CMFRI discovers natural treatment for fatty liver illness from seaweeds

Kochi: The Central Marine Fisheries Study Institute (CMFRI) has developed a nutraceutical product from chosen seaweeds to treat non-alcoholic fatty liver disease (NAFLD) as part of its ongoing research into generating natural therapies from marine creatures against various lifestyle diseases. Cadalmin LivCure extract is a one-of-a-kind combination of 100% natural bioactive compounds extracted from seaweed and eco-friendly green technology to strengthen liver health.

This will be the ninth product developed from marine creatures by the CMFRI, which has previously released nutraceuticals to battle a variety of lifestyle disorders such as type 2 diabetes, arthritis, cholesterol, hypertension, hypothyroidism, and osteoporosis, as well as boost immunity. Eight of these nutraceuticals are derived from seaweeds, and one from the green mussel. The study was led by Kajal Chakraborty, Principal Scientist at the CMFRI's Marine Biotechnology, Fish Nutrition, and Health Division. He stated that the nutraceutical product was developed using bioactive pharmacophore leads derived from seaweed.

According to Kajal Chakraborty, Principal Scientist at the CMFRI's Marine Biotechnology, Fish Nutrition and Health Division, bioactive pharmacophore leads from seaweed were employed to generate the nutraceutical product. 'Pre-clinical experiments demonstrated that LivCure extract has the potential to inhibit several enzymes and various target receptors linked with dyslipidemia and pathophysiology leading to NAFLD,' Chakraborty added. This helps to promote liver health, reduce fatty material disposition, and keep other liver/lipid parameters within clinically acceptable limits.' According to comprehensive preclinical research, nutraceuticals have no negative effects. According to Chakraborty, it has been demonstrated that long-term oral use of this medicine would not result in general organ or systemic toxicity. The technology will be licensed soon to pharmaceutical companies for commercial production of the nutraceutical.

Significance of seaweed

The CMFRI has been focusing heavily on seaweed research in recent years, primarily to generate natural items valuable for enhancing human health, according to A. Gopalakrishnan, Director of the CMFRI.Because of their potential therapeutic effects, seaweeds are often referred to as the 'wonder herbs of the sea.' Also Read | India plans to increase seaweed output at 11.5 lakh tonnes in five years. This marine macroflora has recently received a lot of attention in the nutraceutical industry because of its protective function against various chronic diseases, he said, adding that CMFRI's intensive and ongoing research on extracting bioactive compounds from seaweeds has helped them win national recognition.