

# The Deflaming Guidelines

## How to Reduce Inflammation with Diet and Supplements

The information contained in the Deflaming Guidelines is consistent with the information found at [www.deflame.com](http://www.deflame.com), the internet's most comprehensive website devoted to reducing inflammation with nutrition.

The focus of [deflame.com](http://deflame.com) and the Deflaming Guidelines is quite specific...to explain how to reduce a chronic inflammatory state with diet and nutritional supplements. This is an extremely important nutritional goal, as research now clearly demonstrates that our dietary habits can promote a state of chronic inflammation that leads to the expression of aches, pains, disability, and most chronic diseases, such as diabetes, heart disease, cancer, osteoarthritis, and neurological diseases such as Alzheimer's disease, Parkinson's disease and multiple sclerosis (1-7).

The Deflaming Guidelines are divided into five different sections.

### Part 1: The Inflammation Checklist

Find out how many inflammatory factors are active in your life at this moment. The goal is to have as few as possible.

### Part 2: Introduction to Basic Deflaming Concepts

Basic conceptual issues are discussed and simple steps to reducing inflammatory food consumption are introduced.

### Part 3: Why Grains Inflamm

The truth we must all deal with is that grains are simply not the appropriate food to eat as a staple food. Grains are best in condiment portions or not at all.

### Part 4: Foods and Dietary Suggestions to Fight Inflammation

Provided is a thorough list of the foods that are anti-inflammatory, as well as suggestions regarding meals.

### Part 5: Nutritional Supplements to Help Fight Inflammation

A simple and clear approach to supplementation is outlined, and supplement programs are presented.



**The Deflaming Guidelines work best when coupled with regular exercise.**

**Walking 1/2 hour to 1 hour a day is sufficient for many, while more intense exercise is preferred by others.**



\*\* An MP3 audio version of these guidelines is available at [www.deflame.com](http://www.deflame.com), in which key highlights are discussed.



## Part 1: The Inflammation Checklist

### How many inflammation factors apply to you?

- I have chronic aches and pains, such as back pain, neck pain, headaches, or general muscle and/or joint soreness.
- I regularly take anti-inflammatory or anti-pain medications, such as ibuprofen, aspirin, or Tylenol®, or a similar prescription drug.
- I regularly eat grains and 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 refined sugar (including desserts, sodas, sweetened drinks, etc.).
- I regularly eat partially hydrogenated oils (trans fats) found in most margarines, deep fried foods (French fries, etc.) and most all packaged foods.
- I regularly eat corn oil, safflower oil, sunflower oil, cottonseed oil, soybean oil, and foods made with these oils such as mayonnaise, tarter sauce, margarine, and nearly all salad dressings.
- I regularly eat cheese in more than condiment size portions.
- I regularly drink or eat dairy products in more than condiment size portions, or drink/eat in the place of fruits and vegetables.
- I regularly consume soy or soy products, or eat them in place of fruits and vegetables.
- I regularly eat meat and eggs from grain-fed animals (regular supermarket brands).
- I am overweight and/or it is hard for me to lose weight/fat.
- I can grab too much fat around my waist.
- I am physically lethargic.
- I do not exercise regularly.
- I do not feel well when I exercise or if I exercise a little more than I should, it is hard to recover.
- 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 am prone to cold, allergy, and flu symptoms.
- I am a smoker.
- I suffer from one or more of the following: 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, the insulin resistance syndrome (pre-diabetes), or diabetes.



BMI (Body Mass Index) [Determine BMI at <http://www.nhlbisupport.com/bmi/>]

Underweight = <18.5; Normal weight = 18.5-24.9; Overweight = 25-29.9; Obesity = 30 or greater

## Part 2: Introduction to Basic Deflaming Concepts

As you just discovered, we all suffer from inflammation issues to varying degrees. Therefore, each of us needs to focus on reducing our individual inflammation issues, and diet is the key to realizing this goal. The following foods cause inflammation; that is, they are pro-inflammatory and therefore, should be avoided (1-7).

