

Product, medication, therapy, latin name, linklist (Clusty.com)

Contents, scientific name, foreign name, Wikipedia informationResearch

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[Aclydine](#)

Aclydine is an alkaloid, derived from selected plants that have substantial effects on the protein structure and the metabolism.

At cellular it affects the activation of insulin-like growth factor (IGF-1) receptor.

...the researchers tested levels of IGF-1 and IGF-BP-3 in the patient's blood before Aclydine was taken...

Value of **IGF-BP-3 / IGF-1** General Response to Aclydine:

4.5 or greater : Greatest Probability of Response

3.5 to 4.5 : Some patients responded, some did not

Less than 3.5 : Most patients did not respond

The researchers concluded that Aclydine is best suited for patients with a ratio of IGF-BP-3/IGF-1 greater than 3.5. Patients with a ratio greater than 3.5 have a IGF-1 deficiency.

In the case the ratio is less than 3.5, but the concentration of IGF-1 is higher than normal, it might be useful to begin with a low dose of Aclydine, 1-2 capsules per day.

Anti inflammatory, anti-viral, anti fungal, immune enhancer (?)

Methods: 90 individuals suffering from CFS (Holmes and/or Fukuda criteria) entered the study. They were not allowed to take any other medication than minor pain relievers and homeopathic medication.

The treatment protocol consisted of first 4 weeks: 250 mg four times a day in combination with amino acids; second 4 weeks 250 mg Aclydine twice daily in combination with amino acids. The primary efficacy variable was the change from baseline in CFS as measured by the Clinician's Global Impression Scale (CGI) after 4 and 8 weeks of treatment. Secondary endpoints were: IGF-1, IGF-BP3 values, LMW/HMW RNase L ratio, GHQ-30, POMS, SF-36 and SCL-90.

Conclusions:

Aclydine in combination with amino acids gives an improvement in CFS symptoms (54% in the active group compared to 16% in the placebo group). No major adverse events were noted. Aclydine appears to be a safe and adequate drug for CFS.

This study was sponsored by [Optipharma](#), The Netherlands.

In one of the few studies in which possible effects have actually been measured, fm/cfs-patients who consumed a nutritional supplement containing freeze-dried aloe vera extract, which is rich in acetylated mannans, reported significant improvement in their symptoms.

(*Dykman KD ; Ford CR* :

A longitudinal study of the effects of dietary supplements on the symptoms of fm/cfs 1998)

Glycoscience.com

Interesting info on Amino acids:

Aminoacidpower.com

[Aloe](#) (diverse)

[Amino acids](#)

[Amino Acids \(Wikipedia\)](#)

Anti-microbial, stimulates white blood cells (?)

Ampligen

WARNING!

Ampligen is a very controversial drug! There are opposing views concerning the honesty of the company Hemispherx and the efficacy of the drug.

Read this before trying Ampligen:

Asensio.com on Hemispherx

HOWEVER, I found this on CFSFMExperimental-yahoogroup:

"...and hasn't [Asensio & Company](http://Asensio.com) been charged and on several counts fined by the court with manipulating stock and bringing about the destruction of many companies?

I wouldn't trust them as a source of information, because they have a vested interest in making money off their accusations, and they've gained a reputation for unethical behavior..."

Die Therapie mit dem Ampligen Poly (1).poly (C12U) kann zu einer Verbesserung der körperlichen und mentalen Leistungsfähigkeit führen. (Ebene II)
o uni-züri/klipsy.ch

Ampligen is an investigational drug produced by Hemispherx Biopharma.

It is a modified RNA molecule. Previous double-blind studies in the U.S. and Europe have had encouraging results. There have not been major side-effects directly attributable to the drug. The current 516 study is a "phase III" study, the final step before a drug is considered for approval by the FDA.

[Dr. Podell's Ampligen program](#)

Several double-blind clinical trials have found that andrographis can help reduce symptom severity in people with common colds. Though the earliest clinical trial among these showed modest benefits, later studies have tended to be more supportive. Standardized andrographis extract combined with eleuthero (Siberian ginseng), known as

Kan jang, has also been shown in a double-blind clinical trial to reduce symptoms of the common cold. A preliminary uncontrolled study using isolated andrographolide found that while it tended to decrease viral load and increase CD4 lymphocyte levels in people with HIV infection, at the amount used, the preparation led to side effects, including headache, fatigue, a bitter/metallic taste in the mouth, and elevated liver enzymes (which returned to normal after the medication was stopped). It is unknown whether the andrographolides used in this study directly killed HIV or had an immune-strengthening effect.

Healthwell.com/andrographis

To reduce their energy load, free radicals react with certain chemicals in the body, and in the process, interfere with the cells' ability to function normally.

In fact, free radicals are believed to play a role in more than sixty different health conditions, including the aging process, cancer, and atherosclerosis.

Reducing exposure to free radicals and increasing intake of

Andrographis

Andrographis paniculata

- Diterpene lactones (Andrographolides)

Chinese: Chuan xin lian

Andrographis is believed to have immune-stimulating, anti-inflammatory, fertility-decreasing, liver-protective, and bile secretion-stimulating actions. Though some older studies suggested andrographis was antibacterial, modern research has been unable to confirm this finding.

... supposedly most helpful for the URI's (upper respiratory tract infections) that hit CFS patients. Also, clot busting.

Details on Andrographis can be found at:

Altcancer.com/andcan.htm

Herbs, such as:

- **bilberry**
- **turmeric (curcumin)**
- **grape seed**
- **pine bark** extracts
- **ginkgo**

can also provide powerful antioxidant protection for the body.

Antioxidants

[Antioxidant \(Wikipedia\)](#)

In addition to enzymes, many vitamins and minerals act as antioxidants in their own right, such as:

- **vitamin C**
- **vitamin E**
- **beta-carotene**
- **lutein**
- **lycopene**

- **vitamin B2**
- **coenzyme Q10**
- **cysteine** (an amino acid).

Ashwagandha

Withania somnifera
(Indian ginseng)
(Winter cherry)
(Ajagandha)
(Kanaje Hindi)
(Samm Al Ferakh)

"...The species name somnifera means "sleep-bearing" in Latin, indicating it was considered a sedative, but it has been also used for **sexual vitality** and as an **adaptogen**. Some herbalists refer to ashwagandha as Indian ginseng, since it is used in ayurvedic medicine in a way similar to that ginseng is used in traditional Chinese medicine..."

[Ashwagandha \(Wikipedia\)](#)

"Withania is used to treat **debility**, and **nervous exhaustion**. It is also good for **increasing body weight** especially for very thin emaciated children. It is a **nervine sedative, anti-inflammatory, tonic** and **adaptogen**. It **boosts the immune system** and is a **calming stress reliever**"

[Chrysalis4me.com/herbpage](#)

Astragalus

Astragalus membranaceus

Chinese: Huang qi

Azithromycin

(Zithromax)
(Zmax)
(Sumamed)
(Aztrin)

Azithromycin is an azalide, a subclass of macrolide antibiotics. Azithromycin is one of the world's best-selling antibiotics, and is derived from erythromycin; Azithromycin is used to treat certain **bacterial infections**, most often bacteria causing **middle ear infections, tonsillitis, throat infections, laryngitis, bronchitis, pneumonia** and **sinusitis**. It is also effective against certain sexually transmitted infectious diseases, such as non-

Free radicals are highly reactive compounds that are created in the body during normal metabolic functions or introduced from the environment. Free radicals are inherently unstable, since they contain "extra" energy.

"...Generally, ashwagandha stimulates the immune system. It has also been shown to **inhibit inflammation** and **improve memory**.

Taken together, these actions support the traditional reputation of ashwagandha as a **tonic** or **adaptogen**. It counteracts the effects of stress and generally promote wellness..."

[Holistic-online.com/ashwagandha](#)

Supports T-cells, adrenals, anti-toxin (?)

Astragalus has been valued by the Chinese for centuries for its immune-enhancing and adaptogenic properties. As an adaptogen, it may modify and improve the body's response to stress through action on the adrenal cortex.

"...One doctor gave me azithromycin for a sinus infection. It did not help my sinus problems at all, but suddenly my stomach problems were much better.

I have since learned that azithromycin is one of the antibiotics used to treat mycoplasmas.

antioxidant nutrients has the potential to reduce the risk of free radical-related health problems.

[Healthwell.com/antioxidants](#)

"...Ashwagandha root, is an important herb from the Ayurvedic or Indian system of medicine. Ashwagandha has been traditionally used for the treatment of **debility, emaciation, impotence, and premature aging**. This dietary supplement is used to **enhance mental and physical performance, improve learning ability, and decrease stress and fatigue**.

Ashwagandha is a general tonic to be used in stressful situations, especially **insomnia, overwork, nervousness, restlessness, and CFS...**"

[Immunesupport.com/articles](#)

Boone K. Withania 1998

The Indian Ginseng and Anti-aging Adaptogen. Nutrition and Healing.

Singh A, Naidu PS, Gupta S, Kulkarni. 2002 Effect of natural and synthetic antioxidants in a mouse model of chronic fatigue syndrome. *J Med Food*.

Chang CY, et al. 1983

Effects of Astragalus membranaceus on Enhancement of Mouse Natural Killer Cell Activity.

Zhao KS, et al. 1990

Positive Modulating Action of Shengmaisan with Astragalus membranaceus on Anti-tumor Activity of LAK Cells.

Azithromycin Therapy May Be Beneficial for Subset of CFS Patients

In a group of 99 Chronic Fatigue Syndrome patients treated experimentally for six weeks with azithromycin, a subgroup of 58 patients reported a positive decrease in overall symptom severity. Azithromycin is an antibiotic, but is also believed to possess **beneficial immunomodulation** (immune system affecting) abilities. ...After the azithromycin treatment, the responders' blood

gonococcal **urethritis** and **cervicitis**.

[Azithromycin \(Wikipedia\)](#)

I had not yet heard of mycoplasmas, but it is now apparent that I may have had an infection..."

Cfs-recovery.org/mycoplasma

"The temporary initial benefits come crumbling down after not so long, probably because antibiotics don't address more key upstream issues in ME/CFS."

[CFSEMEExperimental-yahogroup/message](#)

plasma levels of [acetylcarnitine](#) were lower on average than for the nonresponders.

The researchers speculate that the reason for the lower acetylcarnitine levels in the responders' blood has to do with cellular energy production. Acetylcarnitine is involved in the cells' normal use of fatty acids to produce energy (oxidation). They cite studies offering preliminary evidence of **a relationship between CFS patients' fatigue and dysfunction of cellular energy production, indicating "a complex response involving acetylcarnitine."**

Are the responders' cells using more acetylcarnitine, for example?

Immunesupport.com/azithromycin

[Baclofen \(Kemstro\)](#)
[\(Lioresal\)](#)

Baclofen (brand names Kemstro® and Lioresal®) is a derivative of gamma-aminobutyric acid.

It is used for the treatment of **spastic movement**, especially in instances of **spinal cord injury** and in **multiple sclerosis**. Its beneficial effects result from actions at spinal and supraspinal sites. Baclofen can also be used to treat **hiccups**.

Historically Baclofen was designed to be a drug for epilepsy in the 1920's, and was derived from GABA. The effect on epilepsy was disappointing but it was found that in certain patients spasticity decreased.

Recommendation by *Dr. Jacob Teitelbaum*:
Baclofen: 10 to 20mg 1 to 3 times a day (sedating).

[Immunesupport.com/Dr. Jacob Teitelbaum](http://Immunesupport.com/Dr.JacobTeitelbaum)
(Treatment Protocol for Chronic Fatigue Syndrome & Fibromyalgia)

Baclofen was and is still given orally with variable effects. In the severely affected children, the oral dose is so high that side effects appear and the treatment loses its benefit. How and when Baclofen came to be used in the spinal sack is not really clear but this is now an established method for the treatment of spasticity in many conditions.

[Baclofen \(Wikipedia\)](#)

Binds the bacterial toxins (?)

Increases blood cell production in bone marrow (?)

Binds toxins, alters intestinal flora (?)

May interfere with the release of toxins (?)

Dr. Jay Goldstein's treatment protocol from the book "Betrayal by the Brain":

Ncf-net.org/forum/jay.htm

[Bentonite clay](#)

[Beta glucan](#)

[Brewers yeast](#)

[Bromelain](#)

[Bromelain \(Wikipedia\)](#)

[Bromocryptine \(Parlodel\)](#)

[Bupropion](#)

MAO- Hemmer

Ebenfalls eine Verbesserung psychischer Variablen bewirken Bupropion (Ebene III-3) und Nefazodon (Ebene

Burdock root

Butyrate

Carnitine (L-Carnitine) (Acetyl-L-carnitine)

Carnitine, also known as L-carnitine is an amino acid responsible for transport of fatty acids into a cell's mitochondria. It is often sold as a nutritional supplement. Like all other proteinogenic amino acids natural carnitine is the L-stereoisomer. It can be synthesised within the body from the amino acids **lysine** or **methionine**. **Vitamin C** (ascorbic acid) is essential to the synthesis of carnitine. It has been speculated that during growth or pregnancy the requirement of carnitine could exceed its natural production.

[Carnitine \(Wikipedia\)](#)

Cat's Claw

Uncaria tomentosa

- Alkaloids
- Sterols
- Glycosides
- Procyanidins and other plant factors

Fights staph
Eliminates toxins (?)
Antimicrobial,
increases alkalinity (?)

Acetyl-L-carnitine or ALCAR, is an acetylated form of L-carnitine. **ALCAR is far superior to normal L-carnitine in terms of bioavailability** in that it is absorbed by the gastrointestinal tract, enters cells and crosses the blood-brain barrier more readily than unacetylated carnitine.

ALCAR has a broad range of uses including combination with alpha lipoic acid to comprise a patented formulation that has been evidenced to "rejuvenate" the mitochondria of aging mice in studies conducted by Bruce Ames and others. Accordingly, acetyl-L-carnitine has potential as a life extension supplement probably capable of improving the quality and possibly also extending the average life-span of humans. Other attributed uses for ALCAR include using it as a treatment for depression (250 mg per day for several weeks) and for clearing plaque/fatty deposits out of the veins and arteries.

- antioxidant
- immune stimulating
- antiinflammatory
- cell rejuvenation (?)
- age retarding, reversing (?)
- repairs DNA (?)

III-3).
uni-züri/klipsy.ch

from a discussion forum:
"I have a high white blood count in my intestines and low butyrate. Butyrate is a small chain fatty acid that provides fuel for the cells that line the colon. **Psyllium seeds** are a soluble fiber that can raise butyrate. (Many foods such as oats are soluble fibers too but I'm allergic to them and they feed the yeast.)"

Some researchers suggest that **L-carnitine and coenzyme Q10 might have an additive or synergistic effect.**

Both coenzyme Q10 and L-carnitine are involved with maintaining mitochondrial energy production in cells and may help protect against oxidative and toxin-induced damage.

Naturaldatabase.com

Dose: 3 x 1g daily.

L-Carnitin bewirkt eine Verbesserung in somatischen und die Lebensqualität betreffenden Variablen (Ebene III-4), sowie physiologischen Variablen (Ebene III-3).

uni-züri/klipsy.ch

"L-Carnitine was found to promote statistically significant clinical improvement in 12 of 18 CFS patients. Along with helping to reduce physical fatigue, our study showed that L-Carnitine also helped aspects related to mood as well as mental fatigue. L-Carnitine is a very safe and well-tolerated naturally occurring amino acid which improves the clinical status of CFIDS patients." - *Dr. Audrius V. Plioplys, M.D.*, Chronic Fatigue Syndrome Center and Department of Research at Mercy Hospital and Medical Center Chicago Illinois.

[Rudd Vermeulen \(Amsterdam, Netherlands\)](#) had treated 150 CFS patients with oral L-carnitine 1gm bid for 6 months.

69% reported improvement in symptoms.

Made from the inner bark of the root, this supplement is several times stronger than supplements made from just inner bark. Act as a tonic.

Enhances the immune system's ability to fight viruses, bacteria, intestinal parasites, and is reported to have anticancer properties.

Chlorella

Chlorella is more than 50% protein, 1.6% chlorophyll, and rich in carotenoids, RNA-DNA, [B12](#) and [magnesium](#). Very similar in nutrients to [spirulina](#) & blue-green algae. [Beyondcenturyonline.com](#)

Heavy metal and toxin chelator, builds white blood cells, improves brain function (?)

Dose : 2g per day up to 6g per day

Cipro Coconut oil

Contains monolaurin and Acetyl-L-carnitine (?)

To disturb the envelope of (?) HHV6 : take 24g (3 tsp.) a day

cipro.de * bayer.de

[Coconut oil links](#)

Colloidal silver

Alternative to antibiotics. (?)

[Homecure](#) (Reportedly the best)

Some brands work supposedly against staph, others don't.

[Silver-colloids.com](#)

[Utopiasilver.com](#)

Cordyceps

Cordyceps sinensis

Cordyceps sinensis is a fungus parasite that lives on caterpillars in high mountain regions of China. For commercial purposes, the cordyceps cells (Cs-4 strain) can be artificially propagated in the laboratory. Jinshuibao capsules are the commercially available form of fermented Cordyceps sinensis Cs-4.

