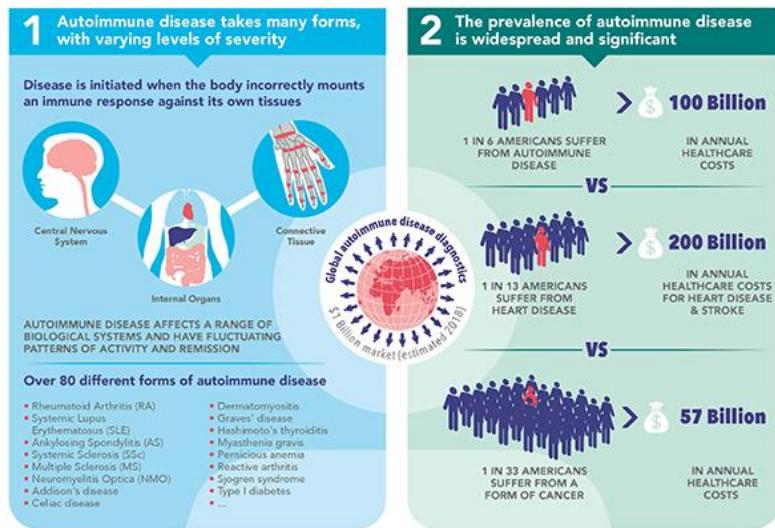




# AUTOIMMUNE REPAIR PROGRAM

(AIR-Program)

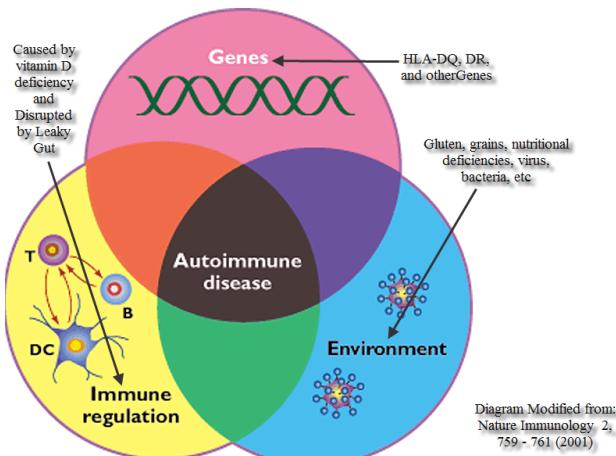
## Fighting autoimmune disease The need for a personalized approach



The autoimmune gut-repair nutritional program is a dietary and lifestyle program that helps patients struggling with autoimmune issues, to overcome the core underlying factors preventing recovery. These include: inflammation, cervical spine subluxation, leaky gut, hormone imbalances, blood sugar & insulin imbalances, micronutrient deficiencies, past traumas, stress & anxiety, immune system dysregulation etc.

The AIR-Program involves **ELIMINATION** and **REINTRODUCTION** – which means, that for a time you eliminate foods that are known to trigger or aggravate inflammation (may have symptoms or not), and then you reintroduce foods carefully and systematically, to rule out any reactivity (Complete an MSQ questionnaire before and after to help monitor your symptoms)

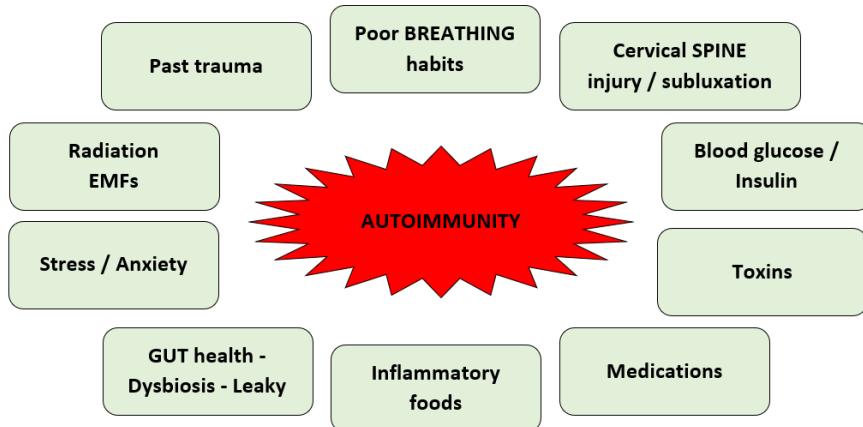
The optimal end-result is a nutrition & lifestyle program, that supports your health while, avoiding factors that undermine it. The nutrition program is very strict, but the more stringent the approach, the better the results. The initial diet is very basic and simple, so as not to trigger any inflammation in the intestines and further worsen gut permeability and autoimmune flare-ups.





