

COMMON DIETS: NUTRITION, AND OBESITY

Chikere Kingsley Ruben

University of Ibadan, Oyo State-Nigeria 4, Abiola street, off Oduduwa Road, Oworonshoki, Lagos 234001-Nigeria

Scientific data suggest positive relationships between a vegetarian diet and reduced risk for several chronic degenerative diseases and conditions, including obesity, coronary artery disease, hypertension, diabetes mellitus, and some types of cancer. Vegetarian diets, like all diets, need to be planned appropriately to be nutritionally adequate.

Position statement

It is the position of The American Dietetic Association (ADA) that appropriately planned vegetarian diets are healthful, are nutritionally adequate, and provide health benefits in the prevention and treatment of certain diseases.

Vegetarianism in Perspective

The eating patterns of vegetarians vary considerably. The lacto-ovo-vegetarian eating pattern is based on grains, vegetables, fruits, legumes, seeds, nuts, dairy products, and eggs, and excludes meat, fish, and fowl. The vegan, or total vegetarian, eating pattern is similar to the lacto-ovo-vegetarian pattern except for the additional exclusion of eggs, dairy, and other animal products. Even within these patterns, considerable variation may exist in the extent to which animal products are avoided. Therefore, individual assessment is required to accurately evaluate the nutritional quality of a vegetarian's dietary intake.

In addition to the health advantages, other considerations that may lead a person to adopt a vegetarian diet pattern include concern for the environment, ecology, and world hunger issues. Vegetarians also cite economic reasons, ethical considerations, and religious beliefs as their reasons for following this type of diet pattern. Consumer demand for vegetarian options has resulted in increasing numbers of foodservices that offer vegetarian options. Presently, most university foodservices offer vegetarian options.

Health Implications of Vegetarianism

Vegetarian diets low in fat or saturated fat have been used successfully as part of comprehensive health programs to reverse severe coronary artery disease (3,4). Vegetarian diets offer disease protection benefits because of their lower saturated fat, cholesterol, and animal protein content and often higher concentration of folate (which reduces serum homocysteine levels) (5), antioxidants such as vitamins C and E, carotenoids, and phytochemicals (6). Not only is mortality from coronary artery disease lower in vegetarians than in non-vegetarians (7), but vegetarian diets have also been successful in arresting coronary artery disease (8,9). Total serum cholesterol and low-density lipoprotein cholesterol and triglyceride levels vary depending on the type of vegetarian diet followed (10).

Vegetarians tend to have a lower incidence of hypertension than non-vegetarians (11). This effect appears to be independent of both body weight and sodium intake. Type 2 diabetes mellitus is much less likely to be a cause of death in vegetarians than non-vegetarians, perhaps because of their higher intake of complex carbohydrates and lower body mass index (12).

Incidence of lung and colorectal cancer is lower in vegetarians than in non-vegetarians (2,13). Reduced colorectal cancer risk is associated with increased consumption of fibre, vegetables, and fruit (14,15). The environment of the colon differs notably in vegetarians compared with non-vegetarians in ways that could favourably affect colon cancer risk (16,17). Lower breast cancer rates have not been observed in Western vegetarians, but cross-cultural data indicate that breast cancer rates are lower in populations that consume plant-based diets (18). The lower estrogen levels in vegetarian women may be protective (19).