



PHYTOPLANKTON GUAM

IN VITRO EVALUATION OF THE PROLIFERATION OF FIBROBLASTS WHEN A RAW MATERIAL OF MARINE ORIGIN THAT STIMULATES CELL GROWTH IS PRESENT OR MISSING

The Test was carried out by a major Italian University to evaluate the effects of the tested substance (GUAM Phytoplankton) on the vitality and growth of fibroblasts (vital cells that make up the skin and take part in the reactions of skin metabolism), using a model of human skin cells cultivated in vitro.

In vitro tests are an interesting alternative to classic in vivo methods (on animals) to evaluate the biological characteristics of finished cosmetic products and ingredients; this type of test provides a great deal of information on the reactions that may occur in vivo following the use of the products.

- The isolated fibroblasts were placed in contact with increasing percentages of GUAM Phytoplankton and incubated for 24, 48 and 72 hours.
- Cells not treated with GUAM Phytoplankton were used as negative control. At the end of the periods of exposure the cell growth percentage was evaluated compared to the control by means of a spectrophotometric reading of absorbance (at 540 nm).

Conclusions:

GUAM Phytoplankton proved to stimulate the cellular proliferation of fibroblasts and therefore to favour cell renewal.

The “regenerating” action of GUAM Phytoplankton contributes to keep new and vital cells on the skin surface and therefore to maintain optimal hydration.