

# Cold, painful fingertips? Try these remedies!



Over 45 years ago in college, as a recently transplanted Southern Californian newly arrived in New York City, I suffered from painful, white, numb fingertips during a record cold winter. Ski trips were a misery, as even the most insulated mittens proved a poor match for the frigid winds.

Today, I face winters with equanimity. On all but the coldest days, I'm OK with thin cotton or wool knit gloves, but it's taken decades of the right kind of nutritional support to overcome my problem. x

What causes cold fingertips? Medically, the condition is referred to as Raynaud's disease (or phenomenon), named for the first doctor to characterize it, Dr. Maurice Raynaud. In 1862 he published a case study of a woman whose fingertips grew painful and turned blue or white upon exposure to cold.

How common is Raynaud's? It's estimated to affect 5-10% of the population, and is mostly just a nuisance unless it's a sign of a more serious underlying condition.

Cases of cold, painful fingertips without an apparent cause are referred to as Raynaud's disease, or primary Raynaud's. Sometimes, Raynaud's is a harbinger of an underlying autoimmune disease like lupus, mixed connective tissue disease, or scleroderma. It then earns the designation Raynaud's phenomenon, or secondary Raynaud's. Other less common causes of Raynaud's phenomenon included repetitive stress injury (like chronic use of a pneumatic jackhammer), vasculitis, or certain diseases where the red blood cell count is increased, causing a circulatory "traffic jam." Cold urticaria and acrocyanosis are relatively rare conditions that produce Raynaud's symptoms.

Raynaud's bears a certain correlation to sympathetic nervous system overdrive; "nervous" people tend to have cold hands. The reason is that the "fight or flight" reaction is engineered to protect animals from blood loss in the event they get their fingers or toes bitten off. Conversely, a relaxed state returns circulation to the extremities. Hence the utility of meditation and biofeedback in the treatment of Raynaud's.

While there's no perfect medical "fix" for Raynaud's, drug treatments may help to ameliorate it. Commonly, calcium channel blockers (blood pressure meds like Norvasc and Cardizem) are prescribed for Raynaud's sufferers. My experience is they don't help much, and they may cause side effects like constipation, light-headedness and ankle swelling.

Of course, lifestyle measures like wearing gloves, avoiding air conditioning, and using hand warmers help. It's essential to avoid smoking because nicotine causes blood vessels to constrict. Additionally, decongestant ingredients found in cold and

allergy remedies promote vasospasm. Whirling the arms in a windmill motion may help some sufferers drive blood to their hands.

An old Air Force experiment had volunteers climb atop Quonset huts in wintertime while immersing their hands in buckets of warm water for a few minutes at a time to condition their hands to vasodilate in response to cold temps, with some success.

Of course, cold hands and feet may be a sign of hypothyroidism, but by no means are all patients with cold extremities in need of thyroid meds.

It's worth checking for iron deficiency or other causes of anemia in some sufferers of poor circulation. Restoration of normal blood counts can restore tissue perfusion.

Let's look at the evidence for use of certain supplements to help cold extremities:

**Magnesium:** While there are no formal studies showing reversal of Raynaud's syndrome with magnesium supplementation, it stands to reason that its vasodilating properties could help. Something I've long noted in patients receiving magnesium IVs at my center is that they experience warmth and flushing of their extremities.

Comparably high blood levels of magnesium may be hard to achieve with pills alone because of the diarrhea-inducing effects of too much oral magnesium. But a 1994 study demonstrated that women with primary Raynaud's phenomenon were relatively deficient in magnesium compared to controls. The disparity was particularly pronounced in winter, when symptoms were worse.

**Fish oil:** "Rheology" is the study of the flow characteristics of blood. Sticky blood has difficulty transiting the narrow arterioles and capillaries of fingers and toes. Omega 3 fish oil, with its platelet-inhibiting effects, can render blood less viscous. It's like the light-weight, winter motor oil to which folks in Northern climes seasonally switch; indeed, Arctic fish and mammals rely on the cold-resistant lubrication afforded by Omega 3 oils to keep their parts moving.