- 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, which includes most desserts and packaged snacks.
- Partially hydrogenated oils (trans fats) found in margarine, deep fried foods (French fries, etc.) and most all packaged foods.
- 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.
- Soda and sugar are inflammatory. If you eat dairy or soy, they should be consumed as condiments, not staples.
- Meat and eggs from grain-fed animals (domesticated animal products). Modern meat is problematic because the animals are obese and unhealthy; they are loaded with saturated fats and contain too many pro-inflammatory omega-6 fatty acids. Grass-fed meat or wild game are our best choices. Otherwise, we should eat lean meat, skinless chicken, omega-3 eggs and fish (4). Lean cuts of meat and lean hamburger meat are available at most grocery stores, and even extra-lean is sometimes available.



Most of us find it somewhat distressing and/or depressing that so many foods are pro-inflammatory, and wonder what there is left to eat. However, far more depressing than making basic dietary changes is suffering from any of the numerous diseases and conditions caused by 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, the insulin resistance syndrome or syndrome X (pre-diabetes), and diabetes (1-7).

You need to decide how much pain and suffering you are willing to live with, and then, eat and exercise accordingly. The fewer inflammatory foods you eat, the less inflammation you will have and feel. No one will be perfect with their eating...we all just need to do your best. If you have a few weak moments or longer periods of time where you dine excessively on inflammatory foods, do not beat yourself up or become depressed. This happens to everyone, so simply re-commit yourself to the deflaming process.

The best eating thought to embrace is that, with every bite we take, we are either deflaming or inflaming. This is a fact we all must accept, so we should all do our best to eat mostly anti-inflammatory foods.

If you are fortunate and have "good" genes, you may be able to handle more inflammatory foods than some of your family members or friends. The problem is that most inflammatory diseases develop slowly and without symptoms...until it is far too late. Therefore, we all need to be careful about consuming pro-inflammatory foods and not take for granted what appears to be good health.

In a nutshell, all you need to do is eat mostly fruits, vegetables, nuts, fish, chicken, and lean meat. Eat until you begin to feel full and then stop. Take the key supplements and exercise more. There is no need to make deflaming a complicated or negative process, and this is illustrated by the many examples found in the Success Stories section at [deflame.com](http://deflame.com).



The next two pages discuss the problems with grains in more detail. Key issues will be addressed and common objections will be answered.

## Part 3: Why Grains Inflamm

Grain consumption is a sensitive subject for many individuals, which is why additional information is provided. Most people have eaten bread, pasta, and cereals their entire lives, and giving up grains can be psychologically traumatic for some, which illustrates the strong and often inappropriate emotional attachment that we have with food.



A goal should be to view eating as a mechanism to fuel the precious vehicle (your body) that conveys you throughout life. Remember, you can only trade in your motor vehicle, not your body vehicle. With this mindset, we are less likely to be opposed to making any changes that would benefit our body vehicle.

Many find it surprising that grains are a relatively new food from a historical perspective. The following foods were never consumed prior to 5,000-10,000 years ago: grains, pasta, cereal, soy, beans, dairy, refined sugar, partially hydrogenated fats, and seed oils, such as corn, safflower, cottonseed, sunflower, peanut, canola, and soybean oil (4,7). Mammals with a similar genetic code to ours inhabited the earth for 1,990,000 years before man appeared on earth. We must appreciate that our genes are not dissimilar from those that came before us; modern science has demonstrated this fact.

This means that humans are genetically adapted to eat fruits, vegetables, fish, fowl, meat, roots, tubers, and nuts. Consider also that there are no chronic diseases caused by eating these foods. No matter what disease you may suffer from, none of these foods must be eliminated from the diet. The same cannot be said for grains in particular. In a nutshell, grains contain several problematic substances including gluten, lectin, and phytates, and grains also promote inflammation by promoting body acidity, and disrupting proper blood sugar regulation.

### Gluten

Celiac disease is a disabling digestive condition that is caused by the gluten found in certain grains. Most notorious on the list of gluten grains is wheat; others include couscous, spelt, kamut, rye, and barley. Among the non-gluten grains are rice, wild rice, millet, and corn. A detailed list of gluten foods can be found at the Celiac Sprue Association's website ([www.csaceliacs.org](http://www.csaceliacs.org)).

It is not only those suffering from celiac disease that need to avoid grains. Gluten can promote many other symptoms and conditions, ranging from schizophrenia (7) to more common conditions such as headaches (8). For certain individuals, gluten sensitivity can present exclusively as a neurologic disease, and not with classic digestive problems. The most common symptoms include headache and nervous system symptoms such as numbness, tingling, and weakness (8-10).

