

HAIR LOSS

CURCUMA LONGA CALLUS

Turmeric (*Curcuma longa*) is an herbaceous perennial plant from the south west of India. It has very branched rhizomes which range in colour from yellow to orange and are round in shape and aromatic. The spice Curcumin is extracted from its root, often used as a food colouring thanks to its yellow-orange colour and famous for being one of the main ingredients in curries.



Its properties were first used in India between 610 BC and 320 BC, as a wool and skin dye before later being used to dye cotton, silk and leather, as well as colour paper, lacquers, varnish, wax, dyes etc.

This ingredient has been used for many years in cosmetics as a skin conditioner thanks to its multiple antiseptic and antibacterial properties, as well as its ability to regulate sebum.

By regulating the secretion of sebum, it helps to prevent hair loss, as the majority of skin conditions affecting hair are caused by excess sebum.

The DHT hormone (Dihydrotestosterone) causes hair loss in both men and women.

One of the components inside turmeric, known as curcumin, combats against hair loss by preventing the negative effect of this hormone.

It also has anti-inflammatory and antimicrobial effects which help hair to grow healthy and strong.

By revitalising the scalp area, it also effectively combats dandruff and maintains proper hydration, stopping the hair from becoming dry.

BENEFITS OF TURMERIC FOR HAIR:

- Reduces dandruff
- Prevents hair loss
- Prevents flaking
- Prevents excess sebum from being secreted

GINKGO BILOBA





Ginkgo Biloba is a unique tree as it is considered to be the oldest higher plant species on the planet. It originates from China and is considered in Chinese mythology to represent dualism.

The leaves of the Ginkgo Biloba are the source of an extract containing flavonoids which increase central and peripheral blood circulation. These flavonoids are also effective at neutralising free radicals associated with skin and hair aging. Thanks to this, Ginkgo Biloba promotes cellular activity in the hair, starting from the roots.

One of the major benefits of this plant for the hair is that it helps to prevent hair loss. This is a very common problem and is generally a results of poor blood supply. Thanks to its properties and flavonoid and amino acid content, such as arginine, methionine and cystine, which help to improve circulation, Ginkgo Biloba is able to increase the supply of blood to hair follicles.

In addition to the above, Ginkgo Biloba also benefits the hair by promoting its growth, due mainly to its cysteine and keratin makeup, which positively affect the formation and nourishment of hair follicles and the skin. It is for that reason that consuming Ginkgo Biloba is highly beneficial for people suffering from a variety of problems, such as men with alopecia or likely to be affected by it.

This Chinese plant not only helps hair to grow, but also strengthens it thanks to reducing hair thinning.

CENTELLA ASIATICA

Centella asiatica, or hydrocotyle asiatica, contains an essential oil, triterpenoid saponins (asiaticoside, brahmoside), alkaloids (hydrocotylin), tannins, phytosterols, vitamin K and mineral salts (magnesium, calcium and sodium). It stands out for its astringent, antiseptic, anti-inflammatory and skinfriendly properties. Triterpene derivatives stimulate the formation of fibroblasts, cells



which are indispensable for repairing damaged tissues.

They also regulate collagen deposition in the skin. The active ingredients of Centella asiatica triterpenes modulate the creation and metabolism of connective tissue.

Several scientific studies have shown that Centella asiatica promotes healing. One of the main action mechanisms of this plant seems to be the stimulation of type I



collagen production. It helps to improve healing, with better re-epithelialisation and standardised perivascular connective tissue, thus improving venous tone and elasticity.

It has been scientifically proven that the triterpenes in Centella asiatica, including asiaticoside, asiatic acid, madecassoside and madecassic acid, are the most beneficial active components for caring, strengthening and growing hair.

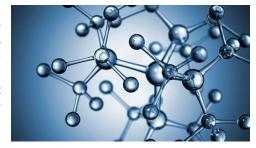
Centella triterpenes are known for contributing to the regeneration of capillaries:

- They restore the amorphous matrix, part of reticular tissue in the dermis, by facilitating cohesion in the epidermis, leaving skin firmer and preventing hair loss, as well as increasing the amount of hyaluronic acid in the scalp, which keeps hair hydrated.
- They duplicate fibroblasts, creating bigger collagen molecules and stimulate connective tissue by providing it with new amino acids, namely alanine and proline. We know that collagen is one of the most important elements for maintaining healthy hair.