This exotic, chinese mushroom is noted for:

- increases T-cells & NK-cells
- lowers serum lipids (cholesterol)
- raises SOD (antioxidant) levels
- improve kidney function
- increases energy by elevating cAMP & ATP levels
- reducing asthma and respiratory problems,
- lowering blood pressure,
- increasing blood supply to the brain (improving memory and mental sharpness)
- enhancing sexual vigor.

Cordyceps polysaccharides show evidence that they might increase corticosterone production. Other studies suggest they might reduce blood glucose without reducing plasma insulin levels, as well as reduce plasma triglycerides and cholesterol.

Preliminary animal studies suggest cordyceps could possibly be beneficial in treating systemic lupus erythematosus. Limited human evidence suggests C. can improve liver function in patients with chronic hepatitis B. (Abstracts by: [Naturaldatabase.com](#))

Dose: 1 to 3 grams per day.

other names:

- Caterpillar Fungus
- Cs-4
- Dong Chong Xia Cao
- Dong Chong Zia Cao
- Hsia Ts'ao Tung Ch'Ung
- Vegetable Caterpillar.

contains:

- Cordyceptic acid
- Adenosine

Has beneficial effects on the immune, endocrine, cardiovascular, respiratory, renal, sexual, hepatic, immunologic, and nervous systems. Preliminary studies suggest cordyceps might stimulate immune function by increasing the number of T helper cells; increasing the natural killer cell activity ; stimulating the blood mononuclear cells ; increasing the levels of interferon-gamma, tumor necrosis factor-alpha, and interleukin-1; and prolonging the survival of lymphocytes.

Studies in animals with cancer

Researchers at Pharmanex in California, which produces a remedy called **CordyMax**, tried it out on 131 volunteers. Some were given the remedy and some a placebo over a 12-week period.

Researchers measured exercise capacity, endurance performance and metabolic alterations before, during and after receiving the remedy or placebo. Oxygen

Volume of oxygen consumption went up 5.5% in the group given the remedy, but only 2.2% in the others, suggesting an increase in aerobic capacity.

The time taken to complete a one-mile walk was reduced by 29 seconds in the CordyMax group but increased slightly in the others. And diastolic blood pressure fell by 3.2% among people taking the remedy.

The researchers said: "This study provides scientific evidence that CordyMax is effective in enhancing aerobic

[Diazepam](#)
(Valium)
(Stesolid)
(Diazemuls)
(Seduxen)
(Bosaurin)
(Diapam)
(Antenex)
(Apozepam)

Diazepam, marketed under brand names Valium, Stesolid, Diazemuls, Seduxen, Bosaurin, Diapam, Antenex and Apozepam is a drug which is a benzodiazepine derivative. It possesses **anxiolytic, anticonvulsant, sedative, skeletal muscle relaxant and amnesic** properties. This makes it a useful drug for **treating anxiety, insomnia, seizures, alcohol withdrawal, and muscle spasms.**

It is also used before certain medical procedures (such as endoscopies) to reduce tension and anxiety, and in some surgical procedures to induce amnesia. Diazepam is a core medicine in the World Health Organization's "Essential Drugs List", which is a list of minimum medical needs for a basic health care system. Diazepam is used to treat a wide range of conditions and is one of the most frequently prescribed benzodiazepines.

[DHEA](#)
Dehydroepiandrosterone

DHEA (dehydroepiandrosterone) is a hormone secreted from the adrenal glands. It is a precursor of the sex hormones (estrogen and testosterone). DHEA-S has recently been shown to have beneficial effects on memory, stress, anxiety, sleep and depression. Therefore, the deficiency of DHEA-S might be related to the symptoms in patients with CFS. *(van Rensburg, Potocnik et al. 2001)*

suggest cordyceps improves immune response, reduces tumor size and lengthens survival time . Some evidence suggests cordyceps might be cytotoxic to cancer cells, particularly lung carcinoma and melanoma. Other evidence suggests that cordyceps might reduce the risk of renal toxicity from cyclosporine or aminoglycoside drugs, and prove beneficial in chronic renal failure. Cordyceps shows evidence that it can inhibit platelet aggregation and thrombus formation. Other information suggests it might counteract or prevent arrhythmias, while decreasing heart rate and contractility.

Over the years, physicians, psychiatrists and neurologists have discovered many new off-label uses for diazepam, such as **treatment of spastic paresis** and palliative treatment of **stiff-person syndrome.**

Diazepam is also found in nature. Several plants, such as potato and wheat, contain trace amounts of naturally occurring diazepam and other benzodiazepines.

[Diazepam \(Wikipedia\)](#)

Treatment with DHEA or [Melatonin](#) alone, as well as together , prevented the reduction of B- and T-cell proliferation as well as of Th1 cytokine secretion caused by retrovirus infection. Supplementation also suppressed the elevated production

exercise capability, endurance exercise performance, and exercise metabolism and alleviating fatigue in healthy humans."

[Bbc.co.uk](#)

One study showed the value of DHEA and [Vitamin C](#) infusion treatment in the control of cfs. *(Kodama, Kodama et al. 1996)*

A study of 15 subjects with CFS, 15 subjects with major depression, and 11 healthy subjects found that DHEA and DHEA-S levels were significantly lower in the cfs compared to the healthy group. DHEA-S levels, but not

DHEA has been reported to improve energy levels in cfs patients. (Kuratsune, Yamaguti et al. 1998b)

DHEA has been shown to improve neurological function (including memory, mood enhancement, and EEG readings), immune surveillance, and stress disorders.

DHEA is definitely a brain chemical. It's not only utilized by the brain, it's manufactured by it.

Although researchers don't know what it's supposed to do yet, they do know that giving a person 500 mg of DHEA will cause them to have more REM (dream) sleep. This indicates a major role in brain chemistry.

of Th2 cytokines stimulated by retrovirus infection. (Zhang, Araghi-Niknam et al. 1999)

One study showed the value of DHEA and **vitamin C** infusion treatment in the control of cfs. Refer to the

[DHEA Replacement Therapy protocol](#) before embarking on this therapy.

DHEA replacement therapy has become popular as an antiaging regimen and offers aging patients help in preventing diseases such as osteoporosis, fatigue, depression, atherosclerosis, and cancer.

DHEA (50 or 100 mg a day) was also shown to significantly elevate insulin growth factor (IGF). Aging causes a decline in IGF levels that contributes to the loss of lean body mass, as well as to excess fat accumulation, neurological impairment, and age-associated immune dysfunction.

- stimulant
- improves daytime energy, attentiveness & concentration.
- sounder, but less sleep
- improves mood

Antibiotic, against Lyme-Borreliose (?)
Fights staph
Immune system stimulant for people suffering from seasonal illness. Use with care when frequently sick.

DHEA, were lower in the depressives. The authors concluded that DHEA has a potential role both therapeutically and as a diagnostic tool, in CFS. (Scott, Salahuddin et al. 1999)

Another study of DHEA levels in 22 CFS patients and 14 healthy controls found normal basal DHEA levels, but a blunted serum DHEA response curve to ACTH (adrenocorticotrophic hormone) injection. ACTH normally stimulates the adrenal glands to secrete DHEA. The authors concluded that endocrine abnormalities play a role in CFS and that a relative glucocorticoid deficiency might contribute to the overall clinical picture in CFS. (De Becker, De Meirleir et al. 1999)

Use DHEA up to 4 months for full effect (?)

[Remedyfind.com on DHEA](#)

Keeps the brain fog at bay and helps with concentration (?)
DMAE-H3 (Twinlabs- \$8.95 a bottle)
You can buy a bottle of DMAE at almost any health food store and try it and you should know within a week if it helps.

Science suggests that this herb stimulates macrophage production.

Die Extrakte der Echinacea purpurea und **Panax ginsengerhöhen** bei CFS- Patienten die Funktion der natürlichen Killerzellen (Ebene III-3) und die antikörperabhängige zelluläre Zytotoxizität ADCC (Ebene III-3).

[Universität Zürich / Dr. Jens Gaab](#)

[DMAE](#)
Dimethyl amino-ethanol

precursor to Choline and Acetylcholine

[Doxycycline](#)

[Echinacea](#)
Echinacea purpurea

EDTA

Elderberry

Black elderberry extract
(*Sambucol?*)
- Anthocyanin
- Catechin polyphenols

- inhibiting flu virus
- reduces oxidation of LDL cholesterol

EDTA is good at breaking down the calcium shell around the cells

Adaptogen (helps in stress situations). Supposedly an antioxidant more powerful than blueberry.

lherb.com

Enzymes, digestive

Essential fatty acid

Omega 3: Alpha-linolenic acid

Flaxseed oil contains **linolenic, linoleic, and oleic acids**. It is among the best sources of alpha-linolenic acid. Linoleic acid and alpha-linolenic acid are required for the structural integrity of all cell membranes.

Helps body fight bacteria and absorb nutrients (?)

Alpha-linolenic acid is possibly effective:

Udo's choice oil blend offers Omega-3, 6, 9-acids in a 2:1:1 relation.

Omega 6: Linoleic acid

Alpha-linolenic acid raises serum omega-3 polyunsaturated fatty acids, including eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA).

...when used orally as a part of the diet for the primary prevention of coronary heart disease. There is some evidence that high dietary intake of alpha-linolenic acid over a period of 6 years can reduce the risk of myocardial infarction by as much as 59% in both men and women.

Inventor: [Udo Erasmus](http://UdoErasmus.com)

His book: "[Fats that heal, fats that kill](#)"

Omega 9: Oil acid
(**not essential ?**)

There is some evidence that flaxseed oil can lower triglyceride levels. Flaxseed oil seems to have other potentially beneficial cardiovascular effects.

In women, a high dietary intake of alpha-linolenic acid over 10 years can reduce the risk of fatal ischemic heart disease by 65% ; however, it is not known if alpha-linolenic acid supplements have these same benefits.

Distributor USA: Florahealth.com

Distributor Switzerland: Chrisana.ch

Udo's choice oil blend contains:

- Flax oil
- Sunflower oil
- Sesame oil
- Medium chain triglycerides
- Evening primrose oil (12.6 mg GLA per tablespoon)
- Rice germ & Bran oil
- Soy lecithin
- D-alpha tocopherol (natural Vitamin E)
- Oat germ & Bran oil.

There is also some preliminary evidence that a low fat diet plus the flaxseed oil can increase systemic arterial elasticity, which might improve circulatory function.

...when used orally as a part of the diet for secondary prevention of coronary heart disease.

One tablespoon liquid form contains:

- Calories 135
- Total fat 14.5 g
- Saturated fat 1.5 g
- Polyunsaturated fat: (Omega-3 fatty acids 6.4 g, Omega-6 fatty acids 3.2 g)
- Monounsaturated fat (Omega-9 fatty acids 3 g)
- Medium chain triglycerides 231 mg.

Some researchers think flaxseed oil can also decrease platelet aggregation, and increase the bleeding time, but data are conflicting. Higher serum levels of linoleic acid, an omega-6 fatty acid contained in flaxseed oil, seems to protect against ischemic stroke and lacunar infarction, possibly by lowering blood pressure and improving blood flow by reducing platelet aggregation and enhancing erythrocyte deformability.

Starting a Mediterranean diet rich in alpha-linolenic acid and low in saturated fat and cholesterol after an initial myocardial infarction can significantly reduce the rate of occurrence of a second myocardial infarction and death rate.

Udo's Choice® Ultimate Oil Blend does not contain preformed EPA and DHA as it is an all vegetarian product. **EPA** and **DHA** can only be obtained preformed in the form of fish oil. As we completely want to avoid the potential problems of contamination with persistent organic pollutants, such as dioxins, furans and PCBs, we only use seed oils in Udo's Choice® Ultimate Oil Blend. The particular combination we used provides the following "important" fatty acids:

Flaxseed oil is used for rheumatoid arthritis because it might have anti-inflammatory effects. Alpha-linolenic acid contained in flaxseed oil is a precursor of - **eicosapentaenoic acid (EPA)** and - **docosahexaenoic acid (DHA)** which are converted to non- or anti-inflammatory prostaglandins and leukotrienes in the body.

Over a 27 month period, patients using this diet seem to be 73% less likely to have a second myocardial infarction and 70% less likely to die from any cause, compared to the standard postinfarction diet.

1. **Alpha-linolenic acid (ALA)**, 18:C3-n3, which is the

Supplementation with flaxseed oil or alpha-linolenic acid increases the ratio of EPA and DHA to the pro-inflammatory arachidonic acid.

Alpha-linolenic acid has also been reported to suppress the production of interleukin-1 (IL-1), tumor necrosis factor

(TNF), leukotriene B4, and oxygen free radicals by polymorphonuclear (PMN) leukocytes and monocytes.

There is some evidence that alpha-linolenic acid from flaxseed oil might have anti-tumor effects, possibly by increasing peroxidation of fatty acids in tumor cell membranes, or by altering the balance of prostaglandin production away from tumor promoting prostaglandins of the E2 series. Flaxseed oil seems to reduce the volume of chemically-induced mammary tumors in animal models.

Abstracts from:

Naturaldatabase.com

Another EFA-product:

[Efamol marine](#), combination of fish oil and evening primrose oil. (...provides the body with Omega-3 and Omega-6 polyunsaturated fatty acids, GLA, EPA and DHA. These essential fatty acids enable the body to produce prostaglandins that help in cell functions, growth and other biological functions.)

EFA's bewirken in der Anwendung bei CFS-Patienten **eine Verbesserung des Symptombildes.** (Ebene II)

[Universität Zürich / Dr. Jens Gaab](#)

Feverfew has been used for reducing fever, for treating **headaches** and for **arthritis**. Modern work has supported the use of feverfew as a treatment for **migraine headaches**.
[Feverfew \(Wikipedia\)](#)

Flavonoids are a large group of low molecular weight

parent of the omega-3 fatty acid series. If provided in sufficient amounts, ALA is converted into EPA and DHA. Furthermore, ALA has a host of beneficial biological effects on its own that are independent of conversion into EPA and DHA. To facilitate optimal conversion, it is necessary to provide all the cofactors used by the enzymes involved in the desaturation and elongation of essential fatty acids (EFAs). The main ones are zinc, magnesium, vitamin B3 (as niacin), vitamin B5, vitamin B6, selenium and vitamin E (preferably as natural mixed tocopherols). Also, the diet should contain sufficient amounts of protein (at least 20%E), have a low-glycemic index, have a high ratio of EFAs to saturated fats and an overall ratio of omega-6:omega-3 of no more than 4:1.

2. **Linoleic acid (LA)**, 18:C2-n6, which is the parent of the omega-6 fatty acid series that includes gamma-linolenic acid (GLA), di-homo-gamma-linolenic acid (DGLA) and arachidonic acid (AA). If enough LA is provided, then the body can convert it into GLA and DGLA. The same issues as those for ALA also pertain to LA in terms of optimal conversion.

3. **GLA**, 18:C3-n6, in small amounts.

4. **Lauric acid**, 12:C0, which is known to stimulate the immune system and suspected of having an effect on certain groups of vira because it disrupts their lipid envelope. If people get the recommended dosage of the oil blend, approx. one 15-ml tablespoon per 25 kg bodyweight daily and make sure they create the right environment in their body to facilitate optimal conversion (as mentioned above), then ample amounts of EPA, DHA and GLA should be produced in the body.

Feverfew has been tried with reports of success for **Epstein-Barr virus (EBV)**, but no formal studies have been done.

Lassesen.com/cfids/ebv.htm

Cocoa, particularly dark chocolate, is loaded with the flavonoid **epicatechin** and has been found to have nearly

Feverfew

Tanacetum parthenium

Flavonoids

Flavonols: Quercetin, Kaempferol, Myricetin, Isorhamnetin
Flavones: Luteolin, Apigenin

Flavanones: Hesperetin, Naringenin, Eriodictyol
Flavan-3-ols: (+)-Catechin, (+)-Gallocatechin, (-)-Epicatechin, (-)-*Epigallocatechin, (-)-Epicatechin 3-gallate, (-)-Epigallocatechin 3-gallate, Theaflavin, Theaflavin 3-gallate, Theaflavin 3'-gallate, Theaflavin 3,3' digallate, Thearubigins
Isoflavones: Genistein, Daidzein, Glycitein
Anthocyanidins: Cyanidin, Delphinidin, Malvidin, Pelargonidin, Peonidin, Petunidin

[Gabapentin \(Neurontin\)](#)

Neurontin, Parke-Davis' brand name for gabapentin, is a unique anticonvulsant, chemically unlike any other drugs available to treat seizures. It was approved in 1993 for the treatment of seizure disorders after extensive testing with epilepsy patients. Ever since, clinicians and researchers have been experimenting with and studying neurontin for a growing assortment of conditions, particularly mood disorders and neuropathic pain (pain associated with a nervous system injury or disease).

from: *Dr. Charles Shepherd*

A new drug treatment for moderate to severe nausea/feelings of sickness (?)

A small minority of people with ME/CFS, often the more severely affected, experience quite severe problems with nausea. And it can be a very difficult symptom to relieve.