In one study (11), researchers randomly selected 200 disease-free individuals for the purpose of assessing anti-gluten antibody levels, which is a way to measure gluten sensitivity. Health complaints of the 15% of subjects with the highest antibody levels were compared with the 15% of subjects with the lowest levels. Interestingly, those with the highest antibody levels suffered from headaches, chronic fatigue, regular digestive complaints, subtle anemic changes, and NO signs of celiac disease, while those with the lowest levels were symptom-free. In another report, 3 cases of gluten sensitivity were discussed. All patients were women in their mid 40's and each suffered from digestive bloating, gas, abdominal pain, and fatigue. Symptoms resolved after going on gluten-free diet (12).

### Lectins

All grains and legumes (beans, lentils, soy) also contain sugar-proteins known as lectins, which resist digestion and cooking. Before absorption, lectins are known to cause digestive system inflammation, which may or may not cause obviously linked symptoms (13). After lectins are absorbed into circulation from the digestive tract, they bind the surface of cells throughout the body. While all the details are not known, researchers state that, "there is now abundant evidence that lectins can cause disease in man and animals" (14). Research suggests that lectins may play a role in promoting the following conditions: inflammatory bowel disease, diabetes mellitus, rheumatoid arthritis, glomerulonephritis, psoriasis, multiple sclerosis, retinitis and cataracts, as well as congenital malformations, infertility, allergies and autoimmune problems (14).

## Other problems with grains

Grains contain a substance called phytic acid, which is known to reduce the absorption of calcium, magnesium and zinc from grains (7). Grains also promote an acidic body pH, which is known to be inflammatory. Research has now demonstrated that a diet-induced acidic state helps to promote the loss of bone and muscle that occurs as we get older (4). Finally, while grains are a low-fat food, they contain an elevated ratio of omega-6 to omega-3 fatty acids (7). Omega-6 fatty acids are converted into chemicals the cause inflammation, chronic disease, and pain (1,2,5,6).



With the above in mind, you may be wondering why we have been told that grains are so good for us? First, whole grains do contain nutrients and fiber, both of which are healthy and anti-inflammatory. However, we get more nutrients and fiber from fruits and vegetables. Second, grains are inexpensive and can be stored easily, so they are profitable for food manufacturers. We are never told that we can get all the nutrients and fiber we require by eating fruits, vegetables, and nuts, and that there is no need to consume grains.

It is important to understand that the health conditions discussed above have only been associated with the consumption of grains and legumes (beans) and have never ever been associated with the consumption of fruits, vegetables, nuts, and healthy animal products. Therefore, try to avoid grains, flours, bread, pasta, etc., and try to replace these foods with fruits and vegetables. Sprouted grains are somehow seen as a loophole to refined and whole grains, but this seems unlikely.

## What about fiber?

A great misconception is the notion that we cannot get adequate fiber unless we eat whole grains. In fact, whole grains are a poor source of fiber when compared to fruits and vegetables on a calorie basis. When we compare foods based on calories, fresh fruit typically contains twice the amount of fiber found in whole grains, and non-starchy vegetables, such as broccoli and lettuce, contain almost 8 times the amount of fiber found in whole grains (4).

In addition to being low in fiber, grains are also low in potassium when compared to fruits and vegetables. Research has demonstrated that diets low in potassium predispose one to numerous diseases such as chronic pain, osteoporosis, age-related muscle wasting, calcium kidney stones, high blood pressure, stroke, asthma, exercise-induced asthma, insomnia, air sickness, high-altitude sickness, Meniere's Syndrome (ear ringing), and age and disease related chronic kidney insufficiency (2,4).

