

# **INGREDIENTS OF LEAD DETOX PRODUCT**

## **Black (Cumin) Seed**

### **DESCRIPTION**



Referred to simply as "black seed", the substance known as black cumin seed has been used as a nutritional supplement for centuries, for a variety of conditions related to respiratory health, kidney and liver support, circulatory and immune system support and to promote general health. Ancient traditions document the use of black cumin seed as an energy source, perhaps because of its rich nutritional value. The seeds are still believed to increase heat in the body, making metabolism more efficient. Over the past six decades, black cumin seed has been studied at various universities throughout the world, and more than 200 studies support its use as an effective herbal supplement.

**PRECAUTIONS:** Though there is no known toxicity, pregnant and lactating women should not use black cumin seed.

### **STUDIES**

- More than 200 studies have been conducted on black cumin seed. It has been found to be excellent for digestive problems, helping with peristalsis and the expelling of parasites. Studies of black seed have shown it to aid in cancer prevention and treatment, as performed by scientists at Cancer Immuno-Biology Laboratory of Hilton Head Island, South Carolina. The conclusion was that black seed stimulates "neutrophil" activity, or increased production of immune cells, bone marrow cells, and B-cells that produce antibodies. The results showed that black seed fosters a healthy immune system, which detects and destroys cancer cells before the cancer can endanger the patient. Detailed studies are listed here:
- [The in vitro effect of aqueous extract of Nigella sativa seeds on nitric oxide production.](#)
- [Neuropharmacological activity of Nigella sativa L. extracts.](#)
- [Chemopreventive potential of volatile oil from black cumin \(Nigella sativa L.\) seeds against rat colon carcinogenesis.](#)
- [Nigella sativa \(black cumin\) ameliorates potassium bromate-induced early events of carcinogenesis: diminution of oxidative stress.](#)
- [Delayed apoptosis upon the treatment of Hep-2 cells with black seed.](#)
- [Effect of Nigella sativa \(N. sativa L.\) and oxidative stress on the survival pattern of MCF-7 breast cancer cells.](#)
- [Protective effect of Nigella sativa seeds against carbon tetrachloride-induced liver damage.](#)
- [Effect of Nigella sativa \(black seed\) on subjective feeling in patients with allergic diseases.](#)

***Transformation, Hope, Strength, and Perseverance***

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## ***Docahexaenoic Acid (DHA)***

### **DESCRIPTION**

Docahexaenoic acid, or DHA, is a major component of fish oil. It is a long-chain polyunsaturated fatty acid (LCPUFA) of the n-3 or omega-3 type. DHA is a vital component of the phospholipids of human cellular membranes, especially those in the brain and retina. It is necessary for optimal neural development and visual acuity. DHA is vital for normal brain development and for the maintenance of normal brain function throughout life. DHA is taken

up by the brain into the brain cells and the retina (in the eye). DHA appears to be a major determinant of membrane fluidity in brain cells, and this could play a major role in the maintenance of normal cognition and mood. DHA is indicated for those with attention deficit disorder, dyslexia and, possibly, those with cognitive impairment and dementia (including Alzheimer's disease).

**CONTRAINDICATIONS:** At present, DHA is contraindicated for hemophiliacs and those taking warfarin, since fish oils themselves are known to increase bleeding time and have anticoagulant properties.

### **STUDIES**

- A study was published in Pediatrics Journal which showed that increases in cognitive ability and school performance were attributed to the effects of lipids, especially DHA, on early development of the nervous systems of infants who were breastfed. Mothers who regularly ate DHA-rich foods, including oily fish, through their pregnancies and during lactation, gave birth to infants who had better visual development by age three than the children of mothers who had similar diets but who did not breastfeed. This study is a testament to the benefits of DHA and the benefits of breastfeeding. All in all it shows how to enhance the beneficial qualities of DHA in the diet by breastfeeding, and by the mother eating DHA-rich foods which ultimately benefit the child.
- Studies have shown that infants who were fed formula supplemented with DHA and ARA from birth to age four months exhibited superior problem-solving skills by 10 months of age, compared to an infant who was not fed this type of formula. These higher problem solving skills lead to higher performance on IQ tests in childhood. Both DHA and ARA (Arachidonic Acid) are considered non-essential fatty acids because they can be manufactured in the body.
- A National Institutes of Health (NIH) study compared DHA and ARA-enriched formula to unenriched formula, and determined that the former group exhibited significantly improved IQ scores at 18 months of age. Also infants fed the enriched formula had better visual acuity at four months and one year compared to the other group who were fed the unenriched formula. In addition, the visual acuity of the enriched group was similar to the breastfed infants.

