

## Treatment of diabetes by nutrition management.

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Nutrition is the science that interprets the nutrients and other substances in food in relation to maintenance, growth, reproduction, health and disease of an organism. It includes ingestion, absorption, assimilation, biosynthesis, catabolism and excretion. The diet of an organism is what it eats, which is largely determined by the availability and palatability of foods. For humans, a healthy diet includes preparation of food and storage methods that preserve nutrients from oxidation, heat or leaching, and that reduces risk of food borne illnesses. The seven major classes of human nutrients are carbohydrates, fats, fiber, minerals, proteins, vitamins, and water. Nutrients can be grouped as either macronutrients or micronutrients (needed in small quantities).

The connection among diet and disease flare-ups has been found lately and hence dietary changes are taken into thought as a proportion of health advancement. Weight, hypertension, iron deficiency, osteoporosis, diabetes, cancer, and atherosclerosis are diseases that diet assumes a significant job in their flexibility. Every one of these infections can be a foundation for other diseases; for example, obesity might be an antecedent to hypertension and diabetes. In humans, an unhealthy diet can cause deficiency-related diseases such as blindness, anemia, scurvy, preterm birth, stillbirth and cretinism, or nutrient excess health-threatening conditions such as obesity and metabolic syndrome; and such common chronic systemic diseases as cardiovascular disease, diabetes, and osteoporosis. Under nutrition can lead to wasting in acute cases, and the stunting of marasmus in chronic cases of malnutrition. The role of diet is notable in controlling diabetes. As indicated by the most recent investigations, low-calorie diet with high starch sugars, high fiber and low fat is the most ideal approach to lose weight and control type II diabetic patients. In the studies that have been directed on the healthful status of diabetic patients on the world; it has been indicated that food instability was higher among diabetic patients than those without diabetes. In America it was seen, that the predominance of diabetes in individuals with extreme food insecurity was higher than those with mild food instability and people without higher food instability. A diabetic diet is a diet that is used by people with diabetes mellitus or high blood sugar to minimize symptoms and dangerous complications of long term elevations in blood sugar cardiovascular disease, kidney disease, obesity. For overweight and obese

people with diabetes, the most important aspect of any diet is that it results in loss of body fat. Losing body fat has been proven to improve blood glucose control and lower insulin levels. The most agreed-upon recommendation is for the diet to be low in sugar and refined carbohydrates, while relatively high in dietary fiber, especially soluble fiber. Likewise, people with diabetes may be encouraged to reduce their intake of carbohydrates that have a high glycemic index (GI), although the ADA and Diabetes UK note that further evidence for this recommendation is needed. However, in cases of hypoglycemia, they are advised to have food or drink that can raise blood glucose quickly, such as a sugary sports drink, followed by a long-acting carbohydrate (such as rye bread) to prevent risk of further hypoglycemia

The people with diabetes can eat any food that they want, a healthy diet with carbohydrates, but they need to be more cognizant of the carbohydrate content of foods and avoid simple sugars like juices and sugar sweetened beverages. Carbohydrates include sugars, starches, and fiber. These foods have the greatest impact on blood sugar levels as once they are consumed they are broken down into sugars that absorbed in the small intestine. Fiber have more benefits may be obtained by consumption of dietary fiber. Cholesterol does not have a specific recommendation for dietary cholesterol intake. Protein has been concern about the level of protein consumption in individuals who have diabetes induced kidney disease; however, there is no evidence that low protein diets improve kidney function. Specific diets contains: Low-carbohydrate diet, Vegan/vegetarian, Low glycemic index diet and High fiber diet. Diabetes has warned against purchase of products that are specially made for people with diabetes, on grounds that: they may be expensive, may contain high levels of fat and they may confer no special benefits to people who have diabetes Human nutrition deals with the provision of essential nutrients in food those are necessary to support human life and good health. Poor nutrition is a chronic problem often linked to poverty, food security or a poor understanding of nutrition and dietary practices and poor knowledge about nutrients required by the body at various stages of life to prevent deficiency of nutrients in body which can have adverse effects on body. Malnutrition and its consequences are large contributors to deaths, physical deformities and disabilities worldwide. Good nutrition is necessary for management of the diabetes and it plays an essential role.

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