

Prevalence of hyperlipidemia among the Sindhi community: A case study

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ABSTRACT

Estimation of lipids study was done among 100 subjects in Sindhi community group. Other 70 subjects in general community group studied as the control group. Subject's data was recorded with respect to age, height, sex, weight, food habit, smoking habit etc. Total 170 subjects were participated in this study. 12 hrs fasting blood samples were collected and analysis was done on biochemistry semi-auto analyzer in the clinical laboratory. Data analysis was performed using Statistical Software Epi Info. The study showed that was 69 % subjects were obese. 19% subjects found were with hypercholesterolemia. According to many researcher Hypercholesterolemia and obesity is the major risk factor for Coronary Heart Disease. Study found percentage shows serious problem among the Sindhi community. Study shows necessary to advice eating right, regular exercise, no smoking, avoid alcohol, consumption of unsaturated fatty acids and regular check up of the body.

Key words: Lipids, Hypercholesterolemia, BMI, Sindhi community.

INTRODUCTION

Lipids are more important to the body as well it is more harmful to the body when it excess. Lipids constitute about 15-20 % of the body weight in humans. Plasma lipids consists of triacylglycerols (16 %), Phospholipids (30 %), Cholesterol (14 %), and Cholesteryl esters (36 %) and a much smaller fraction of unesterified long-chain fatty acids (free fatty acids) (4 %).

Cholesterol is a soft, waxy substance found among the lipids (fats) in the bloodstream and in the body's cells. It is an important part of a healthy body because it's used to form cell membranes, some hormones and other needed tissues. But a high level of cholesterol in the blood – hypercholesterolemia – is a major risk factor for coronary heart disease, which leads to heart attack.

The plasma levels of lipids are often useful for assessing the health of the individual. Table: 1 Cholesterol, a waxy substance containing fats, is

found in foods such as meat, eggs, and other animal products. It is also produced in the liver. Saturated fatty acids are the chief culprit in raising blood cholesterol, which increases the risk of heart disease. But dietary cholesterol also plays a part. The average man consumes about 360 milligrams of cholesterol a day; the average woman, between 220 to 260 milligrams. Some of the excess dietary cholesterol removed from the body through the liver. Still, the American Heart Association recommends

Table 1: Lipids of human blood plasma

Lipid fraction	Concentration (mg/dl) Range	Mean
Total lipid	350-800	570
Triacylglycerol	75-175	140
Total Phospholipid	125-400	210
Total Cholesterol (free cholesterol)	150-250 (25-100)	200
Free fatty acids	5-15	10