

Raspberry ketone, also known as rheosmin, is a natural phenolic compound extracted from red raspberries. A small amount of raspberry ketone is also present in cranberries and blackberries. The fragrance of raspberries is caused by this raspberry ketone. Rasberry ketone is famous for its alleged weight loss properties. Research shows that when applied on the scalp, it may lead to increased hair growth.

#### **EFFECT ON HAIR GROWTH**

Raspberry ketone was found to regulate the metabolism and affected a hormone named adiponectin. A study on the effects of adiponectin on cultured hair follicles showed that adiponectin enhances the production of various growth factors such as Insulin-like growth factors (IGF-1). These growth factors promote the growth of hair follicles (Won et al., 2012).

A Japanese research group analyzed the effects of raspberry ketone on bald humans and mice separately. When a cream of only 0.01% raspberry ketone was applied on the scalp of bald humans, it resulted in an increase in hair growth among 5 of the 10 subjects suffering from alopecia, after 5 months of daily topical application. While in mice an increase in production of insulin-like growth factor (IGF-1) was observed after 30 minutes of topical application of 0.01% raspberry ketone (Harada, 2008).

### **ORAL USE OF RASPBERRY KETONE**

There is no evidence of the effectiveness of the oral use of raspberry ketone (also not for its weight loss properties). Also, the safety of oral use is not determined. Structurally, Raspberry ketone is similar to Synephrine and Capsaicin. Synephrine is banned by the US Food and Drug Administration because of its cardiovascular toxicity property and Capsaicin has also been reported as a cardiovascular toxic agent. In 2014, the Food Standards Agency has ruled out Raspberry Ketone from the list of novel food. Now, oral supplements of Raspberry ketone are banned in the UK.

## **TOPICAL USE OF RASBERRY KETONE**

The studies conclude that raspberry ketone can be applied on the scalp for the improvement of hair growth through the increased dermal IGF-I production.

## REFERENCES

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