

Properties of Emu Oil

Comedogenicity

Many oils found in skin care or cosmetic applications have a tendency to clog pores, cause acne, and create unfavorable skin conditions.

Comedogenicity (pore-clogging) testing of emu oil conducted at the University of Texas Medical School at Houston resulted in both observational and histological scores of less than 1. These test results reveal that emu oil "is considered to indicate a substance that is unlikely to produce a comedogenic response during human use and is therefore considered to be a negative result."

"On the basis of observational and histologic testing from comedogenicity, the emu oil used in this test, from 25% to 100%, is non-comedogenic." Even though it is an oil, emu oil was demonstrated to be a "non pore-clogging substances, helping to keep the skin healthy."

Fatty Acid Analysis

A fatty acid analysis test was conducted by Dr. Margaret C. Craig-Schmidt, Associate Professor in the Department of Nutrition and Food Science, at Auburn University. Dr. Craig-Schmidt noted that the properties of the emu oil made favorable to be used by the cosmetic industry.

In addition to cosmetic uses, laboratory experiments and analysis of emu oil both in Australia and in the US have confirmed that emu oil has the ability to reduce inflammation of the joint, and that it is an all-natural anti-inflammatory. Emu oil naturally contains a high level of linolenic acid, (a substance known to ease muscle ache and joint pain) and oleic acid, which provides a local anti-inflammatory effect.

Emu Oil Penetrates Deep Into The Dermis

The penetrating effect of emu oil, according to pharmacist and oil researcher Allen Strickland of Alabama, may be related to its non-phosphorus composition.

"Our skin is phospholipid deficient. In other words, there's no phosphorus in our skin. If you put anything on your skin that has phosphorus in it, your skin is 'programmed' to keep it from penetrating. Anytime you put anything on your skin that is phospholipid deficient, or has no phosphorus, it penetrates right through."

"It was interesting to note that when I looked through the literature concerning the drug and cosmetic industry," expressed Dr. Craig-Schmidt, "I learned that this (oleic) fatty acid is a known enhancer of transport of bio-active compounds through the skin. In other words, the high presence of oleic acid in the emu oil may be one of the reasons that it is able to penetrate the skin to a large degree and at the same time be able to carry active compounds through the skin where they can have an effect in the body."

Property Observation and Clinical Use

In "Emu Oil- A Clinical Appraisal of this Natural and Long Used Product," Dr. G.R. Hobday of Australia reported that emu oil had been frequently tested by government and private laboratories, indicating no steroids, hormones or even bacteria when suitably treated.

Commenting on the use of the oil by over 500 patients in 10 years, Dr. Hobday noted that there had never been any allergic reactions from the oil reported to him. Most significantly, Dr. Hobday affirmed that "From clinical experience with emu oil, it became obvious that its major actions were its anti-inflammatory properties and its ability to penetrate the skin. It also appears to provide some solar protection."

Dr. Hobday's 10 years of clinical usage of emu oil focused on the skin. The report reveals that, "After advising patients of its experimental nature I have prescribed emu oil for use in three main areas: dry skin problems, treatment of muscle aches and pains, and treatment of wounds which had epithelialized."

Results of usage are summarized as follows:

Skin:

Eczema - emu oil and creams made of emu oil reduce irritation and inflammation of the skin

Keloids - significantly reduces recent keloid scarring

Burns - appears to promote faster healing with less pain and scarring

Donor sites in skin grafting - reduced pain and less scarring

Joints:

Joint pain - reduced pain, swelling, and stiffness most evident where the joint is close to the skin surface, such as hands, feet, knees, and elbows.

Bruising and muscle pain - significant benefit to recent bruising and muscle pain where injury is relatively superficial. Significant reduction in sports related muscle strains post-exercise emu oil massage.

Recent wounds:

Epithelialized wounds - reduced scar tissue formation, soothing of wounds after surgery by anti-inflammatory action.

Proliferative Activity of the Skin and Excelerated Hair Growth

Dr. Michael Holick, M.D, Ph.D., Professor of Medicine, Physiology, and Dermatology at Boston University School of Medicine, conducted a study involving a processed emu oil, and the results were so outstanding that they quickly became a topic of conversation in many medical and other journals.

Dr. Holick had been interested in looking at factors that stimulate and inhibit skin and hair growth. "We depilated some mice and we then topically applied, in a blinded fashion, (a processed emu oil) and corn oil to two different groups of mice, and we did this for two weeks," he explained.

"We found that there was about a 20% increase in DNA synthesis, which means that there was a 20% increase in the proliferative activity, or the growth activity of the skin in the animals that received (a processed emu oil), compared to the animals that received corn oil," said Dr. Holick.

"We found that there was an enhancement in the growth activity of the hair follicles. So it gives us very good scientific indication that we were stimulating skin growth," Dr. Holick elaborated.