# Rovisome Relax, a New Liposomal Anti-age and Anti-wrinkle Active

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## Abstract:

Rovisome Relax contains an amino acid hydrolysate extracted from the green algae and theanine, an amino acid uniquely found in green tea. This composition of different amino acids are characterised by their moisturising properties, improving of skin elasticity and skin firming. Fine wrinkles can be visibly reduced.

## Green algae Enteromorpha intestinalis

Enteromorpha intestinalis is a bright green macro algae, which lives sessile on stones and rocks in the upper region of the ocean on the Atlantic coast of Namibia. Also loosened, broken-down plants can survive on the water surface and are washed ashore, where they continue their growth.

Enteromorpha intestinalis have a tube-shaped thallus, which mostly is unranked. The thallus, whose cell wall consists of exactly one cell layer, achieves a length of 40 cm. The leaves of the Enteromorpha intestinalis, which are 1-2 cm broad, have a frizzy border and are formed intestinally, which gives the algae its name. The Greek word “enteron” means intestine and “morphe” means form.

Fig.1 Enteromorpha intestinales

The algae Enteromorpha intestinalis is very resistant, because it is adapted to both differences in temperatures between 2 and 30°C and long dry seasons during low tide. For assuring its survival Enteromorpha produces large quantities of proteins, enabling it to resist hydrodynamic stress and changes in gas concentrations.

These special proteins are enzymatically hydrolyzed under mild conditions in comparison to an acidic conversion by high temperature. The extract gained is rich in natural amino acids and small peptides and contains no salts.

The following amino acids can be found: Asparaginic acid (15 – 18%), Glutamic acid (14 – 17%). Alanine (8 – 12%) and Threonine, Glycine, Serine (6 – 9%).

Asparaginic acid converts carbohydrates into energy and is involved in the synthesis of immunglobulins and anti-bodies. A deficiency in Asparaginic acid decreases cellular energy and may likely be a factor in chronic fatique.

Glutamic acid is involved in the metabolism of sugars and fats, as well as being important for brain function, synthesis of DNA, glutathione and other amino acids.

Alanine promotes cell renewal and strengthens the immune system by producing antibodies. It also helps in the metabolism of sugars and organic acids.

Threonine is an important constituent of elastic fibres like collagen and elastin.

Glycine is a natural antacid and sweetener that is involved in the synthesis of DNA, phospholipids and collagen.

Serine is an important component involved in the energy generation of the cells.

## Theanine

Theanine is a unique amino acid because it is only found in tea plants with few exceptions. Theanine in tea leaves accounts