Chronic fatigue syndrome

Also listed as: Fatigue - chronic syndrome

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People with chronic fatigue syndrome (CFS) often feel so tired that they are unable to perform even half of their normal daily activities -- and the feeling doesn't go away, even with more rest. Twice as many women as men are diagnosed with chronic fatigue syndrome. It may last a month, a couple of years, or many years. Sometimes symptoms may come and go.

**Signs and Symptoms**

- Severe fatigue that comes on suddenly, especially after you've had the flu
- Low grade fever (100.4 °F) and chills
- Sore throat and swollen lymph glands in the neck or armpits
- Muscle and joint aches, without any swelling
- Headaches
- Sleep that doesn't feel refreshing
- Feeling like you are in a fog and are unable to concentrate or remember
- Mood changes

**What Causes It?**

The cause of chronic fatigue syndrome is unknown, but a virus or an immune system reaction may be responsible. Risk factors include extreme stress or anxiety, flu like illness that doesn't completely go away, and poor eating habits. Depression substantially influences the length and intensity of fatigue and disability.

**What to Expect at Your Provider's Office**

There is no laboratory test for chronic fatigue syndrome, but your doctor may use tests to rule out other illnesses. Your doctor will go over your symptoms, check your medical history, and do a physical examination. If you have CFS, your health care provider may prescribe drugs to treat your symptoms, or suggest herbs, vitamins, or dietary changes to help you. Your doctor may also suggest that you get plenty of rest, exercise regularly, and learn to pace your activity. Often these treatments and time will correct the problem.

If the usual treatments do not work, your doctor may check for other conditions, such as a psychiatric illness, muscle disease, or exposure to a toxic agent, that can cause symptoms similar to those of chronic fatigue syndrome.

**Treatment Options**
Chronic fatigue syndrome is a stressful disease. It is important to get emotional support as well as treatment for your symptoms. Studies show that psychological support, including cognitive behavioral therapy, can help treat symptoms of chronic fatigue syndrome. Although there is no cure, symptoms can be treated with medications such as antidepressants and anti-anxiety drugs. Pain relievers and anti-inflammatory drugs help relieve muscle and joint aches. Support groups and stress management techniques can help you cope with the disease.

**Drug Therapies**

Antidepressants -- In addition to relieving depression, these drugs can reduce fatigue and muscle tension, and improve sleep. Side effects vary. Antidepressants often prescribed for chronic fatigue include:

- **Tricyclics**: amitriptyline (Elavil), desipramine (Norpramin), nortriptyline (Pamelor)
- **Selective serotonin reuptake inhibitors (SSRIs)**: citalopram (Celexa), escitalopram (Lexapro), fluoxetine (Prozac), paroxetine (Paxil), sertraline (Zoloft)

Anti-anxiety medications (benzodiazepines) -- Side effects vary. Alprazolam (Xanax) or lorazepam (Ativan) are among those prescribed.

Antihistamines -- relieve allergy like symptoms. Side effects include drowsiness and headache.

Nonsteroidal anti-inflammatory drugs (NSAIDs) -- help relieve pain. These drugs include naproxen (Aleve) and ibuprofen (Advil, Motrin). Side effects can include gastrointestinal bleeding when used for a long period of time.

Acetaminophen (Tylenol) -- another pain reliever. Side effects can include kidney damage when large doses are taken.

**Complementary and Alternative Therapies**

Eating a healthy diet and using herbs and homeopathic remedies as recommended may help reduce the debilitating symptoms of CFS, and may improve overall energy. Counseling, support groups, meditation, yoga, and progressive muscle relaxation are stress management techniques that may help as well.

**Lifestyle**

- **Save your energy** -- Your doctor may suggest that you learn to slow down and pace yourself, so that you don’t overdo it one day and pay for it the next with increased symptoms. The goal is to maintain a steady, moderate amount of activity that includes regular exercise.

- **Get regular exercise** -- Your doctor may suggest that you see a physical therapist to create an appropriate exercise program. At least one study shows that people with CFS who exercise have fewer symptoms than those who do not exercise.

- **Reduce stress** -- Stress can make CFS symptoms worse. Guided meditation or deep breathing may help you relax.

**Nutrition and Supplements**

Avoid refined foods, sugar, caffeine, alcohol, and saturated fats. Eat more fresh vegetables, legumes, whole grains, protein, and essential fatty acids (found in nuts, seeds, and cold water fish).

The following supplements may help reduce symptoms of CFS. You should speak to your doctor before starting any of the following supplements and work with someone knowledgeable in complementary and alternative medicine therapies.
Magnesium (300 - 1,000 mg per day) may help reduce fatigue, but studies show mixed results. Too much magnesium causes diarrhea. To correct this problem, gradually reduce the amount you are taking. It is sometimes combined with malic acid (600 mg twice per day) to boost energy. Magnesium can alter blood pressure and interfere with certain medications.

Essential fatty acids, such as those found in fish oil (1,000 mg 3 times per day with meals) and evening primrose oil (3,000 - 6,000 mg per day) may also help reduce fatigue. Essential fatty acids may increase bleeding in people taking blood thinning medications such as Coumadin (Warfarin). Speak with your physician.

NADH, a naturally occurring chemical involved in energy production in the body (5 - 20 mg per day).

Coenzyme Q10, which helps cells function and produce energy (60 - 100 mg per day).

DHEA, a hormone produced by the body that may improve energy levels (50 - 200 mg per day). DHEA is a precursor to testosterone and estrogen. It is truly a hormone rather than a supplement, and should never be taken without a doctor's prescription. Do not use DHEA if you have or are at risk for breast cancer, prostate cancer, or any other hormonally influenced illness. Do not take DHEA if you are pregnant or breastfeeding.

