Blood Cleanse, blood cleansing herb-supplement-nutrients information

[Healthy Blood | Blood Cleansing Nutrients]
[Blood Characteristics | Cleanse and Strengthen Your Blood]

Healthy Blood

Many health conditions develop from an over-acid blood pH resulting from accumulated toxins in the blood. Most of these toxins are acids formed by the natural; wastes of the body and the foods we eat, and are normally eliminated when the body's organs are functioning properly.* When a poor diet consisting of excess sugar, white flour, fatty foods, caffeine, alcohol, and chemical food additives and preservatives are consumed, the blood stream can be congested with toxins. Blood Cleanse aids in the health of the blood and is vital for life and the maintenance of a strong immune system. Following are herbal ingredients to help supply nutritional support to the blood.*

Blood Cleansing Nutrients

Burdock Root is an excellent herbal blood purifier that detoxifies the blood and lymphatic system.* It is high in iron, and can help build blood during times of low hemoglobin.* In the botanical classification of herbs, blood purifiers help remove toxins from the blood and can also remove excess moisture that provides an environment for pathogens to grow in. Blood purifiers stimulate the immune system to fight off pathogens. Burdock root promotes healthy kidney function by working through the kidneys to remove acids from the blood.* It is especially helpful with skin conditions, and supports liver and gallbladder function by stimulating bile secretion and digestive juices.*

Dandelion Root is an excellent blood purifier that neutralizes acids and has a strong alkalinizing effect on the body.* Dandelion is rich in minerals and potassium that are easy to assimilate. It has strong antioxidant activity, being high in Vitamins A and C, and supports liver and gall bladder function.* It stimulates the liver to promote detoxifica-

tion of toxins.*

Echinacea is recognized as one of the most powerful blood and lymphatic cleansers in the botanical kingdom.* The root is used as a tonic and blood purifier that neutralizes acid conditions and aids in lymphatic stagnation.* The chemical compounds in Echinacea that are responsible for the immune enhancing activity are polysaccharides, fatty acids and glycosides.* Echinacea enhances T-cell activity and stimulates the production of white blood cells to promote strong immune systems.*

Red Clover Blossom is an excellent blood purifier that helps promote and boost the immune system.* It also has anti-inflammatory properties.* Red Clover contains compounds including genistein and daidzein. The tocopherol present in Red Clover is responsible for its antioxidant activity.*

Carotenoid Complex - Carotenoids are pigments synthesized by plants that give them their orange, yellow and red colors. Along with Vitamin A and C, beta-carotene is considered an important antioxidant in nutrition.* The upper intestinal tract is responsible for converting beta-carotene into vitamin A in the body, as it is needed. Antioxidants assist the body's immune system to quench free radicals before they damage healthy cells.* Free radicals are unstable molecules that circulate in the body and can be caused by exposure to food additives and chemical preservatives, rancid oils, processed foods, radiation, UV sunlight and environmental pollution. They are responsible for many degenerative health conditions. Recent research has revealed other carotenoid compounds, found in various vegetables and fruits, that can destroy free-radical causing agents.* For example, alpha-carotene may have 10 times more powerful antioxidant activity than beta-carotene and zeaxanthin may provide even stronger protection.* The potential health benefits of carotenoids show much promise in promoting healthy heart and circulatory systems, enhancing the immune system and in providing protection against age-related and eyesight conditions*

Chlorophyll is the pigment that makes plants green. Through photosynthesis, it absorbs sunlight energy and converts it into plant energy. When we consume Chlorophyll, it is transferred into our blood and cell tissue. Scientifically, its molecular structure closely resembles human hemoglobin, the pigment that makes our blood red. When taken internally, Chlorophyll can oxygenate human cells by helping to build red blood cells.*

Chlorophyll neutralizes acids and toxins in the blood and helps eliminate them from the body.* Its detoxifying and immune enhancing qualities may be helpful for heavy metal build up and optimal health. Chlorophyll is rich in vitamin K. Vitamin K forms a compound in the body that inhibits the formation of calcium oxalate crystals which in turn promotes healthy kidneys*

Astaxanthin is a member of the carotenoid family and is a powerful newly discovered antioxidant that helps protect against more types of free radicals than any other antioxidant. It is highly bioavailable because it binds to a lipid (fat) molecule and enters the bloodstream more readily than other antioxidants. Astaxanthin is a fat-soluble nutrient that is able to cross the blood-brain barrier, which enhances its effectiveness. The natural form of Astaxanthin is derived from the microalgae Haematococcus pluvialis and is at least 10 times more effective as an antioxidant than beta-carotene. Astaxanthin supports the immune system by increasing the production of antibody cells. The mitochondria is the site of the cell's energy production and metabolic activity. The advanced pharmaceutical technology behind Astaxanthin provides an excellent delivery system for nutrients to penetrate the mitochondria of the cell, which promotes a cleansing and therapeutic action at the cellular level. Astaxanthin enhances the actions of Vitamin C and E in the body. Astaxanthin is 100-500 times more effective than vitamin E with inhibiting lipid peroxidation, which is the destruction of fatty acids and proteins in cell membranes that can cause oxidative damage. *Cumulative, oxidative damage to lipids in cell membranes may increase the risk of age-related health conditions. Results from clinical studies testing the safety of Astaxanthin have shown no known toxicity.

