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Diet, Nutrition and Cardiovascular Disease

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Review Article

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ABSTRACT

Nutrition science is a rapidly evolving multi face field, is accompanying the research journey from chemistry to social sciences. It has a unique impact in reducing the adverse health effects caused due to poor diets. Nutrition plays a vital role in aetiology of major cardiovascular diseases like hypertension and atherosclerosis. Many lifestyle and dietary factors leads to these diseases and developed countries and youth are at high risk of cardiovascular diseases. Preventive steps must be initiated immediately after diagnosing. Diet is complete mixture of nutrients, It is very important in development and prevention of heart diseases, is has high impact on all the risk factors that are causing cardiovascular disorders. Change in food, dietary plans and health system will help in reducing the evidences of cardiovascular diseases which will in turn reduces the economic burden on population all over the world. The current review summarizes the effect of nutrition on cardiovascular diseases.

INTRODUCTION

As we know heart disease is the major cause of death worldwide and it is also estimated by scientists that morality rate of disease and death is estimated to be more in future. Heart disease causes 16 million deaths per year all over world. Diet and nutrition plays an important role in prevention of cardiovascular diseases. In researches and medical policies it is concluded that healthy diet can reduce the risk of cardiovascular diseases. As we know healthy diet is essential for each and every human being who wants a healthy life. A healthy diet is one that helps to maintain or improve overall health. A healthy diet provides all the nutrients like vitamin, protein, mineral, fatty acids to body. In studies it is found that diet rich in fruits, vegetables and whole grain helps in protecting the body from heart disease and high blood pressure, while a diet lack of above things can actually cause those diseases. Even small diet deficiencies can have tremendous effect on body. A diet high in fruits and vegetables appears to decrease the risk of cardiovascular disease [1-9].

This review article gives a brief idea about cardiovascular disease and diet like- Essential diets to reduce the risk of cardiovascular diseases in individuals.

There are many societies and organizations which aim to counsel and encourage public awareness from different types of heart diseases related to food and also provide value added services to improve patient care [10-17]. These types of organizations are providing assistance to individuals with the support of group of physicians and consultants and their continuous advice to human being.

Some of the major societies like Mongolian Association of Nutrition and Food Service Management which provides platform for professional development activities which helps to achieve accreditation status. This society brings awareness of nutrition, dietetics, food services and the professional image of the profession and association, foster closer cooperation between dietitians, nutritionists and other professionals in allied fields [18-33].

National Heart Forum of UK aims to improve public awareness in cardiovascular health, and the advancement of quality standards to enhance patient care. It also support and promote researches in the field of cardiovascular diseases [34-39].

United Heart Foundation of USA which main aim is to educate human beings regarding the disease and their causes and how to overcome with the help of health knowledge and practice related to prevention and treatment of heart disease [40-46].

European Society of Cardiology is another international society comprising of professional cardiologists, contributes to the development of effective policy and programmatic responses to Cardiac patients at the global level, particularly in the European countries [47-54].

The main purpose of these societies is to spread advancement in the field of heart diseases and their causes so that scientists can provide better service to the patients and work together to reduce the risk of diseases. These societies main aim is to create awareness among the global communities.

There are several Journals on cardiovascular disease and nutrition which provides the information on current ongoing researches related to nutrition and heart disease across the globe, which helps readers to get updated with the current advancement's in this field. Some of them are: Journal of Cardiovascular Diseases & Diagnosis which is an international peer review Open access scholarly journal and provides a multidisciplinary source of information in the field of cardiovascular disease and their diagnosis [55-63].

Journal of Food and Nutritional Disorders is a hybrid open access journal which covers a wide range of fields in food and nutrition disorders and offers a platform for the researchers by providing a peer review process for their eminent work. Journal of Clinical Nutrition & Dietetics journal studies improve the knowledge and provide cutting-edge research strategies for the development of new therapeutics. Journal of Nutritional Disorders & Therapy is a best open access peer reviewed leading provider of information on nutritional disorders & therapy and novel methods of treatment followed [64-76].