Gabapentin (trade name = Neurontin) is an anticonvulsant drug that is increasingly being used for the relief of moderate to severe neurological pain. I know that quite a few people with ME/CFS have gained benefit from gabapentin, and it's a drug that I sometimes recommend or prescribe myself.

polyphenolic phytochemicals found in all vascular plants. In the diet, flavonoids are found in many fruits, vegetables, and processed plant-derived foods such as teas and wines. The beneficial effects of fruits and vegetables are often attributed to flavonoid compounds rather than known nutrients as they show a wide range of biological effects including anti-inflammatory, anti-allergic, and anti-cancer activity.

With ME/CFS patients, gabapentin can be effective at very low doses and most people don't experience any major problems with side-effects.

Today's edition of the Lancet (ref: May 17, 361, 1703-1705) carries an interesting short report on the 'effect of gabapentin on nausea induced by chemotherapy in patients with breast cancer'. 6/9 patients reported a significant improvement and 3/9 had a complete resolution of their nausea. The authors, from Rochester USA, go on to describe how gabapentin may be relieving nausea by its effect on sickness-producing brain chemicals called tachykinins. They also refer to the fact (which I wasn't aware of) that **gabapentin can reduce hot flushes**

This is an interesting small study and I would be interested to hear from anyone with ME/CFS who has been prescribed gabapentin for pain relief (and has nausea as well) as to whether it had any effect on their feelings of sickness. Also, has anyone been prescribed gabapentin for nausea related to ME/CFS?

twice the antioxidants of red wine and up to three times those found in green tea. Epicatechin improves blood flow and thus are good for cardiac health.

Good sources of flavonoids include **citrus fruits, berries, onions, parsley, legumes, green tea, red wine, and dark chocolate** with a cocoa content of 70% or greater.

[Flavonoids \(Wikipedia\)](#)

[Dr. Goldstein](#) recommendation

Dr. Jay Seastrunk:

Parke-Davis, the company that purchased gabapentin, has seen *dosages that range from 3,000 to 6,000 mg per day while, even at 10,000, the drug is not toxic.*

Dr. Seastrunk has never found anyone to be allergic to Neurontin in the hundreds of patients he has treated. It does not cross-react with other medications. Magnesium, however, will block Neurontin.

[Ncf-net.org \(The National Forum\)](#)

[Brain injury in cfids and mcs](#)

[Researchers explore many uses for Neurontin \(Cfids.org\)](#)

Dr. Paul Cheney:

...believes Neurontin can help "protect the brain" from further damage He has said that an injured brain may respond to lesser stimuli than a healthy brain, and this overstimulation of the brain may contribute to feelings of fatigue and pain. He has found that Neurontin seems to raise the sensitivity threshold of the brain's pain response in CFIDS patients.

...Neuroprotection - The brain is injured in a monotonous way. It fires at lower threshold levels.

Therefore, *information density will confuse, sensitivity to light, pain intensified, cannot sleep, hearing is amplified.* **Drugs which treat this are magnesium, klonopin, neurontin, doxapin, nicotine, and narcotics.** These need to be titrated at small optimum doses different for each patient. These drug preserve the brain from damage.

[Lecture by Dr. Cheney, May 7, 1998](#)

[Gabapentin \(Wikipedia\)](#)

Garlic

Allium sativum

Garlic is a bulbous perennial food plant of the family Alliaceae

Components; *Phytochemicals*:

Allicin
Beta-carotene
Beta-sitosterol
Caffeic acid
Chlorogenic acid
Diallyl-disulfide
Ferulic acid
Geraniol
Kaempferol
Linalool
Oleanolic acid
P-coumaric acid
Phloroglucinol
Phytic acid
Quercetin
Rutin
S-allyl cysteine
Saponin
Sinapic acid
Stigmasterol
- Gingerols

[Ginger \(Wikipedia\)](#)

Ginger

Zingiber officinale

Dr Charles Shepherd (UK)

Components; Nutrients:

Calcium
Folate
Iron
Magnesium
Manganese
Phosphorus
Potassium
Selenium
Zinc
Vitamin B1 (Thiamine)
Vitamin B2 (Riboflavin)
Vitamin B3 (Niacin)
Vitamin C

Fights nausea/dizziness very effectively - see my [longterm success in fighting nausea and dizziness with ginger!](#)

- antioxidant
- thermogenic
- lowers cholesterol
- increases glutathione levels
- protects the liver
- improves digestion & appetite

Ginkgo

Ginkgo biloba

Ginkgo flavone glycosides

- Increases brain oxygenation, transmission rate to nerve cells
- concentration, mental alertness & memory
- circulation

Anti-microbial, anti-yeast, anti-fungal.

Inhibits bacteria by disrupting their enzyme function

Natural Yeast Treatments:

Fresh Garlic, if you can handle it well, can also be very effective. Daily, crush 1 to 3 garlic cloves in olive oil, add salt, spread it on bread and eat it. It can be quite tasty and lethal to whatever infections you have in your gut.

Immed.org/teitelbaum

Also supposed to inhibit abnormal blood platelet aggregation while increasing ATP and 'calcium pumping' in the heart.

How to use your own ginger-plants here!

Although the primary use of gingerroot (*Zingiber officinale*) is to ease **motion sickness** and **nausea**, researchers in Denmark are studying its role in the prevention and treatment of **migraine headaches**. The idea that ginger may ease migraine symptoms comes from Ayurvedic medical practice, which advocates ginger as part of the treatment for neurologic disorders, including headaches.

Ginkgo Biloba and [Nimodipine](#) are probably the two most important treatments for normalising brain circulation in cfs/me.

It works by countering the viscosity produced by excess production of platelet activating factor (which thickens the blood).

[Dr. David Mason Brown](#)

Ginseng
Panax Ginseng

[Ginseng \(Wikipedia\)](#)

Glutathione

Glutathione is a peptide-like molecule naturally synthesized in the body from three amino acids:

- L-glutamic acid
- L-cysteine
- Glycine

Ginkgo supposedly also inhibits cortisol biosynthesis

Die Extrakte der **Echinacea purpurea** und Panax ginseng erhöhen bei CFS- Patienten die Funktion der natürlichen Killerzellen (Ebene III-3) und die antikörperabhängige zelluläre Zytotoxizität ADCC (Ebene III-3).

[Universität Zürich / Dr. Jens Gaab](#)

Cysteine is a precursor to glutathione. It has been hypothesized that glutathione and cysteine metabolism may play a role in skeletal muscle wasting and muscle fatigue. The combination of abnormally low plasma cysteine and glutamine levels, low natural killer (NK) cell activity (with a resulting susceptibility to viral infection), skeletal muscle wasting or muscle fatigue, and increased rates of urea production defines a complex of abnormalities that is tentatively called "low CG syndrome."

These symptoms are found in patients with HIV infection, cancer, major injuries, sepsis, Crohn's disease, ulcerative colitis, cfs, and to some extent in over-trained athletes. *(Droge and Holm 1997)*

N-acetyl-cysteine is a precursor of glutathione that has been shown to be helpful against viruses (most of the research has been with HIV and Hepatitis infections). *(Sprietsma 1999)*
(Weiss, Hildt et al. 1996)

Gookinaid

Gookinaid for low blood volume and orthostatic intolerance. (?)

Homemade:

- 1 cup spring water
 - 1 cup seltzer water
 - 1/4 tsp sea salt
 - 1/4 tsp "no salt" brand salt substitute (potassium)
 - Stevia sugar substitute is allowed, sugar is not. Flavoring is allowed
- Drink 3 - 4 glasses daily. Observe blood pressure response. Consider stopping if blood pressure rises above 140/90.

[Gookinaid.com](#)

Grapefruit seed extract

Grapefruit seed extract is a **strong antimicrobial** with proven activity **against bacteria and fungi**. It also has antioxidant properties.

- fights staph (?)
- antioxidant
- inhibit enzymes that cause inflammation

It's probably easiest and cheapest to just eat lots of grapefruits...!
Reportedly 20 times stronger antioxidant than Vitamin C and 50 times as powerful than vitamin E (?)

[Grapefruit \(Wikipedia\)](#)

[Green tea](#)

- **Polyphenol antioxidants**

(A class of phytochemicals found in high concentrations in green tea, and have been associated with heart disease and cancer prevention. The slight astringent, bitter taste of green tea is attributed to polyphenols.

Dried leaves contain about 10% polyphenols.)

- **Catechins**

(A category of polyphenols.

In green tea, catechins are present in significant quantities, more specifically:

- epicatechin (EC),

- epigallocatechin (EGC),

- epicatechin gallate (ECG)

- epigallocatechin gallate (EGCG). EGCG makes up about 10-50% of the total catechin content and appears to be the most powerful of the catechins – with antioxidant activity about 25-100 times more potent than vitamins C and E.

- **Theanine** (amino acid that reportedly stimulates production of alpha waves)

- improves circulation and capillary integrity

- Green Tea probably is the most cost-effective of all the plant antioxidants!

- Makes staph aureus more susceptible to penicillin (?)

- A cup of green tea may provide 10-40mg of polyphenols and has antioxidant activity greater than a serving of broccoli, spinach, carrots or strawberries.

- Green Tea's ingredient **EGCG** is believed to be over 200 times more powerful than Vitamin E at inhibiting lipid peroxidation.

- Studies show lower arthritis, cancer and heart disease rates with regular use of 4 cups or more per day.

- Improves hormone balance by inhibiting both 5-alpha reductase and aromatase.

- Green Tea causes thermogenic fat loss, controls blood sugar, inhibits the digestion of starch and prevents dental caries.

contains also:

Tannins - A group of simple and complex phenol, polyphenol, and flavonoid compounds, bound with starches, and often so amorphous that they are classified as tannins simply because at some point in degradation they are astringent and contain variations on gallic acid. Produced by plants, tannins are generally protective substances found in the outer and inner tissues. All of the tannins are relatively resistant to digestion or fermentation, and either decrease the ability of animals to easily consume the living plant, or, as in deciduous trees, cause shed parts of the plant to decay so slowly that there is little likelihood of infection to the living tree from rotting dead material around its base. All tannins act as astringents, shrinking tissues and contracting structural proteins in the skin and mucosa. (For a mouth rinse you can swallow, use [Xylitol](#) and Green Tea!)(?)

[Health benefits of tea \(Wikipedia\)](#)

[Guaifenesin](#)

[Ho Shou Wu](#)

Ho Shou Wu herb possesses properties similar to ginseng. Ho Shou Wu is highly prized in China as an adaptogenic herb. A member of the buckwheat family, ho shou wu contains [Quercetin](#) that help protect and maintain blood vessel health.

[Hydrocortisone \(Cortisol\)](#)

Cortisol is a corticosteroid hormone that is involved in the response to stress; it increases blood pressure and blood sugar levels and

Hypothalamo-Pituitary-Adrenal Axis Dysfunction in cFIDS and the effects of low-dose hydrocortisone

300 mg twice a week

[Guaifenesin.com](#)

[Home.ozonline.com.au/tmarcon](#)

[1001herbs.com/hoshouwu](#)

Die niedrigdosierte Therapie mit Hydrokortison führt zu einer Verbesserung der Lebensqualität. (Ebene II) [uni-zürich/klipsy.ch](#)

suppresses the immune system. Synthetic cortisol, also known as hydrocortisone, is used as a drug mainly to fight allergies and inflammation.

[Cortisol \(Wikipedia\)](#)

[Hyperbaric oxygen therapy \(HBOT\)](#)

(First try Breathwork: See my success with [Rebirthing!](#))

[Hyperthermia](#)

- Hot immersion bath
Sauna
- FIR
(Far-Infrared Sauna)

Hyperbaric oxygen therapy (HBOT) is the medical use of oxygen at a higher than atmospheric pressure.

[Hyperbaric oxygen therapy \(Wikipedia\)](#)

(Some of the following text represents unproven hypothesis, according to the author *R.V.Konynenburg*)

...I think you're right about the FIR sauna promoting detox. Since PWCs tend to have lots of toxins stored up as a result of **glutathione depletion** over extended times, this is probably a big factor in the FIR's benefits for PWCs.

I suspect that the FIR sauna simultaneously does several things that are beneficial to PWCs. As you probably know, [Jim Clements](#) emphasizes the increase in body temperature and the resulting increase in metabolic rate.

Sherry Rogers emphasizes the detox aspect.

I have hypothesized that it enables the sympathetic nervous system to:

Stop generating so much norepinephrine in the skin, to shut down the blood flow there, thus lifting the demand on glutathione to dispose of the oxidation product of norepinephrine, and also freeing up supplies of tyrosine and phenylalanine so that the sympathetic nervous system can make norepinephrine, to control pooling of blood in the legs, and to stop the orthostatic intolerance.

In view of all this, I suspect that the FIR sauna will have the biggest benefits for PWCs who have:

therapy.

Conclusions:

In conclusion, this study provides evidence that there may be impaired adrenal cortical function in CFS on some measures and that low-dose hydrocortisone therapy is associated with a reversal of this HPA axis dysfunction in the minority of patients with CFS who gain benefit from treatment.

Among the "off label" uses of HBOT are use as a therapy for brain healing (as in stroke, dementia, cerebral palsy), and for some infectious conditions, such as **Lyme disease** and **Post-polio syndrome**

Douglas Lewis, N.D., Chair of Physical Medicine at the Bastyr College Natural Health Clinic in Seattle, Washington, states that **a hot immersion bath, if done without raising body temperature and heart rate too quickly or too high**, can be used as an adjunctive treatment for a "diverse number of diseases - from upper respiratory infections and sexually transmitted diseases to cancer and AIDS."

Hyperthermia in the form of hot baths has also proved useful in the treatment of herpes simplex and herpes zoster (shingles).

At first the treatment aggravates the situation, but conditions improve considerably after a short time.

It is also useful in treating the common cold and flu, as well as chronic fatigue syndrome.

Article on HPA-imbalances here:

Cfsresearch.org/cfs/research/abnormalities

Many bacteria thrive in anaerobic conditions so blasting them with oxygen, kills them (?)

O2med.com

Chinook-med.com

[What is far infrared?](#)

by *Jim Clements*

["Infrared Thermal System For Whole-Body Regenerative Radiant Therapy"](#)

by *Dr. Aaron M. Flickstein*

["Warming Up to Far Infrared"](#)

by *D.J. Fletcher*

["Detox in the Sauna"](#)

by *Lawrence Wilson, MD*

["Turn Up the Heat: Improve Health with the Infra-red Sauna"](#)

by *Stefan Kuprowsky, MA, ND*

["The Manual of Sauna Therapy"](#)

by *Dr. Lawrence D. Wilson MD*

["Infrared Sauna"](#)

by *Dr. Jim Chan ND*

["Energy Returns with Cellular Purification"](#)

["250-Watt Infrared Heat Lamp Warnings"](#)

- a big **toxin load**,
- a **lower than normal armpit temperature**,
- **orthostatic intolerance**, and
- **glutathione depletion**.

Rich Van Konynenburg
CFSFMExperimental (at) yahooogroups

Inositol

Hexa-hydroxy-cyclo-hexane

Also known as:

Antialopecia Factor, Cyclohexitol, D-chiro-inositol, Dambrose, Inose, Inosite, Inositol Monophosphate, Lipositol, Meso-inositol, Mouse Antialopecia Factor, Myo-inositol, Vitamin B8.

Related products:

Inositol Nicotinate and IP-6.

Endogenous inositol is an essential component of cell membrane phospholipids. It has weak lipotropic activity, and can move fat out of liver and intestine cells (2187). Inositol has a variety of stereoisomers, including myo-inositol and D-chiro-inositol.

Myo-inositol is the most abundant form in the central nervous system (CNS).

Biological function varies among the isomers (2047,2048). Inositol might reverse desensitization of serotonin receptors (2187). Limited clinical evidence suggests exogenous inositol may have similar benefits as the selective-serotonin-reuptake inhibitors (SSRIs) in conditions such as **panic disorder, depression, and obsessive-compulsive disorder**

The body protects itself from viruses, bacteria, and other harmful substances through the use of numerous defense systems.

Infraredsauna.net
(Medical info)

One of these is fever. Fever raises the body's temperature above normal in an attempt to destroy invading organisms and sweat impurities out of the system.

Fever is a highly effective and natural process of curing disease and restoring health, and has been recognized as such for thousands of years. Hyperthermia deliberately creates fever in the patient in order to utilize this natural healing process.

Bodytrends.com

Companies that sell infrared heaters :

Thmi.com (*I recommend this product!*)

Buyamag.com
Chinow.com

Arrowheadhealthworks.com
(Infrared Tents)

Amazon.com

POSSIBLY EFFECTIVE:

...when used orally for treating panic disorder with or without agoraphobia. In one small-scale, placebo-controlled trial, inositol significantly reduced the severity and rate of panic attacks and severity of agoraphobia compared to placebo over 4 weeks of treatment (2184).

Large scale, long-term trials are needed to confirm inositol's potential benefit in panic disorders.

