



The  
**Nutritional Foundation**  
How to Reduce Inflammation  
with Diet and Supplementation



# Personal Assessment

## THE INFLAMMATION CHECKLIST



### HOW MANY FACTORS APPLY TO YOU?

#### Signs and Symptoms

- I have chronic aches and pains, such as: back pain, neck pain, headaches, or general muscle and/or joint soreness.
- I am overweight.
- It is hard for me to lose weight/fat.
- I can grab too much fat around my waist.
- I do not exercise regularly.
- I don't feel well when I exercise.
- I have difficulty recovering from moderate to light exercise
- I am physically lethargic.
- I am mentally lethargic and feel rundown and depressed more than I would like.
- I look old and/or feel old for my age.
- My skin looks old and is sagging.
- I suffer from one or more of the following:  
Frequent cold symptoms, frequent flu symptoms, frequent allergies, arthritis, fibromyalgia, chronic fatigue syndrome, sinusitis, acne, asthma, digestive conditions, dysmenorrhea, endometriosis, Alzheimer's disease, Parkinson's disease, multiple sclerosis, cancer, heart disease, osteoporosis, hypertension, depression, the insulin resistance syndrome (pre-diabetes), or diabetes.

#### Dietary Factors

- I regularly take anti-inflammatory or anti-pain medications, such as: ibuprofen, aspirin, or Tylenol®, or similar prescription drugs.
- I regularly eat refined sugar.  
including table sugar, desserts, soda, sweetened drinks, etc.
- I regularly eat grain products, such as: white bread, whole wheat bread, pasta, cereal, pretzels, crackers, and any other product made with grains or flours from grains, which includes most desserts and packaged snacks.
- I regularly eat partially hydrogenated oils (trans fats) found in most margarines, deep fried foods (French fries, etc.) and most packaged foods.
- I regularly eat corn oil, safflower oil, sunflower oil, cottonseed oil, soybean oil, peanut oil and foods with oils such as mayonnaise, tartar sauce, margarine, and nearly all salad dressings.
- I regularly eat meat and eggs from grain-fed animals. (regular supermarket brands)
- I regularly drink or eat dairy products.  
in greater than condiment size
- I regularly consume soy or soy products, or eat them in place of fruits and vegetables.

Body Mass Index (BMI) is a standardized ratio of weight to height, and is often used as a general health indicator.

Your BMI can be calculated by dividing your weight (in kilograms) by the square of your height (in meters)

**Underweight** = <18.5

**Normal weight** = 18.5-24.9

**Overweight** = 25-29.9

**Obesity** = BMI of 30 or greater

For a FREE online BMI calculator you can visit [www.nhlbisupport.com/bmi](http://www.nhlbisupport.com/bmi)

Name: \_\_\_\_\_ Date: \_\_\_\_\_

# DEFLAMING VS INFLAMMING

As you most likely discovered by completing the previous page's survey, we all suffer from inflammation issues to varying degrees. Each of us needs to focus on reducing our individual inflammation issues and diet is the foundation to reducing inflammation or "deflaming". This booklet will outline a no-nonsense approach to healthy, anti-inflammatory eating that will help you to avoid unhealthy, pro-inflammatory foods that are inflaming.<sup>1-6</sup>

## PRO-INFLAMMATORY FOODS



- **All Grains and Grain Products**

Including white bread, whole wheat bread, pasta, cereal, pretzels, crackers and any other product made with grains or flours from grains. This also includes most deserts and packaged foods.

- **Partially Hydrogenated Oils (*trans fats*)**

Found in margarine, deep fried foods (French fries, etc) and most packaged foods.

- **Seed and Legume Oils (*inaccurately called vegetable oils*)**

Corn oil, safflower oil, sunflower oil, cottonseed oil, peanut oil, soybean oil and foods made with these oils such as mayonnaise, tartar sauce, margarine, salad dressings and many packaged foods.

These oils/foods contain extremely high levels of inflammatory omega-6 fatty acids.

- **Soda and Sugar**

- **Dairy and Soy (*when consumed as staples*)**

- **Meat and Eggs From Grain Fed Animals**

## ANTI-INFLAMMATORY FOODS

- **All Fruits and Vegetables** Eaten raw or lightly cooked.