Other detailed studies are listed here:

[Genotoxicity and subchronic toxicity studies of DHA-rich oil in ... Polyunsaturated fatty acids, including docosahexaenoic acid \(DHA\), are natural constituents of the human diet.](http://www.medscape.com/medline/abstract/17933446)  
<http://www.medscape.com/medline/abstract/17933446>

[Clinical Studies With DHA](http://www.brightbeginnings.com/babynutrition/dha_studies.asp)  
[Bright Beginnings baby formulas contain 19mg of DHA per 100 Calories and costs 30% less than other national baby formula brands...](http://www.brightbeginnings.com/babynutrition/dha_studies.asp)  
[http://www.brightbeginnings.com/babynutrition/dha\\_studies.asp](http://www.brightbeginnings.com/babynutrition/dha_studies.asp)

[Term infant studies of DHA and ARA supplementation on ...  
BioInfoBank Library...  
http://lib.bioinfo.pl/pmid:14597910](#)

[DHA As An Anti-Inflammatory Nutrient | Studies](#)  
Whereas most studies have explored the effects of predominantly EPA-based n-3 FAs preparations, few have addressed the effects of n-3 FAs preparations with DHA as the main FA.  
[http://www.wellnessresources.com/studies/entry/dha as an anti inflammatory nutrient](http://www.wellnessresources.com/studies/entry/dha%20as%20an%20anti%20inflammatory%20nutrient)

[DHA During Pregnancy is Vital for Sensory, Cognitive, and Motor ...](#)  
Study DHA during pregnancy is an essential nutrient for any woman.  
[http://www.wellnessresources.com/newsroom/index.php/studies/entry/dha\\_during\\_pregnancy is ...](http://www.wellnessresources.com/newsroom/index.php/studies/entry/dha_during_pregnancy_is_...)

[DHA-Geneva Sitrep No. 53](#)  
[UNIVERSITY OF PENNSYLVANIA - AFRICAN STUDIES CENTER ... RWANDA CIVIL DISTURBANCE DHA-GENEVA DAILY INFORMATION REPORT NO.](#)  
[http://www.africa.upenn.edu/African\\_Studies/Newsletters/DHA\\_53.html](http://www.africa.upenn.edu/African_Studies/Newsletters/DHA_53.html)

[DHA-Geneva Sitrep No. 52](#)  
[UNIVERSITY OF PENNSYLVANIA - AFRICAN STUDIES CENTER ... RWANDA CIVIL DISTURBANCE DHA-GENEVA DAILY INFORMATION REPORT NO.](#)  
[http://www.africa.upenn.edu/African\\_Studies/Newsletters/DHA\\_52.html](http://www.africa.upenn.edu/African_Studies/Newsletters/DHA_52.html)

[DHA-GENEVA SITREP 35 \(Rwanda\)](#)  
[UNIVERSITY OF PENNSYLVANIA - AFRICAN STUDIES CENTER ... RWANDA CIVIL DISTURBANCE DHA-GENEVA DAILY INFORMATION REPORT NO.](#)  
[http://www.sas.upenn.edu/African\\_Studies/Urgent\\_Action/DHA\\_35.html](http://www.sas.upenn.edu/African_Studies/Urgent_Action/DHA_35.html)

[DHA-Geneva Sitrep No. 49](#)  
[UNIVERSITY OF PENNSYLVANIA - AFRICAN STUDIES CENTER ... RWANDA CIVIL DISTURBANCE DHA-GENEVA DAILY INFORMATION REPORT NO.](#)  
[http://www.sas.upenn.edu/African\\_Studies/Urgent\\_Action/DHA\\_49.html](http://www.sas.upenn.edu/African_Studies/Urgent_Action/DHA_49.html)

[Plasma and brain endocannabinoid level correlation studies after ...](#)  
[Plasma and brain endocannabinoid level correlation studies after increasing DHA dietary intake...](#)  
[http://www.fasebj.org/cgi/content/meeting\\_abstract/21/6/A1067](http://www.fasebj.org/cgi/content/meeting_abstract/21/6/A1067)

## ***Eicosapentaenoic (EPA)***

### **DESCRIPTION**

Eicosapentaenoic acid, or EPA, is a major component of fish oil. EPA may be indicated for lowering elevated triglycerides in those who are hyperglyceridemic. EPA may play some therapeutic role in those with cystic fibrosis to reduce disease severity and may similarly play a role in type 2 diabetics in retarding the progression of diabetic nephropathy.