## KEY FOCUS AREAS:

In any autoimmune condition, there are several key areas that underlie symptoms. These need to be addressed individually for each patient, and in so doing, will bring the body back into balance, so it can function properly, and ultimately **OPTIMALLY!**



1. **Gut health:** Gut inflammation, gut dysbiosis (imbalances in gut bacteria), and a permeable/leaky gut-lining, contribute to poor absorption of nutrients and systemic inflammation that feeds the autoimmune response. In the diet, foods that irritate the gut lining are avoided, while foods that support gut health are included.
2. **Nutrient density:** Every system in the body needs a wide array of nutrients to function at its best, including the immune system. Nutrient-dense foods are central to the diet, giving the body the tools it needs to heal deficiencies and support immune system function.
3. **Blood glucose & insulin balance:** High and low blood glucose (sugar) can lead to systemic inflammation, immune flares, hormonal imbalances, and compromised brain function. Supporting balanced blood sugar is critical for recovery from any inflammatory condition. The autoimmune diet gives you the tools to support healthy blood glucose & insulin balance.
4. **Immune system regulation:** Inflammation, leaky gut, hormone imbalances, blood sugar imbalances, and micronutrient deficiencies all contribute to immune system dysregulation. By reducing bacterial overgrowth and inflammation in the gut, removing food immune triggers from your diet, providing dense nutrition and supporting blood sugar regulation, the autoimmune diet helps to support healthy immune function.
5. **Emotional and Mental triggers/blocks/past issues or trauma:** The gut is often called the second brain - for a very good reason. Information does not only travel from the brain to the gut but also from the gut to the brain. Emotional and psychological issues greatly affect the autonomic nervous system which includes digestion, absorption and metabolism of nutrients. It has been shown in many studies that psychological mental/emotional issues can greatly impact on physiology – right down to a cellular and genetic level. Addressing underlying/past blocks and/or emotional issues is crucial in supporting gut health and a strong immune system.



## TIPS FOR USING THE AUTOIMMUNE DIET:

These are always good basic guidelines with which to start whether you are waiting to work with a practitioner or are going it alone:

- Focus on eating 6-9 servings of vegetables per day, including the full colour spectrum.
- Eat plenty of essential fatty acids (ideal omega-6 to omega-3 ratio is between 1:1 - 4:1).
- Eat plenty of fermented foods to support healthy gut flora (caution if histamine intolerant or sensitive)
- Include sufficient appropriate fats and protein in your diet, to prevent hunger soon after eating.
- Eat frequently enough to avoid energy crashes caused by low blood sugar – but we will be progressing to intermittent fasting (eg: 16-8) once you are a little more settled with the dietary changes.
- Stay hydrated with plenty of fresh, filtered water. Also, cravings are often a disguise for thirst, so stay hydrated and add electrolytes or tissue salts to your water if need be.
- Strictly avoid foods on the “Foods to AVOID” list. Even just a small snack or a bite of these foods can trigger an immune reaction, inflammation, and an autoimmune flare-up. Cravings for these foods will pass quickly, especially as you start to feel and function better.
- For this diet to be successful it’s extremely important to pay attention to blood sugar symptoms, keep blood glucose stable and be aware of which foods trigger your symptoms.
- **Elimination/Reintroduction:** This protocol is intended as an elimination diet to reduce inflammation and immune response, then a reintroduction protocol to determine food sensitivities and know the best foods for you. We will discuss the reintroduction part, once you have the basics under control.

## DAILY LIFESTYLE HABITS TO SUPPORT HEALING:

- Get enough sleep: Aim for 8 - 10 hours per night, and more when possible.
- Manage stress:
  - What stressful factors can you reduce or eliminate from your life?
  - What daily stress-reducing activities can you engage in?
- Exercise: Light to moderate is good — avoid over-exerting yourself – try to do something every day.
- Cold water immersion or taking a cold shower AFTER a warm shower - to stimulate your lymphatics and improve overall resilience and immunity.
- Maintain social connections: Many studies show that those who maintain healthy social connections are healthier, happier, and live longer. Laugh!

