



THE
33

BEST AND WORST
INFLAMMATION
FIGHTING FOODS

AlgaëCal

What is inflammation and why is it bad for your health?

Inflammation is your body's attempt at self-protection. The purpose of inflammation is to eliminate the cause of the injury or disruption in your body. The signs of inflammation can be pain, heat, redness, swelling and loss of function.

Now, inflammation can be good as it keeps you alive! It lets your body know that there's something wrong and it acts immediately. This type of inflammation is referred to as acute inflammation as it's a short term process - it appears within minutes or hours and is a natural part of the healing process.

But the type of inflammation that wreaks havoc on your body and cells is called Toxic Inflammation Overload. Toxic Inflammation Overload is a low-grade systemic inflammation that happens at the cellular level. It is silent, subtle and you may never even notice it.

The importance of your Omega balance.

Omega 3 fatty acids come from animal based foods such as fatty fish and fish oil and unfortunately, most Americans are deficient.

What they are getting more than enough of is omega 6 fatty acids. Omega 6 fatty acids comes from highly processed vegetable oils like canola, soy and corn - think trans fat.

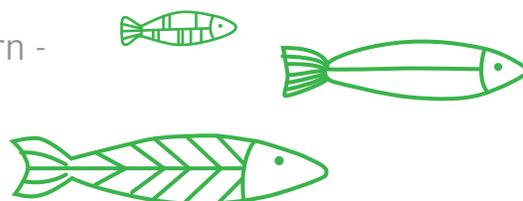
Our ancient ancestors are thought to have a 1:1 ratio of omega 6 to omega 3 fats. Western diets are now at a ratio of 20:1 or higher!

Why is this bad?

Excess amounts of omega 6 fatty acids (a very high omega 6 to omega 3 ratio) has been found to promote many diseases including cardiovascular disease, cancer and inflammatory and autoimmune diseases.

Specifically, when your omega 6 fatty acid intake is high it promotes an inflammatory response in your body. And with inflammation now being linked to many chronic diseases this is a major concern.

The good news is that you can control it by what you do and don't eat. The following is a list of the BEST foods to fight inflammation and the WORST:



Best

1 Fatty, Oily Fish

Cold water fish like salmon, sardines, and mackerel are all high in omega 3-fatty acids, which have been shown to reduce inflammation. Choosing wild-caught, cold-water fish will give you a higher dose of Omega 3 fatty acids at about 1000 mg in a 3 ounce cooked portion, compared to less than 200 mg of Omega 6 fatty acids. It is recommended to eat 2-3 servings of fatty fish per week to reap the benefits. Although there has been concerns about the increasing levels of heavy metals such as mercury in fish, recent research suggests that the mercury in fish is not high enough to pose any risks. The reason being is, past research has ignored the importance of selenium. Selenium acts as a protector against mercury because it binds to it, meaning mercury is then unable to bind to anything else in your body, which is the ultimate concern. Rule of thumb: if the fish has a higher level of selenium than mercury, it is safe to eat.



2 Turmeric



Turmeric has been used for centuries in Asia and India as a condiment, healing remedy and even as a textile dye. It was traditionally referred to as “Indian Saffron” as it mimics the deep yellow-orange color that is similar to saffron. The active agent in turmeric called curcumin has been shown to exhibit anti-inflammatory properties. It is so potent that studies have shown curcumin to be just as effective as potent drugs and over-the-counter anti-inflammatories. The best part: it produces NO toxicity, unlike its drug comparables.

3 Astaxanthin

Technically, astaxanthin is not a food, but an important part of foods like shrimp, salmon and other seafoods. Astaxanthin is a carotenoid, which are compounds that give certain meats their beautiful color (like giving salmon and shrimp their bright pink to red colors). Carotenoids also boast potent antioxidant properties. In fact, astaxanthin is arguably the strongest and most beneficial one! Astaxanthin helps to support a normal inflammatory response and at the same time, it helps to protect every cell and tissue from free radical damage.