**CONTRAINDICATIONS:** Before taking EPA, tell your doctor if you are pregnant or breast feeding. Fish oils, a source of EPA, can be high in Vitamin A and Vitamin D. Taking more than 25,000 IU of Vitamin A per day, or 800 IU of Vitamin D per day is not advised while you are taking EPA.

### **STUDIES**

- Japanese studies by Mitsuhiro Yokoyama, MD, PhD (Kobe University Graduate School of Medicine, Japan ) have shown that EPA reduces LDL-cholesterol and stabilizes HDL-cholesterol, which is a healthy benefit. Other detailed studies are listed here:

[Randomized, placebo-controlled study of ethyl-eicosapentaenoic acid ...](#)  
 OBJECTIVE: The study investigated the efficacy and tolerability of ethyl-eicosapentaenoic acid (E-EPA) as add-on treatment in chronic, severe schizophrenia.  
<http://www.medscape.com/medline/abstract/12202284>

[Double-blind, placebo-controlled, randomized study of ...](#)  
 Double-blind, placebo-controlled, randomized study of eicosapentaenoic acid diester in patients with cancer cachexia.  
<http://www.medscape.com/medline/abstract/16849754>

[Efficacy of ethyl-eicosapentaenoic acid in bipolar depression: ...](#)  
 Efficacy of ethyl-eicosapentaenoic acid in bipolar depression: randomised double-blind placebo-controlled study \*  
<http://bjp.rcpsych.org/cgi/content/abstract/188/1/46>

[Double-Blind, Placebo-Controlled, Randomized Study of ...](#)  
 Double-Blind, Placebo-Controlled, Randomized Study of Eicosapentaenoic Acid Diester in Patients With Cancer Cachexia  
<http://jco.ascopubs.org/cgi/content/abstract/24/21/3401>

[Double-Blind, Placebo-Controlled, Randomized Study of ...](#)  
 Downloading the PDF version of: J Clin Oncol Fearon et al. ... This file is in Adobe Acrobat (PDF) format. If you have not installed and configured the Adobe Acrobat Reader on your system, ...  
<http://jco.ascopubs.org/cgi/reprint/24/21/3401>

[Unbound MEDLINE | Double-blind, placebo-controlled, randomized study ...](#)  
 Unbound MEDLINE | Double-blind, placebo-controlled, randomized study of eicosapentaenoic acid diester in patients with cancer cachexia. Journal article. Search by keyword, journal, author or by EBM ...  
[http://www.unboundmedicine.com/medline/ebm/record/16849754/abstract/Double\\_blind\\_pla](http://www.unboundmedicine.com/medline/ebm/record/16849754/abstract/Double_blind_pla)  
 cebo c...

[Red Blood Cell Docosahexaenoic Acid and Eicosapentaenoic Acid ...](#)  
 Red Blood Cell Docosahexaenoic Acid and Eicosapentaenoic Acid Concentrations Are Positively Associated with Socioeconomic Status in Patients with Established Coronary Artery Disease: Data from the ...  
<http://jn.nutrition.org/cgi/content/abstract/138/6/1135>

[Randomized, Placebo-Controlled Study of Ethyl-Eicosapentaenoic Acid ...](#)  
 Randomized, Placebo-Controlled Study of Ethyl-Eicosapentaenoic Acid as Supplemental Treatment in Schizophrenia  
<http://ajp.psychiatryonline.org/cgi/content/abstract/159/9/1596>

[European Journal of Clinical Nutrition - Abstract of article: ...](#)  
 Influence of three rapeseed oil-rich diets, fortified with -linolenic acid, eicosapentaenoic acid or docosahexaenoic acid on the composition and oxidizability of low-density lipoproteins: results of ...  
<http://www.nature.com/doi/10.1038/sj.ejcn.1602523>

