Efficacy of Supplementation of Fish Oil and Impact of Nutrition Counselling on Anthropometric and Clinical Profile of at Risk Heart Subjects

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KEYWORDS Anthropometry. Clinical Profile. Fish Oil. Nutrition Counselling

ABSTRACT Sixty males belonging to middle and high socio-economic status, who were at risk of developing coronary heart disease were selected. The study was conducted in three phases. In phase I, anthropometric parameters, blood glucose, blood pressure and blood lipids of subjects was recorded. Subjects were followed for one month and no treatment was given except prescribed medicines and was treated as self control. At one month interval, above parameters were again recorded and subjects were divided into two groups of 30 each. In phase II, supplementation with fish oil capsules seven seas sea cod 300 mg thrice a day was done in group I and nutrition counselling regarding heart and its related risk factors, dietary factors with special emphasis on use of fish (100g) and raw garlic (1-4 cloves) in daily diet was imparted for a period of 2 months in group II. There was significant decrease in weight, body mass index, waist to hip ratio, mid upper arm circumference, triceps skinfold thickness, systolic blood pressure, diastolic blood pressure, blood glucose, low density lipoprotein cholesterol, very low density lipoprotein cholesterol and triglycerides and significant increase in high density lipoprotein cholesterol in both fish oil supplementation and nutrition counselling group. Percentage decrease was however more in nutrition counselling group as compared to fish oil supplementation group indicating that inclusion of fresh raw garlic (1-4 cloves/day) and 100g of low fat fish on daily basis is better alternative in mitigating the risk of coronary heart disease.