

A Review on Nutritional Management of Obesity and CHF

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Abstract

Every year, heart failure or arrest claims the lives of 2.8 million adults. Due to changes in today's lifestyle, such as excessive fast food consumption, a lack of physical activity, and excessive consumption of sugar-sweetened beverages, obesity and coronary heart failure have emerged as significant illnesses. Obesity has a significant negative impact on the cardiovascular system. Heart issues started to emerge as a result of fat. For patients' health and quality of life to improve, nutritional management is crucial. These reviews aim to maintain dietary treatment of obesity-related cardiovascular disease and the need for optimal body weight reduction.

Keywords: Cardiac Heart Failure; Obesity; High Blood Pressure; Diabetes; Valvular Heart Disease; Coronary Artery Disease

Introduction

An excessive amount of adipose tissue that poses a health concern is referred to as obesity. Cheyne first proposed the idea of obesity-related coronary heart disease in 1818 [1]. This is what causes it. Recently, two genes for obesity were discovered. Leptin is a protein produced by the ob gene, while leptin receptor is a protein produced by the db gene.

Many clinical conditions, including sleep apnea, atherosclerosis, hypertension, and heart failure, are brought on by fat. Pain or discomfort in the jaw, neck, or back, pain or discomfort in one or both arms and shoulders, and shortness of breath are examples of chest pain or discomfort. A condition known as cardiac heart failure occurs when the heart cannot pump enough blood to meet metabolic demand [2-5].

There are Two Types of Heart Failure (Figure 1)

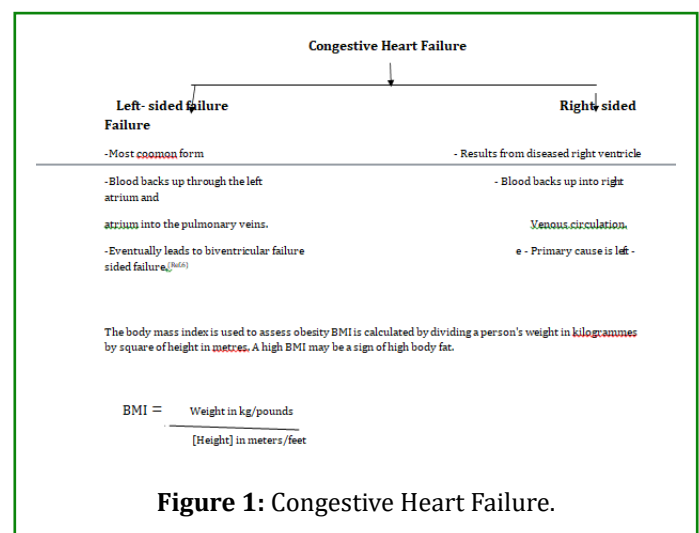


Figure 1: Congestive Heart Failure.

Classification	BMI [kg/m ²]	Risk
Underweight	<18.5	Low [but risk of other clinical problems]
Normal range	18.5-24.9	Average
Overweight	25.0-29.9	Mildly increased
Class 1	30.0-34.9	Moderate
Class 2	35.0-39.9	Severe
Class 3	>40.0	Very severe

Table 1: The body mass index is used to assess obesity BMI is calculated by dividing a person's weight in kilogrammes by square of height in metres. A high BMI may be a sign of high body fat.

Pathophysiology of Cardiac Heart Failure (Figure 2)

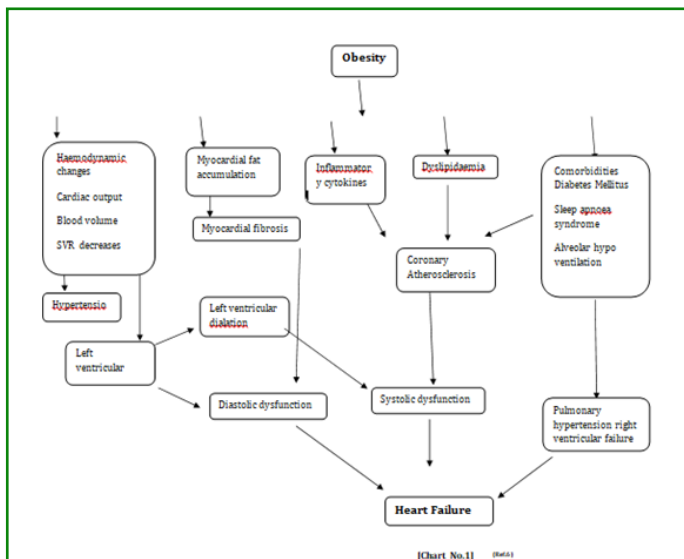


Figure 2: Obesity has a significant negative impact on the cardiovascular system [6].

Risk Factors of CHF:

- Obesity
- High blood pressure
- Diabetes
- Other conditions related to heart disease
- Valvular heart disease
- Coronary artery disease
- Smoking
- Irregular heart beat
- Sleep apnea
- Viruses [7,8]

Life Style Approach to Reduce Cardiac Heart Failure Risk

Healthy Diet

A heart-healthy diet is crucial for optimum results. A heart-healthy diet should include fruits, fibre, vitamins, vegetables, low-fat dairy products, beers to avoid, and foods low in saturated fat, cholesterol, and sodium. Choose salt-free foods including fresh meals, chicken, fish, dried and fresh beans, eggs, milk, and yoghurt. We should include some beans and pulses in our meals. Plant-based diets are a category of eating plans that emphasise consuming more plant-based foods while consuming fewer animal-based foods. The importance of nutrition in preventing cardiovascular disease has been emphasised. To maintain a healthy heart, be sure to incorporate these items in a nourishing, well-balanced diet [9-11].

Treatment

Treatment of cardiac heart failure is depends on severity. Medications includes,

- Diuretics
- Beta blockers
- ACE inhibitors
- Antihypertensive drug
- Dietary supplements
- Blood pressure support
- Vasodilators
- Antianginal [5,12]

Conclusion

Dietary control has been shown to support heart development in addition to greater physical health and less susceptibility to disease. The major goal of the review article is to discuss dietary management strategies to reduce obesity, which leads to a variety of heart problems, as well as strategies to prevent such a variety of diseases.

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