4 Cold-pressed Extra Virgin Olive Oil

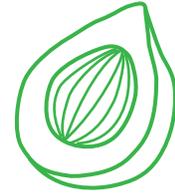
Cold-pressed olive oil is produced by applying physical pressure to the whole fruit to extract the oil. This process ensures quality and purity due to minimal processing. It also contains higher levels of polyphenols because they are not destroyed by using heat to extract the oil. Polyphenols have been shown to have an impressive anti-inflammatory effect. Olive oil contains both omega 3 fatty acids and omega 6 fatty acids, although omega 6 fatty acids is much higher. In fact, the ratio averages about 10:1, meaning olive oil on average is 10% omega 6 fatty acids and 1% omega 3 fatty acids. This ratio shouldn't turn you off of olive oil though, as it is still beneficial for your health and inflammation.

5 Chia Seeds

Chia seeds are one of the top plant-based sources of omega 3 fatty acids. This seed can easily be added to salads, yogurt, cereal and even whole grain breads. When soaked in water, the outside of the chia seed forms a gel and can absorb up to 10x their weight in water. In just two tablespoons of chia seeds, there is a whopping 5 grams of omega 3's. It should be noted that all plant sources of omega 3's (in the form of ALA) have limited conversion to EPA and DHA, which are the fatty acids associated with the health benefits like brain and heart health.



6 Avocados

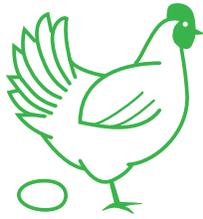


According to NHANES the consumption of half an avocado boasts a whopping 345 mg of potassium (more than a banana) 19.5 mg of magnesium and significant amounts of vitamin A, folate and vitamin C. The avocado is also rich in carotenoids, which is a powerful antioxidant and gives vegetables and fruits their colors. It is said that the highest carotenoid concentration of the avocado is the dark green flesh close to the peel. Additionally, avocados contain a healthy helping of phenolics which have been shown to reduce oxidative and inflammatory stress. It is well known that avocados are high in fat and that's true. BUT the fats that are in it like monounsaturated fatty acids have heart-related benefits. One cup of avocado contains 15 grams (out of 22) of these monounsaturated fatty acids, while only 3 grams is from polyunsaturated fatty acids (both omega 3's and omega 6 fatty acids).

7 Walnuts

Researchers have found that nuts, specifically walnuts, hold major antioxidant powers - and antioxidants also reduce inflammation. In one study, walnut polyphenols were the highest out of any other nut tested. And nuts in general have been shown to improve the lipid profile, increase endothelial function and reduce inflammation, all without causing weight gain. In ¼ cup of walnuts, it contains about 2.7 grams of omega 3 fatty acids, which is pretty substantial.

8 Grass-Fed Meat and Dairy



Feedlot animals (called Concentrated Animal Feeding Operations or CAFOs) that produce meat, dairy and eggs are one of the biggest contributors to omega imbalance because the animals diet consists of high amounts of corn and soy throughout their lifetime. When the animals eat this high omega 6 feed, it inevitably leads to high amounts of omega 6 fatty acids in their meat. Take the cow for instance. The way a cow is fed has a big impact on the nutrient composition of the beef. Grain-fed cows or conventionally raised cows are put into large feedlots and are fed grain-based feeds consisting of soy or corn. Conventionally raised cows are also given drugs, hormones to make them grow faster and antibiotics for their unsanitary living conditions. Grass-fed cows on the other hand are given more space to roam and are fed grass and other plants throughout their lifetime. The term “grass-fed” isn’t clearly defined yet so there is some variation and this is simplifying it, but for the most part, grass-fed cows mostly eat grass and grain-fed cows mostly eat soy or corn at least for the last stage of their life to fatten them up. As for their fatty acid composition, you may be surprised that grain-fed and grass-fed cows have similar amounts of Omega 6 fatty acids. Grass-fed cows also have similar or slightly lower levels of saturated and monounsaturated fat to that of grain-fed cows. But the major difference between grass-fed and grain-fed cows is their Omega-3 fatty acid makeup. Grass-

fed cows have significantly higher omega 3’s than grain-fed cows, up to 5x the amount. And while grass-fed meat does have higher amounts of omega 3’s than convention meat, cold water, fatty fish, like salmon, is said to have 35x that amount! (That’s why it’s #1 on this list)