[Study on the effect of eicosapentaenoic acid on ph...\[J Pharm Biomed ...](#)  
 PubMed is a service of the U.S. National Library of Medicine that includes over 16 million citations from MEDLINE and other life science journals for biomedical articles back to the

[1950s. PubMed ...  
http://www.ncbi.nlm.nih.gov/pubmed/18280689](http://www.ncbi.nlm.nih.gov/pubmed/18280689)

## ***Mood Enhancing Fish Oils Eicosapentaenoic Acid (EPA) and Docosahexaenoic Acid (DHA)***

### **DESCRIPTION**

Oil from fish contains eicosapentaenoic acid (EPA) and docosahexaenoic acid (**DHA**); both are omega-3 fatty acids. Fish oils appear to have mood-stabilizing properties when used in the treatment of bipolar disorder. Overactive cell-signaling pathways may be involved in the pathophysiology of bipolar disorder. EPA and DHA may dampen signal transduction associated with phosphatidylinositol and arachidonic acid.

**PRECAUTIONS:** Check with your physician when considering fish oil supplements for children, pregnant women, nursing mothers, hemophiliacs, and diabetics.

### **STUDIES**

- Omega-3 fatty acids, given in the form of fish oil tablets, were shown in a 1999 controlled trial<sup>Stoll</sup> to maintain mood stability far better than an olive oil placebo. The Stoll Study looked at bipolar condition that had recently gone into remission, and showed that a relapse was sharply reduced in the group given the 9.6 grams of fish oil.
- Some studies in people with depression or bipolar disorder have used EPA alone, including one of the most recent with the strongest positive results; but one of the larger earlier studies using EPA alone showed no benefit. Many other studies, including the first one from Harvard, used fish oil tablets which provided both EPA and DHA. For now it seems safe to conclude that having both does not interfere with the antidepressant and mood stabilizing actions; and that EPA alone *might* be sufficient.
- The Frangou study, 2006, examined mild bipolar depression and showed that EPA performed significantly better than the placebo; there were no increases in mania scores for subjects on EPA. Two grams of EPA did not perform any better than one gram daily.
- The Sagduyu study, 2005 showed less irritability for bipolar subjects with EPA.
- The Zanarini study, 2003 of borderline bipolar subjects showed decreased aggression and depression.
- The Nemets study, 2002 showed that with 2 grams of EPA daily, there were highly significant benefits by the third week.
- The Puri study, 2001 showed EPA used in treatment-resistant depression resulted in symptom remission, structural brain changes and reduced neuronal phospholipid turnover.

## ***Ethylenediaminetetraacetic Acid (EDTA)***

## DESCRIPTION

EDTA is the chemical compound **ethylenediaminetetraacetic acid**. It has been used in chelation therapy for acute hypercalcemia and mercury and has been used for lead poisoning. EDTA is a chelator, used in medicine (chelation therapy), where they are employed to safely bind with poisonous metal agents such as mercury, arsenic, or lead to stabilize them and allow them to be excreted without further interaction with the body.

## STUDIES

- Studies have shown that EDTA makes a very stable bond with mercury, a specific metal. It was previously thought that EDTA could not remove mercury in vivo or existing inside a living organism. This was believed because it had never been seen to show up in the urine on a provocative EDTA challenge test. This is partially correct. Under most circumstances mercury bound EDTA, will not come out of the urine, but it will come out of the stool (but no one thought to look for it there). You can get mercury bound EDTA to come out in the urine by giving a large amount of EDTA over a short period of time but this is not recommended. The kidneys are very sensitive to mercury, and if your body can get rid of the mercury through the stool, so much the safer. Since mercury is normally detoxified via the colonic route, EDTA suppositories may prove to be more effective than I.V. EDTA chelation for this purpose since the highest concentration of the EDTA in suppositories is being delivered right to the colonic mucosa.
- In studies, mercury will not show up in the urine unless huge doses of EDTA are taken (again, not recommended), otherwise they will be in the stool, for which a fecal metal test would be required. Other detailed studies are listed here:

[Study on EDTA-degrading bacterium Burkholderia cepacia YL-6 for ...  
Bioaugmentation production of EDTA-degrading bacterium Burkholderia cepacia YL-6 was carried out in an aerobic fermentor.  
http://www.medscape.com/medline/abstract/16051084](http://www.medscape.com/medline/abstract/16051084)

