

Interesting facts (About the seaweed)

1. How does seaweed benefit marine life?

Seaweed has various benefits for marine life. Seaweed acts as shelter for various marine animals such as fish, crustaceans, **mollusks**, and marine mammals. As a dense structure like a **kelp forest**, seaweed acts as a habitat for a number of marine animals. Fish species, like the juvenile and sargassum fish, and crustaceans, such as crabs, shrimp, lobsters, and **amphipods**, reside in seaweed that provides shelter and guards them from predators. Mollusks and invertebrates, such as abalone, marine snails, worms, and sea squirts, make their home in dense seaweed. Furthermore, sea mammals such as sea otters and sea lions routinely make their homes and also search for opportunities for hunting in kelp forests. They act as a food source for marine life. Birds like sea ducks find their food in kelp forests. During the process of photosynthesis, seaweed produces a large amount of oxygen, and this oxygen is utilized by marine animals. They maintain the marine ecosystem by absorbing excess amounts of nitrates and phosphorus from the water. They also absorb the excess amounts of carbon dioxide present in the marine environment. Seaweed on the seabed protects the coastline from erosion. Overall, seaweed is an important part of the marine ecosystem maintenance chain.

2. How is seaweed beneficial for humans?

Seaweed is a rich source of vitamins, minerals, fiber, and potent antioxidants that are generally not present in land-based plants. It plays a crucial role in thyroid function, heart function improvement, gut health, and the control of blood sugar level. The thyroid gland requires iodine for the production of hormones that regulate metabolism, growth, and energy production, and seaweed is rich in iodine. Seaweed is rich in vitamins such as vitamins A, C, K, E, and B. They also contain minerals such as calcium, zinc, magnesium, and iron. Chemical constituents such as polyphenols and carotenoids present in seaweed have an important role in guarding body cells from the damaging effect of free radicals. They are enriched with fibers and polysaccharides such as alginate, carrageenan, and fucoidan that are beneficial for gut microbial flora. They enhance the healthy gut microbiome and hence, ultimately, improve gut digestion. Fibers and chemicals such as fucoxanthin play a crucial role in the regulation of blood sugar levels and also regulate insulin levels and hence lower the risk of type 2 diabetes. As they are rich in fiber and have low calories, they also play a crucial role in weight management.

3. What is the risk associated with seaweed to humans?

Some kinds of seaweed have a high amount of iodine that leads to thyroid dysfunction, so people with a thyroid condition should avoid it. There may be a possibility of the presence of toxic elements such as arsenic, cadmium, and lead in seaweed that are present in a contaminated marine environment. They also interfere with blood-thinning medication, as they are rich in vitamin K.

References

- <https://www.healthline.com/nutrition/benefits-of-seaweed#gut-health>
- <https://www.medicalnewstoday.com/articles/323916#benefits>
- <https://en.wikipedia.org/wiki/Seaweed>