- **Red and Sweet Potatoes**

Eaten with protein such as eggs, fish, meat or fowl.

- **Fresh Fish** Avoid farm-raised tilapia, catfish, basa and bronzini

- they have elevated levels of inflammatory omega-6 fatty acids.

- **Meat, Chicken, Eggs from Grass-Fed Animals**

Eatwild.com is a website that lists producers of grass-fed animals

Do the best you can to get lean cuts of regular meats otherwise.

- **Wild Game Including Deer, Elk, etc.**

Animals that feed on vegetation in the wild.

- **Anti-Inflammatory Omega-3 Eggs and/or Egg Whites**

- **Raw Nuts** Such as almonds, cashews, walnuts, hazelnuts, pistachios, Brazil nuts, and macadamia nuts.

- **Spices** Such as ginger, turmeric, garlic, dill, oregano, coriander, fennel, red chili pepper, basil, rosemary, etc. If you wish, you can add a little sea salt.

- **Oils & Fats** Moderate amounts of organic butter, coconut oil and extra virgin olive oil. Butter from grass fed cows is also a healthy choice.

- **Salad Dressing Choices** An example is extra virgin olive oil, balsamic vinegar or lemon juice, mustard, along with spices.

- **Beverages** Water, organic green tea, and if you choose to drink alcohol, red wine and stout beer are the best choices.



# HEALTH VS DISEASE

It can be frustrating and depressing to discover that so many foods are pro-inflammatory, leaving you wondering what to eat. More depressing is suffering from many of the numerous diseases and conditions associated with inflammation: chronic pain, arthritis, fibromyalgia, chronic fatigue syndrome, sinusitis, allergies, acne, asthma, digestive conditions, flu symptoms, dysmenorrhea, endometriosis, Alzheimer's disease, Parkinson's disease, multiple sclerosis, cancer, heart disease, osteoporosis, hypertension, depression, insulin resistance syndrome (pre-diabetes), and diabetes.

In reality, "everything in moderation" is a poor term when referring to diet. With every bite, we either increase or reduce inflammation. If you are

fortunate and have "good" genes, you may handle pro-inflammatory foods better than your family members or friends. The problem is most inflammatory diseases develop slowly and without symptoms until it is too late. We need to be careful about consuming pro-inflammatory foods and not take for granted what appears to be current good health. The fewer inflammatory foods we eat, the less inflammation we will have.

## Why Grains Inflamm

### History

Consider the fact that grains have been consumed for a short period of man's time on earth. The use of grain products for food existed for a brief 10,000 years out of the 2 million years in the history of early and modern man. Grains, refined sugar, partially hydrogenated fats, vegetable & seed oils as well as other foods were not consumed. Humans are genetically adapted to eat fruit, vegetables, nuts, fish, fowl and meat; foods not related to any chronic disease.<sup>7</sup> Our genetic code is not that different from our predecessors but our food definitely is. After grains were adopted as a staple food that replaced animal proteins a number of negative health outcomes occurred including the following:

- Increased infant mortality
- Reduced lifespan
- Increases in infectious diseases
- Increase in iron deficiency anemia
- Increased number of dental cavities and enamel defects
- Increased osteoporosis, osteomalacia and other bone mineral disorders

### Gluten

Many different biochemical components make grains inflammatory. The most notorious is a protein called gluten, which is found in wheat, rye, barley, barley malt, semolina, spelt, kamut, and cous cous. Gluten may cause many symptoms and conditions ranging from Celiac (a disabling digestive disease) to more common conditions such as headaches.<sup>7</sup> Researchers randomly selected 200 disease-free individuals to access anti-gluten antibody levels. 15% of the subjects were severely effected by gluten and suffered from headaches, chronic fatigue, regular digestive complaints, anemic changes and showed no signs of having celiac disease.<sup>8</sup>

### Lectins

All grains and legumes (beans, lentils, soy) contain sugar proteins known as lectins that can cause digestive system inflammation.<sup>9</sup> Lectins are absorbed through digestion and bind to the surface of many different types of cells in the body. While details are not known, researchers state that, "there is now abundant evidence that lectins can cause disease in man and animals," such as arthritis, glomerulonephritis, psoriasis, multiple sclerosis, retinitis, cataracts, congenital malformations, infertility, allergies and autoimmune problems.<sup>10</sup>

