Vitiligo

Vitiligo is a disorder of skin pigmentation characterized by progressively widening areas of depigmented (very white) skin. The phenomenon is associated with the local destruction of melanocytes, the cells that produce melanin pigment to darken the skin. It affects 1–4% of the world’s population.1

Nutritional supplements that may be helpful: A clinical report describes the use of vitamin supplements in the treatment of vitiligo.2 Folic acid and/or vitamin B12 and vitamin C levels were abnormally low in most of the fifteen people studied. Supplementation with large amounts of folic acid (1–10 mg per day), along with vitamin C (1 gram per day) and intramuscular vitamin B12 injections (1,000 mcg every two weeks), produced marked repigmentation in eight people. These improvements became apparent after three months, but complete repigmentation required one to two years of continuous supplementation. In another study of 100 individuals with vitiligo, oral supplementation with folic acid (10 mg per day) and vitamin B12 (2,000 mcg per day), combined with sun exposure, resulted in some repigmentation after three to six months in fifty-two cases.3 This combined regimen was more effective than either vitamin supplementation or sun exposure alone.

Supplementation with the amino acid L-phenylalanine may have value when combined with ultraviolet (UVA)
radiation therapy. Several clinical trials, including one double blind trial, indicated that L-phenylalanine given in amounts of 50 mg per kilogram body weight per day (3,500 mg per day for a 154-pound person) or less, increased the extent of repigmentation induced by UVA therapy. L-phenylalanine alone also produced a more modest repigmentation in some people.4 Another study of vitiligo in children reported that L-phenylalanine plus UVA was an effective treatment in the majority of children.5 Recently, a group of Spanish doctors reported on their experience using L-phenylalanine over a six-year period. Some of the 171 patients with vitiligo received L-phenylalanine (50 or 100 mg per kg body weight per day) for up to three years. Between April and October of each year, the patients also applied a 10% L-phenylalanine gel, prior to exposing their skin to the sun for thirty minutes. Some improvement was seen in 83% of the patients, and in 57% the results were rated as good (75% improvement or better).6

In one early report, lack of stomach acid (achlorhydria) was found to be associated with vitiligo. Administration of dilute hydrochloric acid after meals resulted in gradual repigmentation of the skin (after one year or more).7 Hydrochloric acid, or its more-modern counterpart betaine hydrochloride (HCl), should be taken only under the supervision of a nutritionally oriented doctor.

Another early report described the use of PABA (para-aminobenzoic acid)—a compound that is commonly associated with B-complex vitamins. Persistent use of 100 mg of PABA three or four times per day along with an
injectable form of PABA and a variety of hormones tailored to individual patients’ needs, resulted, in many cases, in repigmentation of areas affected by vitiligo.8

**Are there any side effects or interactions?** Refer to the individual supplement for information about any side effects or interactions.

**Herbs that may be helpful:** An extract from khella (*Ammi visnaga*) may be useful in repigmenting the skin of those with vitiligo. Khellin, the active constituent, appears to work like psoralen drugs—it stimulates repigmentation of the skin by increasing sensitivity of remaining pigment-containing cells (melanocytes) to sunlight. Studies have used 120–160 mg of khellin per day.9

Another herb that may prove useful for vitiligo is St. John’s wort.10 As with khella, it increases the response of the skin to sunlight. However, to date no studies have demonstrated the effectiveness of St. John’s wort for vitiligo.

**Are there any side effects or interactions?** Refer to the individual herb for information about any side effects or interactions.

**References:**


