

RELATIONSHIP OF DIET AND CARDIOVASCULAR DISEASES Faran Khan, Ahmad Mujeeb Khan

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eart, the vigorous engine of our bodies, is deeply affected by the choices we make to eat food. Cardiovascular diseases are the primary cause of death worldwide, it is estimated that approximately 20 million people perished from cardiovascular diseases annually.¹ According to World Health Organization 80% of the CVD deaths are due to heart attacks and strokes and one thirds of these deaths occurs prematurely. The major contributor in hearts diseases are lifestyle and behavioral risk factors like poor dietary choices, excessive use of salt, sugars, saturated fats, sedentary lifestyle, use of tobacco and alcohol. The effects of these lifestyle factors may express as high blood pressure, high blood glucose and imbalance in blood lipid profile. Individuals also appeared as overweight or obese. These intermediate risks factors can be manageable as primary and secondary care. In the period of industrialization and trend of modern diets where lifestyle diseases become a global epidemic. The rise in cardiovascular diseases is largely attributable to modern fad diets, which emphasize excessive consumption of processed foods, loaded with hidden sources of sodium, sugars, and saturated fats. These diets plays a vital role in the surge of cardiovascular diseases also creates an alarming increase in obesity, hypertension, dyslipidemia, diabetes and metabolic disorders these all are the major contributor to heart related issues.²

Lifestyle amendments including diet changes are the necessary practice in managing cardiovascular risk factors. As a result, primary and secondary prevention of cardiovascular disease (CVD) requires an understanding of the various diets and their effects on cardiovascular health. Diet includes a combination of food compounds that has strong influence on human overall health. Diets rich in complex carbohydrates like whole grains, fruits, non-starchy vegetables, legumes, plant based protein and lean protein sources, with avoidance of processed foods, refined carbohydrates, saturated fats, and high fructose corn syrup sweetened beverages, are recommended by International prevention guidelines for cardiovascular diseases. The Mediterranean, DASH, and plant-based diets have all recognized as cardio-protective effect in varying degrees and are recommended by healthcare professionals.³

The Mediterranean diet has gained acclaim for its heart-protective qualities. Focused on plant-based foods, extra virgin olive oil, seeds & nuts, fish, this diet is rich in antioxidants, omega-3 fatty acids, and fiber. Several studies reveals that adherence to the Mediterranean diet is associated with a lower risk of cardiovascular diseases. Wholesome choice of food in diets like fruits, vegetables, whole grains, and legumes are the key components of a heart healthy diet provide essential antioxidants and fiber. Antioxidants help combat oxidative stress, while fiber aids in maintaining healthy cholesterol levels and promoting overall cardiovascular health. Modifying recommendations coupled with lifestyle changes like regular physical activity (including walk, brisk walk, jogging) smoking cessation, dietary changes can significantly contribute to preventing and managing cardiovascular diseases. In the quest of cardiovascular health, incorporating nutrient-dense super-foods into your diet can be a proactive and delicious strategy. Foods that are rich in vitamins, minerals, antioxidants, and other bioactive compounds that can contribute to heart well-being some examples are fatty fish which are high in unsaturated fatty acids (omega-3) associated with reduced risk of cardiac diseases. Berries packed with antioxidants, fibers and vitamins contribute to reducing inflammation and oxidative stress. Nuts are high in unsaturated fats and plants sterols, regular consumption of nuts associated with lower level of blood cholesterol. Barley and oats are source of soluble fibers lower the cholesterol levels and promote heart health. Dark leafy vegetables packed with many vitamins, minerals and antioxidants. They are also rich in dietary nitrates that can stimulate blood vessel health. Legumes, beans, lentils are high in fiber, protein, and various nutrients, legumes have been linked to lower blood pressure and improved cholesterol levels. They are also a good alternative to red meat. Green tea is rich in catechins, antioxidants that have been associated with improved heart health. Regular consumption may help lower cholesterol levels and reduce the risk of heart disease. Adopting a heart-healthy diet comes with not many obstacles and restrictions but with combination of delicious variety.⁴⁻⁵

The associated relationship between diet and cardiovascular health is an evolving narrative that demands public attention. In our quest for sound health, we must acknowledge the profound impact of our dietary choices on the intricate machinery of our hearts. Embracing a balanced, nutrient-dense diet rather than caloric dense diet can not only prevent but also converse the progression of cardiovascular diseases, offering a healthier, heartful future. Remember that a balanced and varied diet with moderation, along with an overall healthy lifestyle, is key to promoting cardiovascular health. It's advisable to consult with a healthcare professional or a registered dietitian to create a personalized nutrition plan tailored to your specific needs and health conditions.

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