

## Anti-inflammatory Strategies

Would it surprise you to know that most of our “Western” chronic diseases have 1 thing in common? I’m talking about many conditions such as Cancer, Arthritis, Heart Disease, Diabetes, Depression, Anxiety, Insomnia etc

I’ve always been taught that inflammation, at first, was a good thing and was required for healing after an injury or infection. This is true, but if this process becomes chronic then it can contribute greatly to disease. We all have a fire burning inside of us. Keeping that flame as small as possible on a daily basis, is the basic strategy for health and vitality.

Time Magazine had a cover entitled “Inflammation: The Secret Killer” and that brought this very serious issue out from the labs and into the mainstream in 2004. It has become far too easy for our bodies to become chronically inflamed. We eat a diet high in sugar, trans fats, Omega 6 oils (man made vegetable oils etc) and dangerous food additives such as MSG, artificial dyes, flavors, hydrolyzed plant proteins, carageenan etc

For example, Dr. Russell Blaylock (neurosurgeon and nutritional researcher) reports that carageenan injected into animal tissues, causes intense inflammation. Also, if a dilute solution of carageenan is injected close to a tumor, it causes it to grow very rapidly. This additive is found in yogurt, ice cream and many other processed food type products. It is a derivative of MSG and some form of this substance can be found in 99% of all processed foods prepared by the processed food industry. We need to get back to the kitchen and avoid all forms of MSG. Other names for MSG include hydrolyzed plant protein, yeast extract, soy protein isolate, natural flavor, etc

Also, avoiding direct causes of inflammation is very important ie) lead (ceramics made in China), mercury (canned tuna, mercury fillings etc), aluminum (aluminum foil, antiperspirants with aluminum, pesticides/herbicides etc. Buy organic if produce has a thin skin and heavily sprayed ie) apples, pears, peppers, grapes, berries etc. Mangoes, bananas, pineapples, watermelon, cantaloupe etc are safe to eat if non-organic because of the protective thick skins.

In this article, I will briefly outline some of my favorite supplements to reduce inflammation and improve health.

- 1) Ginger- This is a herbal medicine product and a food with broad anti-inflammatory actions that have been known for centuries. During the past 25 years, many labs have provided scientific support. They discovered that ginger shares pharmacological properties with NSAID drugs such as Advil and Aleve. Ginger suppresses prostaglandin synthesis through inhibition of COX1 and COX2 enzymes just as NSAIDS do. Ginger also suppresses leukotriene biosynthesis by inhibiting 5-lipoxygenase. This property distinguishes ginger from NSAIDS and adds to its anti-inflammatory action. It was also discovered that a ginger extract (EV.EXT.77) inhibits the induction of several genes involved in the inflammatory response. This discovery provided the first evidence that ginger modulates biochemical pathways responsible for chronic inflammation.

Ginger can be made into a tea by steeping the peeled root in hot water, added to food or taken as a supplement. Ginger is related to Turmeric which I mentioned in my previous article and quite often, these 2 supplements are found together in 1 capsule for a 1-2 punch on inflammation. There are no side-effects other than improved digestion, cancer prevention, younger skin and a better functioning brain.

- 2) Resveratrol- This is a powerful antioxidant found in wine and has broad anti-inflammatory actions. A study lead by Presh Dandona, from the University of Buffalo in The Journal of Clinical Endocrinology and Metabolism states “These comprehensive suppressive effects on reactive oxygen species generation and inflammation are consistent with an anti-aging action of resveratrol”. It has long been known that resveratrol activates a gene called SIRTU which is thought to extend life in humans. 1 supplement capsule of resveratrol is equivalent to many bottles of red wine so you can not activate this gene with heavy drinking and that, obviously, is not recommended. 100-250mg/day is the usual recommended dosage. Higher doses do not provide any additional benefit and are controversial.
- 3) Pycnogenol- A potent antioxidant plant extract from the bark of the French maritime pine tree is very effective for reducing inflammation in a variety of health problems. Dr. Raffaella Canali of the National Research Institute in Rome, Italy, found that pycnogenol inhibits the generation of COX-2 and 5-LOX which are associated with inflammatory conditions in the body such as arthritis and asthma including autoimmune disorders. “Standard NSAID medications reduce the production of prostaglandins by COX enzymes to lower pain” explains Dr. Canali. “In contrast, pycnogenol turns to the root of the problem, completely stopping the production of COX-2 in inflammation”. Three recent clinical trials also showed pain relief and a reduced need for pain medication in arthritis patients after taking pycnogenol. Another showed a significant reduction of

inflammatory marker C-reactive protein. The usual dose for pycnogenol is 150-300mg/day. More information can be found at [www.pycnogenol.com](http://www.pycnogenol.com).and can be found in any health food store. Pycnogenol also protects the brain/memory, strengthens tissues (esp blood vessels), and improves erectile function.

- 4) Quercetin- A flavanoid that, like turmeric/ginger, possesses great anti-inflammatory powers but does so with a different mechanism of action. It works by reducing TNF-induced recruitment of pro-inflammatory genes. This is why combining them is especially useful for severe inflammation. Absorption is greatly increased when combined with olive oil, just like turmeric. It may not taste the best but it is worth the few seconds of discomfort. I always have a little juice nearby for a chaser. Quercetin has also shown great benefit in seasonal allergies and chronic hives at 500mg/day.

In summary, the above supplements, along with the others mentioned in my previous article (fish oil, olive oil, white tea/green tea, magnesium citrate etc etc) pack a very strong anti-inflammatory punch which will benefit health for anyone. Everyone has an inflammatory flame burning. Making a concerted effort to douse these flames will increase longevity and more importantly, quality of life.

Freya Nielsen  
Pharmacist  
Certified Nutritional Consultant.