

## Protocol and Diet Therapy

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Cardiovascular diseases are those that involve the disturbance in the functioning of the heart and the blood. The most common types of the cardiac diseases are hypertension and atherosclerosis. The cardiovascular diseases can affect the heart, blood circulation and its, the kidneys and the brain of the patients.

#### **Myocardial Infarction**

Myocardial infarction, commonly known as a heart attack, is the irreversible necrosis of heart muscle secondary to prolonged ischemia. This usually results from an imbalance in oxygen supply and demand, which is most often caused by plaque rupture with thrombus formation in a coronary vessel, resulting in an acute reduction of blood supply to a portion of the myocardium. Patients with typical myocardial infarction may have the following prodromal symptoms: Intense sharp chest pain, radiation of chest pain up to neck, shoulder, jaw and down left arm, ventricular tachycardia, atrial fibrillation or flutter, Coughing, wheezing, Fever, Fatigue, chest discomfort, and Malaise.

#### **Diet**

The patient of the cardiac disease should eat the diet having as less saturated fats as possible, but, the intake of the saturated fats may not be fully prevented. The patient should eat a variety of healthy low cholesterol and light fat foods. The intake of salt and sodium must be reduced in order to keep the circulation of the blood proper. On the other hand, the use of carbohydrates and fiber should be increased. These include the potatoes, pasta, vegetables and rice. Apart this fruits are rich in fiber so the diet must include the daily intake of fruits in the daily diet. The portions of the diet taken at one time should be limited to the small quantity to avoid the overburden. It is better to take more portions with regular intervals but smaller in quantity (Reddy, 2004).

The patient should also prevent the consumption of the oily and fried foods plus the use of the margarine. The red meat and especially beef are to be avoided as much as it is possible. In terms of sweet foods, the preparations like pastries, cakes, cream and soda drinks are to avoid strictly because they are the major cause of the development of saturated fats. All the vegetables and fruits those are high in magnesium aids in the protection of the heart and the cardiac system. These include broccoli, seeds of the wheat, spinach and some other green vegetables. Apart from these the use of garlic is very good for the cardiac patients, and it also controls the blood pressures. The garlic should be used daily in the diet with low fat milk products (Reddy, 2004).

### **Risk Factors of Cardiovascular Client**

A patient of cardiovascular disease might be at risk of both controllable and uncontrollable factors. Controllable factors may include blood cholesterol, diabetes, smoking habit, blood pressure, and obesity. On the other hand, uncontrollable factors can be identified as heredity, age and sex (Library for Health Information, n.d.). A person with higher risk factors is more likely to develop cardiovascular disease.

### **Nutrition**

The sodium intake in the foods should be strictly reduced, but, it should not be stopped. The salt and sodium reduction help the patients to recover from the cardiac disease and the use of magnesium foods increases the health of the cardiac patients. The foods that are rich in potassium should also be increased in the daily diet. These include the strawberries bananas, fruits that are dry in nature such as prunes, raisins and dates, green vegetables such as the spinach, avocados etc. There are also some other foods which can be beneficial for the cardiac patients such as tomatoes, squash, whole grains and nuts. The increase in the use of the vitamin C is also, beneficial for the cardiac patients, which includes the oranges, citrus juices such as lemon juice etc. The inclusion of the high fiber foods in the daily diet is also necessary for the

cardiac patients. The potassium in the body may decline if the patient is taking more diuretics, which can cause weakness, fatigue and excessive urination. These are symptoms of the potassium getting low in the body which in turn may cause the danger to the cardiac system and heart (Reddy, 2004).

### **Activity Level**

The cardiac patients should avoid the high isometric exercise which entails the sit-ups and push-ups. This is because these exercises involve the twisting of the muscles with other muscles which in turn is, hazardous for the health. Moreover, the exercise in the cold season at outdoor places should be strictly avoided; this should be same even in the high humid weather. This is because the humid weather may cause the tiring of the patients easily and above the level of the tiring required. This may also cause the breathing problem and the pain in the chest. It is better to use the treadmill inside the house where the temperature and the weather are normal. Picking up of heavy loads and objects is not allowed to the cardiac patients (Myers, 2003).

### **Nutrition Intervention**

The diet should be balanced with smaller portions with regular intervals. The food should be taken in small quantity at a time and to fulfill the hunger needs the food might be taken more than three times a day. The weight should be checked on a regular basis that is monthly or weakly, and the increase in the weight must be encountered with the proper weight loss dieting.

The patients suffering from the cardiac disease are not strictly bound to avoid or to have any foods but the excess intake of the foods that are not allowed may become the cause of ill health. Furthermore, the heavy workout and stress also leads to the disturbance in the cardiac system which in turn may cause the patient to expire through heart attacks.



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