HYALURONIC ACID

Hyaluronic acid is a polysaccharide from the glycosaminoglycan family with β bonds which has a structural function similar to chondroitin sulphates.

It has a viscous texture, is a natural component of the skin and plays a crucial role in the fight against aging and wrinkles because of its deep hydrating action. In the dermis, hyaluronic acid is the main component of the extracellular matrix (ECM). Fibroblasts are responsible for producing collagen and elastin in the skin. The ECM is the space between skin cells.



It makes skin soft, smooth and elastic. Young skin (smooth and elastic) contains a large amount of HA.

- Hydration: it greatly increases the moisture content of the hair, making it stronger and less brittle.
- Protection: it combats and protects the damage hair can suffer as a result of outside agents such as the sun, rain, dyes and any other hair product.
- Nourishment: hyaluronic acid can be very nourishing for the hair, especially its follicles, right from the roots. It is especially effective in people with weak hair, so applying a mask containing hyaluronic acid at home is perfect for them.
- Frizz: it effectively combats frizzy and dry hair as it is hydrating enough to be able to be able to resolve this problem immediately.
- Volume: another one of its great benefits is that it makes your hair more voluminous by restoring its density.



• Split ends: one of the main problems that hair suffers from is split ends, which is best to repair quickly as it makes hair look unattractive and damaged. The positive results of hyaluronic acid are visible from the very first treatment.

NIACINAMIDE

Otherwise known as vitamin B3. It is found in vegetables, milk, meat, fish, eggs and yeast. It prevents the emergence of expression lines, acne and wrinkles on the skin. It maintains hydration levels and reduces the appearance of blemishes. It renews the cells on the outermost layer of the skin to leave it looking brighter. It minimises pores.



The main role of B vitamins is to metabolise lipids and protein in the body. This makes them essential for maintaining healthy and beautiful hair, among other things.

In addition to this, vitamin B3 (Niacin)

contributes to the metabolism of keratin proteins, which are responsible for making hair shiny, soft and voluminous. Thanks to this, they help to strengthen hair fibre and make it more resistant to the damage caused in everyday life.

BIOTIN

Known as the "skin, hair and nail vitamin", it hydrates irritated skin and prevents hair loss. It promotes smooth and nourished skin and repairs dehydrated, dry or irritated skin.

TROXERUTIN

Troxerutin stabilises the endothelial membrane, leading to a reduction in capillary permeability.

One of the primary reasons for hair loss is the destruction of HDP cells. These cells play a vital role in skin, hair and nail growth. Troxerutin is a naturally occurring type of flavonoid. This flavonoid fends off the H2O2-mediated reduction in viability to protect HDP cells.

PHYTIC ACID

Phytic acid or inositol is an organic acid containing phosphorusand is found in plants, especially seeds and fibre.

Comentario [TR1]: Frase incompleta - ha estado copiada y pegada de "http://follione.es/2017/12/10/caida-capilar-e-inflamacion-del-cuero-cabelludo-tratamiento-y-explicacion/". Creo que quieren decir "Este tipo de flavonoide se llama rutósido."



The catabolites found in phytic acid are called inositol poliphosphates. Some examples are penta-(IP5), tetra- (IP4) and triphosphate (IP3).

Inositol helps to keep the hair and skin healthy, for example through its role in skin regeneration, meaning that a lack of inositol can result in dermatitis or eczema.



It stabilises cell membranes, keeping hair follicles

in a good condition and stimulating the growth of strong and healthy hair. Its antioxidant properties help to protect follicles and it also has moisturising properties.

RIBOFLAVIN

Riboflavin helps to delay skin aging. It regulates excess oil and has an antibacterial and anti-inflammatory effect, very beneficial to skin which is prone to acne.

It helps to prevent hair loss and works against seborrhoea. It is abundant in many types of food including: milk and derivatives (yoghurt, cheese...), eggs, meat, fish, liver, legumes and nuts (almonds, walnuts...).