...when used orally for treating depression. In one small-scale, placebo-controlled trial, depressed patients receiving inositol for 4 weeks had significant improvement, based on Hamilton Depression Rating Scale scores, compared to placebo (2185). In a follow-up study, patients initially responding to inositol rapidly relapsed upon

...when used orally for treating obsessive-compulsive disorder (OCD). In one small-scale, placebo-controlled trial, OCD patients receiving inositol for 6 weeks had significant improvement, based on Yale-Brown Obsessive Compulsive Scale scores, compared to placebo (2186). Abstracts from:

Naturaldatabase.com

1'200 mg per day of myo-inositol has been effective (within 2 weeks) for some cfs-patients with hormonal problems.

Fights blurry vision (?)

[Inositol \(Wikipedia\)](http://Inositol (Wikipedia))

discontinuation of treatment (2026).

Large scale, long-term trials are necessary to confirm inositol's potential benefit in depression.

Interferon (Alpha Interferon)

Interferons are natural proteins produced by the cells of the immune systems of most animals in response to challenges by foreign agents such as viruses, bacteria, parasites and tumor cells. Interferons belong to the large class of glycoproteins known as cytokines.

[Interferon \(Wikipedia\)](#)

Isoprinosine (Imunovir)

Alpha interferon is an oral form of chemotherapy that is used to treat cancer, MS, and hepatitis-C. Some doctors are using it to treat ME-CFIDS-CFS, in very low doses daily for six months. It is supposed to boost the immune system and increases energy.

Has both immunomodulating and antiviral properties. It helps to treat acute and chronic viral infections.

Causes weight gain?

Someone from CFSFMExperimental-forum:
"Speaking as someone who has regained about 60% of my previous functionality (up from about 20% 4 years ago), the best treatment I have used is the six month course of oral alpha interferon...
...My energy and stamina improvement were remarkable."

Isoprinosine acts on the immune system to restore impaired cell-mediated response to baseline in addition to enhancing humoral response. It has also a direct antiviral activity. Isoprinosine can reduce the intensity of symptoms and shorten the duration of the viral infection. In addition, the occurrence of complications is reduced and the frequency and severity of recurrences is minimised. Isoprinosine is an immunoenhancing agent in aged humans.

[Anti-aging-drugs.com](#)

Klonopin (Clonazepam) (Rivotril)

Clonazepam (marketed by Roche under the trade-name Klonopin® in the United States and **Rivotril**® in Canada and Europe) is an anticonvulsant sedative-hypnotic anxiolytic (anti-anxiety drug), and a member of the benzodiazepine class of drugs.

Like other benzodiazepines, Clonazepam is believed to act by simulating the action of GABA on the central nervous system. Because of strong anxiolytic properties and euphoriant side-effects it is said to be among the class of 'high potent' benzodiazepines with a higher risk of abuse, misuse and dependence than other benzodiazepines. The sedative effects of Clonazepam are relatively weak, compared to its strong anxiolytic and anticonvulsant effectivity.

250 micrograms (0.25mg) are equivalent to 5mg Diazepam.

[Klonopin \(Wikipedia\)](#)

[Dr. Paul Cheney Discusses the Benefits of Klonopin](#)
by Carol Sieverling
ImmuneSupport.com
10-12-2001

Two receptors in the brain, NMDA and GABA, determine the threshold potential. During the waking hours of a healthy person, NMDA and GABA should be equally active. This balances the person in the middle of the seizure/coma continuum. NMDA stimulates, and GABA inhibits. If NMDA increases, one moves toward seizure. If GABA increases, one moves toward coma. In CFIDS, NMDA is more activated than GABA, lowering the threshold potential. This causes neurons to fire with very little stimulation, resulting in sensory overload. This condition of excitatory neurotoxicity is dangerous. Dr. Cheney emphasizes that in an attempt to protect itself,

Klonopin is taken "day and night"; Neurontin "night, or day and night"; kava kava "daytime only"; and valerian "nighttime only." The first four are by prescription, the last two are herbs. In my limited experience, only certain patients are put on magnesium/taurine injections, and then only for a limited period before switching to oral supplements.

Many myths abound concerning Klonopin. When asked about these myths, Dr. Cheney shared the following information.

MYTH NUMBER ONE: THE GENERIC IS JUST AS GOOD.

When the generic Clonazepam came on the market, many patients switched to it because it was less expensive than Klonopin. Cheney then began hearing that most patients had to take more Clonazepam to get the same effect. Generics aren't exactly identical to the original products, and with most drugs the slight variations don't matter. However, most CFIDS patients can tell the difference between Klonopin and its generic form, Clonazepam. Most find Klonopin to be more effective.

Editor's Note: The following is based on a recent interview conducted by Carol Sieverling with Dr. Paul R. Cheney, M.D., Ph.D., and the article "CFIDS Treatment: The Cheney Clinic's Strategic Approach" (CFIDS Chronicle, Spring 1995). Dr. Cheney gave permission to share this information, but has not reviewed or edited it.

Many CFIDS specialists prescribe the drug Klonopin. In the October 1999 issue of The Fibromyalgia Network, nine CFS/FM specialists summarized their most effective treatments, and six included Klonopin. Interestingly, the three who did not are primarily FM specialists.

Dr. Cheney prescribes Klonopin to address a condition associated with CFIDS called "excitatory neurotoxicity." To explain this condition to patients, he draws a line with "seizure" on the far left and "coma" on the far right. A big dot in the middle represents where healthy people are when awake. A dot somewhat to the right of the middle indicates where healthy people are when asleep – slightly shifted toward coma. He highlights in red the left portion of the line, from seizure to the middle, and labels it "Neurotoxic State" (damaging to the brain). He highlights in blue the right portion of the line, from coma to the middle, and labels it "Healing State."

In CFIDS, an ongoing injury to the brain shifts patients toward seizure. A dot to the left of the middle, marked "injury," represents the position of CFIDS patients. This puts us in the red "Neurotoxic" zone. When we shift toward seizure, we often experience "sensory overload." It's as if our brain's "radar" is too sensitive. Our neurons (nerve cells) are sensing stimuli and firing when they should not. This causes amplification of sensory input. Light, noise, motion and pain are all magnified. At the beginning of their illness, many patients report feeling exhausted, yet also strangely "wired." The "wired" feeling is the slight shift towards seizure that occurs as a result of the excitatory neurotoxicity.

Cheney frequently uses the term "threshold potential" when discussing excitatory neurotoxicity. (Think of the threshold - bottom - of a doorway. The lower it is, the more accessible it is. When it is at floor level, everything can enter. When it is raised, access is restricted to taller people. If it is too high, no one can enter.) Threshold potential refers to how much stimulus it takes to make neurons fire. If the threshold potential is too low, even slight stimulation is "allowed to enter" and is detected by the neurons. This causes the neurons to fire, resulting in sensory overload. If the threshold is dropped to nothing, all stimuli get through and the neurons

the body will eventually kill neurons that fire excessively. He states that brain cell loss can result if this condition isn't addressed. How can the brain be protected against excitatory neurotoxicity? Klonopin. This long acting benzodiazepine has been Dr. Cheney's most effective drug for CFIDS over the years. He believes that Klonopin and the supplement magnesium may be two of the most important treatments for CFIDS patients because of their neuroprotective qualities. He recommends two or more 0.5 mg tablets of Klonopin at night. Paradoxically, very small doses (usually a quarter to a half a tablet) in the morning and mid-afternoon improve cognitive function and energy. If the daytime dose is low enough, you'll experience greater clarity and think better. If the daytime dose is too high, you'll become drowsy. Adjust your dose for maximum benefit, taking as much as possible without drowsiness. Adjust the morning dose first, then take the same amount mid-afternoon if needed, then take three to four times the morning dose at bedtime. Dr. Cheney recommends doubling the dose during severe relapses. Dr. Cheney most frequently prescribes the combination of Klonopin and Doxepin, along with the supplement "Magnesium Glycinate Forte." Magnesium Glycinate alone is a good choice for the more budget minded (www.ImmuneSupport.com sells it as "Magnesium Plus".) A common dosage of magnesium is 200 mgs at bedtime. Too much magnesium can cause diarrhea,

MYTH NUMBER TWO: KLONOPIN IS ADDICTIVE. Dr. Cheney was adamant that Klonopin is not addictive. In treating thousands of patients, he has never seen a patient become addicted to Klonopin. He reviewed the definition of addiction, stating that it involves: (1) psychosocial disruption, (2) accelerated use, (3) inappropriate use, and (4) drug seeking behavior.

Dr. Cheney said a case might be made that Klonopin is habituating. It's true that it can't be stopped suddenly. You must taper off of it gradually. However, he was cautious about even calling it habituating. The process of tapering off a drug is not the same thing as withdrawal, a term that implies addiction.

Dr. Cheney said to keep in mind that Klonopin is given for a physiological problem – excitatory neurotoxicity. It's prescribed to adjust the threshold potential: to keep neurons from firing inappropriately and being destroyed. He stressed that Klonopin should never be given unless you intend to raise the threshold potential. He stated, "Problems arise when you begin to use benzodiazepines for reasons other than threshold manipulation." However, CFIDS patients have a "threshold potential aberration" and need Klonopin (or something similar) to avoid brain injury. Dr. Cheney has never seen a recovered patient have difficulty coming off Klonopin. He stated, "When you no longer need the drug, coming off it is very easy."

On the other hand, trouble arises when someone who still has an injured brain tries to come off Klonopin. It's like a thyroid patient stopping their thyroid medication. Dr. Cheney warned, "All hell breaks loose". However, it's not because the drug is addicting, and it's not withdrawal. The condition still exists, and the body lets you know it has a legitimate physical need for the drug. Cheney stated, "When a CFIDS patient who is still experiencing the underlying mechanisms of brain injury goes off Klonopin, there is a burst of excess neural firing and cell death. That's the havoc we hear about that is mistakenly called withdrawal."

MYTH NUMBER THREE: KLONOPIN DISRUPTS STAGE 4 SLEEP. Dr. Cheney said that he honestly doesn't understand this concern. He believes Klonopin might disrupt the sleep of people who take it for conditions other than the threshold potential aberration found in CFIDS. He also acknowledged that if you are looking just for drugs to facilitate sleep, Klonopin is certainly not the first one to come to mind, nor should it be used to induce sleep in

fire continuously, resulting in a seizure. If the threshold is raised, only stronger stimuli can make neurons fire. A healthy person's threshold potential naturally rises at bedtime, promoting sleep. If the threshold potential is too high, you feel drugged or drowsy. If the threshold potential is raised extremely high, coma results.

though glycinate is usually the best tolerated form.

Cheney prescribes Doxepin in the form of a commercial elixir (10mg/ml). At low doses, this tricyclic antidepressant acts as a very potent antihistamine and immune modulator. Doxepin acts synergistically with Klonopin to assist sleep, and may improve pain. Patients tend to be very sensitive to Doxepin, which can cause morning fog and fatigue if the dose is too high (5 to 10 mg or higher). He recommends starting at two drops a night and gradually increasing the dose until "morning fog" becomes a problem. Most patients can't tolerate more than half a cc.

On a handout entitled "Neuroprotection via Threshold Potentials," Cheney lists six substances that can protect the brain. Under the category "NMDA Blockers" Cheney lists: 1. Parenteral magnesium and taurine (intramuscular injections of magnesium and taurine, usually given with procaine) 2. Histamine blockers (Doxepin Elixir) Under the category "GABA Agonists" (increases GABA) Cheney lists: 3. Klonopin 4. Neurontin 5. Kava Kava 6. Valerian Root

"ordinary" patients. It's not a sleep drug per se. However, a large part of the sleep disorder of CFIDS is excitatory neurotoxicity and the resulting shift toward seizure. If you treat this condition with Klonopin, then you have treated a large part of the sleep disorder in CFIDS. Most importantly, he said he simply does not see stage 4 sleep disruption in his patients on Klonopin.

Towards the end of this discussion on Klonopin, Cheney smiled, and remarked, "But suppose I'm wrong about the brain injury and the threshold potential aberration and the shift toward seizure? What if I'm wrong about your need for Klonopin? I'm absolutely sure I'm right, but what's the worst case scenario? Do you know what long-term studies on Klonopin have shown? Reduced incidence of Alzheimer's Disease. Alzheimer's Disease is a complicated and convoluted way of knocking out your neurons, and Klonopin protects your neurons. Now it's believed that Klonopin didn't actually stop Alzheimer's. It just delayed its onset so long that everyone died of something else before they ever got it - which is to say you won't get Alzheimer's. You'll die of something else first."

The last question Cheney addressed concerned the dose: what happens if the dose is too high? He said the only downside was that if you took a little too much (we are not talking overdose here) it would shift you toward coma on the continuum. It would shut your brain down to some degree, and thus impact your ability to function. This is inconvenient, but it's not harmful. In fact, it shifts you into the "healing state" on the continuum. You may feel like a zombie, but your brain is protected and your neurons are not getting fried. However, not being able to function isn't an option for most of us, so we need to find the maximum dose that doesn't make us drowsy.

Dr. Cheney emphasized that Klonopin, Doxepin, and magnesium are very, very good at protecting the brain from cell death due to excess firing. However, they can't stop the underlying mechanisms of CFIDS that are injuring the brain in the first place.

Though it can't stop the underlying mechanisms causing the injury, Klonopin can protect your brain and keep your neurons from being destroyed. Then, as Cheney put it, "When you come out on the other side of this, you'll have more of your brain left."

Kombucha

Kombucha is the Western name for a fermentation of sweetened tea using lactobacilli and yeast cultures.

Some studies have found potent anti-stress, hepato-protective, antioxidant and immunomodulating properties

The tea contains a symbiosis of yeast species and acetic acid bacteria, mostly *Bacterium xylinum*. Species of yeast found in the tea can vary, and may include: *Brettanomyces bruxellensis*, *Candida stellata*, *Schizosaccharomyces pombe*, *Torulaspora delbrueckii* and *Zygosaccharomyces bailii*.

Kutapressin

Kutapressin is an immune modulator and a broad spectrum **anti-viral**. It is a porcine(pig) liver extract. There is very little published research on it.

- Effective against **Epstein-Barr virus**
- Effective against human herpes-virus-6 (**HHV6**)

Lassesen.com/cfids/kutapressin

Lactoferrin (**Lactotransferrin**) (**Colostrum**) (**Whey Protein**)

Lactotransferrin (LTF) is a globular multifunctional protein with antimicrobial activity (bacteriocide, fungicide), is part of the innate defense, mainly at mucoses.

LTF is found in milk and many mucosal secretions such as tears and saliva.

LTF is also present in secondary granules of PMN and also is secreted by some acinar cells. LTF can be purified from milk or produced recombinantly. Human colostrum has the highest concentration, followed by human milk, then cow milk.

[Lactoferrin \(Wikipedia\)](http://Lactoferrin (Wikipedia))

Aka: Bovine lactoferrin

Lactoferrin is a protein belonging to the iron transporter family that occurs naturally in several bodily fluids such as tears, saliva, mucus and milk. Found in mother's milk produced 24 to 48 hours after birthing, lactoferrin provides the body's first defense against disease.

Lysine is one of the 20 amino acids normally found in proteins. With its 4-aminobutyl side-chain, it is classified as a basic amino acid, along with arginine and histidine.

It is an **essential amino acid**, and the human nutritional requirement is 1–1.5 g daily.

A deficiency in lysine can result in a deficiency in niacin (which is a B Vitamin). This can cause the disease pellagra. Lysine can also be used as a nutritional supplement to help against **herpes**.

[Lysine \(Wikipedia\)](http://Lysine (Wikipedia))

(Similar effects as Ampligen?!)(?)

Colostrum, in lactoferrin is the pre-milk fluid produced by mammals immediately after birthing. With high protein, immunoglobulin and antibody content, it's nature's perfect food contributing to newborn's defense system.

Fights staph
Anti-microbial (?)

Covers many including
coag negative epidermidis and
yeast (?)

Lysine is lacking in many diets, particularly vegetarian.

Both lysine and **arginine** contribute to immunity and have antiviral properties. Proteins (meats, fish and cheese) usually contain slightly more lysine than arginine, with eggs containing equal amounts. Supplementation with equal amounts of lysine and arginine is recommended for those considering this therapy.

Dose : 1 x 500 mg capsule of each
can be taken once or twice daily.

in Kombucha preparations given to rats. However, rare, serious health problems have also been attributed to drinking or preparing Kombucha.

[Kombucha \(Wikipedia\)](http://Kombucha (Wikipedia))

Whey protein is comprised of four major protein fractions and six minor protein fractions. The major protein fractions are:

- beta-lactoglobulin,
- alpha-lactalbumin,
- bovine serum albumin,
- immunoglobulins.

Each of these components have important disease-fighting effects.

Lactoferrin, in particular, has been shown to have significant antiviral activity.

(van der Strate, Beljaars et al. 2001)

(Swart, Kuipers et al. 1998)

(Harmsen, Swart et al. 1995)

Linus Pauling recommended Lysine with **Vitamin C & L-Proline** to prevent formation of Lp-a, which contributes to arterial plaque formation.

Dose : 3 x 1g daily (for 3 months)

Maca

Lepidium meyenii

Maca (*Lepidium meyenii*) is a biennial plant or annual plant grown in very high parts of the Andes in Peru for its enlarged hypocotyl, used as a root vegetable. Botanically this herb is related to turnip and radish.

The part of the radish that is eaten is also known as a hypocotyl. Maca is the only member of its genus with a fleshy hypocotyl. Maca's hypocotyl is roughly 10-15 cm long and 3-5 cm long in each plant.

