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INVITRO AND INVIVO ANTIOXIDANT ACTIVITY OF SEAWEED EXTRACTS AND SEAWEED FOOD PRODUCTS

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Introduction and Objective: Gulf of Manner is a rich region with abundant wealth of seaweeds of India. The main objective of the study was to find the antioxidant property of the green seaweeds collected from islands of Gulf of Manner and to promote seaweed for use as food and medicine.

Method: The algae studied were green algae ULVA reticulata and ULVA lactuca. The algae were collected fresh, cleaned, dried and pulverized to powder form and extracted with methanol and ethanol and powders were incorporated in seaweed tea and multigrain chocolate. Antioxidant activity was studied using DPPH scavenging activity using BHT as control. ULVA reticulata and ULVA lactuca extracts and seaweed tea and chocolate was tested for invivo antioxidant property in rats using vitamin C as control and tested for antioxidant enzymes namely superoxide dismutase, catalase, glutathione and lipid peroxidase. The seaweed extracts were fed to the animal for a period of 20 days at different dosing levels.

Results: The results of the study revealed that seaweed extracts and incorporated tea and multigrain chocolate showed a positive antioxidant activity both qualitatively and quantitatively when compared to the standard butylated hydroxy toluene and in vivo antioxidant activity was found to be high with increased dosing levels up to 2 ml/kg body weight, the enzymes superoxide dismutase and catalase levels increased significantly

Conclusion: Addition of seaweeds was found to boost the antioxidant activity of the tea and chocolate, thereby offering the promise of a functional food and helping to treat major degenerative diseases by utilising it in diet supplements.

FF-010

EFFICACY OF CHLORELLA GROWTH FACTOR (CGF) SERUP INTAKE ON CLINICAL SYMPTOMS OF DENGUE HEMORRHAGIC FEVER (DHF)

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Introduction and Objective: The objective of this study was to analyze the effect of Chlorella Growth Factor (CGF) intake on clinical symptoms of Dengue Hemorrhagic Fever (DHF).

Method: The design of this study was a randomized clinical control trial with 37 subjects of intervention group and 37 subjects of control group. The subjects were inpatient of Dengue Hemorrhagic Fever (DHF) of economic class of Karya Bhakti Hospital in Bogor, west Java. The criteria for subjects were grade II and III of DHF, age \geq 17 years, fever up to 7 days, serology Dengue IgM (+), platelet $<100.000/mm^3$, not pregnant and not suffering from immune impaired diseases. Both intervention and control group was given a standard therapy, and each patient of the intervention group was given everyday 30 ml Chlorella Growth Factor (CGF) syrup.

Results: The result of the statistical analysis show that the effect of CGF syrup intake was significant ($p < 0.01$) on reducing clinical symptom of DHF patients and its severity.

Conclusion: TH CGF syrup reduces the severity of TH clinical symptoms of DHF patients.