9 Coconut Oil

Coconut oil has been classified as a “superfood” and is high in saturated fats. But don’t let that scare you, the fat is in the form of medium chain fatty acids, which have been shown to have many health benefits, such as helping with weight loss. They can also increase energy expenditure, which can lead to significant weight loss over time. Lauric acid in coconut oil has anti-inflammatory properties and can kill bacteria and can also help stave off infection. And while coconut oil is high in fatty acids, it does not contain any omega 3 fatty acids whatsoever. Coconut oil can be used for cooking, baking and even in smoothies.

10 Ginger

Ginger has been known for its anti-inflammatory properties for centuries. Studies have shown that this herbal product shares pharmacological properties with nonsteroidal antiinflammatory drugs. Ginger has been used for conditions such as osteoarthritis as an anti-arthritic agent to reduce inflammation in older adults.

11 Dark Leafy Greens

Dark leafy greens such as kale, collards and chard and other leafy greens are excellent sources of vitamins and minerals, including antioxidants, which have an anti-inflammatory effect. Make sure you have at least one serving at each meal. Now, leafy greens are not high sources of fat in any form, but they do contain some omega 3 fatty acids. For instance, a cup full of spinach has 352 mg of omega 3 fatty acids. Kale and collards are similar as well.

12 Colorful Vegetables

Incorporating more colorful vegetables into your diet is healthier in general. Carrots, tomatoes and bell peppers have high antioxidant properties and generally lower levels of starch. Try to have many colors on your plate at each meal. A cup of sautéed green bell peppers contains 216 mg of omega 3 fatty acids, while one cup of cherry tomatoes only has 4.5 mg of omega 3 fatty acids. While colorful vegetables are low in fats in general, their health benefits are unquestionable. Note: peppers are a nightshade vegetable and are believed to trigger inflammation in some people, particularly people with rheumatoid arthritis. With this in mind, what helps one person might harm another. So following a bio-individual approach to diet is ideal. Meaning that you should pay attention to your diet and symptoms and find out what works best for you.

13 Tea



If you start or end your day with a cup of tea, you'll be happy to hear that tea (green, black, white, oolong) possesses strong anti-inflammatory properties. Tea leaves contain varying amounts of polyphenols, particularly flavonoids. While black tea and green tea contain similar amounts of flavonoids, they differ in their chemical composition; as green tea contains more catechins (simple flavonoids). This is due to the process as the tea leaves of oolong and black teas are oxidized or fermented so they have lower flavonoids than green tea. Green tea therefore has a higher anti-inflammatory effect because of its higher flavonoids (catechin) content. You can enjoy tea hot or cold, blended into a smoothie or any other way you see fit.

14 Dark Chocolate

Good news: chocolate has many health benefits and should be a part of a healthy diet. BUT that's not true for all chocolate as not all chocolate is created equal. Dark chocolate in particular is a powerful source of antioxidants and has a high ORAC value. ORAC stands for Oxygen Radical Absorption Capacity and measures the antioxidant activity in foods. The antioxidants in dark chocolate include with polyphenols, flavanols, catechins to name a few.