## FOODS TO EAT:

The AIR program is based broadly on a “paleo” style way of eating.

It is important that if you have an allergy or intolerance to any of these foods, then AVOID it - DON'T EAT it just because it's on this list!

**Most organic vegetables:** Include as much variety as possible, making sure to include the full colour spectrum (darker colours are usually better); anise, rocket/arugula, artichoke, asparagus, beets and their **greens**, bok choy, broccoli, cabbage, carrots, cauliflower, celery, chives, cucumbers, garlic, kale, kohlrabi, leeks, lettuce, mustard greens, olives, onions, parsley, radishes, rhubarb, shallots, spinach, squash, sweet potatoes and yams (not true potatoes), water chestnuts, watercress, baby marrow/zucchini, etc.

NOTE: Vegetables from the **brassica** or **cruciferous** family (broccoli, cauliflower, kale, etc.) are no longer considered bad for thyroid function.

**Quality meats:** beef, chicken, bison, pork, lamb, turkey, and wild game. Select hormone-free and antibiotic-free chicken, turkey, and lamb. Chicken has high Omega 6 content; eat in moderation – especially the skin. Eat a lot of Omega 3 oils to compensate. Select beef that is grass fed, hormone free, and antibiotic free. Best choices



are locally-raised grass-fed and pastured meats; second best is organic. Avoid factory-farmed meats that contain antibiotics and hormones.

**Introductory phase:** include free-range or **organic eggs** – eliminate these as you progress – then reintroduce / test / challenge.

**Organ meats and offal:** heart, liver, kidney, tongue, and **bone broth**. An important concentrated form of nutrients including vitamins, minerals, healthy fats, and essential amino acids.

**Glycine-rich foods:** Include foods containing connective tissue, organ meat, joints, skin, or bone broth.

**Fish and shellfish:** Seek out ocean-caught cold water, low mercury fish with high fat content. Swordfish, most tuna, and king mackerel are usually very high in mercury, but depends on where caught. Salmon, snoek, river trout etc. are all usually good sources.

**Quality fats:** fatty cold-water fish, olive oil, avocado oil, coconut oil, low-mercury Omega 3 fish-oil supplements, pasture-raised, grass-fed animal fats (in moderation to start and then increase slowly to ascertain your individual level). I usually recommend more plant oils than animal oils/fats to include less consumed cholesterol, and they tend to be less inflammatory.

**Low glycemic organic fruits:** apples, apricots, avocados, berries, cherries, grapefruit, lemons, peaches, pears, plums, etc. Keep sugar intake between 10 - 20g per day.

**Edible mushrooms:** Mushrooms are generally fine for most individuals. However, some people with autoimmune conditions may react to immune-stimulating fungi such as Maitake and mushroom-derived beta-glucan, so monitor your response.

**Probiotic and fermented foods:** sauerkraut, kimchi, pickled ginger, fermented cucumbers, coconut yogurt (guar-gum free), kombucha, water kefir, coconut milk kefir, supplements, etc. You may need to make your own or buy one of the few brands that are genuinely fermented and free of sugars or additives. Also, search for information about anaerobic fermented foods in air-tight containers; these ferments do not produce histamines that some people react to (including rashes, digestive upset, inflammation) commonly found in aerobic, or open, ferments typically using mason jars. (Hard to find here in SA)

**Coconut:** coconut aminos, coconut milk (guar gum free), coconut water and coconut water vinegar, coconut cream (not concentrate), and coconut oil. Whole coconut products (coconut butter, coconut cream concentrate, coconut flakes and chips, unsweetened coconut yogurt, fresh coconut) have high inulin fiber and moderately high phytic acid, which causes some individuals digestive issues — consume in moderation until you know your tolerance level.

**Noodles:** Soba and Mung-bean noodles (sold in Asian grocery stores and some natural food stores) are generally ok, but avoid the noodles that contain tofu (soy). To start, I often include rice noodles as well, but all grains can potentially affect autoimmunity – so eliminate once you are more settled into your AIR / AIP program.

**Herbs and spices:** basil, cilantro, cinnamon, coriander, clove, garlic, ginger, horseradish, lemongrass, mace, mint, oregano, parsley, rosemary, sage, saffron, sea salt or Himalayan salt, thyme, turmeric (black pepper is considered a reintroduction item). Avoid iodized salt unless you are deficient in iodine.