Choline is a lipotropic that plays an important role in metabolizing lipids like cholesterol and fat.* Lipids are fats and fat-like substances that are essential to health and are found in every human cell. The primary function of lipotropics in the body is to regulate the build up of excess fat in the liver.* Choline helps eliminate toxins from the body by supporting liver function.* Choline combines with inositol, in the body to form lecithin. Lecithin breaks up cholesterol and moves it through the bloodstream. Choline is responsible for detoxifying the metabolic waste generated by the breakdown of proteins in the body.*

Folic Acid is part of the B complex family and works together with B12 in the breakdown of proteins in the body.* One of its most important roles in the human body is

helping with the formation of red blood cells.* It also triggers the production of Hydrochloric Acid which can prevent intestinal problems.* Folic Acid supports liver function.*

Copper is present in every cell. It is a trace mineral necessary for the conversion of iron into hemoglobin.* It is essential for the utilization of vitamin C and the absorption of iron.* It is an important blood antioxidant that keeps cells healthy.*

Phosphorus plays a role in every metabolic reaction of the body because it is present in all of our cells. Phosphorus makes up a part of the molecular structure of phospholipids. Phospholipids are important constituents of cell membranes that are involved in fat metabolism as well as inhibiting the accumulation of too much acid in the blood.* For example, Lecithin is a phospholipid.

Vitamin B12 is an important nutrient for the nervous system and promotes energy levels in the body.* It plays a major role in the formation and regeneration of red blood cells.* B12 works with folic acid in the breakdown of proteins. It is helpful with assisting the body to absorb carotene.*

Blood Characteristics

The health of your blood is vital for life and the maintenance of a strong immune system.

- blood supplies oxygen to the body's cells.
- blood transports hormones and nutrients.
- blood neutralizes toxic waste.
- The blood and lymph carry toxic substances taken in by food and the natural wastes of the body.
- Lymphatic vessels drain waste products from tissues.

Many health conditions develop from an over-acid blood pH resulting from accumulated toxins in the blood. Most of these toxins are acids formed by the natural wastes of the body and the foods we eat. These acids are normally eliminated when the body's organs are functioning properly.*

Blood quality must be healthy for the lymphatic system to filter toxins out adequately. The acid and alkaline quality of the blood should always be balanced. The pH factor ranges from a scale of pH-1 to pH- 12. A pH of less then 7 is acid and more than 7 is alkaline. Healthy blood should be slightly alkaline, between a pH of 7.3 and 7.45.

When a poor diet consisting of excess sugar, white flour, fatty foods, caffeine, alcohol and chemical food additives and preservatives are consumed, the bloodstream can become congested with toxins, fat, cholesterol and mucus that accumulates in the organs. This may lead to further deterioration of the blood quality and negatively affect the lymphatic system.*

When a failure of the mechanisms responsible for maintaining a balance between acid and alkali takes place, an abnormal level of acidity in the blood causes a condition known as acidosis. Acidosis can create an unhealthy internal environment that leaves the body's health vulnerable.*

Cleanse and Strengthen Your Blood By Eating a Healthful Diet

- Low-level acid-forming foods that may include butter, cheeses, dried fruits, most grains, seeds and nuts
- Alkaline forming foods that include
- fruits and vegetables
- Blood purifying herbs and nutrients that cleanse, alkalinize and strengthen the blood and immune system*

AND…

Drink at least eight glasses of water daily to help with cleansing and carrying toxins out of the body.

Reprinted with the exclusive permission of Health Plus, Inc.

COX-2 Inhibitor,
Ibuprofen Side Effects, and
Pain Management Without Side Effects

What is a COX-2 Inhibitor and Why is Inhibiting COX-2 Important?

Cyclooxygenase (COX) is an enzyme naturally present in our body. Scientists discovered there were two forms of this Cyclooxygenase COX enzyme -- COX-1 and COX-2 enzymes.

