

# Marine Algae as a Remedy against Infections and Skin Cancer

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## Abstract

Seaweed is a term applied to marine multicellular algae that are large enough to be seen unassisted by the eye. Some can grow to a length of up to 60 metres. Seaweed is made up of red, brown and green algae. Microalgae are a major source of many valuable by-products such as carbon compound.

## Keywords

Seaweed • Rhodophyta • Essential structural diversity • Medicinal

## Description

Seaweed is a term applied to marine multicellular algae that are large enough to be seen unassisted by the eye. Some can grow to a length of up to 60 metres. Seaweed is made up of red, brown and green algae. They're members of the Protista kingdom, meaning they're not plants. They do not have a plant vascular system (internal transport system) and do not have roots, stems, flowers or cones and leaves. They use the pigment chlorophyll for photosynthesis, like plants, but they also contain other pigments that may be red, blue, brown or gold [1].

Algae may be categorised as red algae (*Rhodophyta*), green algae (*Chlorophyta*) and brown algae (*Phaeophyta*), and can also be classified as macroalgae or microalgae according to their scale. Macroalgae (seaweed) is a large multicellular algae that is visible to the naked eye, whereas microscopic single-cell algae are called microalgae, which may be prokaryotic or eukaryoti [2,3]. Due to their essential structural diversity, which includes several interactions, the mechanism of anticancer activity by which microalgae have their effects is complex. Microalgae are a major source of many valuable by-products such as carbon compounds; they have medical, cosmetic, and medicinal applications for these carbon compounds (Figure 1) [4]. Ucoxanthin, a carotenoid present in microalgae, diatom, and brown seaweeds, which showed potent anticancer properties via growth prevention of malignant cells, stimulation of cancer suppressor genes, and arrest cell cycles, while it does not affect tumor cells apoptosis [5].



Figure 1. Microalgae as cancer remedy.

## References

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