[Application of computer imaging, stripping voltammetry and mass ...  
Application of computer imaging, stripping voltammetry and mass spectrometry to study the effect of lead \(Pb-EDTA\) on the growth and viability of early somatic embryos of Norway spruce \(Picea abies ...  
http://www.medscape.com/medline/abstract/16220262](http://www.medscape.com/medline/abstract/16220262)

[Learn More About Chelation Therapy and the Study \[NCCAM Health ...  
More information about the national research study that is testing whether chelation therapy is safe and effective for treating heart disease. Chelation therapy is an investigational therapy using a ...  
http://nccam.nih.gov/chelation/chelationstudy.htm](http://nccam.nih.gov/chelation/chelationstudy.htm)

[DOUBLE BLIND STUDY PROVES EDTA CHELATION THERAPY EFFECTIVE  
A Pilot Double Blind Study of Sodium-Magnesium EDTA in Peripheral Vascular Disease...  
http://www.drcranon.com/chelation/study8.htm](http://www.drcranon.com/chelation/study8.htm)

[Critique of the Calgary PATCH study using EDTA chelation to treat ...  
Critique of the Calgary PATCH study using EDTA chelation to treat heart disease. \(Letters to the Editor\). - Townsend Letter for Doctors and Patients...  
http://www.enotes.com/townsend-letter-doctors-patients-journals/86387593](http://www.enotes.com/townsend-letter-doctors-patients-journals/86387593)

[SHARF Study at EDTA shows no outcomes difference between IHD and ...  
A RANDOMISED TRIAL OF DIFFERENT RENAL REPLACEMENT MODALITIES IN ACUTE RENAL](#)

[FAILURE: RESULTS OF THE SHARF STUDY June 6th, 2005 In a study reported at the ERA/EDTA Congress in Istanbul, Robert ...](http://www.hdcn.com/misc/edtapr1.htm)  
<http://www.hdcn.com/misc/edtapr1.htm>

[Study on EDTA-degrading bacterium Burkholderia cep...\[Bioresour ...](http://www.ncbi.nlm.nih.gov/pubmed/16051084)  
[PubMed is a service of the U.S. National Library of Medicine that includes over 16 million citations from MEDLINE and other life science journals for biomedical articles back to the 1950s. PubMed ...](http://www.ncbi.nlm.nih.gov/pubmed/16051084)  
<http://www.ncbi.nlm.nih.gov/pubmed/16051084>

[Critique of the Calgary PATCH study using EDTA chelation to treat ...](http://www.encyclopedia.com/doc/1G1-86387593.html)  
[- Editor: In January, 2002, the American Medical Association published a : Encyclopedia.com...](http://www.encyclopedia.com/doc/1G1-86387593.html)  
<http://www.encyclopedia.com/doc/1G1-86387593.html>

[1993 New Zealand Study « EDTA Chelation: A Factual Blog](http://chelate.wordpress.com/2007/06/22/1993-new-zealand-study/)  
[Another study was conducted in New Zealand. The researchers looked at 32 patients, also with IC. These patients were treated with intravenous chelation or placebo for 10 weeks, and the ...](http://chelate.wordpress.com/2007/06/22/1993-new-zealand-study/)  
<http://chelate.wordpress.com/2007/06/22/1993-new-zealand-study/>

[1990: An Amazing Study « EDTA Chelation: A Factual Blog](http://chelate.wordpress.com/2007/06/18/1990-an-amazing-study/)  
[It seems like the confusing results of the 1963 chelation study scared a lot of researchers away from the field for some time, ... At this point, the doctors running the study did something very strange. ...](http://chelate.wordpress.com/2007/06/18/1990-an-amazing-study/)  
<http://chelate.wordpress.com/2007/06/18/1990-an-amazing-study/>

## **Olive Leaf Extract**

### **DESCRIPTION**



Olive Leaf has been used historically as an anti-bacterial that destroys only bad bacteria. It is also anti-fungal, antibiotic and anti-viral. A phytochemical called oleuropein (pronounced oh-lee-or-oh-pin), is found in the olive leaf. A natural supplement of olive leaf extract contains substantial medicinal benefits. The ancient Egyptians regarded it as a symbol of heavenly power, and in keeping with that belief, they extracted its oil and used it to mummify their kings. Later cultures found the leaf was better utilized for the living

than the dead. Over the ages, there is documentation that it was a popular folk remedy for combating fevers.