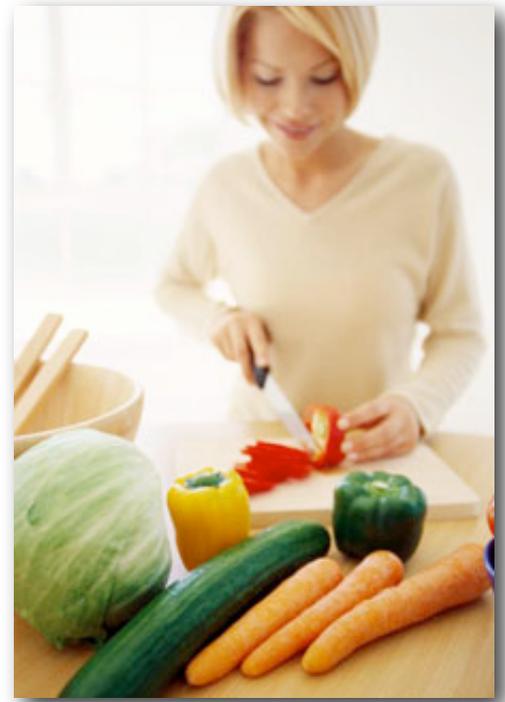
Unlike other minerals, it is important that we get potassium from food, NOT supplements. Supplementing with potassium can lead to inappropriately high levels of potassium in the blood, called hyperkalemia, which can lead to muscle weakness, numbness and tingling, abnormal heart rhythm, muscle paralysis, troubled breathing, and even heart failure and death.

Notice the difference in the fiber and potassium (K+) content in grains versus fruits and vegetables.

Food and Portion	Calories	Fiber (grams)	K+ (mg)
1.5 glazed donuts	270	1.5	0
1 Zone Perfect Bar	210	3.0	90
2 cups oatmeal	290	8.0	262
1 cup brown rice	220	3.2	258
3 pieces white bread	240	2.1	108
4 pieces whole wheat bread	280	8.0	280
4 golden delicious apples	240	10	400
3 cup size naval oranges	240	12	900
6 cups steamed broccoli	264	27.6	3036
3 heads of romaine lettuce (35 cups)	280	35	5670

## Part 4: Foods and Dietary Suggestions to Fight Inflammation

- All fruits and vegetables. Eat fruits raw and vegetables raw or lightly cooked. Red and sweet potatoes are acceptable as long as they are consumed with a protein, such as eggs, fish, meat, or fowl.
- Fresh or frozen fish. A recent study indicated that farmed-raised tilapia, catfish and bronzini had unacceptable omega-6 to omega-3 ratios, while all other fish had appropriate ratios (17). Shell fish are also a good option.
- Meat, chicken, eggs from grass-fed animals. Go to [www.eatwild.com](http://www.eatwild.com) to find producers of grass-fed animal products. If you cannot acquire grass-fed products, do the best you can to get lean cuts of regular meats, which are available at all supermarkets.
- Omega-3 eggs. Common supermarket brands of anti-inflammatory omega-3 (n-3) eggs are Christopher Eggs (600mg n-3 per egg yolk), followed by 4-Grain Vegetarian omega-3 Eggs (300mg n-3 per yolk), Sparboe Farms omega-3 eggs (250mg n-3 per yolk), and Egglund's Best (110mg n-3 per yolk). Egg whites are also a good choice.
- Wild game (deer, elk, etc.)
- Nuts: raw almonds, cashews, walnuts, hazelnuts, macadamia nuts, etc. As nuts are high in calories, be sure to temper your nut consumption if your goal is to lose weight. For example, 1/4 cup of nuts provides about 170-225 calories.
- Spices like ginger, turmeric, garlic, dill, oregano, coriander, fennel, red chili pepper, basil, rosemary, kelp, etc. (sea salt is okay if you wish to add a little salt).
- Oils and fats: It is best to use organic oils, as it is thought that non-organic oils may contain pesticides. Use organic extra virgin olive oil and coconut oil. Butter is also a healthy choice and the best butter comes from grass fed cows. You will get the best available butter if you buy organic butter (Organic Valley indicates that their butter and heavy cream are from grass-fed cows).
- Salad dressing: extra virgin olive oil, balsamic vinegar (or lemon juice), mustard if you like, and spices (Greek, Italian, ginger, dill, oregano, etc.; whatever suits your taste). When eating in a restaurant, use dressings sparingly, as most are made with soybean oil or worse, and most are rich in sugar.
- Whenever you are thirsty, drink water or organic green tea (non-organic green tea may contain pesticides and should be avoided).
- Alcohol: Red wine and stout beer are the best choices.
- Candy: Dark chocolate. *Be sure to temper your consumption as dark chocolate is high in calories. Try to eat no more than 50-100 calories per day.*



We clearly have many anti-inflammatory food options and so should not think that there will be nothing to eat if we do not eat breads, pasta, grains, cereal, and pastries.