### Other Problems with Grains

As you may know, calcium is important for bone health. Grains contain phytic acid which is known to reduce the absorption of calcium, magnesium, iron and zinc. Grains also promote the pH of our body to become more acidic, which is known to be inflammatory. Finally, grains contain higher amounts of fatty acid biochemicals called omega-6 fatty acids which cause inflammation.<sup>7</sup> This is in contrast to fatty acid biochemicals called omega-3 fatty acids which are prevalent in fish and green vegetables that reduce inflammation.

### Two Sides to a "Health Food"

Are you wondering why grains are heavily promoted as good for us? First, whole grains do contain nutrients and fiber which are healthy and anti-inflammatory. Unfortunately, these benefits most likely do not outweigh the problems with grains previously discussed. We can obtain the nutrients and fiber required by eating good meats, fruits, vegetables, nuts and using supplements wisely. Second, from an economic standpoint, grains are inexpensive and profitable to store and manufacture. This is why they are found everywhere in fast foods, snacks, easy to prepare meals, packaged foods, etc.

# A BASIC PLAN FOR HEALTH

You will have to make a choice regarding foods, will they be pro-inflammatory or anti-inflammatory foods? If you do not have symptoms and feel wonderful, you need to decide if you want to risk regularly consuming pro-inflammatory foods that are known to cause significant health problems and disease. If you do suffer from any of the conditions previously mentioned, you may wish to see if pro-inflammatory foods are a cause. Commit to discovering how your health is influenced by the consumption of pro-inflammatory foods. Commit to at least 1 month of anti-inflammatory eating. Within a week to a month you are likely to feel a difference and know for sure how food affects your health. If you are very inflamed you may need 2-3 months.

## Meal Suggestions

### Breakfast



Omega-3 eggs or plain egg white omelet with vegetables or scrambled. A small portion of sautéed potatoes can be added. It is best to use organic virgin coconut oil for cooking eggs and potatoes; olive oil is the next best option.

If you wish to have oatmeal or grits, add a couple of tablespoons of ground up chia seeds, raisins or berries and use a little organic heavy cream.

Meal shake with your favorite fruit(s) such as banana, blueberries, etc., egg white or other low sugar protein powder. Other additions can be coconut with raw nuts. **Make sure to use water for blending.**

### Lunch & Dinner



Chicken, fish or steak Caesar or garden salad **without** croutons is a meal with appropriate portions of vegetables and proteins. This meal can be changed many different ways for variety.

Italian marinara sauce, favorite protein with vegetables **instead of pasta noodles.**

When you feel like you have room for dessert, eat more vegetables or wait to see if you are indeed still hungry. If so, have your favorite fruit or a healthy dessert.

Soups with healthy broths, stocked with vegetables & healthy meats **instead of pasta noodles & rice.**

### Snacks/Desserts



1-2 tbsp of organic heavy cream over frozen cherries, blueberries or other fruit.

1-2 tbsp of organic heavy cream over a combination of dried coconut, dates, raisins and raw nuts.

Dark chocolate, raisins along with raw almonds, or other recommended nuts.

Fruits alone or as a fruit salad.

Recommended nuts with organic yogurt, dark chocolate shavings & chia seeds.

Fruit shake blends frozen into popsicle sticks for the kids.



In a nutshell, your basic anti-inflammatory plan is to eat mostly fruits, vegetables, nuts, fish, chicken and healthy meat. Drink plenty of clean water and appropriately exercise as much as you can.

In addition to diet and exercise, nutritional supplements can be helpful. In this booklet 4 Essential Supplements are described, as well as additional supportive supplements. The supplements function to improve cellular energy function, prevent free radical activity, and reduce inflammation.

