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PROPERTIES OF EGG OIL

A SUMMARY OF EGG OIL HAIR APPLICATIONS

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Executive Summary

Ecovatec's revolutionary technology has unlocked the amazing potential of egg oil. Egg oil, which is also known as egg yolk lipids have a long history of being used in traditional medicine for various ailments in many cultures. Ecovatec's egg oil can be used as a topical ointment to promote healing of the skin, cosmetically for hair and skin conditioning, and as a carrier oil for essential oils.

Background

Egg oil is a "traditional medicine" that has been used by several ancient societies. In traditional Indian medicine, egg oil is used to treat hair loss, dandruff, grey hair, and frizzy hair.¹⁻³ The legacy method of extracting egg oil involves burning hard-boiled egg yolks on high heat until they release oil, which is scraped into a container, leaving the burnt yolk behind. This process leaves the home smelling of smoke for days and it modifies the fats in the oil, reducing their benefits. Ecovatec's egg oil is isolated from commercial chicken egg yolk without the use of high temperatures. It contains triglycerides with traces of cholesterol, biotin, and zanthophylls (lutein and zeaxanthin). The triglycerides include many types of essential fatty acids, including oleic (omega 9) and linoleic fatty acid (omega 6)⁴. Cholesterol is beneficial for the skin and hair and is easily absorbed in the absence of proteins⁵. The zanthophylls are known to be excellent antioxidants, supporting general health while fighting stress and ageing. Eggs have long been recommended for hair treatments and homemade recipes for these treatments are common¹. However, preparing these recipes is time consuming, messy, and smelly. Using this extracted oil allows you to access the hair benefits of eggs easily, at a reasonable cost.

Hair Benefits of Egg Oil

The fatty acids present in egg oil are said to stimulate hair growth, combat inflammation, prevent hair loss, regenerate hair follicles, and provide antioxidants^{1-3,6-8}. This is because of the unique combination of fats in the oil. These fats improve blood circulation and provide nutrients to the scalp cells, helping them grow and stay healthy.^{1,7,9} Monounsaturated fatty acids (omega-9s), which compose around 50% of the fats in egg oil, are known for their ability to penetrate better into the hair and scalp than other types of fatty acids making them even more moisturizing.¹⁰

The cholesterol in egg oil reduces frizz, eliminates dandruff, and conditions hair – making it shinier, smoother, and stronger.^{1,7,9} Cholesterol is also well known for its effects in skincare⁵, as it is incredibly moisturizing. Since it is a waxy oil that coats the hair shaft, it both conditions, protects, and strengthens the hair.¹⁰ This protective effect of cholesterol makes it ideal for damaged hair, such as hair that has been chemically treated or that has become thin due to ageing.

As people age, the body's natural antioxidant system decreases and the reactive oxygen species (ROS) increase.¹¹ These ROS or "free radicals" damage the body's cells and since they build up over time, lead to the hair loss and greying associated with ageing.¹¹ Providing more antioxidants to the hair and scalp will help slow and potentially reverse this process.¹¹ Often, premature greying of hair is due to oxidative stress which occurs due to hair damage, exposure to UV, and other environmental stressors¹¹. Oxidative stress also leads to an accumulation of free radicals. So, whether hair loss and greying are due to age or stress, the solution is the same – to add more antioxidants to the hair and scalp cells. Therefore, the lutein and zeaxanthin found in egg oil are incredibly valuable. These compounds fight the free radicals, supporting the body's natural antioxidant system.^{1,7,9,11}

These same free radicals lead to scalp conditions such as dandruff, psoriasis, and dermatitis because they also cause inflammation.¹ So the combination of the antioxidants and the anti-inflammatory fatty acids in egg oil work together to solve many hair and scalp concerns at the same time.¹ In particular, the omega 6 fatty acids in egg oil reinforce the skin barrier, which is disrupted in these "dry skin" type conditions. You can learn more about the benefits of egg oil on scalp skin conditions in our white paper on the topical applications of egg oil.

Conclusion

While egg oil is well known in parts of Asia, it is relatively new to Western consumers who are more familiar with plant oils. However, the unique composition of egg oil is far superior to these plant oils and can help with many skin and hair concerns. There are many ways to mix egg oil with other plant and essential oils to mask the egg smell while retaining the full benefits of this amazing product. Vitellus Health Inc, for example, is using egg oil in a variety of personal care products to bring the benefits of egg oil directly to consumers.

Sources

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