## Now, CMFRI Comes Up With Natural Remedy For Fatty Liver Disease

Kochi: In continuation of its major research work on developing natural remedies from marine organisms against various lifestyle diseases, the Central Marine Fisheries Research Institute (CMFRI) has come up with a nutraceutical product from select seaweeds to treat non-alcoholic fatty liver disease (NAFLD).

Named CadalminTM LivCure extract, the product is a unique blend of 100 percent natural bioactive ingredients extracted from seaweeds with an eco-friendly green technology to improve liver health.

This is the 9th such product from marine organisms being developed by the CMFRI which already had brought out nutraceuticals to combat a series of lifestyle diseases, such as type-2 diabetes, arthritis, cholesterol, hypertension, hypothyroidism, and osteoporosis, and to improve immunity, an official statement said here.

Out of these nutraceuticals, eight products are from seaweeds and one from green mussels, it said. Kajal Chakraborty, Principal Scientist at the Marine Biotechnology, Fish Nutrition and Health Division of the CMFRI led the research works to develop the product. He said that bioactive pharmacophore leads from seaweeds were used to develop the nutraceutical product.

Pre-clinical trials showed that LivCure extract proved to have the potential to inhibit different enzymes and various target receptors associated with dyslipidemia and pathophysiology leading to NAFLD, he said.

"This helps improve liver health, reduce the disposition of fatty substances, and maintain other liver/lipid parameters within the clinically acceptable limits", the expert explained The nutraceutical does not have any side effects as established by detailed preclinical trials.

"It has proved that long-term oral administration of this product will not lead to general organ or systemic toxicity", Chakraborty added. The technology will be out-licensed soon to those in the pharmaceutical industry for commercial production of the nutraceutical. For the last few years, the CMFRI intensively focuses on research on seaweeds mainly for developing natural products beneficial to improving human health, said A Gopalakrishnan, Director of CMFRI.

"Seaweeds are often termed as the wonder herbs of the ocean due to their potential pharmaceutical properties. Recently, this marine macroflora is gaining immense attention in nutraceutical industries due to its protective function against various chronic diseases", he said, adding that intensive and continuous research on extracting bioactive compounds from the seaweeds has helped CMFRI win much national recognition, the statement added.