The above mentioned journals are best scholarly, peer reviewed, highly accessed, open access journals on cardiovascular disease and diet or in other words nutrition and disorders, which maintains the quality and standard of the journal content, reviewer's agreement and respective editor's acceptance in order to publish an article. These journals ensures the barrier-free distribution of its content through online open access and thus helps in improving the citations for authors and attaining good journal impact factors. Open access journals provide more visibility and accessibility to the readers in gaining the required information. The ongoing researches all over the world, which are being exhibited through open access journals, serve as the main source of information in various fields [77-83].

OMICS Group organizes conferences on Food and Nutrition with an aim to make an everlasting relation of upcoming new strategies in the field of Nutrition disorders with the scientific community and thereby giving everyone a healthier and quality life. Recently 6th Global Healthcare Nutritionists and Dieticians Annual Conference was a grand success on December 05-06, 2016, USA. The main theme of this conference is to discuss novel research and innovations in the field of dietetics and Nutrition, how it benefits our daily lives and ultimately leading to a healthier and prosperous tomorrow. 11th European Nutrition and Dietetics Conference which is going to held on June 29- July 01, 2017 Madrid, Spain. The main intention is to promote latest Innovations & applications in the field of Nutrition and Dietetics to the community [84-91].

DIET FOR HEART DISEASE

A healthy eating regimen and way of life are best weapons to challenge die related cardiovascular diseases. Food plan is a major important risk in coronary heart disorder. To stop gaining weight and reducing the risk of coronary heart disease, healthy diet can help individual since food is mainly involved in various causes of heart disease and if we pay attention on our diet then we can definitely prevent the risk of disease.

Narrowing of artery specifies coronary heart disease which prevents flow of blood, cuts off the oxygen supply to the heart and damage of heart cells which leads to heart attack [92-94].

HEART DISEASE AND RISK FACTORS

There are various types of risk factors associated with deposition of fat in the coronary arteries which includes smoking, lack of physical activity or genetics.

Other risk factors include

Eating Habits-Eating Habits play a major role in increasing heart diseases. For example: Fats like saturated and trans fat increases blood cholesterol level and heart attack rates while fats like polyunsaturated and monounsaturated fat lower the risk of heart attacks [95].

Obesity- Obese patients whose body shaped like apple and if most of the body fat is accumulating around stomach were in verge of getting heart attacks.

Hypertension-Hypertension means high blood pressure which is the amount of pressure within the arteries. In this pressure arteries pump blood at high pressure compared to normal pressure which increases the chances of heart attack [96].

Cholesterol-It is an essential component of cell membranes and certain hormones which is produced by the liver, but it is also present in dairy products, meat and eggs. A high amount of cholesterol in the blood can lead to its deposition in the arteries that can restrict blood flow and increase risk of heart disorder [97].

FOODS TO PREVENT HEART DISEASE

Healthy diet which includes low-saturated fat, high-fiber, high plant food diet helps in reducing heart disease. High salt diets increase blood pressure and the risk of heart attack and stroke [98-100].

List of some foods which protect against heart disease include:

- Oily fish- Mackerel, sardines, tuna and salmon
- Some vegetables oils- Corn, soy and safflower
- Fruit and vegetables
- Fibre- Wholegrain cereals and fruit and vegetables
- Legumes and soy
- Nuts and seeds
- Tea
- Alcohol
- Foods containing vitamin E
- Garlic
- Foods enriched with plant sterols

CONCLUSION

Many of the causes and risk factors associated with cardiovascular disease begin in young age and therefore preventive measures like proper nutrition and change in lifestyle both in children as well as young adults has to be taken at the earliest possible to promote health. Major research studies have concluded that the changes in individual nutrients, foods and several dietary factors will increase the rate of cardiovascular diseases. Obesity rates among population have to be reduced by commercial dietary plans, since obesity is one of the major risk factors of cardiovascular diseases. Physicians should focus on recommending balanced diets rich in important fatty acids, plenty of fibers, foods that are rich in nutrients, minerals and antioxidants that fight free radicals.

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