

Low-Fat, Whole-foods, Plant-based “Paddison Program” Diet And Lifestyle Approach For Rheumatoid Arthritis: A Guide For Rheumatologists

ABSTRACT

There is an ever-increasing body of evidence that supports the health advantages of plant-based nutrition. Working with a modified 'Paddison Program' version of this dietary framework, along with a strong daily exercise plan, enabled the author of this report to recover from crippling RA and become symptom free and drug free long term¹ and help many others achieve life-changing results rarely witnessed with this condition² The objective of this report is to provide published evidence of the impact of lifestyle choices on RA disease progression, highlighting the link between gut health and disease activity, and to encourage medical practitioners to encourage safe, healthy lifestyle habits for their patients to minimise their disease perpetuation.

SUMMARY

Every patient needs to eat, and eat they will. So why not encourage them to eat in a way that supports their overall health? Despite popular belief that diet plays little role in RA outcome, the truth is that diet plays a dominant role, and changes to diet create rapid changes in patient symptoms. The table below explores the interaction between the BLAAME (bacteria, leaky gut, acidosis, acid levels in the stomach, mucosal lining integrity and enzymes) with disease severity.

Issues: BLAAME	Description	Cause	Natural Solution (Effective)	Supplement Solution (Mildly Effective)
Bacteria	<p>Autoimmune disease are dramatically influenced by gut bacteria³ In cases of Rheumatoid Arthritis (RA), newly diagnosed patients have much higher presence of certain gut bacteria⁴, more pathogenic gut bacteria⁵, and lower levels of healthy bifidobacteria⁶ than controls.</p> <p>Established RA patients commonly have small intestinal bacterial overgrowth, and the severity of RA symptoms are proportional to the bacterial overgrowth⁷ A vegan diet changes the faecal microbial flora in RA patients, and changes in the faecal flora are associated with improvement in RA activity⁸</p> <p>Likewise, in other autoimmune conditions, correlation has been validated between the altered intestinal microbiota composition with the onset of</p>	<p>Diet has a huge impact on gut bacteria and therefore immune function^{13 14 15}</p> <p>Antibiotics can permanently change the gut flora¹⁶ and even a single use can set a platform for pathogenic bacteria¹⁷ and rapidly reduce bacterial diversity¹⁸</p>	<p>Prebiotics (bacteria-friendly foods) such as leafy greens and all plant foods^{19 20 21}</p> <p>Fermented foods (bacteria-rich foods) such as miso paste, sauerkraut, kefir.²²</p> <p>23 24</p> <p>Exercise [not endurance ex.²⁵] improves microbiome^{26 27 28 29}</p> <p>30 31 32</p> <p>Brain and gut microbiome are linked in a functional axis;³³ improving either improves immune control</p>	<p>Probiotic Supplements have been shown to reduce RA symptoms via restoration of the gut microbiome^{34 35}</p> <p>36 37 38 39 Coslon</p>

