

Balancing Energy Coffee & Peppermint, to regain a balanced energy

Because, like any part of the body, skin is sometimes tired, it is necessary to help it to regain its energy. For a lightener skin, more beautiful, that feels an impression of well being.



• How it works

Balancing Energy Coffee & Peppermint relaunched cell energy in epidermis by increasing cell energetic production, that is creating through respiration in cell mitochondriae. It contributes to boost chemical reactions (oxidations), that supply ATP, the source of elemental energy for cells, by maintaining the global energetic balance respect (energetical homeostasia), meaning that it keeps a balance between degradation processes (catabolism) and synthesis processes (anabolism). Those processes are inclined to unbalance with ageing. Besides, it minimizes the production of free radicals, that lead many cell disorders in short and long term: they also can limit cell activity.

Thanks to those actions, skin cells can get back a level of activity to fill their functions, including those delayed by ageing.

• Marketing claims - energizing & anti-oxidant

Energizing, boosts and relaunched the skin metabolism, helps to cell regeneration and to improve epidermis cell functions, contributes to decrease skin tiredness, anti-oxidant, against free radicals, anti-ageing.

To be used in skincare and make-up products

cream, fluid, serum, balm, milk, gel, foundation, concealer, etc.

in any skincare and cosmetic products dedicated to maintain or relaunch the skin metabolism.

- **Two stories - the coffee, a popular taste all around the world**

Coffea arabica, *Rubiaceae*

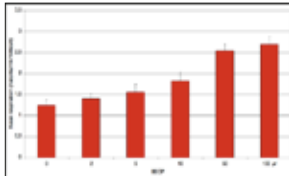
Very recently discovered, coffee is a shrub with little short-lived white flowers, born in Ethiopia and in the South tropical Africa, it used to live in the shadow under high trees between 500 and 1600 m. Arabica is the most ancient sort of coffee, it was placed in the XVth century in Arabia, then cultivated by Dutch people in the XVIIth century. Its name comes from arabian « qahwa » or « gahwa ». But the word Moka comes from the harbour located in the North Yemen. Cultivated in monoculture, coffee is first dedicated to be prepared as a universal drink. It contains coffeine, an alcaloid, which is a heart booster. It also has diuretic and analgesic properties. Coffee is a rich plant: grains contain essential oils, glucose, proteins and vitamin PP too.

- **Two stories - the peppermint, an hybrid with a concentrated perfume**

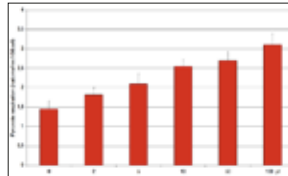
Mentha x piperita, *Lamiaceae*

That perennial herbaceous and fragrant plant, has been created from the hybridizing of the aquatic mint (aquatica) and the green mint (spicata) but its geographical origin is still unknown. Growing rapidly, it propagates through stolons. Very used in in the everyday life in the Antiquity for its fragrance, today it is cultivated in several areas in the world especially in the United States of America for its essential oil, that is very rich in menthol (giving its perfume), and extracted from leaves. Many food products like herbal teas, candies, liquors, include peppermint but also pharmaceutical products (against cough, cold, or antiseptical creams, local painkillers, etc.).

- **Efficacy - *In vitro* testing results**



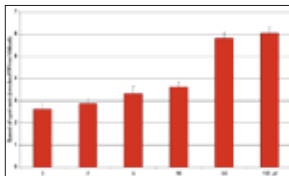
Increase of the speed of cell basal respiration



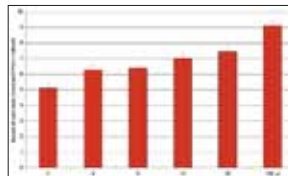
Increase of the speed of mitochondrial respiration

Effect on the energetic metabolism of keratinocytes:

- increase of the speed of cell basal respiration
- increase of the speed of mitochondrial respiration
- increase of the speed of the synthesis of ATP (cell basal and mitochondrial)
- increase simultaneous of the concentration of ATP and of concentrations of ADP and AMP
- Stable energetic balance (stable EC)



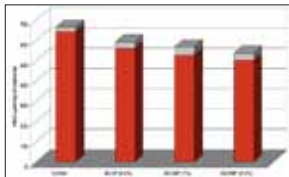
Increase of the speed of the synthesis of basal cell ATP



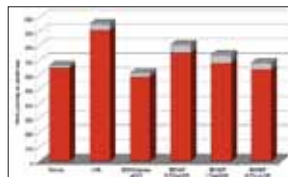
Increase of the speed of the synthesis of mitochondrial ATP

Anti-oxidant effect: at 0.5%, 1% and 2.5%

- decrease of the physiological lipoperoxidation which is translated by a decrease of the MDA rate by 13%, 18% and 22%
- decrease of the lipoperoxidation induced by UVB (150 mJ/cm²), which was translated by a decrease of the MDA rate by 17%, 25% and 30%, respectively, compared with protective enzymes SOD/catalase (-36%)



Decrease of physiological lipoperoxidation



Decrease of induced lipoperoxidation

- **Technical information - formulating Balancing Energy Coffee & Peppermint**

- INCI name of cells: coffea arabica leaf cell extract / mentha piperita leaf cell extract
- form: cells (20%) dispersed in vegetal glycerine (80%)
- aspect: liquid
- concentration starting at 0.5%
- dispersible in any formulation