The plant spreads entirely by seeds which germinate within 5 days given good conditions and have no dormancy.

[Maca \(Wikipedia\)](#)

Magnesium

Food Sources of Magnesium:

Green vegetables such as spinach provide magnesium because the center of the chlorophyll molecule contains magnesium. Nuts, seeds, and some whole grains are also good sources of magnesium.

Although magnesium is present in many foods, it usually occurs in small amounts.

As with most nutrients, daily needs for magnesium cannot be met from a single food. Eating a wide variety of foods, including five servings of fruits and vegetables daily and plenty of whole grains, helps to ensure an adequate intake of magnesium.

The magnesium content of refined foods is usually low.

Whole-wheat bread, for example, has twice as much magnesium as white bread because the magnesium-rich germ and bran are removed when white flour is processed.

The table of food sources of magnesium suggests many dietary sources of magnesium.

Water can provide magnesium, but the amount varies according to the water supply. "Hard" water contains more magnesium than "soft" water. Dietary surveys do not estimate magnesium intake from water, which may lead to underestimating total magnesium intake and its variability. Following are some foods and the amount of magnesium in them:

- spinach (1/2 cup) = 80 milligrams (mg)
- peanut butter (2 tablespoons) = 50 mg
- black-eyed peas (1/2 cup) = 45 mg
- milk, low fat (1 cup) = 40 mg

[Magnesium \(Wikipedia\)](#)

Maitake

Hen of the Woods (*Grifola frondosa* referring to a mythical

Maca root

- glucosinolates which have a positive effect on fertility.
- Proteins, as polypeptides, make up 11 per cent of the maca root;
- calcium makes up 10 percent - magnesium and potassium are present in significant amounts.
- iron, silica and traces of iodine, manganese, zinc, copper and sodium.

Vitamins in maca are thiamine, riboflavin and ascorbic acid.

One group of researchers reported that individuals with CFS were found to have lower red cell magnesium concentrations compared to matched controls. In a double-blind study, 32 patients with chronic fatigue syndrome were either given 50% magnesium sulfate in a 1 gm/2 ml I.M. weekly injections or a placebo of 2 ml of injectable water. Patients treated with magnesium claimed to have improved energy levels, better emotional states, and less pain.

Twelve of 15 patients reported benefiting from the therapy and 7 patients reported significant energy improvement.

The underground tubers from

Menopausal symptoms: hot flashes, tender breasts, sleeplessness and emotional upsets, "brain fog", vaginal dryness.

Osteoporosis: significant bone rebuilding, improvement in bone density.

Energy booster: Balances the endocrine system - thyroid, pituitary and adrenal glands.

Male impotence

Chronic Fatigue Syndrome

Period problems: Pain, PMS, flooding and/or scant flow.

Healalliance.com/macaroot.html

In the placebo group only 3 of 17 patients said they felt better and one patient had improvement in energy. Red cell magnesium normalized in all patients receiving the injection, but only 1 patient returned to normal in the placebo group.

The authors conclude that chronic fatigue syndrome patients have slightly lower magnesium levels than healthy controls and that magnesium therapy appeared to be of benefit. They cautioned that their trial was small and only had a follow-up of 6 weeks.

Cox IM, et al. 1991

Red Blood Cell Magnesium and CFS.

Magnesium führt kurzfristig zu einer Verbesserung in physischen, physiologischen, psychischen und die Lebensqualität betreffenden Variablen (Ebene II).

uni-zürich/klipsy.ch

Dr. Rosenbaum:

"I have found that a cocktail of *calcium* 600 to 800 mg and *magnesium* 300 to 500 mg taken before bedtime has a relaxant effect that is very useful for sound sleep and to prevent restless legs."

Immunesupport.com/article

Activates macrophages and variety of other immune cells.

(Hen of the Woods)
Grifola frondosa

beast which is half-lion and half-eagle), also known as Sheep's Head and Maitake (pronounced my-tah-keh), is an edible mushroom.

It has a rippling form with no caps, and grows in clusters at the foot of oak trees, giving it an image of dancing butterflies, and thus the Japanese named it "maitake", literally meaning "dancing mushroom".

Hen of the Woods should not be confused with the similarly named edible bracket fungi, Chicken of the Woods (*Laetiporus sulphureus*), also known as "sulphur shelf". Some people prefer calling it Chicken Mushroom precisely so that they don't confuse it with Hen of the Woods.

[Maitake \(Wikipedia\)](#)

which Hen of the Woods arises has been used in Traditional Chinese and Japanese medicine to enhance the immune system. Researchers have also indicated that whole maitake has the ability to regulate blood pressure, glucose, insulin, and both serum and liver lipids, such as cholesterol, triglycerides, and phospholipids, and may also be useful for weight loss. Maitake is rich in minerals (such as potassium, calcium, and magnesium), various vitamins (B2, D2, Niacin, and C), fibers and amino acids. The active constituent in maitake for enhancing the immune actively has been identified in the late 1980s to be the protein-bound polysaccharide compound, **beta-glucan**, an ingredient found especially in the family of polyporaceae.

[Melatonin](#)

Melatonin, 5-methoxy-N-acetyltryptamine, is a hormone produced by pinealocytes in the pineal gland (located in the brain) and also by the retina and GI tract.

It is naturally synthesized from the amino acid **tryptophan** (derived from serotonin) by the enzyme 5-hydroxyindole-O-methyltransferase.

Most of biological effects of melatonin are produced by its binding to and action on melatonin receptors [1].

Melatonin is also synthesized by various plants, such as rice, and ingested melatonin has been shown to be capable of reaching and binding to melatonin binding sites in the brains of mammals.

[Melatonin \(Wikipedia\)](#)

Treatment with **DHEA** or melatonin alone, as well as together, prevented the reduction of B- and T-cell proliferation as well as of Th1 cytokine secretion caused by retrovirus infection.

Supplementation also suppressed the elevated production of Th2 cytokines stimulated by retrovirus infection.

(Zhang, Araghi-Niknam et al. 1999)

[Milk thistle](#)
Silybum marianum
Silybum eburneum
Silybum × gonzaloi

By far the more widely known species is *silybum marianum*, which is known to give some remedy for liver diseases : cirrhosis, jaundice and hepatitis.

Its potent extract is used in medicine under the name silymarin. Another extract, silibinin or a derivative, is used

Powerful antioxidant, promoting liver & kidney function. Inhibits excess cell proliferation in cancer, atherosclerosis & aging

(for food use : the leaves and flowers are eaten as a vegetable)

against poisoning by amanitas, such as the Death Cap (Amanita phalloides) and the Fly Agaric (Amanita muscaria).

[Milk thistle \(Wikipedia\)](#)

[Mito cocktail](#)

Mito "cocktail" consists of relatively large amounts of:

- [L-carnitine](#)
- [CoQ10](#)
- [D-Ribose](#) (Possibly)
- [Vitamin B12 \(Cyanocobalamin\)](#)
- [Vitamin B7 \(Biotin\)](#)
- Several other nutrients

[MSM](#)

(Methylsulfonylmethane)

Methylsulfonylmethane (MSM, or dimethylsulfone) is an organic sulfur compound with the chemical formula CH₃SO₂CH₃. It belongs to a class of compounds known as sulfones. It is found naturally in some primitive plants and is present in small amounts in many foods and beverages...
...MSM is marketed as a dietary supplement. However, the claims of proof of its beneficial effects are disputed and published research on the compound's effects is considered thin...

[NAC](#)

(N-acetylcysteine)

N-acetylcysteine is a chemical, commonly called NAC, produced by the body that enhances the production of the molecule **glutathione**, a powerful antioxidant.
NAC is a thiol, in which the hydrogen atom can act to reduce free radicals.
In the United States, NAC is available as an over the counter supplement in health stores and in a prescription-only oral solution as **Mucomyst®** (Bristol-Myers Squibb) or **Mucosil®** that can be ingested or aerosolized and inhaled. Outside of the United States, it is available in pharmacies as an over the counter oral medicine and also available in an intravenous form as **Parvolex®**.
NAC has different uses in the treatment of medical conditions:

[NADH](#)

Nicotinamide adenine dinucleotide (NAD) and nicotinamide

Mito cocktail: Symptoms of CFS generally resemble those of metabolic and mitochondrial disorders. Mito cocktail consists of a combination of supplements which is sometimes used to treat ME-CFIDS-CFS. As with

Claims of beneficial effects
MSM has been purported to have **anti-inflammatory**

[MSM \(Wikipedia\)](#)

NAC is used as a mucolytic ("**mucus dissolving**") agent to help break up the thick mucus often present in people suffering from respiratory ailments (e.g. flu, bronchitis, sinusitis), which it accomplishes by the splitting of disulfide bonds in mucoproteins.

In more severe cases, like chronic respiratory conditions, it is given as an inhaled mist.

Studies indicate that NAC can also be used to lessen the symptoms and duration of the **flu** and the **common cold**.

It is used by AIDS patients, **whose glutathione levels are depressed, and also by bodybuilders, whose intense training causes temporary lower levels of glutathione.**

A recent randomized, double-

mitochondrial disorder, it is believed that large amounts (eg, 2-10g/day l-carnitine) are necessary to have a significant effect. Smaller amounts of these nutrients might not be helpful.

[Chronic fatigue syndrome / Mito cocktail \(Wikipedia\)](#)

NAC may also be useful in the treatment of cocaine addiction and in the **removal of mercury** from the body.

Studies suggest that NAC, taken together with Vitamin C and B1 can be used to prevent and relieve symptoms of **veisalgia** (hangover caused by alcohol).

[NAC \(Wikipedia\)](#)

In terms of biochemistry, aging is a transition from an

(Nicotinamide adenine dinucleotide)

adenine dinucleotide phosphate (NADP) are two important coenzymes found in cells. NADH is the reduced form and NAD⁺ is the oxidized form of NAD.

[NADH \(Wikipedia\)](#)

NADH is the reduced form (energy rich) of the biological compound called **coenzyme #1**.

It is called coenzyme #1 based on its level of importance to the body. It's the highest ranking coenzyme in the body.

NADH is the body's most potent biological antioxidant. (?)

Coenzyme #1 is the substance within the cell with the highest reduction power of all biologically active compounds.

[Nefazodon](#)

Nefazodone hydrochloride

Nefazodone hydrochloride (Serzone®) is an **antidepressant** drug marketed by Bristol-Myers Squibb. Its sale was discontinued in 2003 in some countries, due to the small possibility of hepatic (liver) injury, which could lead to the need for a liver transplant, or even death. It is still prescribed and sold in the United States.

[Nettle \(Stinging\)](#)

Urtica dioica

The Stinging nettle (*Urtica dioica* and sometimes jaggy nettle or burning weed) is a herb native to Europe, Asia, and North America, the best known member of the nettle genus *Urtica*.

[Stinging Nettle \(Wikipedia\)](#)

[Neurotropin](#)

Neurotropin is a "non-protein extract of cutaneous tissue from rabbits inoculated with vaccinia virus"

blind, placebo-controlled crossover study examined the use of NADH with CFS.

26 eligible patients diagnosed with cfs received either 10 mg of NADH or placebo for a 4-week period.

8 of 26 (31%) responded favorably to NADH in contrast to 2 of 26 (8%) to placebo.

Based upon these encouraging results the authors decided to conduct a larger study to establish its efficacy in cfs. (Forsyth, Preuss et al. 1999)

NADH (5 to 10 mg per day) is most effective when taken in the morning 30 minutes before breakfast.

Nefazodone's claimed advantages over other antidepressants available at the time included reduced possibility of disturbed sleep or sexual dysfunction, and ability to treat some patients who did not respond to other antidepressant drugs.

[Nefazodon \(Wikipedia\)](#)

Nettles have a long history of use in the home as a herbal remedy and nutritious addition to the diet[K].

A tea made from the leaves has traditionally been used as a cleansing tonic and blood purifier so the plant is often used in the treatment of hay fever, arthritis, anaemia etc[254].

The whole plant is antiasthmatic, antidiarrhoeal, astringent, depurative, diuretic, galactagogue, haemostatic, hypoglycaemic and a **stimulating tonic**.

[Pfaf.org/urtica-dioica](#)

A 28-year-old male visited an outpatient department due to

energy rich state to an energy poor state. An energy rich state is also called the reduced form. An energy poor state is also called the oxidized form.

An analogy would be oxidized steel (or rusted metal) is the poorer of the two states of the metal. In biology it is much the same way:

If you don't feel any effect on 5mg per day, increase to 15mg per day. **The effect of NADH should be noticeable immediately. (?)**

NADH ist bei cfs-Patienten von einem allgemeinen Nutzen, was die Lebensqualität betrifft (*Ebene II*)

uni-zürich/klipsy.ch

[Immunesupport's NADH products](#)

[Nadh.com](#)

Nefazodon bewirkt eine Verbesserung psychischer Variablen.

(Ebene III-3).

uni-zürich/klipsy.ch

contains 5-HTP
(increases vivid night dreams?)

Medication was discontinued from 11 weeks based on the patient's judgment as he felt little general fatigue and pain

Masscfids.org

Neurotropin is a medication that is currently used in Japan to treat RSD and other painful conditions.

(RSDS = Reflex Sympathetic Dystrophy Syndrome)

Rsdhope.org

general fatigue and pain involving the entire body. He did not suffer from fibromyalgia, but he was diagnosed with CFS.

At the initial visit, he complained of lack of concentration, memory decline, frequent urination, insomnia and occasional difficulty of emotional control, as well as general fatigue and pain involving the entire body. Four tablets of Neurotropin per day alone were administered. General fatigue and pain were gradually alleviated one week later. His sleep condition, concentration power, and memory also improved two weeks later.

involving the entire body. Treatment was completed 3 months later. The symptoms disappeared and did not recur five months after the discontinuation of Neurotropin. He was looking for a job without fatigue and pain 8 months later (5 months after the cessation of treatment).

[Efficacy of neurotropin in chronic fatigue syndrome \(Immunesupport.com\)](http://Immunesupport.com)

[Nimodipine](#)

Nimodipine (marketed by Bayer as **Nimotop®**) is a dihydropyridine calcium channel blocker originally developed for the treatment of high blood pressure.

[Nimodipine \(Wikipedia\)](#)

Nimodipine is a **calcium channel blocker**.

It works by **normalising the blood circulation in the brain**, especially through the smallest blood vessels.

It also works by **relieving areas of localised vessel spasm in the brain** decreasing the vascular headaches sometimes associated with ME-CFIDS

In ME-CFIDS there can be **reduced blood pressure** due to the neurally mediated hypotension found in many patients.

Neurally mediated hypotension is where the blood drains from the head causing parts of the brain to have inadequate circulation.

This is why 'brain fog' often occurs.

The re-stabilisation of the brain circulation releases the neurotoxins, which have become trapped in the brain in a controlled fashion.

Restoring the circulation to the brain and to the pituitary gland allows hormones to reach various glands in the body. This enables the body's distribution system to work as intended, which is vital in order to take oxygen, nutrients and any medication where it is needed. This is analogous to clearing blockages from a railway track to allow the trains to operate again.

[Dr. David Mason Brown](#)

Dr. Goldstein also recommends it.

[Nootropics](#)

Nootropics, or so-called "smart drugs," are substances alleged to increase the faculties of the mind.

The word derives from noos or mind and tropos, a bend.

Proponents claim that these substances **enhance mental performance** in a variety of ways, **bolstering cognition, lucidity, memory, mood, oxygen and glucose utilization, blood circulation in the brain**, or a combination of these or other factors.

[Nootropics \(Wikipedia\)](#)

- [Piracetam](#) (Nootropil)
- Aniracetam
- Oxiracetam
- Pramiracetam
- Pyritinol (Enerbol)
- Ergoloid mesylates (Hydergine)
- Galantamine
- Selegiline
- Centrophenoxine (Lucidril)
- Desmopressin (DDAVP)
- Nicergoline
- Vinpocetine
- Picamilon

Olive leaf extract

Olea europea

- Oleuropein

Raw green olives, direct from the tree, product sources unknown, are very bitter and have high concentrations of *oleuropein*.

- antibacterial
- antiviral
- antiparasitic
- antifungal
- lowers LDL levels
- stimulates phagocyte growth
- increases nitric oxide (NO)

Ondansetron

(Zofran)

(Emeset)

(Emetron)

(Ondemet)

Ondansetron is a **serotonin 5-HT3 receptor antagonist** used mainly to treat nausea and vomiting following chemotherapy. Its effects are thought to be on both peripheral and central nerves.

One part is to reduce the activity of the vagus nerve, which is a nerve that activates the vomiting center in the medulla oblongata, the other is a blockage of serotonin receptors in the chemoreceptor trigger zone. It does not have much effect on vomiting due to motion sickness. This drug does not have any effect on dopamine receptors or muscarinic receptors.

[Ondansetron \(Wikipedia\)](#)

Oregano Oil

Orgianum compactum

Orgianum vulgare

Oregano (*Origanum vulgare*) is a spicy, Mediterranean, perennial herb, particularly common in Greek and Italian cuisines.

It is the leaves that are used in cooking, and the dried herb is often more flavourful than the fresh.