	<p>Type 1 Diabetes ⁹</p> <p>While bacterial diversity is associated with health¹⁰, Psoriatic Arthritis (PsA) patients have less gut bacteria, and both PsA ¹¹ and Crohns patients ¹² have less diversity than controls.</p>			
Leaky Gut	<p>Intestinal permeability or 'leaky gut' is associated with Rheumatoid Arthritis ⁴⁰</p> <p>This process involves undigested food particles or bacteria leaking into the bloodstream, creating a cross reactivity to the body's own tissues.⁴¹ The presence of joint inflammation means more gut inflammation ^{42 43 44} Gut inflammation creates gut lesions, furthering more joint inflammation ⁴⁵</p> <p>Biopsies of intestinal tissue of RA sufferers show a partial or complete loss of the epithelium. ⁴⁶ If the leaky gut can be reversed by re-establishing the intestinal barrier then autoimmune diseases can be arrested ⁴⁷</p>	<p>Systemic inflammation causes increased intestinal permeability ⁴⁸, creating a viscous cycle in many RA patients.</p> <p>NSAID's are a major cause ^{49 50 51 52 53 54}</p> <p>Prednisone causes leaky gut in just five low dosages, either IV or tablet form ⁵⁵</p> <p>Methotrexate^{56 57}</p> <p>Stress ^{58 59 60}</p>	<p>Avoidance of aggravators, heals naturally, cabbage juice and other NRF2 promoters ^{61 62 63 64 65 66}</p> <p>Prebiotic fructans ^{67 68}</p> <p>Exercise ^{69 70 71 72}</p>	<p>Probiotics improve barrier integrity ^{73 74 75}</p> <p>L-Glutamine supplementation can improve gut permeability ^{76 77 78 79 80 81 82 83}</p> <p>Curcumin ^{84 85 86}</p> <p>Arginine ^{87 88}</p>
Acid Secretion Deficiency (Stomach)	<p>RA sufferers have a high frequency of low gastric acid secretion⁸⁹</p> <p>Low HCL equates to poor protein digestion. Undigested proteins leaking into the blood can trigger self-attack on the joint lining through molecular mimicry ⁹⁰</p> <p>Low HCL contributes to the small intestinal bacterial overgrowth ^{91 92} (as described above)</p> <p>Low HCL means decreased absorption of ferric iron ⁹³ possibly perpetuating anaemia, along with other minerals and trace elements ⁹⁴ exacerbating malnutrition (see Mucosal lining below).</p>	<p>Stress ^{95 96 97} and Autonomic imbalance ^{98 99 100 101}</p>	<p>Celery juice ^{102 103}</p> <p>oatmeal (later),</p> <p>Apple Cider Vinegar</p> <p>Meditation ¹⁰⁴</p> <p>Alternate nostril breathing ¹⁰⁵ to improve vagus, which can help improve gastric acidity</p> <p>Yoga ^{106 107}</p>	<p>Betaine</p> <p>Hydrochloride ^{108 109 110}</p>
Acidosis	<p>The Western diet develops a diet-induced low-grade systemic metabolic</p>	<p>Western diet, stress, all</p>	<p>Plant-based "Phase 3" foods in the</p>	<p>RA symptoms improved from</p>

	<p>acidosis ¹¹¹</p> <p>We become more acidic as we age due to declined renal function (kidneys) ¹¹²</p> <p>The synovial fluid in RA patients is too acidic, associated with more inflammation ^{113 114}</p> <p>The most influencing factors on acid/alkaline balance are protein (acid forming) and potassium (alkaline forming) ¹¹⁵</p>	<p>medications, poor respiration ^{116 117}</p> <p>^{118 119 120 121} and age ^{122 123}</p>	<p>Paddison Program are all alkaline forming, to arrest acidosis: Buckwheat, Quinoa, Sweet potato, greens, seaweed</p> <p>Celery and & Cucumber juice ¹²⁴</p> <p>^{125 126 127}</p> <p>Polyphenol-rich foods such as olives, citrus, grapes, green tea that also target TNF ^{128 129 130}</p>	<p>alkalizing minerals supplementation ¹³¹ and potassium supplementation ^{132 133}</p>
Mucosal Lining	<p>Nutrients are absorbed in the mucosal lining which also acts as protective gut barrier. A depleted mucosal lining leads to a state of malnutrition in RA patients ¹³⁴ and the nutritional status/gut health and RA severity are inversely related. ¹³⁵</p>	<p>Prednisone, NSAIDs ^{136 137 138}</p> <p>¹³⁹</p> <p>Stress, causing autonomic imbalance and fight-or-flight system dominance ¹⁴⁰</p>	<p>Counteract malnutrition with leafy green vegetables which are rich in macro/micro nutrients ^{141 142 143}</p> <p>Okra, Oatmeal, Brown Rice may help restore mucosal lining via microbiome benefits ¹⁴⁴</p>	<p>Curcumin ^{145 146}</p> <p>¹⁴⁷</p> <p>Glutamine ^{148 149}</p>
Enzymes	<p>Enzymes are required for all digestive and metabolic activity in the body ¹⁵⁰</p> <p>Digestive enzymes are depleted with age, but can be accessed through foods</p>	<p>Western Diet</p>	<p>Sprouted nuts and seeds, raw honey, green juices, all raw foods, pineapple, papaya, Miso ¹⁵¹</p>	<p>Bromelain, papain, nattokinase ¹⁵²</p>

FAQ's

HAS LEAKY GUT EVER BEEN PROVEN?

The term “leaky gut” has become increasingly common in medical research, frequently appearing in the most prestigious publications. A review of the literature reveals a growing consensus that the shift in microbiome demographics and intestinal permeability play a causative role in immune alteration towards an inflamed or autoimmune disease state.

