implications of organic food and organic agriculture: a comprehensive review. Environmental Health. 2017 Dec;16(1):111.
- 57. He S, Simpson BK, Sun H, Ngadi MO, Ma Y, Huang T. Phaseolus vulgaris lectins: A systematic review of characteristics and health implications. Critical reviews in food science and nutrition. 2018 Jan 2;58(1):70-82
- 58. Pezzilli R. Alcohol abuse and pancreatic diseases: an overview. Recent patents on inflammation & allergy drug discovery. 2015 Aug 1;9(2):102-6.
- 59. Nishikawa A, Furukawa F, Imazawa T, Ikezaki S, Hasegawa T, Takahashi M. Effects of caffeine on glandular stomach carcinogenesis induced in rats by N-methyl-N'-nitro-N-nitrosoguanidine and sodium chloride. Food and chemical toxicology. 1995 Jan 1;33(1):21-6.
- 60. Skřivanová E, Worgan HJ, Pinloche E, Marounek M, Newbold CJ, McEwan NR. Changes in the bacterial population of the caecum and stomach of the rabbit in response to addition of dietary caprylic acid. Veterinary microbiology. 2010 Aug 26;144(3-4):334-9.
- 61. Borzì AM, Biondi A, Basile F, Luca S, Vicari ES, Vacante M. Olive oil effects on colorectal cancer. Nutrients. 2019 Jan;11(1):32.
- 62. Goodman BE. Insights into digestion and absorption of major nutrients in humans. Advances in physiology education.
- 63. Heda R, Tombazzi CR. Physiology, Pepsin. InStatPearls [Internet] 2018 Dec 19. StatPearls Publishing.
- 64. Little KH, Schiller LR, Bilhartz LE, Fordtran JS. Treatment of severe steatorrhea with ox bile in an ileectomy patient with residual colon. Digestive diseases and sciences. 1992 Jun 1;37(6):929-33.
- 65. Wu G. Intestinal mucosal amino acid catabolism. The Journal of nutrition. 1998 Aug 1;128(8):1249-52.
- 66. Larson SD, Li J, Chung DH, Evers BM. Molecular mechanisms contributing to glutamine-mediated intestinal cell survival. American Journal of Physiology-Gastrointestinal and Liver Physiology. 2007 Dec;293(6):G1262-71.
- 67. Kim MH, Kim H. The roles of glutamine in the intestine and its implication in intestinal diseases. International journal of molecular sciences. 2017 May;18(5):1051.
- 68. Mu Q, Kirby J, Reilly CM, Luo XM. Leaky gut as a danger signal for autoimmune diseases. Frontiers in



- 69. Shoulders MD, Raines RT. Collagen structure and stability. Annual review of biochemistry. 2009 Jul 7:78:929-58.
- 70. Inouye K, Kobayashi Y, Kyogoku Y, Kishida Y, Sakakibara S, Prockop DJ. Synthesis and physical properties of (hydroxyproline-proline-glycine) 10: hydroxyproline in the X-position decreases the melting temperature of the collagen triple helix. Archives of biochemistry and biophysics. 1982 Nov 1;219(1):198-203.
- 71. Siebecker A. Traditional bone broth in modern health and disease. Townsend Letter for Doctors and Patients. 2005 Feb 1(259-260):74-82.
- 72.Plaza-Diaz J, Ruiz-Ojeda FJ, Gil-Campos M, Gil A. Mechanisms of action of probiotics. Advances in Nutrition. 2019 Jan 1;10(suppl\_1):S49-66.
- 73. La Fata G, Weber P, Mohajeri MH. Probiotics and the gut immune system: indirect regulation. Probiotics and antimicrobial proteins. 2018 Mar 1;10(1):11-21.2
- 74. Parkes GC, Sanderson JD, Whelan K. Treating irritable bowel syndrome with probiotics: the evidence. Proceedings of the Nutrition Society. 2010 May;69(2):187-94.
- 75. Holscher HD. Dietary fiber and prebiotics and the gastrointestinal microbiota. Gut microbes. 2017 Mar 4;8(2):172-84.
- 76. Markowiak P, Śliżewska K. Effects of probiotics, prebiotics, and synbiotics on human health. Nutrients. 2017 Sep;9(9):1021.
- 77. El-Salhy M, Gundersen D. Diet in irritable bowel syndrome. Nutrition journal. 2015 Dec;14(1):36.
- 78. Conlon MA, Bird AR. The impact of diet and lifestyle on gut microbiota and human health. Nutrients. 2015 Jan;7(1):17-44.
- 79. Fuller C, Lehman E, Hicks S, Novick MB. Bedtime use of technology and associated sleep problems in children. Global pediatric health. 2017 Oct 27.
- 80. Blaylock RL, Maroon J. Natural plant products and extracts that reduce immunoexcitotoxicity-associated neurodegeneration and promote repair within the central nervous system. Surgical neurology international. 2012:3.
- 81. Essa MM, Guillemin GJ, Al-Rawahi AS, Singh V, Guizani N, Memon AM. Walnuts (juglans regia linn) and its health benefits. InNatural Products and Their Active Compounds on Disease Prevention 2012 Aug (pp. 333-349). Nova Science Publishers, Inc..
- 82. Garg ML, Blake RJ, Wills RB, Clayton EH. Macadamia nut consumption modulates favourably risk factors for coronary artery disease in hypercholesterolemic subjects. Lipids. 2007 Jun;42(6):583-7.
- 83. Bechtold ML, Puli SR, Othman MO, Bartalos CR, Marshall JB, Roy PK. Effect of music on patients undergoing colonoscopy: a meta-analysis of randomized controlled trials. Digestive diseases and sciences. 2009 Jan 1;54(1):19-24.
- 84. Avidan B, Sonnenberg A, Schnell TG, Sontag SJ. Walking and chewing reduce postprandial acid reflux. Alimentary pharmacology & therapeutics. 2001 Feb 5;15(2):151-5.
- 85. Cichello SA, Begg D, Weisinger R. Anxiety behaviour displayed in C57BL/6J mice consuming coffee and cocoa, but not observed in mice consuming Japanese green tea in a high fat diet induced obesity model. Current Research in Nutrition and Food Science Journal. 2014 Apr 28;2(1):33-9.
- 86.Chen Y, Ni J, Li H. Effect of green tea and mulberry leaf powders on the gut microbiota of chicken. BMC veterinary research. 2019 Dec;15(1):77.
- 87. Househam AM, Peterson CT, Mills PJ, Chopra D. The effects of stress and meditation on the immune system, human microbiota, and epigenetics. Adv Mind Body Med. 2017;31(4):10-25.
- 88. Rozich JJ, Holmer A, Singh S. Effect of Lifestyle Factors on Outcomes in Patients With Inflammatory Bowel Diseases. The American Journal of Gastroenterology. 2020 Mar 30.
- 89. Molina-Torres G, Rodriguez-Arrastia M, Roman P, Sanchez-Labraca N, Cardona D. Stress and the gut microbiota-brain axis. Behavioural pharmacology. 2019 Apr 1;30(2):187-200.
- 90. Shakeri M, Cottrell JJ, Wilkinson S, Zhao W, Le HH, McQuade R, Furness JB, Dunshea FR. Dietary Betaine Improves Intestinal Barrier Function and Ameliorates the Impact of Heat Stress in Multiple Vital Organs as Measured by Evans Blue Dye in Broiler Chickens. Animals. 2020 Jan;10(1):38.