### **STUDIES**

- The Townsend Letter for Doctors and Patients—The Examiner of Medical Alternatives, May 2001, details how effectively a particular brand of olive leaf extract successfully treated emotional difficulties. Licensed clinical psychologist Jerome Cardell, PsyD, of Coco, Florida observed that many of his patients' neurotic illness such as depression and anxiety had their problems controlled by olive leaf extract. In fact one of his patients who had been diagnosed with HIV used a formula consisting of mixing olive oil, whole lemon juice, orange juice, and olive leaf extract in combination. He uses this drink together with six olive leaf extract capsules daily. He observed that this herb modifies the biological terrain inside the body by making it more alkaline, which inhibits the growth of pathological organisms. Viruses, bacteria, and pathogens simply cannot co-exist in that kind of alkaline environment. Other detailed studies are listed here:

[Computational study of bindings of olive leaf extract \(OLE\) to HIV-1 ...](#)  
[Recent experimental study found that OLE \(olive leaf extract\) has anti-HIV activity by blocking the HIV virus entry to host cells \[Lee-Huang, S.](#)  
<http://www.medscape.com/medline/abstract/17537437>

[antioxidants - PositiveHealth.com](#)  
[Below are the articles associated with this topic. ... Free radicals have been implicated in a great number of human conditions and the literature on the subject is vast.](#)  
<http://www.positivehealth.com/permit/Articles/Antioxidant/jack21.htm>

[Computational study of bindings of olive leaf extract \(OLE\) to HIV-1 ...](#)  
[Recent experimental study found that OLE \(olive leaf extract\) has anti-HIV activity by blocking the HIV virus entry to host cells \[Lee-Huang, S., Zhang, L., Huang, P.L., Chang, Y., and Huang, P.L. ...](#)  
<http://lib.bioinfo.pl/pmid:17537437>

[Olive Leaf Extract](#)  
[Olive Leaf Extract -- A New/Old Healing Bonanza For Mankind is intended exclusively for informational and educational purposes only and not for medical advice.](#)  
<http://www.curezone.com/foods/oliveleaf.html>

[Olive Leaf Extract - works in the body](#)  
[How does d-LENOLATE Olive Leaf Extract Work In the Body? ... d-LENOLATE Olive Leaf Extract Works In Several Ways.](#)  
<http://www.otrecure.com/user/study5.html>

[Olive Leaf Extract - The Book - Otrezure](#)  
[Dr. Morton Walker's book on Olive Leaf Extract has documented studies where diseases were not only prevented and stabilized, but also actually cured.](#)  
[http://www.otrecure.com/user/products5\\_frames.html](http://www.otrecure.com/user/products5_frames.html)

[NutriScreen: Information On Our Olive Extract](#)  
[Olive Leaf extract has the ability to interfere with critical amino acid production essential for viruses. ... Olive Leaf Extract-A New/Old Healing Bonanza for Mankind is intended](#)  
<http://www.nutriscreen.com/olivex.htm>

[Research on Olive Leaf Extract](#)  
[Dr Stevenson, manager of the Natural Products Pharmacology Unit at SCU, said that in a separate aspect of the study, olive leaf extract was also found to produce inhibitory activity against some key ...](#)  
<http://www.healthsupporthome.com/scuni.html>

[Herbal Health Report: Olive Leaf Extract Regains Interest as a ...](#)  
[Herbal Health Report: Olive Leaf Extract Regains Interest as a Superb Anti-microbial Agent...](#)  
<http://www.chiroweb.com/archives/15/15/20.html>

[East Park patented natural Anti-Aging and Immune enhancer products - ...](#)  
[Offers patented olive leaf extract hair and skin care products, and supplements. ... East Park Research's patented olive leaf extract products are natural, ...](#)  
<http://www.eastparkresearch.com/>

## **Selenium**

### **DESCRIPTION**

Selenium is a trace mineral that is essential to good health but required only in small amounts. Selenium is incorporated into proteins to make selenoproteins, which are important antioxidant enzymes. The antioxidant properties of selenoproteins help prevent cellular damage from free radicals. Free radicals are natural by-products of oxygen metabolism that may contribute to the development of chronic diseases such as cancer and heart disease. Other selenoproteins help regulate thyroid function and play a role in the immune system. There is evidence that selenium deficiency does not usually cause illness by itself. Rather, it can make the body more susceptible to illnesses caused by other nutritional, biochemical or infectious stresses. Selenium supplements may be protective against goiter, which refers to enlargement of the thyroid gland.

