

## Can Sea-Buckthorn Treat Acne and Eczema?

Extracts from sea-buckthorn berries (also known as seaberries) have been shown to treat both acne and eczema, two common skin conditions that together affect an estimated 60 million adults and children in the US, and another 9 million people in the UK.

### Sea-Buckthorn as a Topical Treatment for Acne

A 2010 study published in the Journal of Pharmacy & BioAllied Sciences evaluated the anti-sebum effects of a topical skin care cream containing sea buckthorn fruit extract derived from the berries of the Hippophae rhamnoides plant. Excessive amounts of sebum, the oily/waxy substance that lubricates your skin and hair, are one of the main causes of acne vulgaris, both in teenagers and adults. Unusually large amounts of sebum on the skin are typically caused by a hormonal imbalance which causes the sebaceous glands (microscopic glands in the skin responsible for secreting sebum) to become overactive. When sebum mixes with dead skin cells and common skin bacteria (especially Propionibacterium acnes), it clogs the pores, leading to blackheads, whiteheads, and other types of pimples and blemishes associated with acne.

In this study, the cheeks of 10 healthy volunteers were treated with a formulation containing a base plus 1% of sea-buckthorn fruit extract for 8 weeks. A skin care product containing the same base, but no sea-buckthorn extract, was used as a control. The researchers found that the formulation containing the sea-buckthorn extract had statistically significant inhibitory effects on the secretion of sebum, suggesting that sea-buckthorn might indeed be a valuable ingredient in topical skin care products designed to treat acne.

### Effects of Ingestion of Sea Buckthorn on Eczema-Prone Skin

Many people with eczema (atopic dermatitis) find that moisturizing their skin with oils and creams regularly helps bring them relief from the itching,

inflammation, and other symptoms associated with eczema flare-ups. But research now suggests that certain oils might also help treat eczema from the inside out! A placebo-controlled, double-blind study published in the *Journal of Nutritional Biochemistry* found that supplementation with sea-buckthorn pulp oil effectively alleviated eczema symptoms in eczema patients during the four week study period. Interestingly, however, no significant improvement was observed in the group that received capsules containing sea buckthorn seed oil (instead of the pulp oil).

Although both sea-buckthorn seed oil and sea-buckthorn pulp oil come are derived from the berries of the *Hippophae rhamnoides* plant, there are some differences in their fatty acid and vitamin compositions, which might explain the results of the eczema study described above. In the seed oil, the major fatty acids include linoleic (34%), alpha-linolenic (25%), and oleic (19%) acids, while the pulp oil mainly contains palmitic (33%), oleic (26%), and palmitoleic (25%) acids. Both the seed and pulp oils are rich in vitamin E and plant sterols, but the pulp oil contains significantly higher levels of carotenoids.

#### **References**

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