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2. Seaman DR. Nutritional considerations for inflammation and pain. In: Liebenson CL. Editor. Rehabilitation of the spine: a practitioners manual. 2nd ed. Philadelphia: Lippincott Williams & Wilkins; 2006. p.728-740
3. Cordain L. The paleodiet. New York: John Wiley & Sons; 2002
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# 4

## ESSENTIAL SUPPLEMENTS

### Nutritional Support For The Anti-Inflammatory Diet

Research continually supports the need to bolster a healthy diet with nutritional supplements to promote health and prevent disease. Inflammation reduction, antioxidant protection and cellular health are mechanisms of many supplement products. The following supplements are recommended to promote a healthy inflammatory response and support specific nutritional needs.

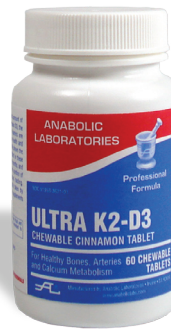


#### Multivitamin and Minerals w/o Iron

The modern diet is known to be deficient in numerous micronutrients. Supplementation with a multivitamin/mineral can help address many of these deficiencies.

Low micronutrient intake may accelerate the aging process and promote the diseases of aging and other chronic diseases. Use of a multivitamin is thought by many authorities to be a wise preventive strategy in addition to a healthy diet. Iron should be taken only by those who have an iron deficiency.

Ames BN. Low micronutrient intake may accelerate the degenerative diseases of aging through allocation of scarce micronutrients by triage. *Proc Natl Acad Sci.* 2006; 103(47):17589-94.



#### Vitamin D3

We derive virtually no vitamin D from the diet and we are supposed to get vitamin D from the sun. Sunscreen with an SPF of 8 reduces vitamin D production by 95%. Subsequently, most Americans are chronically deficient in vitamin D, which promotes a chronic inflammatory state that is associated with expression of numerous chronic diseases.

Vitamin D deficiency is associated with chronic musculoskeletal pain expression, as well as numerous other diseases including osteoporosis, osteoarthritis, fibromyalgia, autoimmunity, heart disease, cancer, diabetes and depression.

The addition of vitamin K2 to vitamin D3 is designed to support cardiovascular health.

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#### Magnesium

Magnesium is chronically deficient in the modern diet and promotes a chronic inflammatory state. Magnesium deficiency is associated with diverse clinical manifestations including heart disease, high blood pressure, diabetes, and headaches. Some researchers have recommended that magnesium be added to the water supply because deficiency is associated with sudden death from heart disease, asthma, and neurological & psychiatric conditions.

Magnesium plays a crucial role in: glucose metabolism, cellular energy production (ATP), calcium transport, nerve signal conduction, and over 300 enzymatic reactions, some of which are involved in the maintenance of joint and bone health.

1. Ford ES, Mokdad AH. Dietary magnesium intake in a national sample of US adults. *J Nutr.* 2003; 133(9):2879-82.  
2. Bar-Dayan Y, Shoenfeld Y. Magnesium fortification of water. A possible step forward in preventive medicine? *Ann Med Interne (Paris).* 1997;148(6):440-4.



#### EPA/DHA from Fish Oil

Supplementing with omega-3 fatty acids (EPA/DHA) addresses the deficiency of omega-3s in the modern diet and helps balance our ratio of omega-6 to omega-3 fatty acids. Adequate omega-3 intake helps to balance inflammatory activity and promote health.

Adequate levels of omega-3 fatty acids help to promote joint and bone health, mental/emotional health, heart health, proper blood sugar regulation, nervous system health, and skin and eye health.

Simopoulos AT. The importance of the omega-6/omega-3 fatty acid ratio in cardiovascular disease and other chronic diseases. *Exp Biol Med.* 2008; 233:674-88.

# In Addition To The Essential Supplements

These Products Are Recommended To Address Your Additional Needs

## Digestive Support

The use of natural bacteria in supplement form may be beneficial to maintaining a healthy digestive tract.

### Probiotic Complete

Contains the beneficial intestinal bacteria (probiotics) *Lactobacillus acidophilus* and *Bifidobacterium lactis*. Supplementation with probiotics reduces intestinal inflammation and prevents harmful bacteria from damaging the digestive system. Less intestinal inflammation is thought to benefit the body in general.

### Digestive Complete

Contains digestive enzymes that can assist in proper digestion and assimilation of food.