COX-1 enzymes are produced widely throughout the body and is involved in the regulation of day-to-day cellular and metabolic activities such as maintaining stomach lining integrity, regulating blood flow within the kidneys and balancing platelet function. COX-1 enzymes are present in the body always and should not be inhibited.

COX-2 enzymes are necessary for inducing pain. The COX-2 enzyme is present in our bodies, ideally on a limited basis; however, factors such as diet, stress, and injury can influence COX-2 production. When COX-2 is produced on a continual basis, constant pain ensues. Therefore, inhibiting COX-2 is an option for muscle pain management.

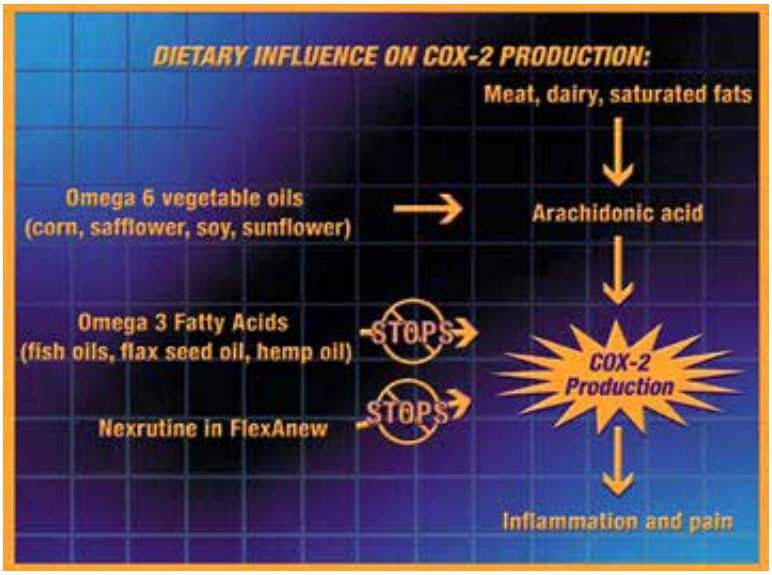
What Causes COX-2 to Get Out of Control?

The consumption of high amounts of saturated fat and the omega 6 unsaturated fatty acids, and a consumption of low amounts of omega 3 fatty acids can give rise to the production of COX-2 enzymes. In a state of ideal dietary balance, our Omega 6 to Omega 3 ratio would be 1:1, certainly no worse than 2:1. Unfortunately, because of our modern dietary indiscretions and the general unavailability of wholesome food, most Americans have an Omega 6 to Omega 3 ratio in the range of 10:1 to 20:1!

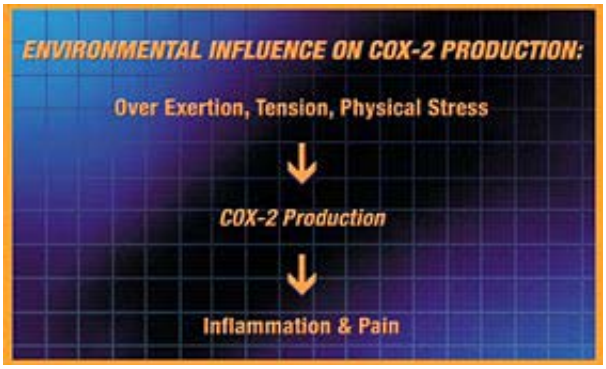
Simply put, by continually having an unbalanced fatty acid intake we are giving the

COX-2 enzyme the raw material to create fire, but not the raw material to put out the fire. It's not that COX-2 enzymes are "bad" enzymes. To the contrary, we need them for life. It's just that our diets and the stresses we live in today create way too much COX-2 enzymes, and we don't use the resources to put out the fires.

Dietary Influence on COX-2 Production



Environmental Influence on COX-2 Production



Is COX-2 production present only in disease states?

- COX-2 Inhibition Protective Mechanism Against Colorectal Cancer NEW

No, as mentioned previously, COX-2 enzyme production occurs due to a myriad of factors and COX-2 production does not indicate that you are in a state of disease. The membranes of all cells in the body contain a fatty acid called arachadonic acid. As old cells die and new cells take their place, arachadonic acid is released into body tissues

and blood. COX-1 and COX-2 enzymes act upon arachadonic acid to form molecules called prostaglandins.

Prostaglandins are compounds that are produced via the metabolism of fats in our diets. These compounds are simplistically categorized as either "good" or "bad." The good prostaglandins are beneficial and constructive to the body while the bad ones, if produced on a continual basis, can be destructive.