Oregano is high in **antioxidant activity**, particularly due to a high content of phenolic acids and flavonoids.

Additionally, oregano has demonstrated **antimicrobial** activity against foodborne pathogens such as *Listeria monocytogenes*.

Both of these characteristics may be useful in both health and food preservation.

[Oregano \(Wikipedia\)](#)

Oxytocin

Oxytocin is a hormone, found in mammals, which in humans

- Vasopressin
- Milacemide

Benefits:

- vasodilator activity
 - antimicrobial agent for treatment of intestinal or respiratory tract infections
 - potentiates the macrophage mediated response
 - antiviral agent
 - strong antioxidant
 - antibacterial and antifungal
- Lasseesen.com/supplements

But it can lower blood pressure, so be careful and add licorice if necessary. Up to 10 capsules per day is safe. Take at bedtime since the effect tends to deepen sleep. Olive leaf extract kills viruses by inhibiting their replication and increases conversion of T4 to T3.

An effective dose of oleuropein increases body temperature 1/2 to 1 degrees F within 1 hour after you take it. Besides increases in body temperature, sometimes people have flu like symptoms and mild headaches due to a die-off effect from killed-off fungal infections.

Dose : Is supposed to work at low doses, yet is believed to be nontoxic even at high doses.

(note that to clear an infection it needs to be taken in very high doses ie 4x 500mg capsules 4 times a day)

Ondansetron bewirkt eine Verminderung der Erschöpfung und einen Anstieg der Leistungsfähigkeit (Ebene III-3).
uni-zürich/klipsy.ch

- anti-viral
- anti-fungal (yeast and candida problems)
- anti-microbial
- anti-tissue agent (meaning it halts coughs and eases spasticity of the lung tubules)
- mucolytic (means it helps thin mobilized mucus)
- anti-spasmodic (meaning it obliterates tightness and spasms of muscles)
- anti-parasitic

Carvacrol levels in *Origanum vulgare* can be as high as 85% in some plants.

Reportedly beneficial properties for the following conditions:

digestion, depression, flu, constipation, rashes, brain fog, lung fungus, toe and fingernail fungus, head lice, aching joints and muscles, warts, athlete's foot, eczema, flu, headaches, toothaches, ear infection, fevers, allergies, burns, bleeding, fatigue, arthritis, sprains, back pain, colds, when sprayed, cleans air, kills bugs on plants, kills fleas, lyme disease, canker sores, gastrointestinal/colitis/diarrhea, e.coli and so on...

"In a male and in a non-pregnant

Dr. Goldstein's recommendation (?)

is released mainly after stimulation of the nipples or distention of the vagina and which facilitates birth and breastfeeding. It is also involved in orgasms as well as in bonding and the formation of trust between people.

- Various **anti-stress functions: reducing blood pressure and cortisol levels, increasing tolerance to pain, reducing anxiety.**

- Oxytocin may play a role in encouraging "tend and befriend", as opposed to "flight or fight", behavior, in response to stress.

- It inhibits the development of tolerance to various addictive drugs (opiates, cocaine, alcohol) and reduces withdrawal symptoms, at least in animal tests. (*Kovacs 1998*)

[Oxytocin \(Wikipedia\)](#)

Pancreatic enzymes

The pancreas produces enzymes that break down all categories of digestible foods (exocrine pancreas) and secretes hormones that affect carbohydrate metabolism (endocrine pancreas). The pancreas

Piracetam (Nootropil) (Myocalm)

Piracetam (brand name: **Nootropil®**, **Myocalm®**), is a cerebral function regulating drug which is claimed to be able to enhance cognition as well as slow down brain aging.

Piracetam is a cyclic derivative of **GABA**. It is one of the racetams, and is similar to the amino acid pyroglutamate.

[Piracetam \(Wikipedia\)](#)

Prednisone

Prednisone is a **synthetic corticosteroid** drug which is usually taken orally and can be used for a large number of different conditions.

It has a mainly glucocorticoid effect. Prednisone is a prodrug that is converted by the liver into prednisolone, which is the active drug and a steroid.

Prednisone is particularly effective as an **immunosuppressant** and affects virtually all of the immune system.

It can therefore be used in autoimmune diseases, inflammatory diseases (such as asthma and Crohn's disease), various kidney diseases including nephrotic syndrome, and to

female, **oxytocin increases blood flow to the eye, to the brain, and to muscle.**

The end result of that is, in a non-pregnant individual it tends to make the skin feel warmer and the body feel warmer. **You think more clearly and you see more**

clearly. It can be remarkable. I can give the patient a shot of oxytocin in the hip and five minutes later they will say, "*I haven't seen this clearly, I haven't felt this well in months.*" It doesn't work for everybody, but when it does, it is quite miraculous and can be a long term therapy."

From [Dr. Charles Lapp's Article](#) on immunesupport.com

is the main source of enzymes for digesting fats (lipids) and proteins - the intestinal walls have enzymes that will digest polysaccharides.

[Pancreas \(Wikipedia\)](#)

Jump to other [nootropics](#)

From a discussion forum:

"...This is remarkable, glad to hear you are getting some life back! I wish it had been that simple for me. I took Prednisone for awhile, I did feel better on it at first, but after a month the good effects all wore off and and I really didn't want to keep raising the dose and take the risks ass'd with it.

After I stopped it my pain and

Somebody went to a talk about fibro (he believes cfd is fibro) given by *Dr. Michael Powell* in Sacramento yesterday, check out his site:

[Fmtlc.com](#)

Piracetam works best when taken with choline. Take 800 mg doses, but none several hours before bedtime. It can be consumed safely at up to 8000 mg per day. An initial dose of 2400 mg followed by daily morning doses of 800 mg is a good general regimen. It may take several weeks to see effects. Taper off slowly. (As with Klonopin)

[Pharmacymex.com](#)

[Folkarts.com/idef/pharmacies.htm](#)

[Uta.fi/~samu/nootropics_resources.html](#)

(Other cognitive enhancers)

From another discussion forum:

"...I have been following the Jeffries protocol since February and noticed huge improvements on 20 mg h/c every day but I was still getting hypoglycemic drops and didn't feel good on getting up. My doctor switched me to Prednisone 2.5mg 9 pm and the same dose 8 am. This has made a HUGE difference and I can say that I no longer have cfs.

The reason is that Prednisone is longer acting, the problem I had with the h/c is that it gives you constant highs and lows even at 20 mg a day whereas the Prednisone doesn't do this.

prevent and treat rejection in organ transplantation.

[Prednisone \(Wikipedia\)](#)

fatigue were a lot worse than before I started it and took me many months to get back to baseline.

I took 5mg Prednisone in the AM. It did make me feel better, but can't say that it came close to curing me, then all effects seemed to wear off completely..."

I can do a huge amount each day with only short sit downs to recover. By the evening I am sometimes quite tired but usually can take my dog out for a 30 minute walk. I sleep through the night nearly every night and this hasn't happened for 10 years.

In addition to the 5mg Prednisone I have to take 2 grains of Armour for my thyroid. These 2 meds have given me my life back and everyday I can lead a more or less normal life (I have high antithyroglobulin antibodies).

Dr. Jeffries proved with thousands of patients over 30 years or more that there were no ill effects as long as one stuck under 20 mg hydrocortisone. In fact he found that his patients on this dose were healthier than his other patients. After all if our bodies are not making enough cortisol all we are doing is bringing it back up to a normal level. My bp still falls if I do too much (41/120) but with 5 minutes of sitting down it recovers to a normal reading of 65/120.

Even if there is a small risk of problems later on I am prepared to take that risk to have my life back now. Who knows maybe in another 6 months time when I have chelated more mercury out of my brain, my adrenals and thyroid might even start to work better and I will drop my dose to 2.5mg a day..."

[Pregnenolone](#)

Pregnenolone is a **steroid hormone** involved in the steroidogenesis of progesterone, mineralocorticoids, glucocorticoids, androgens, and estrogens. As such it is a prohormone.

[Pregnenolone \(Wikipedia\)](#)

Since pregnenolone, progesterone, and DHEA are all biosynthesized from cholesterol by p450 iron-requiring enzymes, the failure of this enzyme system due to an iron metabolizing problem caused by hyperimmunity can lead to low levels of these neuro-hormones.

Low levels of these neurosteroids are known to cause brain **fog**, especially pregnenolone.

[Probiotics](#)

Bifidobacterium bifidum
Bifidobacterium breve
Bifidobacterium infantis
Bifidobacterium longum
Lactobacillus acidophilus
Lactobacillus bulgaricus
Lactobacillus casei
Lactobacillus plantarum
Lactobacillus rhamnosus
Lactobacillus GG
Streptococcus thermoph.

Probiotics are **dietary supplements** containing potentially **beneficial bacteria**.

Probiotic bacterial cultures are intended to assist the body's naturally occurring flora within the digestive tract to reestablish themselves. They are sometimes recommended by doctors, and, more frequently, by nutritionists, after a course of antibiotics, or as part of the treatment for **candidiasis**. Many probiotics are present in natural sources such as **lactobacillus** in yogurt. Claims are made that probiotics **strengthen the immune system**.

The rationale for probiotics is that the body contains a miniature ecology of microbes, collectively known as the gut

There is no published evidence that probiotic supplements are able to replace the body's natural flora when these have been killed off. There is evidence, however, that probiotics do form **beneficial temporary colonies** which may assist the body in the same functions as the natural flora, while allowing the natural flora time to recover from depletion.

The probiotic strains are then

Prebiotics

Although use of probiotic formulations may well help in achieving these benefits, it is also possible to increase and maintain a healthy bacterial gut flora by increasing the amounts of **prebiotics** in the diet such as **inulin**, **raw oats**, and **unrefined wheat**. This is likely to be a more effective mechanism, since without appropriate food sources in the gut, probiotic organisms will die.

flora.

The number of bacterial types can be thrown out of balance by a wide range of circumstances including the use of antibiotics or other drugs, excess alcohol, stress, disease, exposure to toxic substances, or even the use of antibacterial soap. In cases like these, the bacteria that work well with our bodies (see symbiosis) may decrease in number, an event which allows harmful competitors to thrive, to the detriment of our health.

**[Procrit](#)
(Erythropoietin)
(Epogen)
(EPO)
(Aranesp)**

Erythropoietin (EPO) is a glycoprotein hormone that is a growth factor for erythrocyte (red blood cell) precursors in the bone marrow.

It increases the number of red blood cells in the blood. Synthetic erythropoietin is available as a therapeutic agent produced by recombinant DNA technology. It is used in treating anemia resulting from chronic renal failure or from chemotherapy for the treatment of cancer. Its use is also believed to be common as a blood doping agent in endurance sports such as bicycle racing, triathlons and marathon running.

[EPO/Procrit \(Wikipedia\)](#)

The use of Procrit to treat CFS must be considered experimental, and it is currently undergoing a 5 year trial at the University of Miami, in Florida, U.S.A.. One theory is that reduced red blood cell (RBC) mass is a critical hematological marker of CFS, and that increasing red blood cell production may result in more energy and reduced fatigue.

[Propolis](#)

Propolis is a wax-like resinous substance collected by bees from tree buds and used as cement and to seal cracks or open spaces in the hive. Its color varies from green to brown and reddish, depending of its bothanical source. Honeybees will use propolis to attempt to seal any gap inside the hive that is smaller than the bee space, approximately 6.3 mm.

progressively replaced by a naturally developed gut flora. If the conditions which originally caused damage to the natural gut flora persist, the benefits obtained from probiotic supplements will be short lived.

The maintenance of a healthy balance of gut flora not only aids digestion and **boosts the immune system** but also **prevents constipation, reduces insomnia** and is believed to have beneficial impacts on stress-related illnesses...

[University of Miami CFS Study:](#)
The Behavioral Medicine Research Center at the University of Miami is conducting a study funded by the National Heart, Lung, and Blood Institute of the National Institutes of Health. Dr. Barry Hurwitz Ph.D. and Dr. Nancy Klimas M.D. are the principal investigators of this study.

CFS Procrit clinical trial phone is 305-575-7154.

The research study is actively searching for CFS patients who would like to participate in the study.
(11. April 2002)

Propolis shows **powerful local antibiotic and antifungal properties**. Also it is efficient in treating skin burns. However, research is inconsistent on its efficacy. Claims have been made for its use in treating **allergy**; it may **stimulate the immune system**, but some warn that it

Some products containing probiotic bacteria include:

- Kefir
- Raw milk
- Yogurt
- Kombucha
- Sauerkraut
- Kimchi

[Probiotics \(Wikipedia\)](#)

The study is investigating a potential treatment for Chronic Fatigue Syndrome (CFS). The study is a placebo-controlled clinical trial in which Procrit is prescribed to the participants for 13 weeks.

Procrit is a drug that has been used for over a decade to treat anemia which is low red blood cell volume. The drug increases the production of red blood cells, which we have discovered is low in many cfs patients.

Because the red blood cell delivers oxygen to the body, it is projected that this treatment may reduce the debilitating fatigue experienced by individuals with cfs.

Other links:

[Procrit.com](#)
[Ivanhoe.com](#)

Increases effects of antibiotics against staph 10 to 100 times. Effective against TB, oral problems, etc. (?)

**[Q 10, Coenzyme](#)
(Ubiquinone)
(Ubiquinol)
(Ubidecarenone)
(Mitoquinone)**

Coenzyme Q (CoQ), also known as ubiquinone or ubiquinol, is a biologically active quinone with an isoprenoid side chain, related in structure to vitamin K and vitamin E.

...Because of its ability to **transfer electrons and therefore act as an antioxidant**, Coenzyme Q has become a fashionable dietary supplement.

Young people are able to make Q10 from the lower numbered ubiquinones such as Q6 or Q8. The sick and elderly may not be able to make enough. Q10 thus becomes a vitamin later in life and in illness.

Supplementation of Coenzyme Q10 has been found to have a beneficial effect on the condition of some sufferers of migraines, and is a common component of the "**mito cocktail**" used to treat mitochondrial disorders and other metabolic disorders.

It is also being investigated as a treatment for cancer, and as relief from cancer treatment side effects.

[Quercetin](#)

Quercetin is a flavonoid that forms the "backbone" for many other flavonoids, including the citrus flavonoids rutin, hesperidin, naringin and tangeritin.

Quercetin is found to be the most active of the flavonoids in studies, and many medicinal plants owe much of their activity to their high quercetin content.

**[Rebirthing](#)
(Breathwork)
(Holotropic Breathing)
(Conscious connected breathing)**

Rebirthing is a branch of alternative medicine which postulates that human birth is a traumatic event (see birth trauma) and that a discipline consisting of a combination of connected breathing techniques, relaxation and focused awareness can have therapeutic benefits.

[Rebirthing \(Wikipedia\)](#)

should not be taken if the user is likely to have severe allergic reaction to bees.

[Propolis \(Wikipedia\)](#)

Recent studies have suggested that Coenzyme Q10 may act as an important antioxidant in the body and the brain. Some of these studies have indicated that Coenzyme Q10 may **protect the brain from neurodegenerative disease** such as Parkinsons...

[Coenzyme 10 \(Wikipedia\)](#)

Some researchers suggest that **L-carnitine and coenzyme Q10 might have an additive or synergistic effect.**

Both coenzyme Q10 and L-carnitine are involved with maintaining mitochondrial energy production in cells and may help protect against oxidative and toxin-induced damage.

Quercetin has demonstrated significant **anti-inflammatory** activity because of direct inhibition of several initial processes of inflammation. For example, it inhibits both the manufacture and release of histamine and other allergic/inflammatory mediators. In addition, it exerts potent antioxidant activity and vitamin C-sparing action.

[Quercetin \(Wikipedia\)](#)

Disordered Breathing Rhythms

More than half of our patients with FMS or CFS develop a disordered pattern of breathing. They take very small rapid breaths using the

Boosting energy levels is necessary for people suffering from CFS. Coenzyme Q10, 100 mg taken 3 times a day, often helps victims of severe chronic fatigue syndrome.

Coenzyme Q10 has long been prescribed for CFS patients. CoQ10 is a potent antioxidant that aids in metabolic reactions including the process of forming ATP, the molecule the body uses for energy. Virtually every cell in the body contains CoQ10. It is concentrated in the mitochondria, the area of the cells where energy is produced.

One a study of 20 female patients with CFS that required bed rest following mild exercise and 20 healthy controls. Eighty percent of the CFS patients were found to be deficient in CoQ10 which further decreased following mild exercise or over the course of normal daytime activity. After three months of CoQ10 supplementation (100 mg per day) exercise tolerance (400 kg-meters of work) more than doubled.

All patients had improved. **Ninety percent had reduction and/or disappearance of clinical symptoms**, and 85 percent had decreased post-exercise fatigue.

(Judy 1996) (Werbach 2000)

Sources:

Coca Leaf, Cauliflower, Catechu, Fishwort, Hops Fruit, Japanese Knotweed, Neem, Oleander, Prostrate Knotweed, St. John's-wort, Tea Leaf, Tomato, Woodland Hawthorn, White Mulberry Leaf, Yarrow

[Lassesen.com/quercetin](#)

...Breath language is especially rich in communicating emotion. **Strong emotions like crying, anger, fear, sorrow, and pleasure usually involve increased breathing, while repressing emotions means reducing breathing.**

Breath language is a body language. The noises our breath

(Vivation)

See my success with Rebirthing [here](#).