How to Choose Your Chocolate:

- Percentage of cacao. Look to see the percentage of cacao in the chocolate. The higher the percentage is an indicator of higher antioxidant flavonols. Try to choose dark chocolate that is 70% or more cacao.
- Avoid Dutch processing: Avoid dark chocolate that has “alkalinization” (dutch processing) as it strips out the flavonols
- Cocoa Butter not hydrogenated oils: A high quality chocolate bar will add the cocoa butter back into the bar. (During the processing, cocoa butter, which is the natural fat of the cocoa bean is removed) Most mass-manufacturers will save money by adding hydrogenated oils back into the chocolate and not the cocoa butter.

15 Tart Cherry Juice

Tart cherry juice is emerging as a common post-workout drink for many athletes looking to recover quicker. What’s so special about tart cherries? They contain one of nature’s most potent classes of flavonoids called anthocyanins and anthocyanin rich foods deliver major antioxidant and anti-inflammatory activity. (And no, sweet cherries will not give you the same benefit.) A study conducted on marathon runners had participants consume tart cherry juice 5 days before their race, the day of, and 48 hours after their race, compared to a

placebo group. The researchers revealed that tart cherry juice reduced the pain and loss of strength runners experienced after prolonged exercise.

16 Hot Peppers



Chili, cayenne, habanero, banana, jalapeños and chipotle peppers all contain a powerful anti-inflammatory compound called capsaicin, which is a potent anti-inflammatory agent. In addition to fighting inflammation, capsaicin has been shown to provide pain relief, protect your heart, and fight cancer. As a general rule of thumb: the hotter the pepper, the more capsaicin it contains.

17 Red Wine

Drink up! Red wine is ok, even beneficial for your health! A specific polyphenol called resveratrol is an ingredient in red wine that prevents blood vessel damage and prevents blood clots make it all possible. Studies show that resveratrol could be linked to a reduced risk of inflammation and blood clotting. Most research indicates that 1-2 glasses of red wine will optimize the health benefits. Additionally, polyphenols are only found in plants and are abundant in grapes. Studies have also shown that wine can be good for your bone health, too. With one or two glasses keeping the bones strong and staving off the development of osteoporosis.

18 Flax Seed

When we think of antioxidant foods the first things that come to mind are usually fruits and vegetables. But recent research now reveals that flaxseed is an excellent antioxidant source, containing significantly higher polyphenols than fruits like blueberries. The primary omega 3 fatty acid found in flaxseed is alpha-linolenic acid, or ALA. Another unique feature of flaxseed is its lignans. According to WHfoods.org lignans are fiber-like compounds but in addition to acting like a fiber, also provide antioxidant protection due to their structure as polyphenols. Flaxseed can be used in baking, in smoothies or on salads. Flax seeds are high in omega 3 (in the form of ALA). For instance, 1/4 cup of flaxseeds contains about 6.3 grams of omega-3 fatty acids.

19 Winter Squash

Winter squash is not considered a high fat food, but does contain high amounts of omega 3's per serving. One cup of winter squash gives you around 340 mg of omega 3 fatty acids in the form of alpha-linolenic acid (ALA). That is only about 1/3 the concentration of the omega 3's in comparison to walnuts, but it is still significant considering it's a low-fat food.



Worst

It may come as no surprise then that some of the worst foods for your overall health also contribute to major inflammation. The following are some of the top food sources of inflammation in the body.

20 Mayonnaise

Chances are, if you are to look at the ingredients in Mayonnaise you'll find it's made with vegetable oil (usually soybean oil). Vegetable oils are highly processed omega 6's and inflame the body.

21 Grain-Fed Meat

As mentioned earlier, grain-fed and grass-fed cows have similar amounts of Omega 6 fatty acids. BUT the major difference between grass-fed and grain-fed cows is their Omega-3 fatty acid makeup. For instance, grass-fed cows are significantly higher in omega 3's than grain-fed cows (as much as 5x the amount). This is good because grass fed cows therefore have a better omega balance than grain-fed meat that are high in omega 6 fatty acids and low in omega 3 fatty acids.