**Vinegars:** apple cider, balsamic, champagne, coconut, red wine, sherry, plum, white wine.



**Teas:** black, green white, yerba mate (avoid caffeine if you have adrenal fatigue).

**Other:** herbal teas, carob, rooibos tea, De-glycyrrhizinated licorice / DGL (but not whole licorice root), vanilla extract (if cooked).

*In moderation:* fructose (in fruit and starchy vegetables), pomegranate, molasses.

*Very occasionally:* organic maple syrup, local honey, dried fruit, dates and date sugar, molasses, unrefined cane sugar (muscovado). Each person has unique tolerance to sugars – monitor your response – but keep to a minimum if glucose or insulin an issue.

### Grey areas depending on individual sensitivities:

Legumes with edible pods (green beans, sugar-snap or snow peas) – *see below*

Whole bean coffee (organic decaf) in moderation (caution as many instant coffees show gluten contamination).

Sugars: Some people have strong reactions to even small amounts of sugars; monitor your response.

Seaweeds (high in iodine): Some people with Hashimoto's may not do well with additional iodine in the diet or if an iodine allergy.

Nuts and Seeds: : Some people have strong reactions to tree nuts, and peanuts are a definite no. Slowly eliminate and test for a few weeks with no nuts and seeds at all. See FOODS TO AVOID – Initial stages.

**A note on fatty acids:** Consuming a proper ratio of omega-6 to omega-3 fatty acids is key for minimizing inflammation in the body. Too much omega-6 is highly inflammatory, so it's important to get enough omega-3 (anti-inflammatory) to compensate. The average ratio is close to 25 parts omega-6 to 1 part omega-3, resulting in high levels of inflammation. Researchers recommend a ratio of omega-6 to omega-3 fatty acids that ranges from 1:1 to 4:1 for optimal health and prevention of disease.

## FOODS TO AVOID:

- **Grains:** barley, bulgur, corn, couscous, kamut, rye, spelt, wheat, wheat germ.
  - **In initial stages include:** buckwheat, millet, oats, rice, and quinoa
- **Beans and legumes:** black beans, lentils, peanuts, peas, pinto beans, etc., and all soy products (edamame, miso, soy milk, soy protein, soy sauce, tempeh, tofu, soy lecithin, peanut, etc.).
  - **In initial stages include:** lentils and peas
- **Nuts:** all nuts and nut butters including peanuts (actually a legume).
  - **In initial stages include:** all except peanuts – slowly start reducing the higher carb ones 1st
- **Seeds:** chia, cocoa, flax, sesame, sunflower, instant coffee (many brands tested for gluten contamination).
  - **In initial stages include:** pumpkin, flaxseed, chia, organic decaf instant coffee (or beans)
- **Seed-based spices – use with caution:** anise, annatto, celery seed, coriander, cumin, fennel, fenugreek, mustard, nutmeg, poppy seed, sesame, allspice, star anise, caraway, cardamom, juniper, peppercorns, sumac, whole vanilla bean.
- **Dairy:** butter, cheese, cow milk, creams, frozen desserts, goat milk, margarine, mayonnaise, sheep milk, whey, yogurt (coconut yogurt free of guar gum is acceptable).
- **Nightshades:** eggplant, goji berries, sweet and hot peppers, hot pepper sauces, tomatillos, tomatoes, and potatoes (sweet potatoes and yams are okay — not in the same family).
- **Nightshade-based spices:** cayenne, chili powder, paprika, red pepper, curry, and spice blends that contain these
- **Medicinal mushrooms:** Some people with autoimmune conditions may react to immune-stimulating fungi such as Maitake and mushroom-derived beta-glucan, so monitor your response.
- **Refined and processed oils:** including vegetable oils.
- **Sugars:** agave, candy, chocolate, corn syrup, high fructose corn syrup, sucrose, etc.
- **Non-nutritive sweeteners:** acesulfame potassium, aspartame, neotame, and sucralose.
- **Emulsifiers, thickeners, and other food additives:** guar gum, carrageenan, zanthan gum, cellulose gum, soy lecithin.



