

HERBAL CLIPPINGS

ANTICANCER WATERCRESS

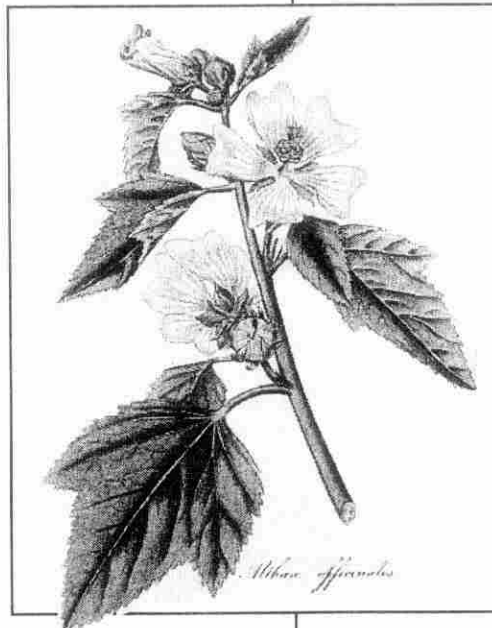
Studies at the Institute of Food Research in the UK and the Division of Carcinogenesis and Molecular Epidemiology in New York found that eating watercress (*Nasturtium officinale*) may help prevent cancer, especially when it is raw. The hot, peppery taste is due to anti-cancer isothiocyanate compounds called "glucosinolates" that are also present in cruciferous vegetables such as Brussels sprouts, broccoli, cabbage, kale, horseradish, radishes, and turnips. These compounds inhibit development of tumors in experimental models so are being investigated as possible chemopreventive agents for specific cancers. Watercress also contains vitamins A, B, C, rutin, niacin, along with minerals. It is grown as a commercial crop in the US where it also has become naturalized in wet areas in many states, sometimes becoming an invasive alien. [Ed. note: Be aware when wildcrafting watercress that livestock and wild animals can pollute it via the water in which it grows.]

Conaway CC, et al. 2002. Isothiocyanates as cancer chemopreventive agents. *Current Drug Metabolism* 3(3):233-55.

IMMUNI-TEA

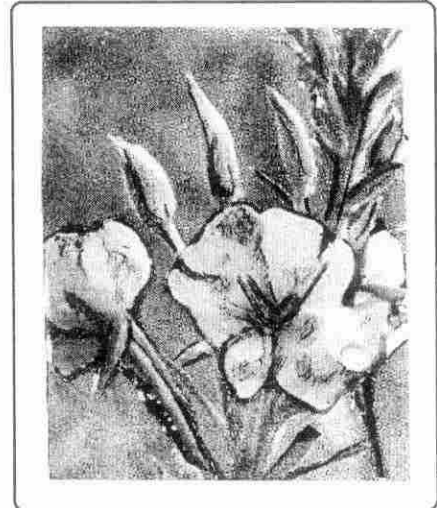
Ten commonly used herbs were analyzed at Upstate Medical University in Syracuse, New York for their ability to enhance the immune system and to modulate proliferation of lymphocyte immune cells. Milk thistle (*Silybum marianum*), St. John's wort (*Hypericum perforatum*), and dong quai (*Angelica sinensis*) produced general stimulation of the immune system and increased lymphocyte activity. Ginseng (*Panax ginseng*) enhanced their proliferation in one of the assays, although not in all of the tests. Ginger (*Zingiber officinale*) and green tea (*Camellia sinensis*) consistently suppressed the immune response. Specifically, Milk Thistle increased interferon gamma, interleukin and cytokines. This effect increased with large doses. The researchers stated that "this immunostimulatory effect may be of benefit in increasing the immunity to infectious disease." They added that green tea, dong quai, ginseng, milk thistle, and ginger may prove useful for organ transplants.

Wilasrusmee C, et al. 2002. In vitro immunomodulatory effects of ten commonly used herbs on murin lymphocytes. *Journal of Alternative and Complementary Medicine* 8(4):467-75; & Wilasrusmee C, et al. 2002. Immunostimulatory effect of SM extract. *Medical Science Monitor* 8(11):BR439-43.



EVENING PRIMROSE UPS IMMUNITY

The University of Oxford in England found that activity of the immune system's natural killer cells was decreased moderately with evening primrose oil and significantly with fish oil. Nine evening primrose oil capsules a day were given to healthy people who were 55-75 years old for three months. The decreased need for killer cell action indicates that the oils improved immune functions. This reduction was not seen with either a placebo or other



oils (such as ALA, AA, DHA, or EPA). Another study that pointed to evening primrose oil improving immune system functions was done with 14 people who had skin dermatitis that was causing itchy, dry, and scaly skin. When they took evening primrose oil, everyone found their skin lesions and itching were markedly reduced. The study's researchers concluded that the oil could be highly effective to treat non-inflammatory types of skin irritations. They saw a connection to the immune system because levels blood of immune-related IFN-gamma changed in the blood.

Thies, F, et al. 2001. Dietary supplementation with eicosapentaenoic acid, but not with other long-chain n-3 or n-6 polyunsaturated fatty acids, decreases natural killer cell activity.... *American Journal of Clinical Nutrition* 73(3):539-48; & Yoon, S, et al. 2002. The therapeutic effect of evening primrose oil in atopic dermatitis patients with dry scaly skin lesions is associated with the normalization of serum gamma-interferon levels. *Skin Pharmacological Applications and Skin Physiology* 15(1):20-5.

LIGHTEN UP WITH MARSHMALLOW

A Japanese study investigating marshmallow extract (*Althaea officinalis*) found that it inhibits melanocyte cell development in the skin in several ways. Since melanocyte is responsible for producing the pigment melanin that darkens skin when it tans, this study suggests that it could be used to lighten skin that is discolored due to problems with pigmentation.

Kobayashi, A, et al. 2002. Inhibitory mechanism of extract of A.o. on... melanocyte activation. *Biology and Pharmacology Bulletin* 25(2):229-34.

