

## Scientists in Kochi develop natural remedy for obesity from seaweeds

Kochi: Indian marine scientists have developed a "natural remedy" from seaweeds for treating obesity and dyslipidemia, a Government-controlled marine research institute said today.

The product--CadalminTM Antihypercholesterolemic extract (CadalminTM ACe)-- is the only one "made by 100 per cent natural marine bioactive ingredients from seaweeds as a natural remedy of obesity and dyslipidemia," according to Scientists at the Kochi headquartered Central Marine Fisheries Research Institute.

The product will be released by Governor P Sathasivam during the inaugural function of the Platinum Jubilee celebration of CMFRI on Saturday here, the institute said in a release.

CMFRI scientists prepared the extract from seaweeds which are commonly available in Indian coastal waters and are natural bounty of the sea and are known for their extraordinary medicinal properties, it said.

Dr Kajal Chakraborty, Senior Scientist in Marine Biotechnology Division of CMFRI, who developed the product, said bioactive pharmacophore leads from seaweeds were used to prepare the nutraceutical product.

"CadalminTM Antihypercholesterolemic extract can be administered to regulate clinical indicators leading to dyslipidemia or obesity, total adipose tissue and visceral fat, triglycerides, cholesterol, both good and bad, known as HDL and LDL," Chakraborty said.

The product contains 100 per cent natural marine bioactive ingredients from selected seaweeds by a patented technology, and would be made available in 400 mg capsules, the scientist said.

"The nutraceutical does not have any side effects as established by detailed preclinical trials. CadalminTM Antihypercholesterolemic extract is the only product made by 100 per cent natural marine bioactive ingredients from seaweeds as a natural remedy of obesity and dyslipidemia, as far as our knowledge goes," Chakraborty added.

Dr P Vijayagopal, Head, Marine Biotechnology Division, said the active ingredients in the product would be packed in plant-based capsules to meet the dietary needs of the large vegetarian population in India and abroad. "CadalminTM Antihypercholesterolemic extract has a promising consumer appeal, and market potential especially for the large vegetarian population in India and abroad," he said. "...The product is being out-licensed to a pharmaceutical company," he said.

CadalminTM Antihypercholesterolemic extract is the fourth in the series of the nutraceutical products developed by the CMFRI. Two anti-arthritic and one anti-diabetic nutraceutical products are the other three products developed by the institute in the past.

All these technologies have been commercialized through pharmaceutical companies. Dr A Gopalakrishnan, Director of CMFRI, said the institute is in the process of developing more health products from the underutilized seaweeds.

"The CMFRI is also in the process of standardizing and promoting seaweed farming all along the Indian coasts as a livelihood option for the coastal communities. This is expected to compensate for the dip in income for the fishermen during lean seasons," Gopalakrishnan said.