[Is Breathwork problem or solution oriented?](#)
by *Wilfried Ehrmann, Ph.D.*

(and other interesting articles like
"What is breathwork practice, psychotherapy and
spirituality")

[Rhodiola Rosea](#) (Russian Rhodiola) (Golden Root)

Rhodiola rosea is a Siberian herb that is effective for improving mood and alleviating depression. Russian research shows that it **improves both physical and mental performance, reduces fatigue**, and prevents high altitude sickness. In one study, the Rhodiola rosea group decreased proofreading errors by 88% while the control group increased proofreading errors by 84%. Rhodiola rosea's effects are attributed to its ability to optimize serotonin and dopamine levels and to its influence on opioid peptides such as beta-endorphins. The stimulant substances involved are referred to as adaptogens.

[Rhodiola Rosea \(Wikipedia\)](#)

[Ribose](#) (D-Ribose)

Beta-D-ribofuranose
Ribose is also sometimes part of the [Mito cocktail](#).

Ribose, primarily seen as D-ribose, is an aldopentose - a monosaccharide...
As a component of the RNA that is used for genetic transcription, ribose is critical to living creatures. It is related to deoxyribose, which is a component of DNA. It is also a component of ATP, [NADH](#), and several other chemicals that are critical to metabolism.

[Ribose \(Wikipedia\)](#)

small muscles of their chest **instead of slow, deep breathing with the large muscles of the abdomen.** These changes are subtle and most people who "hyperventilate" in this manner don't realize that their breathing pattern is out-of-sync. Shallow chest breathing makes people feel tense. Slow, deep abdominal breathing creates feelings of calmness.

Disordered breathing can also cause a broad array of frightening symptoms including mental fog, dizziness, irritability, chest pain, feeling numb and more. Worse symptoms then disrupts breathing further.

[Dr. Podell's site](#)

Effects similar to Siberian ginseng.

It's an adrenalin modifier/buffer with antihypoxia effects, as well as anticoagulant effects. It also increases hemoglobin and red blood cell levels. (?)

Quality Rhodiola rosea extract should contain at least 2.5% rosavin and 1% salidroside. (?) The Russian stuff is considered much better than the Chinese one(?)

How do the researchers think D-ribose supplementation supports improved CFS and FM patient quality of life? Many scientists have come to believe that "inefficient" or "disordered" cellular metabolism may account for the symptoms of fatigue and muscle pain associated with CFS and FM.

makes such as puffing, panting, yawning, gasps, snorts, sighs, coughing, choking, and suffocating are all part of its vocabulary as is the length of the breath and the part of the body it takes place in. **When we are relaxed, we breathe deeply and slowly into our belly. Stress moves our breath from our belly to our chest.**

Our breath can be a language of illness. When we are ill, our breathing is affected; when our breathing is inadequate, our health is affected. **Hyperventilation is an indication of stress and anxiety.** Hesitation and mental conflict can trigger asthma attacks...

[I-breathe.com](#)

Sellers:

[2ameriden.com/products/rosavinframe.html](#)
[Beyond-a-century.com](#)
[Naturedistributors.com](#)
[Anti-aging-guide.com](#)

Variety of adaptogens including Rosavin:
[Cybercities.com/j/jnader/Primeone.html](#)

Dose : 200-300mg per day is safe and effective.

Ribose is used to **increase muscle function, recovery, athletic performance, boost muscle tissue energy, and enhance effectiveness of creatine, replenish ATP stores, and improve or maintain nucleotide salvage and/or synthesis in heart and skeletal muscles** following high intensity exercise...

...Individuals who feel they are overly tired or are concerned about their energy stores typically take up to 3 grams twice per day or adjust to perceived benefit.

[Naturaldatabase.com](#)

The natural dietary supplement D-ribose - a form of sugar essential to fuel cellular energy generation - "**significantly reduced clinical symptoms in patients suffering from Fibromyalgia and Chronic Fatigue Syndrome**"...

[Salt](#)
NaCl

[\(Hydropulse\)](#)

Edible salt is a mineral, one of the few rocks humans eat. There are different forms of it: unrefined salt, refined salt, table salt or iodised salt. It is a crystalline solid, white, pale pink or light grey in color, obtained from seawater or from rock deposits. Sea salt comes in fine or larger crystals. In nature it includes not only sodium chloride, but also other vital trace minerals. Edible rock salts may be slightly greyish in colour due to this mineral content. Salt is necessary for the survival of all living creatures, including humans. Salt is involved in regulating the water content (fluid balance) of the body. Salt flavor is one of the basic tastes. Salt cravings may be caused by trace mineral deficiencies as well as by a deficiency of sodium chloride itself. Salt is required for life, but overconsumption can increase the risk of health problems, including high blood pressure, in those individuals who are genetically predisposed to hypertension. In food preparation, salt is used as a preservative and as a seasoning.

[Edible Salt \(Wikipedia\)](#)

[Selegiline](#)
(Selegilin)

Selegiline is a **Monoamine oxidase B receptor inhibitor**.

Selegiline is sometimes used off-label to treat **narcolepsy** and as a **nootropic**, as well as for its purported **life-extending effects**.

It is also reported to **positively affect libido**, particularly in older males. As of February 28, 2006, Selegiline has also been approved by the FDA to treat **major depression** using a transdermal patch (Emsam Patch).

Selegiline is also used (at extremely high dosages relative to humans) in veterinary medicine to treat the symptoms of Cushing's disease and so-called "**cognitive dysfunction**" in

Patients' **muscles become "anaerobic" or depleted of oxygen** faster than the muscles of normal healthy people. And supplementation with the nutrient D-ribose may represent one avenue for **supporting faster regeneration of ATP and healthier metabolism** in oxygen-deprived muscle cells.

[Immunesupport.com/ribose](#)
(12.Jun.2006)

A recent study found an abnormality in blood pressure regulation in 22 of 23 patients with CFS.

This abnormality, called **neurally mediated hypotension**, causes a sudden drop in blood pressure when a person has been standing, exercising or exposed to heat for a while. When this occurs, patients feel lightheaded and may faint.

They often are exhausted for hours to days after one of these episodes. When treated with **salt** and medications to stabilize *blood pressure*, **many patients in the study had marked improvements in their CFS symptoms.**
(John Hopkins University)

Selegilin ist ein Antidepressivum / MAO-Hemmer und bewirkt Verbesserung psychischer Variablen.

[uni-zürli/klipsy.ch](#)
- **Rasagilin** gehört zur Gruppe der selektiven Monoaminoxidase-Hemmer (MAO-Hemmer) und ist ein MAO-B-Hemmstoff der „zweiten Generation“. **Es hemmt die MAO-B fünf- bis zehnfach stärker** als das bislang aus dieser

...Ribose **and Creatine are very synergistic** (support each other) in their actions...

[Bodybuilding.com/store/ribose.html](#)

Bacteria don't like salt, so eat it and gargle with it, and irrigate your sinuses with it.

[ENT-consult.com](#)

[Salt-Vitamin C theory \(Curezone.com\)](#)

[Salt-n-C](#) (Special CFSFMExperimental-group)

[Lyme Strategies](#) (Yahoo-group)

[Borreliose-abhilfe](#) (Yahoo-group über Salz und Vitamin C, RIFE, Frequenztherapie)

see also:

[Gookinaid](#)
[Vitamin C](#)

Researchers studied the effect of Selegiline, a specific monoamine oxidase B receptor inhibitor, against a placebo in 25 CFS patients over a six-week trial period....

They found that the patients who took Selegiline reported **significant improvement in tension/anxiety, vigor and sexual relations**, and that the drug was **not** acting as an antidepressant.

[PubMed.com](#) (enter this number in the search field: 98259960)

dogs.

[Selegiline \(Wikipedia\)](#)

**Serine
(L-Serine)**

Organic compound, one of the 20 amino acids commonly found in animal proteins. Only the L-stereoisomer appears in mammalian protein.

It is **not essential to the human diet**, since it can be synthesized in the body from other metabolites, including glycine. Serin was first obtained from silk protein, a particularly rich source, in 1865.

[Serine \(Wikipedia\)](#)

**Sertraline
(Sertralin)
(Zoloft)
(Gladem)**

Sertraline is used medically mainly to treat the symptoms of **depression** and **anxiety**. It has also been prescribed for the treatment of **obsessive-compulsive disorder, post-traumatic stress disorder, premenstrual dysphoric disorder, panic disorder, and bipolar disorder**.

[Sertraline \(Wikipedia\)](#)

Shiitake

Lentinula edodes

Mushroom, contains:

- Lentinan
- KS-2 (interferon-inducer)
- 10 % Polysaccharides

Extracts from shiitake mushrooms have also been researched for many other **immunological benefits**, ranging from **antiviral** properties to possible treatments for **severe allergies**. Lenthionine, a key flavor compound of shiitake, also **inhibits platelet aggregation**, so it is a promising treatment for thrombosis.

[Shiitake \(Wikipedia\)](#)

**Siberian ginseng
(Eleuthero)**

*Eleutherococcus
senticosus*

Contains:

- Eleutherocide

Attention: Must be standardized for eleutheroside content!
(According to *Dr. Weil*)

Siberian ginseng is a powerful tonic herb with an impressive range of health benefits. Unlike many herbs with a medicinal use, it is more useful for maintaining good health rather than treating ill health. Research has shown that it **stimulates**

Gruppe verfügbare Selegilin.

[Rasagilin \(Wikipedia.de\)](#)

Sertralin ist ein **Selektiver Serotonin Wiederaufnahmehemmer**, der zu einer Erhöhung der Konzentration von Serotonin im synaptischen Spalt im Zentralnervensystem führt. Nach einer Phase der Modulation der Serotonin-Rezeptoren kann eine **antriebssteigernde und eine stimmungsaufhellende Wirkung** beobachtet werden.

[Sertralin \(Wikipedia.de\)](#)

- immune stimulant
- antiviral
- antitumor

Blood samples from cancer patients on KS-2 showed a very definite antiviral activity, and in mice given KS-2 orally in small doses, blood levels of interferon increase dramatically.

Interferon is a protein in the human body that interferes directly with viral replication.

- increases white blood cells,
- enhances immune system,
- increases energy / recovery,
- normalizes blood pressure

Eleuthero has been reported to **increase stamina and endurance and protect the body systems against stress-induced**

ME/CFS patients fulfilling the Fukuda diagnostic criteria and having low urinary serine excretion were supplemented with 1-3 g L-serine daily.

Significant reductions in symptom expression were seen in core CFS diagnostic symptoms, cognitive, neurological and musculoskeletal symptoms...

[Ahmf.org/01emms2.html](#)

Sertralin bewirkt eine Verbesserung der depressiven Symptomatik. (Ebene III-3)
uni-züri/klipsy.ch

Shiitake extract is used in Japan to treat **low natural killer syndrome (LNKS)** which is identical to the illness called chronic fatigue syndrome (cfs) in the US.

In 1985 *Dr. Tadao Aoki* of the Shinrakuen Hospital in Japan reported that an undisclosed number of LNKS patients who received lentinan injections (1 mg/day, every other day) experienced a gradual improvement in "dullness."

In addition, body temperature and natural killer activity gradually returned to normal.

Complete recovery in the majority of patients occurred within a few months (! ! ?)

Oral dose: 5 mg, which was 5 times the intravenous dose.

[Jvm.com](#)

The Chinese also believed that Eleuthero provided energy and vitality. In Russia, it was originally used by the Siberian people to **increase physical performance** and to increase the quality of life and **decrease infections**. Eleuthero has been studied extensively since the 1940's.

The root has been found to have many **adaptogenic benefits**.(11, 12)

- *Medon PJ*. 1984

Effects of *Eleutherococcus senticosus* extracts on

resistance to stress and so it is now widely used as a tonic in times of stress and pressure. In an alarming situation, the adrenal glands release corticosteroids and adrenaline which prepare the organism for the fight or flight reaction. When these hormones are depleted, the organism reaches an exhaustive phase. Eleutherococcus **delays the exhaustive phase** and allows a more economical and efficient release of these hormones. [Siberian Ginseng \(Wikipedia\)](#)

[Spirulina](#)

Spirulina is a high protein micro-algae. It's very similar in nutrients to [chlorella](#) & blue algae with even more protein, [B12](#) and high amounts of phycocyanin. [Beyondacenturyonline.com](#)

[Spontaneous healing \(Spontaneous remission\)](#)

Spontaneous remission is a catch-all expression by the medical faculty for any healing with no obvious conventional explanation. Cases of spontaneous remission are a good example of statistical outliers due to the large numbers of individuals alive and the corresponding incidences of disease.

[Staphylococcus toxoid \(Superantigen\)](#)

Superantigens (SAGs) are a group of virulent toxins that indiscriminately activate T-cells of the immune system causing **system-wide inflammation** and other serious, potentially fatal symptoms. They are not quite the same as antigens, though they almost all have antigenic properties, but rather receive their name from their powers to induce the production of antibodies.

Superantigens are secreted as exotoxins by bacteria, alternatively viruses hijack our own molecular machinery to generate endotoxin forms of superantigens. They are mainly associated with species of Streptococcus and Staphylococcus infections, and are the contributing cause of toxic shock syndrome. **Superantigens are also the suspected cause of numerous diseases displaying characteristic symptoms**

illness. It is rumored that Soviet Olympic athletes have used Eleuthero successfully to enhance sports performance and concentration.

Eleuthero is a different genus than other popular ginsengs such as the American and Panax or Asian varieties. The use of eleuthero root dates back 2,000 years in the records of Chinese medicine. It was used for respiratory tract infections, as well as colds and influenza.

Traditional medical practice ascribes the effect to rationally explainable influences that simply lack observation. Advocates of faith healing and alternative medicine contend that the expression is a convenient means for dismissing alternative sources of efficacy. [Spontaneous remission \(Wikipedia\)](#)

Therapie mit Staphylococcus toxoid führt zu einer Verbesserung von Variablen, welche die Lebensqualität betreffen. (Ebene III-3) uni-zürli/klipsy.ch

hexobarbital metabolism in vivo and in vitro. - *Davydov M.* 2000 Eleutherococcus senticosus (Rupr. & Maxim.) Maxim. (Araliaceae) as an adaptogen: a closer look. - *Fulder S.J.* 1981 Ginseng and the Hypothalamic-pituitary Control of Stress. - *Asano K, et al.* 1986 Effect of Eleutherococcus senticosus Extract on Human Physical Working Capacity.

Some of the suggested medications and therapies on this database might even cure the physical causes, especially the *tonics* and *adaptogens*, which I added to this list after really being inspired by the excellent book [Spontaneous Healing](#), by *Dr. Andrew Weil* [See Max Rivers' story on his spontaneous healing from ME-CFIDS-CFS](#)

Clinical global impressions showed significant improvement in the vaccine-treated group, and VAS did so in both groups. In a follow-up study of 23 patients, the vaccine treatment was continued for 2-6 years. **Fifty percent were rehabilitated successfully and resumed half-time or full-time work.** The results of this study support the authors's hypothesis that treatment with staphylococcus toxoid may be a fruitful strategy in patients with fibromyalgia and chronic fatigue syndrome [Pubmed: Effects of staphylococcus toxoid vaccine on pain and fatigue in patients with fibromyalgia/chronic fatigue syndrome](#)

with unknown causes.

[Superantigen \(Wikipedia\)](#)

Suma , also called Para toda, is the dried root of *Pfaffia paniculata*, a plant found in the Atlantic rain forest of Brazil. First introduced to the United States as Brazilian Ginseng, Suma is one of the most highly regarded herbs in South America, and is considered to be a true **adaptogen**.

Suma

Pfaffia paniculata

**(Brazilian Ginseng)
(Para toda)**

Transfer Factor

In 1949, *H.S. Lawrence* discovered that a part of an individual's white blood cells was responsible for immune responses while he was studying tuberculosis.

Upon injecting an extract of leukocytes from one host to another, he observed that these molecules were able to replicate the immune response of the host to the recipient. He dubbed these 'immune information' molecules transfer factors for their ability to "inform" other immune cells regarding their immune responses to harmful agents.

Transfer factors are found in [colostrum](#) of humans and other animals, most abundantly in cows.

They are made up of amino acids and are antigen-specific, meaning that specific types of transfer factors can be used to treat specific types of diseases.

...In an informal study, where extraneous factors were not held constant, patients who used transfer factor were free from pathogenic disease for the duration of the administration of transfer factor.

Patients reported **spontaneous disappearance of flu and cold symptoms** concomitant with oral administration of transfer factor containing products...

[Transfer Factor \(Wikipedia\)](#)

The immune system's job is to recognize potentially harmful invaders (pathogens) and then destroy or neutralize them. Transfer factors are tiny protein molecules which are produced by immune cells called T-cells. Transfer factors are the key to the immune system's memory of previous pathogen exposure, and thus, are an integral component for maintaining immune system integrity and effectiveness.