## Fruit and Vegetable Supplements

### Premium Greens™

80% vegetable and 20% fruit mixture.

### Premium Red™

80% fruit and 20% vegetable mixture.

Each serving of powder has the antioxidant value of 10 servings of fruits and vegetables, as determined by the Oxygen Radical Absorbance Capacity (ORAC) method. for more information visit: [www.oracwatch.org](http://www.oracwatch.org)



## Acute Injury/Pain

### Zymain®

Helps to reduce inflammation after strains/sprains or an acute flare-up of neck or back pain. Zymain contains proteolytic enzymes that help degrade the proteins that can be produced in excess after an acute injury.

### Salizain™

A unique supplement that contains white willow bark, which is known to reduce back pain and is recommended by the American College of Physicians and the American Pain Society.

## Antioxidant & Anti-Aging

Contrary to popular belief, the best antioxidant and anti-aging supplements are coenzyme Q10, lipoic acid, and acetyl-L-carnitine.

### Coenzyme Q10 (CoQ10)

A "spark plug" for energy production in our cells, and as we age levels dramatically decrease. CoQ10 is unique because, in addition to producing cell energy, it also functions as an anti-oxidant to protect our cells. CoQ10 also plays an anti-aging role in skeletal muscle gene expression.

### ALA Orac-Plus (ALA = alpha-lipoic acid)

Another unique supplement that improves energy production and is an anti-oxidant. ALA also reduces inflammation and improves blood sugar regulation. The high ORAC fruit/vegetable extracts are additional forms of anti-oxidant nutrients.

### Acetyl-L-carnitine (ALCAR)

Can be used in addition to alpha-lipoic acid [ALA Orac-Plus]. ALCAR functions to improve cellular energy production by helping cells to better burn fats.



## ADDITIONAL SUPPLEMENT RECOMMENDATIONS

## Vitamin B Complex

### T.R.I. B-Plex™

Provides a unique controlled-release delivery system that mimics B-vitamin absorption from food. B-complex vitamins are required for cellular energy production and research suggests that B-vitamin supplementation may offer pain-reducing benefits.

## Bone Support

### Osatate™ (Hydroxyapatite Calcium)

Provides a calcium source that is derived from bone and includes additional trace minerals and collagen, and is thought to be the best calcium supplement for osteoporosis.

## Joint Support

### Glucosamine & Chondroitin Sulfate

A growing body of research demonstrates that supplemental glucosamine/chondroitin improves joint health. They are the building blocks of joints and connective tissues and also have anti-inflammatory activities. While used extensively for joint pain and osteoarthritis, it is also possible that glucosamine/chondroitin may help to prevent osteoarthritis, but more research is needed in this area.

## Chronic Inflammation Management

### Pro-Enz™

Contains extracts of ginger, turmeric, boswellia, rosemary, lemon bioflavonoids, and the enzyme bromelain. Research has demonstrated that each helps to reduce chronic inflammation, which helps to promote health and reduce chronic disease expression.

### High Allicin Garlic

Provides the anti-inflammatory component of garlic called allicin. High Allicin Garlic is odor free, so you get the benefits of garlic without the odor.

# Why Your Doctor Recommends Nutritional Supplements from Anabolic Laboratories



**FOR OVER 60 YEARS ANABOLIC LABS HAS BEEN MANUFACTURING  
NUTRITIONAL SUPPLEMENTS TO PHARMACEUTICAL STANDARDS.**



Anabolic Laboratories nutritional products exceed voluntary standards for manufacturing nutritional supplements. Founded in 1924, Anabolic Laboratories combines its expertise in pharmaceutical, Rx nutritional and nutritional supplements manufacturing to formulate and develop products utilizing many of the same **cGMP's** (Good Manufacturing Practices) mandated by the **USFDA** (United States Food and Drug Administration) for prescription and over the counter (OTC) pharmaceutical products.



*Anabolic Laboratories maintains good manufacturing practice certification for nutritional supplements from the Natural Products Association.*

*By following your doctor's advice, you can be confident you are meeting your nutritional needs.*

For more information on Anabolic Laboratories please visit:

**[www.anaboliclabs.com](http://www.anaboliclabs.com)**

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