22 Farm-Raised Fish

Similar to grain-fed meat, farmed fish is similar when it comes to their omega balance. Farmed raised fish is much higher in omega 6 fatty acids and lower in omega 3 fatty acids than wild fish. Wild fish is not eating diets of soy, GMO's or other feed, making it a much better choice.

23 Margarine

Just like mayonnaise, margarine is loaded with vegetable oils and trans fat, which leads to inflammation. Alternative: choose organic grass fed butter or ghee butter.

24 Salad Dressings

Again, most salad dressings are loaded with vegetable oils. Also, they contain preservatives to keep them 'fresh' for long periods of time. Salad dressings have also been known to have high amounts of sugar, which is a major inflammatory agent (check the ingredients next time, you may be surprised!). Instead, make your own salad dressing. Try a simple olive oil and balsamic vinegar vinaigrette and add some fresh herbs!



25 Food Additives

Food additives: such as coloring, enhancers or preservatives. Stay clear from these as they are not necessary and shown to be harmful or even toxic.



26 Fried Foods

This can probably go without saying, but fried foods such as french fries, chicken wings and anything else that is fried and drenched in vegetable oil is not going to do good things for your body.

27 White Sugar and Sweets

White sugar and sweets: including desserts, sodas and sweetened juice. Sugar has been shown to be highly addictive and inflammatory. Reduce your intake of these types of sweets and sodas.

28 MSG

There has been some research suggesting that MSG may cause inflammation in the body. (MSG is a flavor enhancer and preservative) While MSG and its effects are not well known, it is best to avoid or reduce MSG intake until further research is conducted.

29 Vegetable Oils

Vegetable oils: such as soybean oil, corn oil, canola oil, cottonseed oil and a few more, are high in trans fat, which can lead to inflammation. Vegetable oils only started being produced around 100 years ago because we didn't have the technology to process them, yet. The processing method of these oils requires high heat, chemicals and even bleach.

30 White Breads and Pastas

White breads and pastas are highly processed and when consumed, break down quickly into sugars that in turn, leads to inflammation. A 2010 study found that refined grains was related to inflammatory protein concentrations in human plasma. In other words, refined grain intake have pro-inflammatory effects.

31 Non-Organic Dairy

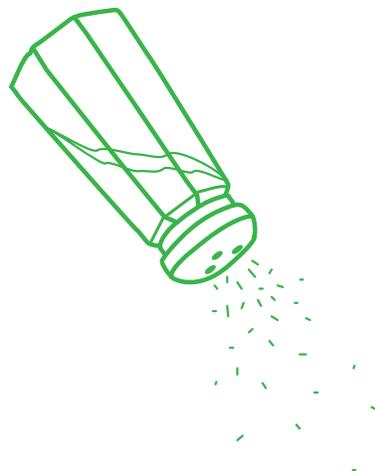
According to Dairy Nutrition, organic dairy contains significantly higher levels of omega-3 fatty acids and conjugated linoleic acid (CLA). In addition, organic dairy typically means that the animals have been pasture-raised and fed a largely grass-fed diet. So if possible, it's always best to choose organic, especially when it comes to dairy.

26 Gluten

If you have been diagnosed with coeliac disease or a gluten intolerance, it is best to avoid gluten. Gluten intolerance can lead to bloating, indigestion and a lower rate of absorption of nutrients and thus lead to an inflammatory response. Some people who have not been diagnosed have even reported feeling better after eliminating gluten from their diet. You know your body. If a gluten-free diet works for you, do it.

33 Excess Salt

The Standard American Diet contains excessive salt, which can result in inflammation of the joints. A study conducted by Tufts University estimated that 1.65 million deaths from heart causes were attributed to high sodium intake. The Dietary Guidelines for Americans recommend limiting sodium to less than 2,300 mg a day.