- **Alcohol:** avoid all alcohol.
- **Gluten-containing compounds:** barbecue sauce, binders, bouillon, brewer's yeast, cold cuts, condiments, emulsifiers, fillers, chewing gum, hot dogs, hydrolysed plant and vegetable protein, ketchup, soy sauce, lunch meats, malt and malt flavouring, malt vinegar, matzo, meat glue, modified food starch, monosodium glutamate, non-dairy creamer, processed salad dressings, seitan, some spice mixtures, stabilizers, teriyaki sauce, textured vegetable protein. Beware of non-specific ingredients like "natural flavourings" or "spices".
- **NSAIDS:** non-steroidal anti-inflammatory drugs such as aspirin and ibuprofen.

## ELIMINATION AND REINTRODUCTION/CHALLENGE OF FOODS:

The autoimmune protocol diet is an elimination and reintroduction/challenge protocol:

For a time you eliminate foods that are known to drive inflammation and resulting symptoms, and then you reintroduce foods methodically (challenge the body) to rule out reactivity.

Everyone asks how long the elimination phase might take, because nobody likes to make major changes in their habits. Timing on reintroductions/challenge depends on the individual. A good rule of thumb is to wait for reintroductions until you notice a marked improvement in your symptoms and quality of life; for some that's 30 days, for others it's months.

It may take time to unwind the self-perpetuating inflammatory cycles that lie beneath your symptoms, and it's important to not rush into reintroductions/challenges. If you begin reintroductions while you are still highly symptomatic you will not be able to gauge whether or not a reintroduced food is causing a reaction and you'll need to start over again.

Your stress level, sleep quality, exercise level, nutrient intake, genetics, oral tolerance and underlying health issues will affect your reactions to foods. This affects when you can start reintroductions, and also means as your status with these factors improves over time, you may be able to reintroduce certain foods that previously tested as reactive.

Sometimes, one successfully reintroduces a food, then symptoms start to return. If this happens to you, it may mean you need to stay away from a food you thought was a good addition, until a later date or even permanently.

## SUMMARY OF REINTRODUCTION RULES – GOLD STD:

1. Select the food to reintroduce. Plan to eat it 2-3 times in one day.
2. The first time you consume it, eat half a teaspoon or less. Wait 15 minutes.
3. If you experience immediate symptoms, do not consume the food again.
4. If you have no immediate symptoms, eat a slightly larger bite.
5. Wait 2-3 hours and monitor for symptoms.
6. If you had no symptoms, eat a normal sized portion, either by itself or with a meal.
7. Do not eat that food again for 4-7 days, and *do not reintroduce any other new or suspect foods during that time*. Monitor for symptoms.
8. If you have no symptoms in the 4-7 day period, that food is potentially safe for you to eat.
9. To confirm that food, eat a bit of it every day for another week, and monitor closely for reactions. Food reactions typically come in two forms; a strong reaction that leaves no doubt, and a slower inflammatory response that builds slowly to become noticeable later. If you have no reaction after this week, you may add this food back into your diet. You may now move on to your next food reintroduction.



### **\*\* IMPORTANT \*\***

Symptoms can be represented by any change; digestive upset, mood changes, fatigue, pain, sleep issues, brain fog, skin rash, etc.

If you have a reaction to a food reintroduction, you must wait until those symptoms are completely gone before moving on to the next reintroduction.

## **GENERAL ORDER OF FOOD REINTRODUCTION:-**

Some foods are more likely cause a reaction than others. It's best to reintroduce foods lowest on that list first, ending with the most-likely items. If you have had food sensitivity testing done, leave any foods you have a diagnosed sensitivity for until the end of reintroductions. A general order of reintroduction is:

### **Seeds before nuts**

Introduce one item at a time, not mixed: seed-based spices (no nightshades), oils, butters, flours; raw nuts (soaked); toasted (beware store-bought seeds roasted in non-compliant oils); cocoa; coffee (in moderation).

**Eggs** – organic if possible

**Dairy** – organic (*not always best for everyone – so only in moderation*)

Grass-fed ghee then butter; raw goat yogurt/kefir, milk, cheese; raw cow dairy in the same order. Why raw, why this order? Raw dairy has live enzymes that make it easier to digest. Dairy has 3 components; butterfat, lactose and casein. Butterfat doesn't cause a problem for many people; intolerance is more common for lactose and casein. Therefore ghee and butter come first. Goat dairy is easier to digest than cow dairy.

