

HEALTHY EATING GUIDELINES- LEAKY GUT

Leaky Gut

- Researchers have identified a chemical (called zonulin) released by the gut wall to naturally moderate its own permeability. Zonulin opens up the spaces between the cells of the intestinal lining. That normally occurs, in order for nutrient and other molecules to get in and out of the intestine. However, when leaky gut is present, the spaces between the cells open up too much allowing larger protein molecules to get into the bloodstream where an immunologic reaction can take place. Once that happens, the body is primed to react to those proteins each and every time they appear.
- Sometimes the body needs to 'open' up the gut wall for a brief period of time (i.e. to flush out an infection in the intestines), but most of the time the gut wall should remain 'closed' and only selected nutrients should be capable of passing from the gut into the body. However, if too much zonulin is released from the gut wall, the gut wall spends most of its time 'open', which sets us up for the production of chronic inflammation and disease.
- Zonulin producers:
 - Gliadin causes zonulin levels to increase both in those people who have celiac disease and those who do not. Gluten affects intestinal permeability in all persons to different extents.
 - SIBO = small intestinal bacterial overgrowth
 - Fungal dysbiosis or candida overgrowth
 - Parasite infections
- High Zonulin found in:
 - IBD- crohns
 - Diabetes 1
 - Multiple Sclerosis
 - Asthma
 - Glioma

Gut Protect your microbiome

- The types of food that best encourage your microbiome to flourish are prebiotic-rich foods, such as avocados, soy beans, and peas. Vegetarian diets have also been found to decrease the pH levels in our gut, which prevents the growth of different strains of bad microorganisms.
 - Prebiotics feed your good bacteria in the gut, which allows you to out compete the bad bacteria.
- On the other hand, a diet that's high in processed fat, refined sugar, and artificial ingredients can cause an imbalance between good and bad microorganisms in your gut.
- Recent studies point to the fact that alcohol can tip the balance of the gut's equilibrium and disrupt our digestive tract's environment, which can potentially lead to a host of digestive issues.

- Polyphenols, from dark pigments in berries, chocolate, and coffee beans, are great at decreasing inflammation. Grape seed extract, pycnogenol, turmeric, and green tea extract are good supplements for polyphenols. You could also have a piece of 72 percent or greater dark chocolate every day.

Decrease full body inflammation

- Eat breakfast like a king, lunch like a prince and dinner like a pauper.
 - Your largest meal should be breakfast (20 grams of protein) and smallest should be dinner.
 - Breakfast consumption is associated with factors such as satisfaction, early daily energy intake, metabolic efficiency, and early appetite regulation.
- Protein & Fat
 - More lean protein and less refined carbs- Protein and healthy fats will help satiate you
 - Oils- olive oil breaks down under high heat. Use olive oil for uncooked recipes (dressings, toppings, salads), use higher temperature oils, like avocado oil, when cooking (sautee, roasting, baking).
- Vegetables
 - Goal is to have veggies at every meal
 - Eat lots and lots of leafy greens
- Water
 - 1-2 liters per day, carry a water bottle with you
 - Add a squeeze of lemon for detox.
- Carbohydrates
 - Some plants protect themselves and their seeds by putting proteins in their leaves and seeds called lectins, humans can not digest these well. Gluten is by far the most famous lectin, but what most people don't know is that it's quite a minor one and that most gluten-free substitutes have far worse lectins! Removing gluten might not be enough. Try removing other lectins from their diet, like Quinoa, corn, beans, and nightshades like potatoes, tomatoes, peppers, and others, which are all loaded with lectins.
 - Cook beans very well! Beans have lot's of lecitins if not properly cooked.
- More home cooked meals, smaller portions
- Less alcohol and caffeine
 - Coffee- is it good? Or is it bad? Try sticking to only 1-2 cups in the morning and limit afternoon use. If you are tired in the afternoon, opt for green tea, or increase protein for breakfast to decrease crashes in blood sugar.
- Less dairy
 - Milk products can be aggravating to many, and many don't even know it.
 - Try home-made nut milk
 - 1 cup raw nuts (almond or cashew) soaked in filtered water for > 8 hours
 - Strain nuts from water.
 - Blend Nuts + 4 cups new filtered water + dash cinnamon + 1-3 dates (for sweetener) + dash salt + ½ tsp vanilla
 - Strain with cheese cloth, nut milk bag, or very thin towel.
 - Refrigerate and enjoy for 4-8 days!

How to make a change:

1. **Step 1:** Choose what you want to limit –OR– what you want to increase
 - a. Start with small changes to make them last– start with 1 food
 - b. Foods to limit

- i. Common allergens: dairy, tree nuts (hazelnuts, walnuts, almonds, and Brazil nuts), soy, wheat/gluten, nightshades, eggs, shellfish, peanuts (groundnuts)
 - ii. Processed food, fast food, freezer-made food
 - c. Foods to increase
 - i. Water, vegetables, healthy fats, quality protein sources
2. **Step 2:** Create a plan for how you will limit –OR– increase
 - a. What will you do if you are out with friends for dinner?
 - b. What if you are starving and need a snack right away?
 - c. What can you substitute for this food?
 - d. What will you do if you fall off track?
 - e. Who is your support team? Who is going to hold you accountable?
 - f. What can you do ahead of time to make this change easier?
 - g. Do you need to change where you shop?
 - h. Where are you going to get recipes from?
3. **Step 3:** Take action on Step 1 and Step 2
 - a. Set a goal– will you do it for 7 days? 21 days? 1 month?
 - b. Keep track of changes you notice IN WRITING– decreased bloating, increased energy, better mood, weight loss, better sleep, improved digestion, etc.
4. **Step 4:** Repeat Steps 1-3 as many times as needed!

