

Herbal extract may help better uptake of Vitamin B12

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New Delhi, December 11 (India Science Wire): a common concern with oral vitamin B12 therapy is absorption especially in people suffering from anemia and gastrointestinal diseases. Researchers at the Council of Scientific and Industrial Research-Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP) have identified a plant extract that has shown potential in enhancing absorption of vitamin B12 through in vitro and in vivo bioassays.

Vitamin B12 cannot be synthesized in human body and has to be regularly obtained from ingestion of animal proteins or fortified cereal products. There are no naturally occurring bioactive forms of vitamin B12 from plant sources. Some plant foods contain added vitamin B12 and others, for example, seaweed and mushrooms contain its analogues that are inactive in humans.



Dr Mahendra P. Darokar

“The name of the plant has not been disclosed due to Intellectual Property Right (IPR) issues but it is a frequently used Ayurveda and traditional system of medicine. No oral sub-acute toxicity of this plant extract was observed at the highest dose up to

2000mg/kg body weight in small animal model. The cost effective oral formulation in capsule form has been developed with standardized plant extract having various advantages,” said Dr. Mahendra P. Darokar, Senior Principal Scientist and Head, Molecular Bioprospection Department CSIR-CIMAP.

According to Dr Darokar, the formulation releases the Vitamin B12 in controlled manner. It would provide pH dependent solubility (soluble in alkaline/intestinal pH) due to which the acidic gastric environment is bypassed and releases in intestinal pH . It also reduces the dosing frequency and thereby improves the patient compliance. There is no other product as bioenhancer of vitamin B12 absorption is available. It is based on plant that is known for its human consumption for many years and it reduced dose of Vitamin B12 to meet RDA.

However, Dr Darokar said, further pre-clinical and human studies are required to be done before the formulation is licensed to the interested industrial partner for its commercial utilization. (India Science Wire)

Keywords: Vitamin B12, herbal formulation, CSIR-CIMAP