INTRODUCING

AlgaeCal's 3-in-1 Inflammation Fighter

Triple Power
Omega 3
Fish Oil
with Added
Curcumin and
Astaxanthin



Triple Power is three big steps beyond any fish oil on the market.

First, it contains 1480 mg of omega 3's per tablespoon. That is triple what the typical fish oil capsules give you. You get 750 mg EPA, 450 mg DHA, and 280 mg other omega 3's.

Also, the absorption of this emulsion is 3 times higher than fish oil caps. So you get more omega 3's in your cells.

Second, it is the world's only fish oil to contain two other anti-inflammatory agents. They are organic curcumin from turmeric, and astaxanthin derived from algae.



Third, it is triple guaranteed.
It is guaranteed to:

- 1 be the best tasting fish oil you have ever tried
- 2 to be fresh and burp free
- 3 to improve your omega 3 blood test levels in just 90 days.

Now that is Triple Power!

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References

- www.sciencedirect.com/science/article/pii/S0753332202002536
- www.soest.hawaii.edu/oceanography/courses_html/OCN331/Mercury3.pdf
- www.whfoods.com/genpage.php?tname=foodspice&dbid=78
- <http://lpi.oregonstate.edu/mic/micronutrients-health/inflammation>
- www.sciencedirect.com/science/article/pii/S0006291X98987356
- www.oliveoilsource.com/definition/omega-3-and-omega-6-fatty-acids
- my.clevelandclinic.org/services/heart/prevention/nutrition/food-choices/plant-sources-of-omega-3s
- authoritynutrition.com/11-proven-health-benefits-of-chia-seeds/
- www.whfoods.com/genpage.php/genpage.php?tname=foodspice&dbid=5
- www.livestrong.com/article/85285-coconut-oil-omega3/
- www.ncbi.nlm.nih.gov/pmc/articles/PMC3664913/
- www.ncbi.nlm.nih.gov/pubmed/22187094
- www.ncbi.nlm.nih.gov/pubmed/16500874
- www.ncbi.nlm.nih.gov/pubmed/3532757
- online.liebertpub.com/doi/abs/10.1089/jmf.2005.8.125
- www.sciencedirect.com/science/article/pii/S0753332202002536
- www.ncbi.nlm.nih.gov/pmc/articles/PMC3401676/
- beefmagazine.com/blog/grass-fed-beef-really-healthier-plenteousveg.com/vegan-sources-omega-3/
- en.wikipedia.org/wiki/Oxygen_radical_absorbance_capacity
- www.lifeextension.com/Magazine/2013/6/Anti-Inflammatory-Properties-of-Tart-Cherry/Page-01
- nutritiondata.self.com/
- www.ncbi.nlm.nih.gov/pubmed/19883392
- www.sixwise.com/newsletters/06/03/29/capsaicin-7-powerful-health-benefits-of-the-stuff-that-makes-peppers-hot-004.htm
- www.algaecal.com/expert-insights/a-glass-or-two-of-wine-for-your-bones/
- www.whfoods.com/genpage.php?tname=foodspice&dbid=81
- www.whfoods.com/genpage.php?tname=foodspice&dbid=63
- www.ncbi.nlm.nih.gov/pubmed/16500874
- www.webmd.com/diet/the-truth-about-seven-common-food-additives
- journals.lww.com/co-clinicalnutrition/Abstract/2010/07000/Neurobiology_of_food_addiction.3.aspx
- www.ncbi.nlm.nih.gov/pubmed/18178378
- authoritynutrition.com/6-reasons-why-vegetable-oils-are-toxic/
- www.ncbi.nlm.nih.gov/pmc/articles/PMC2821887/
- www.slate.com/articles/health_and_science/medical_examiner/2013/02/gluten_free_diet_distinguishing_celiac_disease_wheat_allergy_and_gluten.html
- www.everydayhealth.com/columns/jared-bunch-rhythm-of-life/too-much-salt-can-kill-you-what-is-the-evidence-and-how-to-decrease-your-use/