

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 This report provides published evidence of the impact of lifestyle choices on RA disease progression, highlighting the link between gut health and disease activity, and aims to give medical practitioners the confidence to encourage a sensible, safe, whole-foods plant based diet for their patients, in parallel to existing medical intervention, to minimise their patients symptoms.

SUMMARY

Popular belief in the medical community is that diet plays little role in RA outcome, and that there is little published evidence to support dietary interventions. However, the truth is that diet plays a dominant role, and changes to healthy diet create rapid and dramatic improvement in patient symptoms. What we eat influences several of the most important components of our immune system, all of which begin in our digestive tract.

The table below explores the interaction between our food, RA medications, exercise, stress levels and supplements on these crucial components of autoimmunity – the “BLAAME” (bacteria, leaky gut, acidosis, acid levels in the stomach, mucosal lining integrity and enzymes).

| Issues: BLAAME | Description | Cause | Natural Solution (Effective) | Supplement Solution (Mildly Effective) |
|----------------|--|---|--|---|
| Bacteria | Autoimmune disease are dramatically influenced by gut bacteria ³ In cases of Rheumatoid Arthritis (RA), newly diagnosed patients have much higher presence of certain gut bacteria ⁴ , more pathogenic gut bacteria ⁵ , and lower levels of healthy bifidobacteria ⁶ than controls. Established RA patients commonly have small intestinal bacterial overgrowth, and the severity of RA symptoms are proportional to the bacterial overgrowth ⁷ 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 Likewise, in other autoimmune conditions, correlation has been validated between the altered intestinal microbiota composition with the onset of Type 1 Diabetes ⁹ While bacterial diversity is associated with health ¹⁰ , Psoriatic Arthritis (PsA) patients have less gut bacteria, and PsA ¹¹ . Crohns ¹² and Ulcerative Colitis ¹³ patients | Diet has a huge impact on gut bacteria and therefore immune function ^{14 15 16} Antibiotics can permanently change the gut flora ¹⁷ and even a single use can set a platform for pathogenic bacteria ¹⁸ and rapidly reduce bacterial diversity ¹⁹ | Prebiotics (bacteria-friendly foods) such as leafy greens and all plant foods ^{20 21 22} Fermented foods (bacteria-rich foods) such as miso paste, sauerkraut, kefir. ^{23 24 25} Exercise [not endurance ex. ²⁶] improves microbiome ^{27 28 29 30 31 32 33} Brain and gut microbiome are linked in a functional axis; ³⁴ improving either improves immune control | Probiotic Supplements have been shown to reduce RA symptoms via restoration of the gut microbiome ^{35 36 37 38 39 40} Coslon |

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| | have less diversity than controls. | | | |
| Leaky Gut | Intestinal permeability or 'leaky gut' is associated with Rheumatoid Arthritis ⁴¹ This process involves undigested food particles or bacteria leaking into the bloodstream, creating a cross reactivity to the body's own tissues. ^{42 43} The presence of joint inflammation means more gut inflammation ^{44 45 46} Gut inflammation creates gut lesions, furthering more joint inflammation ⁴⁷ Biopsies of intestinal tissue of RA sufferers show a partial or complete loss of the epithelium. ⁴⁸ If the leaky gut can be reversed by re-establishing the intestinal barrier then autoimmune diseases can be arrested ⁴⁹ | Relapse of symptoms in Increased intestinal permeability precedes the onset of Crohn's disease ^{50 51} , and is increased during relapses ⁵² Systemic inflammation causes increased intestinal permeability ⁵³ , creating a viscous cycle in many RA patients as more inflammation creates more leaky gut. NSAID's are a major cause ^{54 55 56 57 58 59 60} Prednisone causes leaky gut in just five low dosages, either IV or tablet form ⁶¹ and high doses (8.5+ mg/day) can cause macroscopic mucosal lesions ⁶² Methotrexate ^{63 64} Stress ^{65 66 67} | Avoidance of aggravators will allow healing naturally. As commensal bacterial colonies re-establish, their secretions repair tight junctions ⁶⁸ cabbage juice and other NRF2 promoters ^{69 70 71 72 73 74} Prebiotic fructans ^{75 76} Exercise ^{77 78 79 80} | Probiotics improve barrier integrity ^{81 82 83} L-Glutamine supplementation can improve gut permeability ^{84 85 86 87 88 89 90 91} Curcumin ^{92 93 94} Arginine ^{95 96} |
| Acid Secretion Deficiency (Stomach) | RA sufferers have a high frequency of low gastric acid secretion ⁹⁷ Low HCL equates to poor protein digestion. Undigested proteins leaking into the blood can trigger self-attack on the joint lining through molecular mimicry ⁹⁸ Low HCL contributes to the small intestinal bacterial overgrowth ^{99 100} (as described above) Low HCL means decreased absorption of ferric iron ¹⁰¹ possibly perpetuating anaemia, along with other minerals and trace elements ¹⁰² exacerbating malnutrition (see Mucosal lining below). | Stress ^{103 104 105} and Autonomic imbalance ^{106 107 108 109} | Celery juice ^{110 111} oatmeal (later), Apple Cider Vinegar Meditation ¹¹² Alternate nostril breathing ¹¹³ to improve vagus, which can help improve gastric acidity Yoga ^{114 115} | Betaine Hydrochloride ^{116 117 118} |
| Acidosis | The Western diet develops a diet-induced low-grade systemic metabolic acidosis ¹¹⁹ We become more acidic as we age due to declined renal function (kidneys) ¹²⁰ The synovial fluid in RA patients is too acidic, associated with more inflammation ^{121 122} | Western diet, stress, all medications, poor respiration ^{124 125 126 127 128 129} and age ^{130 131} | Plant-based "Phase 3" foods in the Paddison Program are all alkaline forming, to arrest acidosis: Buckwheat, Quinoa, Sweet potato, greens, seaweed Celery and & | RA symptoms improved from alkalinizing minerals supplementation ¹³⁹ and potassium supplementation ^{140 141} |