Here's what some leading researchers are publishing in the leading medical journals:

International Journal of Clinical and Experimental Pathology: “Autoimmune hepatitis is associated with leaky gut and intestinal microbiome dysbiosis. The impaired intestinal barrier may play an important role in the pathogenesis of autoimmune hepatitis”¹⁵³

Therapeutic Advances in Gastroenterology: “In health, homeostasis exists between the intestinal microbiome, mucosal barrier, and immune system. In irritable bowel disease, this homeostasis is disrupted leading to durable alterations in the intestinal microbiome (dysbiosis), disrupted barrier function (leaky gut), and immune system activation (inflammation)”¹⁵⁴

FEBS Letters: “these studies suggest that the intestine may be a critical organ in triggering disease through altered immune homeostasis and a leaky gut with proinflammatory conditions may be an event that begins before the actual onset of clinical phenotype”¹⁵⁵

Journal of Internal Medicine: “In addition, a leaky gut mucosa can trigger systemic inflammation mediating peripheral insulin resistance that together with a blunted incretin response aggravates the hyperglycaemic state”¹⁵⁶

American Journal of Clinical Nutrition: “The data suggest that a leaky gut barrier is linked with liver steatosis and could be a new target for future steatosis therapies.”¹⁵⁷

Pediatric Diabetes: “Increasing evidence, both functional and morphological, supports the concept of increased intestinal permeability as an intrinsic characteristic of type 1 diabetes (T1D) in both humans and animal models of the disease.”¹⁵⁸

WHAT ABOUT NUTRITIONAL DEFICIENCIES?

Although nutrient deficiency is a primary concern for many people when considering plant-based eating, the Academy of Nutrition and Dietetics states¹⁵⁹ that “vegetarian diets, including total vegetarian or vegan diets, are healthful, nutritionally adequate, and may provide health benefits in the prevention and treatment of certain diseases.” The Academy’s position paper goes on to conclude that “well-planned vegetarian diets are appropriate for individuals during all stages of the life cycle, including pregnancy, lactation, infancy, childhood, and adolescence, and for athletes.” Plant-based diets, including calorie-restricted, weight-loss diets, have been found to be more nutritionally sound than typical dietary patterns.¹⁶⁰ During the Paddison Program 'Baseline Phase' it is possible to meet, and usually exceed, all nutritional requirements except vitamin B12 even though the range of foods is relatively small.¹⁶¹ Supplemental B12 is recommended.

ARE THERE OTHER BENEFITS?

It is now well established that RA is associated with increases in both morbidity and mortality compared with the general population. RA increases the risk of cardiovascular (CV) mortality by up to 50% compared with the general population¹⁶²

¹⁶³ ¹⁶⁴ Plant-based diets have been associated with lowering overall and ischemic heart disease mortality¹⁶⁵ Furthermore, a plant based diet have also been associated with sustainable weight management¹⁶⁶ reducing medication needs ¹⁶⁷ ¹⁶⁸¹⁶⁹; lowering the risk for most chronic diseases ¹⁷⁰ ¹⁷¹; decreasing the incidence and severity of high-risk conditions, including obesity¹⁷², hypertension ¹⁷³, hyperlipidemia and hyperglycemia¹⁷⁴, and even possibly reversing advanced coronary artery disease ¹⁷⁵ ¹⁷⁶and type 2 diabetes ¹⁷⁷.

ARE THERE ANY DANGERS, RISKS OR CONTRAINDICATIONS?

- The first two days of the Paddison Program is a 2 day cleanse. If patients are using medications that must be taken with food, these two days should be skipped.
- High blood pressure can usually resolve itself within a few days to a few weeks. Patients on high blood pressure medications should be made aware of this, so as to be monitored closely and avoid potential overmedication and be given guidelines about their medication dosages should their blood pressure comes back to normal.
- Patients eating an all-plant diet should consume a B12 supplement to avoid potential deficiency.

SUMMARY

A whole-foods, low-fat, plant based (vegan) diet is the ideal approach for a patient with Rheumatoid Arthritis. Succinctly stated by authors of this British Journal of Rheumatology study “We conclude that a vegan diet changes the faecal microbial flora in RA patients, and changes in the faecal flora are associated with improvement in RA activity”. [8] The Paddison Program for Rheumatoid Arthritis builds on the successful vegan dietary framework and adds evidence-based modifications to enhance these improvements to gastrointestinal health and intestinal barrier repair. For more information visit www.paddisonprogram.com

- 1 [Clint Paddison TEDx Presentation](#)
- 2 www.paddisonprogram.com/testimonials
- 3 "The gut microbiota shapes intestinal immune responses during health and disease" *Nature Reviews Immunology* 9, 313–323 (1 May 2009) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4095778/>
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