Transfer factors allow the immune system to remember conditions for which immunity has already been established. When a person has been infected with chickenpox in childhood, for example, the body develops a memory of that illness which prevents the person from becoming re-infected later in life. In the future, the specific immune transfer factor

[Transferfactor.ws](#) : Several transfer products have recently been introduced, each with a different focus or specificity:

ImmuneTransfer

CTM and ImmunFactor

2TM. These products contain the widest range of antigen-specific transfer factors in one product. They are designed for enhanced activity for Human Herpes Virus 6 (HHV-6B), Epstein-Barr Virus (EBV), Cytomegalovirus (CMV), Chlamydia pneumoniae, and *Borrelia burgdorferi* (cell-wall deficient Lyme), Babesia, and *Ehrlichia*. Both products utilize chicken derived transfer factors with added bovine colostrum.

Transfer Factor System

200TM, Transfer Factor

6000TM and Formula

560TM. These products contain enhanced activity for HHV-6, (both A and B variants), and CMV. Both products are supported by a patent on the process for obtaining transfer factor from colostrum. Transfer Factor 6000 is the same high quality patented formula (included in the HemexTMLab protocol) as Formula 560, at a lower price.

Transfer Factor System

100TM, Transfer Factor

4000TM and Formula

540TM. These products contain enhanced activity for Epstein-Barr

Used by native peoples for centuries, Suma is advocated as an effective adaptogen to **support the immune system, adapt the body to external stresses, relieve pain, fight chronic fatigue syndrome, and accelerate wound healing.**

Immunesupport.com/glossary

Therapie mit TF (transfer factor) führt zu einer Verbesserung physiologischer Messwerte (Ebene III-3).
uni-zürich/klipsy.ch

[Chisolm Labs](#)

[4Life Research, Utah](#) (Products and independent study)

[Immunesupport.com](#) (Related abstracts, and TF-products)

[Immunity Today](#) (TF against HHV-6; variant A&B and EBV)

[Dr. Podell's](#) suggestion on Transfer Factor.

(Based on *Dr. Joseph Brewer's* double-blind tests)

molecule for chickenpox will endow the immune system with the exact 'blueprint' of what chickenpox looks like, and the body will be able to quickly recognize and respond to any possible re-infection before it can cause disease.

Reportedly the only company that has the patented protected process for extracting transfer factor is *4Life Research*.

Apparently many companies are actually using colostrum instead of transfer factor. (?)

Colostrum contains transfer factors but it is not pure concentrated transfer factor.

Colostrum has all the other properties of the bovine milk in it, and may cause a reaction.

Virus (EBV) and CMV. Both products are supported by a patent on the process for obtaining transfer factor from colostrums. Transfer Factor 4000 is the same high quality formula as Formula 540, at a lower price.

Transfer Factor

Essentials™ (formerly **Transfer Factor Basics™**) This product is a non-antigen specific transfer factor (chicken derived) product designed for daily use to support any person's immune system. In addition to transfer factor, it incorporates pretty high levels of other immune supporting nutrients like beta glucan, IP-6, [astragalus](#), TMG, bovine colostrum, and larch. **Transfer Factor XF** and **Transfer Factor Plus**. For individuals seeking only to improve overall immunity without targeting specific viruses, these products contain only the general transfer factors found in the colostrum, and do not include transfer factors for any targeted pathogens such as HHV-6, EBV, CMV etc.

[Tropisetron](#)

5-HT3 Rezeptorantagonist

[Turmeric](#) (**Tumeric**)

Curcuma longa

[5-HT Rezeptoren \(Wikipedia.de\)](#)

Turmeric is a spice commonly used in curries and other South Asian cuisine. Its active ingredient is **curcumin**. It is a significant ingredient in most commercial **curry powders**. Turmeric is a member of the ginger family, Zingiberaceae. In Ayurvedic medicine, turmeric is thought to have many healthful properties. It is taken in some Asian countries as a dietary supplement, which allegedly helps with **stomach problems** and other ailments. It is popular served as a tea in Okinawa, Japan. It is currently being investigated for possible benefits in **Alzheimer's disease**, **cancer** and **liver disorders**.

Curcumin, the active ingredient in turmeric, might inhibit the accumulation of destructive beta amyloids in the brains of Alzheimer's disease patients and also break up existing plaques. "Curcumin has been used for thousands of years as a safe **anti-inflammatory** in a variety of ailments as part of Indian traditional medicine..."

[Turmeric \(Wikipedia\)](#)

Tropisetron bewirkt eine Verminderung der Erschöpfung und einen Anstieg der Leistungsfähigkeit (Ebene III-3).
uni-zürich/klipsy.ch

Curcuminoid extract from Tumeric is antioxidant (actually **prevents formation of free radicals** as well), antiviral, antiinflammatory, and anticarcinogenic.

[Kilohealth.com/curcumin](#)

Valganciclovir (Valcyte)

Valganciclovir hydrochloride (Valcyte®) is an **antiviral** medication used to treat cytomegalovirus infections.

As the L-valyl ester of ganciclovir, it is actually a prodrug for ganciclovir. After oral administration, it is rapidly converted to ganciclovir by intestinal and hepatic esterases.

[Valganciclovir \(Wikipedia\)](#)

Valganciclovir is a prescription drug approved for treating **HHV-6** infections of the eye, which can occur in individuals with severely weakened immune systems, such as transplant or cancer patients. The HHV-6 virus is not the same as the herpes simplex virus that causes cold sores. Most commonly, it is associated with a condition called roseola infantum, a fever and a rash in children.

Vitamin A (Retinol) (Axerophthol)

Retinol, the dietary form of vitamin A, is a fat-soluble, **antioxidant** vitamin **important in vision and bone growth**.

It belongs to the family of chemical compounds known as retinoids.

Retinol is ingested in a precursor form; animal sources (milk and eggs) contain retinyl esters, whereas plants (carrots, spinach) contain pro-vitamin A carotenoids.

... Vitamin A is essential to provide intact epithelial tissues as a physical barrier to infection; it is also involved in maintaining **healthy lymphocytes and T-cells**.

...Vitamin A affects the production of **human growth hormone**.

[Vitamin A \(Wikipedia\)](#)

Vitamin B

B1 Thiamine

B2 Riboflavin

B3 Niacin (also Vitamin P or Vitamin PP)

B5 Pantothenic acid

B6 Pyridoxine and Pyridoxamine

B7 Biotin (also Vitamin H and Vitamin B-w)

B9 Folic acid (also Vitamin M and Vitamin B-c, important for pregnancies)

B12 Cyanocobalamin

Professor Montoya:

"...Donna was sent to me because high levels of another virus (**Epstein Barr**) had been detected in her system. I found high levels of **HHV-6 virus** as well, so I treated her with valganciclovir to bring down her viral load. I'd hoped it might help a bit, but I didn't expect the results to be anything so dramatic. It was pure serendipity..."

"...It can have serious side-effects including anemia, so you have to monitor patients very carefully. But so far none of the CFS/ ME patients have reacted badly to it..."

Participants report: **"Soaring energy levels"**

"When Donna came to see us, her energy levels were around 10 per cent of what she considered normal," Professor Montoya was quoted as saying. "Today, she is functioning at 90 per cent."

A patient who could hardly walk all the way around the block is now bicycling for up to three hours each day. Another patient who could not even leave the bed now comes to breakfast every day at 7:00 AM.

Immunesupport.com/valganciclovir

Vitamin A plays a role in the development of T-helper and B cells. Vitamin A deficiency impairs innate immunity by diminishing the function of neutrophils, macrophages, and natural killer cells. Although vitamin A does play a role in balancing Th1 and Th2 function, it does so by downregulating Th1 cell IFN-gamma secretion directly, decreasing activated antigen presenting cell (APC) function, and promoting Th2 cell growth and/or differentiation. Therefore, although vitamin A is an important nutrient for immune function, cfs-patients should avoid excessively high doses.

(Wiedermann, Hanson et al. 1993)

(Cantorna, Nashold et al. 1994)

(Cantorna, Nashold et al. 1995)

(Watzl, Bub et al. 1999)

(Stephensen 2001)

All B vitamins are water soluble, and are dispersed throughout the body and must be replenished daily with any excess excreted in the urine.

Vitamin B comes from a number of natural sources, including potatoes, bananas, cereal, lentils, liver, turkey, and tuna. Brewer's yeast is an especially good source of Vitamin B.

[Vitamin B \(Wikipedia\)](#)

...The B vitamins often work together to deliver a number of health benefits to the body. B vitamins have been shown to:

- **Bolster metabolism**

- **Maintain healthy skin and muscle tone**

- **Enhance immune and nervous system function**

- **Promote cell growth and**

Vitamin C *Ascorbic acid*

Vitamin C is a **water-soluble nutrient** and vitamin essential for life and for maintaining optimal health. It is also known by its chemical name ascorbic acid. It is used by the body for many purposes.

As a participant in hydroxylation, vitamin C is needed for the production of collagen in the connective tissue. These fibers are ubiquitous throughout the body, providing firm but flexible structure. Some tissues have a greater percentage of collagen, especially: skin, mucous membranes, teeth and bones.

Vitamin D

Vitamin D1: molecular compound of ergocalciferol with lumisterol, 1:1

Vitamin D2: ergocalciferol or calciferol

Vitamin D3: cholecalciferol

Vitamin D4: 22,23-dihydroergocalciferol

Vitamin D5: sitocalciferol

Vitamin D plays an important role in the maintenance of an intact and strong skeleton. Its primary task is to **regulate the amount of calcium and phosphorus in the blood** by ensuring correct intake and secretion (from intestines and urine, respectively).

Several studies show that vitamin D also regulates the **growth of skin cells**. Psoriasis gives shell-like skin as a result of uncontrolled cell growth. A vitamin D compound is used in the treatment of this disease.

The human body produces its own vitamin D in the skin. This

division

- Together, they also help **combat the symptoms and causes of stress, depression, and cardiovascular disease.**

Vitamin C is required for synthesis of dopamine, noradrenaline and adrenaline in the nervous system or in the adrenal glands.

Vitamin C is also needed to synthesize **carnitine**, important in the transfer of energy to the cell mitochondria.

The tissues with greatest percentage of vitamin C — over 100 times the level in blood plasma — are the adrenal glands, pituitary, thymus, corpus luteum, and retina.

The brain, spleen, lung, testicle, lymph nodes, liver, thyroid, small intestinal mucosa, leukocytes, pancreas, kidney and salivary glands usually have 10 to 50 times the concentration present in plasma.

Vitamin C is an **antioxidant**.

[Vitamin C \(Wikipedia\)](#)

...Those who avoid or are not exposed to summer midday sunshine may also require Vitamin D supplements. **In particular, recent studies have shown Australians and New Zealanders are Vitamin D deficient...**

...In practice, **the human body has enormous storage capacity for vitamin D**, and in any case all common foods and correctly-formulated vitamin pills contain far too little for overdose to ever occur in normal circumstances and normal doses...

One study showed the value of **DHEA** and vitamin C infusion treatment in the control of cfs.

[Salt-Vitamin C theory \(Curezone.com\)](#)

[Salt-n-C](#) (Special CFSFMEExperimental-group)

[Lyme Strategies](#) (Yahoo-group)

[Borreliose-abhilfe](#) (Diskussionsforum über Salz und Vitamin C, RIFE, Frequenztherapie)

"Since I started taking vitamin D and magnesium, the sciatica has completely gone.

The brain-fog is almost gone. The prostate problems and sleepiness are greatly improved.

My dentist tells me that the health of my teeth and gums has improved dramatically. The skin sores, reflux and the mucous in the stool have shown some improvement."

[Cfs-recovery.org/vitamin_d_recovery](#)

[CFSProtocol · CFS Zero Based Protocol \(Yahoo-group\)](#)

["For what it's worth"-protocol \(Ken Lassesen\)](#)

[Vitamin D \(Ken Lassesen\)](#)

process is dependent on ultraviolet radiation from sunlight. **However, Vitamin D should not be excluded from the diet – this is especially important for people who do not receive sufficient sunlight.**

[Xylitol](#)
(Wood sugar)
(Birch sugar)

Xylitol, also called **wood sugar** or **birch sugar**, is a five-carbon sugar alcohol that is used as a sugar substitute. It can be extracted from birch, raspberries, plums, and corn and is primarily produced in China.

Xylitol, gram for gram, is roughly as sweet as sucrose, but contains 40% less food energy.

[Xylitol \(Wikipedia\)](#)

Non-insulin producing sugar-alcohol looks and tastes like sucrose but a bit sweeter and “cooler” in the mouth.

Found in many fruits & vegetables, it is produced from birch wood or corn cobs.

Has **anabolic, anticatabolic** and **immunestimulating** effects, and *fights fatigue from strenuous aerobic and anaerobic activities with its antioxidant and ATP increasing properties.*

[Zadaxin](#)
Thymalfasin
Thymosin alpha 1

Immune modulator

Article from Immunesupport.com/4633 :

...Based on the postulates of viral and autoimmune etiologies of cfs, several interventions have been designed and tested by different research groups around the world, including the United States, Sweden, United Kingdom, Italy, and Japan.

This review addresses those interventions aimed at altering the balance of certain cytokines, the mediators of immune responses.

Cfs-patients who show evidence of activation of the immune system

...The exact long-term safe dose is not entirely known, but intakes of up to 2000 IU (10x the RDA) are believed to be safe, and some researchers believe that 10,000 IU does not lead to long term overdose...

[Vitamin D \(Wikipedia\)](#)

Studies show it **inhibits bacteria that cause dental caries, plaque, mouth sores & ear infections** by coating the bacteria so that they are less likely to adhere to cells.

Children taking 8g/day had 40% fewer ear infections. A 5% solution in saline is sold as a nasal spray. **Use with green tea for a mouthwash you can drink.** Builds stronger bones and tooth enamel.

With only 2.4 Calories per gram (40% fewer than sugar) and a glycemic index of 7, it maintains a steady low level of blood sugar and insulin.

[Beyond-a-Century.com](#)

SciClone Pharmaceuticals in San Mateo, California, [Sciclone.com](#) produces Zadaxin which is a subcutaneously administered, synthetic preparation of a natural peptide, thymosin alpha 1, which among other positive actions enhances the body's Th1 immune response to viral infections (current clinical studies target hepatitis C and hepatitis B) and to certain cancers (current clinical studies target malignant melanoma and hepatocellular carcinoma).

Zadaxin promotes stem cell differentiation into helper T-cells

[Nasal-Xylitol.com](#)

(This site provides information on xylitol and why a nasal spray with xylitol works as well as it does to clean the nose and eliminate the problems that frequently originate there.)

(For a mouth rinse you can swallow, use [Green Tea!](#))

Xylitol toothpaste:
[Lef.org/pages/tooth](#)

As the name "thymalfasin" suggests this drug is the peptide originally isolated from the thymus gland and tested on animals after the thymus gland was removed to reconstitute the immune system.

A healthy functioning thymus is essential to a healthy immune system. Alternative medicine and anti-aging physicians have been prescribing thymus extract for some time.

But this peptide is not readily absorbed through the gut, and there are some safety risks to the use of animal glandulars.

Zadaxin, is a synthetic peptide which exactly matches the human thymosin alpha 1 peptide. It is taken by injection and has none of the risks of an animal product.

... Zadaxin is indicated in infections that shift the immune

have poor immune cell function and a predominance of what is called a T-helper (Th)2-type cytokine response when their lymphocytes are activated.

A Th2-type response, which is characterized by production of cytokines such as interleukin (IL)-4, -5, and -10, favors the function of B lymphocytes, the cellular factories of immunoglobulins.

Another article from

Immunesupport.com/4181 :

...A predominance of a Th2-type response is therefore consistent with pathologies, such as autoimmunity and atopy, which are based on inappropriate production of immunoglobulins.

Many of the cfs therapies discussed decrease the Th2-type predominance seen at baseline in cfs-patients, thereby allowing a greater predominance of a Th1-type response, which favors the function of macrophages and natural killer cells.

The function of the latter cells, which have the natural ability of directly destroying invading microbes and cancer cells, is defective in untreated CFS patients. Typical Th1-type cytokines include IL-2 and interferon-gamma, and some of the therapies induce their production.

and differentiation of those cells into the Th1 subset by **increasing the production of cytokines such as IL-2 and gamma interferon and decreasing production of IL-4.**

In addition, studies suggest that **Zadaxin also increases the number and function of cytotoxic T-cells and natural killer cells.**

...Thus, **compounds which drive the immune response toward a Th1 profile could be highly effective in fighting chronic viral infection.**

system to Th 2 when a Th 1 response is needed. Patients with cfs, fibromyalgia, and gulf war illness seem to have an immune system shifted toward Th 2 immunity. ... Zadaxin should be useful in any disease where the immune system needs to be shifted toward Th 1 immunity. ...Some of these reasons include infections such as viruses and certain bacteria which are intracellular such as:

- Chlamydia,
- rickettsia ,
- mycoplasma,
- and post Q fever syndrome.

A combination protocol similar to the one being used in phase 3 trials for hepatitis C would include either antivirals or antibiotics in combination with two injections of Zadaxin per week for six months to a year.

This is not currently being tested, therefore a patient would need to assume responsibility for this treatment including the cost of purchasing Zadaxin in another country.