

FAT IN THE DIETS OF YOUNG WOMEN

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## INTRODUCTION

One of the major health problems in the United States today is atherosclerosis, which often leads to coronary heart disease (CHD). Although atherosclerosis affects elderly persons most often, there is an increasing incidence of its occurrence in younger populations (1). The major emphasis in the study of CHD has been on men. However, CHD kills more women, as well as men, at all ages than any other factor (2).

Recommendations for dietary changes to combat atherosclerosis have been made by the American Heart Association (AHA) (3), the Food and Nutrition Board of the National Academy of Science (4), and the Council on Foods and Nutrition of the American Medical Association (5). Specific suggestions include: a) caloric intake should be balanced for maintenance of optimum weight, b) dietary cholesterol should be reduced to less than 300 mg/day, c) calories from fat should not exceed 35%, and d) saturated fatty acids should supply no more than 10% of total calories and polyunsaturated fatty acids (PUFA) should supply at least 10% of total calories.

In spite of the recommendation for decreased dietary fat, food fat available/person/day in the United States continues to rise (6). However, saturated fatty acids are accounting for a smaller share and linoleic acid for a larger share of total fat available. The 1965-66 United States Department of Agriculture (USDA) Household Food Consumption Survey reported the proportion of calories from fat in the food eaten by individuals to be above the 35% level thought to be desirable (7).

The objectives of this study were to: a) determine amounts and food sources of dietary fat, b) estimate distribution of calories among fat, protein, and carbohydrate, and c) determine P/S ratio (polyunsaturated to saturated fat) in the diets of a group of young women.

## REVIEW OF LITERATURE

### Dietary Study Methods

There is no generally accepted method of measuring the dietary intake of free-living individuals. The literature on dietary survey methodology is vast (8). Mann et al. (9) stated, "a superficial examination of the technical problems experienced in measuring dietary intake meets such a morass of conflicting opinions that the first inclination is apt to be a decision for abandonment." Comparisons of dietary survey methods have been made, but they were comparisons between methods whose accuracy and reliability are not known (10).

Commonly used methods of dietary survey include: a) the dietary history and its variations, b) the 24-hour recall, and c) the dietary record. In estimating food intake of individuals, results among methods vary with the population group studied and with specific foods and nutrients; there is no consistent pattern of variation (11-13). Therefore, it is impossible to predict with any accuracy, results that would be obtained by one method by projecting values obtained by another method. There is no proof that one method is more reliable than any other (10). Young et al. (11) found that the 24-hour recall and 7-day record could be used interchangeably to obtain a group mean. The method chosen should depend on the objectives of the study. Only one method should be used within a particular study (10).

#### The Dietary History

The dietary history attempts to determine average dietary intake over a considerable time period through the use of an extensive interview.