



The World's Finest and Most Natural Range of Emu Oil Products

Fact Sheet - Emu Oil & Hair Loss

What causes hair loss?

Hair loss, according to experts, is caused by a combination of aging, hormonal changes and family history of baldness. Hair loss can be permanent if destruction occurs to the hair follicle, or, it may just be temporary due to transitory damage to the follicles.

In men, testosterone is converted to DHT (dihydrotestosterone) within the hair follicle. Testosterone is converted to DHT by an enzyme called 5-alpha reductase, which is produced in the prostate, the scalp and various adrenal glands. Over time, DHT causes hair follicles to degrade and shortens their anagen, or active phase. Technically, the follicle is still alive and connected to a good blood supply. Some follicles will die, but most will simply shrink in size and produce weaker hairs. The shorter anagen growing cycle means more hairs are shed and remaining hairs become so thin that they cannot survive daily wear and tear, according to experts. Hairs in balding areas gradually change from long, thick, coloured hairs into fine, un-pigmented, fuzzy hairs. It is understood in hair loss treatment that frontal re-growth is much more difficult to attain than re-growth in the vertex or crown.

What can be done about Hair Loss?

If the hair follicle has died, there is no hope for hair regrowth. However, if the hair follicle is just "sleeping", many consumers report an "awakening" of the hair follicle with the use of Emu oil! Emu oil is an all-natural tissue nutrient; by applying it to the skin, it helps make the skin become healthy and alive again.

Why Emu Oil may assist in stimulating hair growth.

Studies at the Occupational Dermatology Laboratory of the University of Texas Medical School at Houston and elsewhere have shown that 70% of the fatty acids in emu fat are of the unsaturated variety. Oleic acid, a monounsaturated fatty acid is the largest component of emu oil and is well recognised for its ability to penetrate the stratum corneum barrier of the skin.

Emu oil is almost 100% triglyceride in nature which makes it an almost completely neutral lipid. Researchers feel that the reason that it penetrates human skin so readily is that it has a total lack of phospholipids. Human skin is phospholipid deficient which means that there is no phosphorus in human skin. Any product applied to human skin containing phosphorus will not penetrate.

There has been significant research on the anti-inflammatory properties of emu oil. It has been shown to reduce pain, swelling and stiffness in joints, to reduce bruising and muscle pain, and ease sports related muscle strains. Perhaps most significantly it has been shown to inhibit tumor necrosis factor alpha (tnf- α), an inflammatory cytokine that has been shown to be involved in male pattern balding.

Emu Oil has also been shown to be a 5 alpha reductase inhibitor in target tissues when topically applied, which likely contributes significantly to its hair growth properties.

Emu Oil is considered as **bacteriostatic**. Tests show that in its pure form, emu oil does not promote any growth of bacterial organisms. Pure Emu Oil has a long shelf life due to its low levels of polyunsaturated fats which are subject to oxidation and eventual rancidity.

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Emu Oil is considered **hypo-allergenic** and without potential for irritation of the skin and scalp. It is shown to have no side effects, and comparable to irritation levels of water i.e. nonexistent.

Unlike mineral oils and other petrochemical compounds, Emu oil is **non-comedogenic**, that is to say it does not clog up pores of the skin and does not promote pimples.

Emu Oil is a **good moisturiser** which adds to its protective ability and promotes **anti-aging and wound healing** of the skin. Researchers believe that its unique combination of saturated and unsaturated fatty acids may be an explanation for its ability to enhance the willingness of the upper layers of the skin to hold water leading to an increase in the thickness of human skin and scalp up to 2.5 times.

Study on Emu Oil and Hair Growth

The **anti-aging factor** in Emu Oil was proven in a study at the Boston University School of Medicine in which pharmaceutical grade emu oil was topically applied to depilated mice for a two-week-long period in a double-blind study using corn oil as the control substance. The Emu Oil produced a 20% increase in DNA synthesis which meant that the growth activity of the skin of these animals had a 20% increase. Also the hair follicles were much more robust and the skin thickness had increased as well. Dr. Michael Holick, MD, Ph.D. Professor of Medicine, Physiology, and Dermatology who conducted these tests said they also discovered that "over 80% of hair follicles that had been asleep were woken up and began growing hair." He explained that hair follicles go through stages from resting to growth and back to sleep again, and that they awoke these hair follicles by stimulating them which indicates that it stimulates skin growth as well.

Emu Oil and Your Hair

From the study, it can be suggested that Emu Oil may assist to stimulate skin and hair growth. Most topical hair growth solutions don't penetrate the scalp very well, rendering them mostly ineffective whereas Emu Oil easily penetrates the scalp. Once at the root, Emu Oil acts as a potent anti-inflammatory that stimulates the hair's natural growing ability. Emu oil has shown to strengthen hair and promote growth. Topical Emu Oil has consistently received positive feedback in regard to frontal re-growth, with many users experiencing the initiation of vellous (fuzz) growth within a short period of time.

Recommended Application

It is recommended massaging a small amount of emu oil into the hairless or thinning area of the scalp three times per day, if possible. Wash hair with Emu Tracks Emu Oil Shampoo and Conditioner. If your hair follicles were in a sleep state, you may well experience signs of regrowth.

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