Eating anti-inflammatory need not be complicated. Most meals can be prepared the same way as always - just eat as little grain products as possible. Instead of rice, pasta or other grain product, have more vegetables and a modest potato portion with whatever protein dish is being served. The following page offers a few meal options that can be used as templates.

## Meal Suggestions

### Breakfast Options

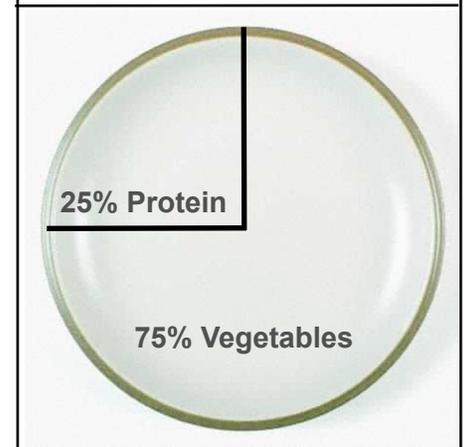
- Soft boiled, poached or gently fried omega-3 eggs and favorite vegetables and spices (a small serving of sautéed potatoes is okay if you are not carbohydrate sensitive). It is best to use organic virgin coconut oil for cooking eggs and potatoes. Olive oil would be the next best option.
- Omega-3 egg or egg white omelet with favorite vegetables and spices. You can pour marinara or pasta sauce over the omelet. Lightly dust the omelet with your favorite cheese - when you add the sauce, it tastes like a pizza.
- If you wish to have oatmeal or grits, add a couple tablespoons of ground up chia/flax seeds, whole hemp seeds, and some raisins, berries or favorite fruit. You can also use chia seeds after they have been soaked for about 10 minutes. Chia seeds can be ordered from [www.sunorganicfarms.com](http://www.sunorganicfarms.com). To avoid excess calories, use water instead of milk [or soy/rice milk] and let the fruit be your sweetener.
- Favorite fruit topped with hulled hemp seeds and/or soaked/ground chia seeds. Instead of the above-mentioned seeds, you can also use a quarter cup of your favorite nut that has been previously soaked in water. Blend the soaked nut with water and pour over the fruit.
- Meal Shake (See Below)

### Lunch and Dinner Options

- A chicken, fish, or steak Caesar salad without croutons is an example of a meal that contains appropriate portions of vegetables and protein; it is a model meal that can be applied to all other meals when determining your vegetable and protein portions.
- Chicken, fish, steak (or favorite lean meat) and steamed/sautéed vegetables with favorite spices. You can have a small portion of sautéed or baked potato. Have as much salad as you like.
- Marinara or pasta sauce poured over vegetables and meatballs from lean chop meat (or animal protein sources of your choice).
- Have as much salad as you like with lunch and dinner.

*When you feel like you have room for dessert, eat more vegetables, or wait an hour to see if you are indeed still hungry.*

*In general, make your lunch and dinner choices of eggs, meat, fish, and chicken fit in the 25% protein section of the meal plate. The remaining 75% of the plate should be piled high with vegetables.*



### Meal shake

- Blend favorite frozen fruit (bananas, blueberries, cherries, strawberries, etc.) and egg white protein powder (or protein powder of choice). You can also add some coconut or your favorite raw nut. Make sure to always use water for blending to avoid excess calories. This shake is not only highly nutritious and filling, but easy and quick to prepare.

### Snack Options

- Any combination of your favorite fresh fruits.
- 1-2 Tbsp of organic heavy cream over frozen cherries, blueberries, or favorite fruit.
- Dark chocolate, raisins, and raw almonds or favorite raw nut\*\*.

*\*\*Nuts are high in calories, so be sure to temper your nut consumption if your goal is to lose weight. For example, 1/4 cup of nuts provides about 170-240 calories. When eating dark chocolate, try to use 50 calorie pieces, as chocolate is also high in calories.*



**Please realize that you may not have to significantly alter the meals you currently prepare. Simply substitute vegetables for grains, bread, and pasta, and eat more fruit (or healthy dessert/snack options) between meals. Clearly, there is no need to make deflaming a complicated or negative process.**

## Meal Preparation

For some, meal preparation becomes an obstacle to healthy, anti-inflammatory eating. Have no fear, several books are available that contain many anti-inflammatory recipes. For example, *The Paleodiet* (3), *The Paleodiet for Athletes* (15), and *Nourishing Traditions* (16) are excellent books that provide anti-inflammatory nutritional advice and offer a wide variety of recipes for meal preparation.