It is interesting to note that the consumption of high amounts of saturated fat and the omega 6 unsaturated fatty acids can give rise to the production of the bad prostaglandins, resulting in our recommendation to decrease animal fat intake and increase more of the unsaturated fats that come from fish into your diet. From a clinical perspective, one of the enzymes that are involved in the production of the destructive prostaglandins, called cyclooxygenase-2 (COX-2), is the target of nutritional intervention in order to suppress these substances. Hence, the introduction of dietary modifications that inhibit the COX-2 enzyme.

So, even though research is examining the role of excessive COX-2 enzyme production as a factor, healthy individuals can experience COX-2 enzyme production in amounts higher than normal, whether it is from diet, trauma or stress, or foreign invaders.

Why NSAIDs (aspirin, ibuprofen, etc.) Have Major Side Effects

- Aspirin, Ibuprofen and Cox-II Pain Killers Increase Risk of Heart Attack
- Side Effects of Regular Aspirin Use Outweigh Benefits in Elderly - Try Nattokinase

It is estimated that 25% of patients using NSAIDs, such as aspirin and ibuprofen, experience some kind of side effect and about 5% develop serious health consequences (massive GI bleeding, acute renal failure, etc.). This is because both COX-1 and COX-2 enzymes are inhibited to varying degrees by all currently available (1st generation) NSAIDs. These first generation NSAIDS include aspirin, diclofenac, ibuprofen, indomethacin, naprosyn, piroxicam, and others. Studies published so far support the hypothesis that the undesirable side effects of NSAIDs such as gastric erosion and renal dysfunction are due to the inhibition of COX-1 enzymes, while the anti-inflammatory (therapeutic) effects are due to the inhibition of COX-2 enzymes.

The benefits and the side-effects of NSAIDs vary among the 1st generation NSAIDS. Here is the key: Inhibitory potency and selectivity of the conventional, 1st generation NSAIDs for COX-1 and COX-2 enzymes vary greatly. Some NSAIDs (e.g., ketoprofen) are relatively COX-1 selective, some (ibuprofen and naproxen) are essentially non-selective, while others (e.g., diclofenac) are relatively COX-2 selective. However, even COX-2 "selective" NSAIDs still had sufficient anti-COX-1 enzyme activity to cause potent inhibition of gastric PGE2. Thus, at therapeutic concentrations, none of the currently marketed NSAIDs spare gastric COX-1 activity.

Selective COX-2 Inhibitor Drugs Under Development

- Ibuprofen-like activity in extra-virgin olive oil
- Pine Tree Bark Reduces Arthritis Pain by Inhibiting COX-II **NEW**

There are currently at least a dozen highly selective COX-2 inhibitors under development by different pharmaceutical companies. These 2nd generation NSAIDs represent a new class of drugs (truly selective COX-2 inhibitors) and are considered a major advance in the management of pain and inflammatory diseases. Of these drugs, celecoxib (SC-58635 or Celebra by Searle) is the first to pass through the FDA advisory panel and will probably be approved shortly for use in rheumatoid and osteoarthritis. Celecoxib is 375 times more selective for COX-2 relative to COX-1 and, at therapeutic doses, its plasma concentration does not reach the level required for effective COX-1 inhibition. In clinical trials celecoxib showed effective anti-inflammatory activity with virtually no gastrointestinal adverse effects compared to placebo. Other agents under developments, now dubbed "the super aspirins", may have a COX-2 selectivity several fold greater than that of celecoxib with virtually on effect on COX-1 and may therefore afford a much wider margin of safety.

Nexrutine™ — A Natural 2nd-Generation COX-2 Inhibitor

- Nexrutine™ was developed from a plant (Phellodendron amurense) used safely for more than 1,500 years in Asia.

- Nexrutine™ has a unique mechanism of action: It is a selective COX-2 enzyme inhibitor . Most herbal COX-2 enzyme inhibitors have not been evaluated for their potential to inhibit COX-1 enzymes. Nexrutine™ has cell culture, animal and human data to support its efficacy and safety as well as data that indicate that it has a characteristic that no other natural COX-2 inhibitor has, which is COX-2 enzyme selectivity.

- Inhibiting COX-1 enzymes could result in greater gastrointestinal irritation, however, Nexrutine™ does not inhibit COX-1 enzymes and is gentle on the stomach [8]. To be most useful, the botanical (Nexrutine) must not have a pronounced inhibitory action on COX-1 enzyme activity. Nexrutine™ selectively inhibits the COX-2 enzyme without affecting the important COX-1 enzyme [6].

- Not only is the key constituent of Nexrutine™ absorbed, [8,9] but also it has been reported to exhibit a strong moderating effect. [1-3,10-12] Human data indicates that a small dosage of Nexrutine™ is needed for efficacy [7] compared to a rather large dose for other ingredients. This equates to less pills an individual must take daily and should improve individual compliance with Nexrutine™.