In addition, some studies suggest a role for Omega 3 oils in blunting sympathetic nerve activation in response to stress, preserving blood flow to extremities.

Of all the things that I've done to promote my tolerance to cold, I rate my liberal consumption of oily fish and Omega 3 supplements as the most consequential. When I arrived at college in the Northeast at the age of 17, I was a fussy eater, occasionally eating a shrimp cocktail (low in EPA/DHA), but with scant dietary sources of Omega 3. For a while in the 70s and 80s I was a strict vegan. But by the time I was done with my medical training, I was expanding my diet and faithfully taking fish oil supplements. Thirty years later, blood tests reveal that I'm replete with Omega 3—and my cold hands are so much better!

Why fish oil supplements aren't routinely recommended for Raynaud's sufferers is beyond me. As early as 1989, a study confirmed that subjects consuming Omega 3 pills (12 per day for up to 17 weeks) experienced dramatic reductions in their cold fingers. In my opinion, with today's high potency pills, you could get away with 6 per day, and then taper to maintenance with just 2 or 3 per day.

Bear in mind that the benefits of fish oil supplementation may be cumulative; it may take a few seasons of consistent supplementation to see a marked difference, as it did for me.

**Arginine:** L-arginine, and lately l-citrulline, are known to promote circulation via

the nitric oxide pathway. A 1991 study demonstrated that oral arginine could help patients with the painful fingers of systemic sclerosis; A 2003 study showed it could help the finger ulceration that develops when circulation is hampered. To be effective, the amount used must be quite high: 4 grams twice daily. The product I've recommended is **Perfusia**.

**Dietary nitrate supplements:** Following the same principle, dietary nitrates from red beets, spinach and kale may help to rev nitric oxide pathways, promoting circulation. Various products incorporate extracts of beets or leafy greens with validated nitrate content, but they have not been specifically tested for efficacy in Raynaud's.

**Ginkgo biloba:** Ginkgo has earned a reputation as an enhancer of cerebral circulation; it also acts as a blood thinner. A small double-blind placebo trial <https://www.ncbi.nlm.nih.gov/pubmed/12710841> showed a reduction in the frequency of Raynaud's attacks.

**Oligonol:** One of the newer candidates for Raynaud's treatment is oligonol (**Metasol**), a high molecular weight polyphenol derived from lychee. It is comparable to pycnogenol and grapeseed extract, which have already earned reputations for circulatory enhancement, but its proanthocyanidin content is said to be higher.

A study utilizing thermography, which measures the temperature of the fingertips, showed improvements in skin surface temperature of healthy subjects after taking oligonol.

**Inositol hexanicotinate:** Niacin at high doses causes flushing, a form of superficial vasodilation that might, at least in theory, aid Raynaud's sufferers. The problem is that the flushing is unpleasant, and high doses of niacin are notorious for producing liver function abnormalities. Hence the use of an alternative, inositol hexanicotinate, a so-called "flush-free" niacin.

In my opinion, inositol hexanicotinate is pretty ineffective for lowering cholesterol, for which it's often touted. A 1988 study showed it to be helpful for Raynaud's, but the lack of subsequent research suggests it may only be of marginal effectiveness.

**Capsaicin cream:** Hot peppers have a distinct warming effect, as well as the ability to reduce nerve pain. When a specific extract of peppers—capsaicin—is applied to fingertips, it has been shown to relieve cold-induced vasospasm.

Various other studies have reported low levels of selenium, glutathione, vitamin C and Vitamin E in Raynaud's sufferers.

Keep in mind that the research on use of supplements for Raynaud's is still pretty sparse, and may be tainted by proprietary interests. Suffice it to say, different strokes for different folks, and you might have to come up with your own personal recipe for relief. One or another of these remedies is likely to help keep your extremities pain-free this cold weather season.

ADDITIONAL RESOURCES:

Raynaud's Association

Handwarmers