Vitamin B12 (2,500 - 5,000 mcg by injection every 2 - 3 days for several weeks) has been shown to improve energy in people who are deficient, but it's not clear whether it will help in cases of chronic fatigue syndrome. Oral supplements do not work as well because the body cannot absorb that much vitamin B12.

Beta-carotene (50,000 IU per day) to strengthen immune function.

Vitamin C (250 - 500 mg 2 times per day) to increase endurance and immune function. Many alternative health care providers recommend higher doses. Talk to your health care provider to determine the proper dose for you.

B-complex (50 - 100 mg per day or 2 ml by injection 1 - 2 times per week) with additional B6 (100 mg per day) and B5 (100 - 250 mg per day) to reduce the effects of stress.

Pantothenic acid, or vitamin B5 (250 mg twice per day).

L-carnitine (500 - 1,000 mg 3 times per day for 8 weeks) to support energy production in the cells. L-carnitine may alter blood pressure. Tell your doctor about any kidney issues you may have.

Vitamin D (600 - 1,000 IU daily) since vitamin D deficiency can exacerbate symptoms that are already present in people who have CFS.

Herbs

The use of herbs is a time honored approach to strengthening the body and treating disease. Herbs, however, can trigger side effects and can interact with other herbs, supplements, or medications. For these reasons, take herbs only under the supervision of a health care provider. Unless otherwise indicated, make teas with 1 tsp. herb per cup of hot water. Steep covered 5 - 10 minutes for leaf or flowers, and 10 - 20 minutes for roots. Drink 2 - 4 cups per day. You may use tinctures alone or in combination as noted.

Herbs that may help with symptoms of chronic fatigue include:

- Ginseng (Panax ginseng), to improve energy (100 - 300 mg 2 times per day).
- Echinacea (Echinacea species), to stimulate the immune system (200 mg 2 times per day). Alternate with astragalus.
• Astragalus (*Astragalus membranaceus*), or huang qi, to stimulate the immune system (add 1 tsp. of the root to 1 cup boiling water, strain and cool. Drink 3 times per day). Alternate with echinacea.

• Licorice (*Glycyrrhiza glabra*), is often recommended to stimulate the adrenal glands, though studies are lacking (200 - 400 mg 3 times per day for 6 - 8 weeks). Do not use licorice if you have high blood pressure, edema, or heart failure.

• Pau d'arco (*Tabebuia avellanedae*), to strengthen the immune system (1 tsp. liquid extract in 1 cup water, 2 - 3 times per day). Do not take pau d’arco if you are taking blood thinning medication, and limit intake to 1 - 2 weeks.

• A tincture of Siberian ginseng (*Eleutherococcus senticosus*), schizandra berry (*Schizandra chinensis*), ashwaganda root (*Withania somnifera*), gotu kola (*Centella asiatica*), and astragalus root (*Astragalus membranaceus*). Take 20 - 30 drops 2 - 3 times per day. These herbs may need to be taken for 4 - 6 months for maximum benefit. Talk to a knowledgeable prescriber.

Essential oils of jasmine, peppermint, and rosemary are calming and restorative and may be used in aromatherapy. Place several drops in a warm bath or atomizer, or on a cotton ball.

**Homeopathy**

The appropriate homeopathic treatment for chronic fatigue syndrome depends on your constitutional type -- your physical, emotional, and psychological makeup. An experienced homeopath assesses all of these factors when determining the most appropriate remedy for each individual. Some remedies commonly used by professional homeopaths to treat CFS include:

• *Arsenicum* -- for restlessness and fatigue accompanied by chills and burning pains that are worse at night

• *Gelsemium* -- for mental exhaustion, including drowsiness and indifference, and physical weakness, such as heaviness of the limbs and eyelids

• *Pulsatilla* -- for people who are moody and emotional, although usually with a calm and gentle disposition

• *Sulphur* -- for people who feel fatigue but are usually not as emotionally sensitive as those requiring *Pulsatilla*

**Acupuncture**

Several studies in China have indicated acupuncture may help treat chronic fatigue syndrome. And some Western studies have found that acupuncture may help conditions with similar symptoms such as fibromyalgia, depression, headache, and irritable bowel syndrome. Some evidence also suggests that acupuncture may help boost your immune system. It may also help people with CFS get a more restful night's sleep, which is often key to turning the condition around.

Acupuncturists treat people with chronic fatigue syndrome based on an individualized assessment of the excesses and deficiencies of qi located in various meridians. In the case of CFS, a qi deficiency is usually detected in the spleen or kidney meridians, but a deficiency may also be found in the lung or liver meridians.

Acupuncturists may use moxibustion (a technique in which the herb mugwort is burned over specific acupuncture points) in addition to needling therapy, as it is thought moxibustion helps to provide a deeper and stronger treatment. Practitioners with herbal training may recommend specific herbal remedies as well as dietary changes.

**Chiropractic**
Although no well designed trials have evaluated chiropractic treatment for CFS, some chiropractors suggest that spinal manipulation may boost energy and decrease pain in some people with the condition. In these cases, it is believed that spinal manipulation may have a stimulating effect on the nervous system.

**Massage**

Therapeutic massage can reduce stress related symptoms, improve circulation, and increase your overall sense of well-being.

**Following Up**

Your health care provider will do routine checkups while you are taking any drugs or following treatments for chronic fatigue syndrome. Contact your doctor if new symptoms develop.

**Special Considerations**

The effects of herbs in pregnancy have not been fully investigated. They should be used only under the careful supervision of your doctor. Avoid high doses of vitamin C if you are pregnant. You should not take echinacea, licorice, and pau d'arco for long periods of time.

**Supporting Research**