### **Nightshades**

These come last because they are the most common food intolerance for those with autoimmune conditions, and if you have an inflammatory reaction, it takes longer to calm down and continue with reintroductions. Be sure to reintroduce one vegetable at a time. You might react to all, or only to some.

### **Consider never consuming**

- NSAIDS (they disrupt gut health)
- Grains/Gluten (most reactivity is related to molecular mimicry).

**\*\* Reintroduction of other foods depends on your individual health history and needs \*\***



## ADDITIONAL INFO:

### **Molecular mimicry: some foods can cross-react with gluten**

Grains, legumes and some other foods present problems for other reasons. Research has shown that many gluten-intolerant people **cross-react** with other foods. In other words, their body erroneously recognizes other foods as gluten and reacts with an immune response that destroys not only the food proteins, but bodily tissue. Not surprisingly, most grains fall into the category of top 24 foods most often to cause cross-reactivity, including amaranth and quinoa.

Other common cross-reactive foods include dairy, chocolate, sesame, and instant coffee.

### **Lectins in grains & legumes**

Grains and legumes are high in proteins called lectins. Lectins have been shown to degrade the intestinal barrier, adding to leaky gut. They can also be transported through the damaged intestinal wall into the bloodstream, where they may bind to insulin receptors and leptin receptors. Some believe lectins may also have the ability to desensitize these receptors, thus contributing to insulin resistance and leptin resistance.

When transported through the gut wall into the blood stream, lectins can also set off an immune reaction that further damages the intestinal wall and sets off systemic inflammation, further supporting the autoimmune reaction.

### **Corn**

I tell all my gluten-free patients and those on an anti-inflammatory program to avoid corn, even though this contradicts the advice on many gluten-free websites. The protein in corn is similar enough to that in wheat and wheat-like grains that it can provoke an immune response. Also, corn has been bred over the years to resist pests - a compound called fucosamine - which is carcinogenic.

### **Seeds & Nuts**

Tree nuts are one of the top allergens and food sensitivities. Leaky gut is exceedingly common in autoimmune patients, and it increases the likelihood of developing food allergies and sensitivities. By removing seeds and nuts from the diet during the elimination phase, one is better able to determine if a sensitivity exists.

In addition, the fiber in nuts and seeds can contribute to gut irritation for some people.

If there is no sensitivity – then these can be a wonderful addition to healthy plant oils, fibre and protein in your diet.

### **Nightshades**

Nightshades contain digestion-resistant and gut-irritating lectins, saponins, and capsaicin (a steroidal stimulant) that can contribute to leaky gut in some patients, as well as pass through the gut lining and contribute to systemic inflammation and immune reactivity.

### **Addressing subconscious beliefs about food**

For those battling a history of weight issues or an eating disorder, this diet can be filled with emotional triggers. In these cases I highly recommend support for underlying subconscious beliefs about food, eating, and your body. Ideas include hypnotherapy, emotional freedom technique (EFT) workshops or instruction, guided meditations and visualizations. You will find plenty of instruction online, and I can recommend support like psychologist, counselors and trained nutrition experts.

Subconscious beliefs aside, many are pleasantly surprised to find cravings and obsessions with food diminish or disappear once they remove immune reactive foods, stabilize blood sugar, and eat a nutrient-dense diet.

Many embarking on this diet are entering new territories of food. You may need to shop at different stores or order things online.



## AUTOIMMUNE DIET RESOURCES & ONGOING SUPPORT:

The AIR program can seem daunting at first, and planning is essential to success. Fortunately, ample support exists on the internet today for a diet such as this. There are online “tribes” for many variations of diet including: AIP, Paleo, Primal, GAPS, and SCD.

You must have the right foods on hand at all times; it’s helpful to batch cook so you have meals at hand and are not tempted to fall ‘off the wagon’. Thankfully, there are now plenty of great websites that offer recipes compliant with the autoimmune diet, also called the “*Autoimmune Protocol*” or AIP.

This dietary and lifestyle protocol is powerful on its own, however to boost the repair and recovery effects, it is important to work with a qualified healthcare practitioner who understands the connections between gut health and the brain, immune system, and endocrine system. Certain supportive supplements and nutrients can provide you significant support and aid in the process of repair and recovery, as well as unwind self-perpetuating inflammatory cycles in the gut and body.

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