## STUDIES

- Studies have shown that vitamin E and selenium act as an antioxidant defense system when found together in supplements or taken together as an alternative therapy.
- Cornell Science News reports that selenium can aid in preventing cancer. Cornell University and the University of Arizona conducted a study where a group of men and women consuming selenium supplements over a 10 year period reported 41 percent less cancer than those subjects who were taking a placebo. Other detailed studies are listed here:

[Selenium and Vitamin E Cancer Prevention Trial \(SELECT\) Home Page](http://www.crab.org/select/)  
[The Selenium and Vitamin E Cancer Prevention Trial \(SELECT\) is a research study to determine if selenium and vitamin E can help prevent prostate cancer.](http://www.crab.org/select/)  
<http://www.crab.org/select/>

[Selenium Study for Non-Small Cell Lung Cancer - National Cancer ...](http://www.cancer.gov/clinicaltrials/ft-ECOG-5597)  
[Researchers are investigating selenium as a chemoprevention agent to combat the development of secondary lung cancer tumors.](http://www.cancer.gov/clinicaltrials/ft-ECOG-5597)  
<http://www.cancer.gov/clinicaltrials/ft-ECOG-5597>

[A case--control study of selenium in nails and prostate cancer risk ...](http://www.medscape.com/medline/abstract/15054461)  
[In view of the experimental evidence suggesting that the micronutrient selenium reduces prostate cancer risk, we investigated the association between the selenium level in fingernails, a measure of ...](http://www.medscape.com/medline/abstract/15054461)  
<http://www.medscape.com/medline/abstract/15054461>

[A case control study of selenium in cancer.](http://www.medscape.com/medline/abstract/8225448)  
[As selenium has been shown to be a risk modifier of cancer at several sites in a case-control approach, selenium nutrition was studied in oral and oesophageal cancer patients.](http://www.medscape.com/medline/abstract/8225448)  
<http://www.medscape.com/medline/abstract/8225448>  
[Prospective Study of Selenium Levels in Toenails and Risk of ...](http://aje.oxfordjournals.org/cgi/content/full/158/9/852)  
[Prospective Study of Selenium Levels in Toenails and Risk of Coronary Heart Disease in Men](http://aje.oxfordjournals.org/cgi/content/full/158/9/852)  
<http://aje.oxfordjournals.org/cgi/content/full/158/9/852>

[Prospective Study of Serum Selenium Levels and Incident Esophageal ...](http://jnci.oxfordjournals.org/cgi/content/full/92/21/1753)  
[In the current study, we examined the relationship between selenium levels measured in pretrial \(1985\) sera from participants and the subsequent risk of developing squamous esophageal, gastric cardia, ...](http://jnci.oxfordjournals.org/cgi/content/full/92/21/1753)  
<http://jnci.oxfordjournals.org/cgi/content/full/92/21/1753>

[A Prospective Study of Plasma Selenium Levels and Prostate Cancer ...](http://jnci.oxfordjournals.org/cgi/content/full/96/9/696)  
[We examined the association between pre-diagnostic plasma selenium levels and risk of prostate cancer in men enrolled in the Physicians' Health Study.](http://jnci.oxfordjournals.org/cgi/content/full/96/9/696)  
<http://jnci.oxfordjournals.org/cgi/content/full/96/9/696>

[Food Standards Agency research on selenium](#)

[Findings from an Agency-funded study suggest that selenium, a trace element found in food, helps our immune system defend the body against viruses. Food Standards Agency \(UK\) advice...](#)

<http://www.medicalnewstoday.com/articles/10393.php>

[CNN - Study: Mineral selenium cuts risk of prostate cancer - August ...](#)

[The study, published by the National Cancer Institute, found men who had the highest intakes of the mineral selenium cut their cancer rates by one-half to two-thirds compared to men with the lowest ...](#)

<http://www.cnn.com/HEALTH/9808/22/prostate.mineral/>

[Prospective study of serum selenium concentrations and esophageal ...](#)

[Prospective study of serum selenium concentrations and esophageal and gastric cardia cancer, heart disease, stroke, and total death<sup>1,2,3</sup>...](#)

<http://www.ajcn.org/cgi/content/abstract/79/1/80>