When healthy eating is a goal, many feel that they can never eat out in a restaurant, as no anti-inflammatory meals are available. It is important to understand that our favorite ethnic restaurants offer a wide range of anti-inflammatory meals. Since traditional Indian, Asian, Hispanic, Greek, and Italian meals focus on vegetables, animal products, and anti-inflammatory spices, they can all be considered anti-inflammatory...just try and avoid the grains, bread and pasta, which represent modern pro-inflammatory additions to these meals. You can also prepare various ethnic foods at home, so acquiring ethnic cookbooks can be very helpful.



## Making a Decision

You need to make a choice regarding the foods you eat: will they be pro-inflammatory foods or anti-inflammatory foods? If you have no 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 in many humans. If you do suffer from any of the conditions previously mentioned, you may wish to see if grains/legumes and the other pro-inflammatory foods are a cause. If you make the decision to defame, you need to first visualize and consider what might be a reasonable deflaming lifestyle for you on a long-term basis.

You need to make sure that this decision is commensurate with how well you wish to feel. For example, if you discover that grains give you headaches, you need to decide how much headache pain you can handle. If you want to be headache free, then you may need to absolutely eliminate grains from your diet. Be aware that there are case reports in the scientific literature that describe patients who can maintain a headache-free state, only if they avoid the gluten grains (8).

After coming to a decision in your mind, you need to commit to discovering how your health is influenced by the consumption of pro-inflammatory foods. You need to commit for at least 1 month to a near perfect deflaming diet. Within a week, you are likely to feel a difference and by the end of 1 month you will know for sure how food affects your health (some people who are significantly inflamed may need 2-3 months).

If you want to cheat and maintain your new-found feelings of wellness, you will need to determine what level of pro-inflammatory foods you can consume. When you find the level that suits you best, stick with it. *You also need to decide whether you wish to take supplements.*

## Part 5: Nutritional Supplements to Help Fight Inflammation

More and more research suggests that supplements can help promote health and prevent disease. Interestingly, inflammation reduction seems to be a likely mechanism of action for many supplements. Thus, each of the suggested supplements has been selected due to its ability to promote health and/or reduce inflammation.

To date, we do not know precisely which supplements we need or the exact amounts. Accordingly, Deflame.com advocates a general approach for inflammation reduction, which is reflected in the Basic Program that includes 4 different supplements. If you wish to take less than the Basic 4, options are listed below.

### Supplement Options

1 supplement: Mega D-1000 (78 cents/day).

2 supplements: Mega-D 1000 and Aved-Multi (1.65 cents/day).

3 supplements: Mega-D 1000, Aved-Multi and Mega Magnesium (about \$2.40/day).

4 supplements: vitamin D, multivitamin/mineral, magnesium and fish oil (about \$3.10/day).

The Basic Program is a reasonable \$93.50 per month (about \$3.00 per day, which is less than what many people spend everyday on coffee/soda and a snack).

The Advanced Program includes the 4 supplements in the Basic Program, with three additional supplements (Probiotic Complete, Coenzyme Q10, and Pro-Enz). The cost for the Advanced Program is about \$6.00 per day.

Most importantly, you need to feel good about whatever supplements you wish to take, whether it be just vitamin D, the Basic Program, or the Advanced Program. It is important to make a decision and stick to your decision. Over time, you may find that you want to take less or more supplements - not a problem. Find what suits you best and stick with it. Please visit [www.deflame.com](http://www.deflame.com) for a detailed explanation of each supplement. And make sure to sign up for our free newsletter so you can be kept up to date with new information.