Tricks to eat more vegetables

- **Buy tasty vegetables!** If your food doesn't taste good, you won't eat it. Vegetables can be amazing, but sometimes supermarket-bought produce tastes like plastic. Invest in tasty vegetables, even if they are a bit more costly. Tell yourself that if you buy cheap vegetables and throw them out, you are actually paying more.
- **Have veggies on hand for when you will be hungry.** There's nothing worse than spending twenty minutes cutting up vegetables when your stomach is rumbling like an avalanche. Pre-wash, pre-cut, and basically prepare your veggies a day in advance, or in the morning, for the whole day.
- Place the veggies on the **top shelf of your fridge**, at eye level. When you see 'em, you'll eat them.
- **Pre-washed greens mix.** For a quick and easy salad, open up a bag of pre-washed greens, toss in some cherry tomatoes and drizzle with olive oil and lemon juice. 45 seconds flat. Note: this is more expensive than spending a few more minutes washing and shredding on your own. Time and money are interchangeable currencies when it comes to healthy eating.\
- Use **lettuce** as sandwich bread.
- **Cherry tomatoes** are nature's m&m's. Pre-wash and place these juicy beauties in a glass bowl near you - work desk, couch, counter top, anywhere you frequent throughout the day.
- **Baby carrots** are cheap, tasty, sweet, crunchy, and easy to eat. Always have some available in your home and office fridge.
- Add **sautéed veggies** to your omelet. Onion, bell peppers, mushrooms. What else?
- Add **greens to your smoothie** - spinach, kale, broccoli, parsley, cilantro and other greens can be added to any fruit smoothies for color and a nutrient boost. If you are a newbie, start with a small amount and increase over time.
- Make **mashed potatoes using cauliflower**. Steam or boil the florets, but don't overdo it or they'll smell bad. Mash with a fork and add salt and olive oil to taste.
- Dip **raw florets** of broccoli or cauliflower in soy sauce or hummus. Unbelievably easy and tasty.

- Add a **dash of salt and pepper**. Cucumber slices become something else with just a few specks of salt dusted on top. The same goes for tomato slices.

The Autoimmune Protocol (AIP) Diet

- The Autoimmune Protocol (AIP) is a very restrictive diet that removes foods considered to be gut irritants. The AIP is a stricter version of the Paleo Diet, which involves the elimination of grains, legumes, dairy, and processed foods. The AIP takes things a step (actually an entire staircase) further, and eliminates many foods which have been shown to potentially irritate and cause holes in the gut lining. The AIP is very difficult for many people to follow, but sometimes it's temporarily necessary to fully heal a very leaky gut.

Foods eliminated on the Autoimmune Protocol (AIP) Diet:

- **Grains** – wheat, rice, corn, and others; and pseudograins (millet, amaranth, teff, etc.)
- **Legumes** – all beans including peanuts, black beans, pinto beans, hummus, etc.
- **Dairy** – all sources of dairy, even raw or fermented
- **Nuts and seeds** – all nuts and seeds including cashews, almonds, quinoa, sunflower seeds, sesame seeds, seed-based spices, chocolate, coffee, etc.
- **Eggs** – especially the white part of the egg, which contains inflammatory proteins
- **Nightshades** – tomatoes, potatoes, peppers, tomatillos, eggplants, goji berries and several spices
- **Industrial seed oils** – pretty much all liquid oils, except for olive and avocado oils
- **Processed foods** – basically anything that comes out of a package
- **Alcohol** – it is well established that alcohol induces a leaky gut. [4]
- **NSAIDs** – Non-steroidal anti-inflammatory drugs such as Ibuprofen, aspirin, and naproxen, which cause holes to form in the gut and stomach linings. [5]
- **Sugar, starches, fruits, yeasts, FODMAPs** – Sweet, starchy, and yeast-containing foods can contribute to imbalances in the gut microflora (dysbiosis) by feeding unfavorable bacteria in the gut. They are best limited or restricted especially at first on the AIP.

Resources

- www.paleomom.com This is the website for Sarah Ballantyne who is the original creator and author of this plan. Lots of great resources here, a getting started guide is here as well.
- www.healingfamilyeats.com – this has some great recipes and pictures for creative meal ideas. This also has a holiday meal guide.
- www.empoweredsustenance.com – there is a free e-cookbook downloadable from this site called The Unboring Paleo Cookbook
- www.asquirrelinthekitchen.com This is another great blog with good articles and recipes as well as other resources you can click from the site.
- The Autoimmune Paleo Cookbook by Mickey Trescott
- The Paleo Approach and Paleo Approach Cookbook by Sarah Ballantyne, PhD
- The Healing Kitchen by Sarah Ballantyne and Alaena Haber – new
- I also highly recommend Pinterest as a great source for more recipe ideas, I think some come from the blogs above, but you could create a special board just for this