

Marine algae based cosmetics

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The ever-expanding market for skin care products and continual search for innovative ingredients has led to a development of a multitude of cosmetic product based on traditional marine sources, especially components derived from marine algae. Given that there is a marked similarity between human skin and the cellular structure of algae, its bioactive components have proven to have beneficial properties for the development of novel cosmetics and become natural alternative to the chemical based cosmetics.

Some of the bioactive ingredients of microalgae claim to possess anti-aging benefits. They enables microalgae cells to thrive in harsh environmental conditions, regenerate and protect themselves under harsh conditions, radiation, intense sun exposure, oxidative stress, drought, starvation and exposure to high salinity, similar to those that skin is exposed to. Many components of these algae have pharmaceutical and cosmetic like benefits, giving rise to term cosmeceuticals. The term cosmeceutical describes skin care products that fall in between cosmetics and drugs. At a fundamental level cosmetics are products which affect the appearance of the skin, while drugs affect the structure and function of the skin.

Cosmeceuticals contain active ingredients such as vitamins, phytochemicals, enzymes, anti-oxidants and essential oils all of which can be incorporated into products such as creams, lotions and ointments. As such, these cosmeceuticals are now emerging as prospective beneficial ingredients in skin care.

Biography

Snezana Agatonovic-Kustrin received her Ph.D. in Pharmaceutical Chemistry and Drug Analysis in 1993, Master of Science Degree in Pharmaceutical Chemistry in 1988 and Bachelor of Science in Pharmacy in 1984. She is Associate professor at La Trobe University. She has over 20 years experience in teaching pharmacy students at different pharmacy discipline worldwide. Although Assoc Prof Kustrin has had a very solid teaching load in the past (80%), she has an excellent research record evident in more than 80 publications, two books and four book chapters.

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