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| | The most influencing factors on acid/alkaline balance are protein (acid forming) and potassium (alkaline forming) ¹²³ | | Cucumber juice ¹³² ^{133 134 135} Polyphenol-rich foods such as olives, citrus, grapes, green tea that also target TNF ^{136 137 138} | |
| Mucosal Lining | 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 ¹⁴² and the nutritional status/gut health and RA severity are inversely related. ¹⁴³ | Prednisone, NSAIDs ¹⁴⁴ ^{145 146 147} Stress, causing autonomic imbalance and fight-or-flight system dominance ¹⁴⁸ | Counteract malnutrition with leafy green vegetables which are rich in macro/micro nutrients ^{149 150 151} Okra, Oatmeal, Brown Rice may help restore mucosal lining via microbiome benefits ¹⁵² | Curcumin ^{153 154} ¹⁵⁵ Glutamine ^{156 157} |
| Enzymes | Enzymes are required for all digestive and metabolic activity in the body ¹⁵⁸ Digestive enzymes are depleted with age, but can be accessed through foods | Western Diet | Sprouted nuts and seeds, raw honey, green juices, all raw foods, pineapple, papaya, Miso ¹⁵⁹ | Bromelain, papain, nattokinase ¹⁶⁰ |
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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"¹⁶¹

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)"¹⁶²

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”¹⁶³

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”¹⁶⁴

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.”¹⁶⁵

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.”¹⁶⁶

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 states¹⁶⁷ 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.¹⁶⁸ 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.¹⁶⁹ 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 population¹⁷⁰
¹⁷¹ ¹⁷² Plant-based diets have been associated with lowering overall and ischemic heart disease mortality¹⁷³ Furthermore, a plant based diet have also been associated with sustainable weight management¹⁷⁴ reducing medication needs¹⁷⁵ ¹⁷⁶
¹⁷⁷; lowering the risk for most chronic diseases¹⁷⁸ ¹⁷⁹; decreasing the incidence and severity of high-risk conditions, including obesity¹⁸⁰, hypertension¹⁸¹, hyperlipidemia and hyperglycemia¹⁸², and even possibly reversing advanced coronary artery disease¹⁸³ ¹⁸⁴and type 2 diabetes¹⁸⁵. A plant-based diet also alleviates the symptoms of osteoarthritis¹⁸⁶ which commonly results in joints afflicted with RA.

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. This form of diet reduces serum CRP by around 30%¹⁸⁷ Succinctly stated in this British Journal of Rheumatology paper “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. Whole foods, plant-based diets can be entirely safe, nutritionally complete, reduce RA symptoms, and reduce the risk of patients developing other chronic diseases. For more information visit

www.paddisonprogram.com

- 1 [Clint Paddison TEDx Presentation](#)
- 2 www.paddisonprogram.com/testimonials
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