Cell Culture Data
COX-2 enzyme inhibitory activity was confirmed in human umbilical endothelial cells. Cells were stimulated with one of two agents to provoke a COX-2 enzyme response and then Nexrutine was added to the cell culture. COX-2 enzyme inhibition was measured and the ability of Nexrutine to inhibit COX-2 enzymes was compared to other selective COX-2 inhibitors. The results were favorable and indicated Nexrutine's COX-2 inhibitory potential. Nexrutine also showed little inhibition of COX-1 enzymes. [6]

In Vivo Data
A series of three animal studies were conducted to evaluate the analgesic activity and safety of Nexrutine. [4]

Human Open Trial
Preliminary data in humans suggest that Nexrutine™ was well accepted and gentle on the stomach.

- NIH Awards Grant to Study the Dietary Supplement Nexrutine for Prevention of Prostate Cancer

References

1. Hsu and Associates. Oriental Materia Medica. Keats Publishing, Inc. 1986.

2. Wang et al. Effects of Oren-gedoku-to and Unsei-in, Chinese traditional medicines on interleukin-8 and superoxide dismutase in rats. J Pharm Pharmacol 1997, 49: 102-104.

3. Ikuta and Nakamura. Canthin-6 one from the roots of Phellodenderon amurense. Planta Med 1995, 61.

4. Sufka K. Anti-inflammatory/Analgesic animal model (series of three studies). University of Mississippi. May-Sept 2000 (unpublished).

5. Patterson D. An acute oral toxicity study in rats with SAC1-0004X. Final Report. Springborn Laboratories, Inc. Ohio Research Center. Oct. 2000. 1-21.

6. Dupuis P. Study of the effects of NPS0029 (Nextrutine™) on various human cyclooxygenase activities. Cerep Laboratories, France (unpublished).

7. Dennis and Company Research. Anti-inflammatory Dietary Supplement HUT: Open Human clinical trial evaluating the efficacy and safety of Nexrutine™. Sept 2000 (unpublished).

8. Bhide MB et al. Absorption, distribution and excretion of berberine. Ind Jour Med Res 1969; 57 (11).

9. Zeng X. HPLC determination of berberine in plasma of patients with ischemic heart failure. Chormatographia 1998; 48(7/8).

10. Ckless K et al. Inhibition of in vitro lymphocyte transformation by the isoquinoline alkaloid berberine. J Pharm Pharacol 1995 Dec, 47(12A): 1029-31.

11. Fukuda K et al. Inhibition of berberine of cyclooxygenase-2 transcriptional activity

in human colon cancer cells. J Ethnopharmacol 1999 Aug, 66(2): 227-33.

12. Yasukawa K et al. Relative inhibitory activity of berberine type alkaloids against 12-O-tetradecanoylphorbo-13-acetate induced inflammation in mice. Chem Pharm Bull (Tokyo) 19991 Jun, 39(6): 1462-5.

13. Vane JR; Bakhle YS; Botting RM Cyclooxygenases 1 and 2. Annu Rev Pharmacol Toxicol, 1998, 38:, 97-120
14. Cryer B; Feldman M Cyclooxygenase-1 and cyclooxygenase-2 selectivity of widely used nonsteroidal anti-inflammatory drugs. Am J Med, 1998 May, 104:5, 413-21
15. Bjorkman DJ The effect of aspirin and nonsteroidal anti-inflammatory drugs on prostaglandins. Am J Med, 1998 Jul 27, 105:1B, 8S-12S
16. Kawamori T; Rao CV; Seibert K; Reddy BS Chemopreventive activity of celecoxib, a specific cyclooxygenase-2 inhibitor, against colon carcinogenesis. Cancer Res, 1998 Feb, 58:3, 409-12
17. Lipsky PE; Isakson PC Outcome of specific COX-2 inhibition in rheumatoid arthritis. J Rheumatol, 1997 Jul, 24 Suppl 49:, 9-14
18. Wu KK. Biochemical pharmacology of nonsteroidal anti-inflammatory drugs Biochemical Pharmacology. 1998; 55(5):543-7.
19. Simon LS; Lanza FL; Lipsky PE; Hubbard RC; Talwalker S; Schwartz BD; Isakson PC; Geis GS. Preliminary study of the safety and efficacy of SC-58635, a novel cyclooxygenase 2 inhibitor: efficacy and safety in two placebo-controlled trials in osteoarthritis and rheumatoid arthritis, and studies of gastrointestinal and platelet effects. Arthritis Rheum, 1998 Sep, 41:9, 1591-602.