Basic Health Promotion & Disease Prevention		Cost
Aved-Multi iron/free	2 tablets/day	\$26.00
Mega Magnesium	400 mg/day; 3 caps	\$23.00
Concentrated Omega-3 (Fish oil-EPA/DHA)	1 gram/day; 2 caps	\$21.00
Mega D-1000	1000-4000 IU/day; 1-4 caps	\$18.50
Cost for Basic Program:		\$88.50
Shipping:		\$5.00
<b>Total:</b>		<b>\$93.50</b>

Advanced Health Promotion & Disease Prevention		Cost
Basic program	See above	\$88.50
Probiotic Complete (healthy gut bacteria)	3 caps/day	\$25.00
Coenzyme Q10 (100mg)	1 cap/day	\$33.00
Pro-Enz (Turmeric/Ginger/Boswellia)	2 tabs/day	\$33.00
Cost for Advanced Program:		\$179.00
Shipping:		Free
<b>Total:</b>		<b>\$179.00</b>

## Why Anabolic Laboratories supplements are the best choice

Currently, there are no government standards specific to supplement manufacturing. This lack of regulation creates a confusing environment for individuals who desire the highest quality nutritional supplements. The vast majority of manufacturers set their own standards, and these are typically characterized in an extremely positive fashion. However, since supplement manufacturing is a generally unregulated industry, there is no authorized agency that verifies manufacturing claims. Third party audits of a supplement manufacturer's facility is voluntary, and most do not volunteer.

Currently, our main method of comparing supplement brands is to use the nutritional supplement manufacturer's yardstick of quality - the Good Manufacturing Practices, or GMPs. The GMP seal is awarded to companies by the National Products Association (NPA). Their GMP Certification Program "is designed to verify compliance of member suppliers of dietary supplements with a standardized set of good manufacturing practices", and is based upon third party inspections. Less than 50 manufacturers (which includes Anabolic Laboratories) meet NPA/GMP standards.

However, there is an even stricter regulation program than the NPA/GMPs, and that program is the Pharmaceutical cGMPs, which is regulated by the Food & Drug Administration. Because of Anabolic Laboratories' status as a licensed manufacturer of pharmaceuticals, Anabolic Laboratories is the only manufacturer of nutritional supplements that operates a facility meeting the FDA's stringent pharmaceutical standards.

The pharmaceutical standards are orders of magnitude more demanding than the NPA/GMPs. Therefore, by choosing Anabolic Laboratories nutritional supplements, you are choosing supplements manufactured to a higher standard. Literally speaking, no other company compares.

## References

1. Seaman DR. The diet-induced pro-inflammatory state: a cause of chronic pain and other degenerative diseases? *J Manipulative Physiol Ther.* 2002; 25(3):168-79.
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.
4. Cordain L, Eaton SB, Sebastian A et al. Origins and evolution of the western diet: Health implications for the 21st century. *Am J Clin Nutr.* 2005;81:341-54.
5. Simopoulos AP. Essential fatty acids in health and chronic disease. *Am J Clin Nutr.* 1999; 70(3 Suppl):560S-569S.
6. Simopoulos AP. Omega-3 fatty acids in inflammation and autoimmune diseases. *J Am Coll Nutr.* 2002; 21(6):495-505.
7. Cordain L. Cereal grains: humanity's double-edged sword. *World Rev Nutr Diet.* 1999; 84:19-73.
8. Hadjivassiliou M et al. Headache and CNS white matter abnormalities associated with gluten sensitivity. *Neurology.* 2001; 56:385-388.
9. Hadjivassiliou M et al. Gluten sensitivity as a neurological illness. *J Neurol Neurosurg Psychiatry.* 2002; 72:560-63.
10. Hadjivassiliou M et al. Neuropathy associated with gluten sensitivity. *J Neurol Neurosurg Psych.* 2006; 77:1262-66.
11. Arnason JA et al. Do adults with high gliadin antibody concentrations have subclinical gluten intolerance? *Gut.* 1992; 33:194-197.
12. van Heel DA et. Novel presentation of coeliac disease after following the Atkins' low carbohydrate diet. *Gut.* 2005; 54:1342.
13. Cordain L, Toohy L, Smith MJ, Hickey MS. Modulation of immune function by dietary lectins in rheumatoid arthritis. *Brit J Nutr.* 2000; 83:207-17.
14. Freed DLJ. Lectins in food: their importance in health and disease. *J Nutr Med.* 1991; 2:45-64.
15. Cordain L, Friel J. *The paleodiet for athletes.* New York: Rodale; 2005.
16. Fallon S, Enig M. *Nourishing traditions.* 2nd ed. Washington, DC: New Trends Publishing; 2001.
17. Weaver KL et al. The content of favorable and unfavorable polyunsaturated fatty acids found in commonly eaten fish. *J Am Diet Assoc.* 2008; 108(7):1178-85.