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# Fruit and its Role in Healthy Nutrition Programs

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#### **ABSTRACT**

Fruits are considered to be of great importance in human nutrition, as they provide the body with various salts and vitamins necessary for humans and their organs. They also help the body maintain agility and ideal weight. Some fruits have a sweet taste, others have a sour taste, and they contain many of the elements and vitamins needed and necessary to function. It performs its functions to the fullest, as it contributes to (preventing heart disease, preventing cancer, promoting weight loss, and reducing the incidence of diabetes). There are several types of fruits, each of which has several nutritional benefits.

**KEYWORDS:** healthy nutrition, Fruit, vitamins, diabetes

#### INTRODUCTION

Perennial plants are regarded as fruit trees. All varieties of fruit trees that keep their leaves all year round, including citrus, banana, olive, palm, and banana trees, are included in the first section, which is evergreen. All species that lose their leaves in the winter and subsequently sprout new leaves at the start of spring are classified as deciduous in the second part. like figs, peaches, apricots, grapes, pears, apples, and others. They are classified into tropical and subtropical fruits based on the climate that supports their growth. These fruits require heat and high humidity to develop and ripen. Fruits like bananas, pineapples, mangoes, and others are examples. Cold-weather produce includes peaches, apples, grapes, apricots, and other fruits. Citrus fruits, pomegranates, olives, and other fruits are found in subtropical areas[1].

Fruits come in a variety of flavors—some sweet, some sour—and are packed with nutrients that the body needs to function as best it can. Therefore, in accordance with good nutrition plans, we will cover here the part that fruit consumption plays in giving the human body the nutrients it requires.

The importance of fresh fruits:

The human body benefits greatly from eating fresh fruits since they include essential nutrients and minerals like salts and vitamins that are vital to the body's organs. Its low calorie content aids in the body's ability to retain flexibility and optimal weight. How much it helps to avoid blood pressure and blood sugar disorders and preserve the body's health. Additionally, it shields the body from all forms of cancer and heart disease. It helps lower the body's high proportion of proteins, lipids, and carbs. It aids in the removal of toxins from the body and stops them in their tracks. It helps to preserve the body's beauty, particularly that of the skin. It aids in cell activation in the body [2]. Due to the vitamin A content of many fruits—particularly orange and yellow fruits—fruits aid in maintaining proper vision. Colds and influenza are among the illnesses that it aids in people's recovery from. Because it has antioxidants and helps prevent renal failure, it also helps shield the body from chronic ailments. People consume both fresh and dried fruits, with dried fruits—especially dried peaches—having numerous health benefits, including promoting bone formation.

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Additionally, they aid in preventing excess obesity, battling constipation, softening the stomach, and maintaining an ideal weight [3].

Preventing heart disease:

Fruits can help lower the risk of developing health issues as we age by providing vitamins, minerals, and antioxidants that are essential for heart health. Five servings of fruits and vegetables a day have been shown to reduce the risk of heart attacks by 15%. Fruits also aid to improve blood circulation in the body; it should be mentioned that citrus fruits—like oranges and grapefruit—help to prevent heart disease more successfully than other fruits [4].

prevention of cancer.

It's advised to include many servings of fruit in the diet to lower the risk of stomach cancer because eating a lot of fruits on a daily basis can increase the incidence of some types of cancer. Fruits are rich in antioxidants, including vitamin C, essential nutrients, and beta-carotene. colon, bladder, larynx, ovary, mouth, lung, and esophageal cancers.

Improving the Loss of Weight Procedure

Fruits have a significant impact on aiding in weight loss since they are high in fiber and water, which increase feelings of fullness. Fruits like apples and oranges help you feel fuller longer than foods like beef and eggs do. This helps you eat less calories each day by encouraging you to eat smaller portions of food [5].

lowering the prevalence of diabetes

Fruits lower the prevalence of diabetes. A study including 9,655 persons in the US demonstrated that eating fruits and vegetables can reduce a woman's chance of developing diabetes by as much as 46%; there was no discernible difference in the risk for men.

Preserving oral health

A significant amount of different nutrients that are absent from other foods are present in fruits of all varieties. In addition, they are low in fat and sodium, which means they protect and preserve tooth health. Tryptophan, for instance, an amino acid essential to tooth health, and potassium are both found in high concentrations in bananas. Furthermore rich in antioxidants, oranges and grapefruits are also a good source of vitamins A and C.

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Potassium and low calorie content are two qualities of watermelon. Cantaloupe is regarded as a fruit that is cooling for the skin.

Sodium and potassium, which are found in peaches, cause the body to eliminate extra water.

Figs are high in natural fibers, which help to keep the stomach pliable and relieve constipation.

Oranges are a good source of vitamin C. Rheumatism can be relieved by using plums, which also improve renal function and blood circulation. There are additional fruit varieties that are advantageous to health; among them are the following:

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Grapefruit: Packed with vitamins and minerals, grapefruit is one of the healthiest citrus fruits. Its high vitamin C content helps with wound healing, protein metabolism, collagen maintenance, and even the prevention of premature aging by reducing the appearance of signs of aging [6].

Strawberries: This red berry is high in water content and vitamins. It also includes minerals and dietary fiber. It helps to improve heart health, much like potassium does. Strawberries also contain other flavonoid molecules, like quercetin. which supports heart health by having anthocyanin compounds and anti-inflammatory qualities [7].

Pineapple: One cup of pineapple provides the daily required amount of vitamin C and roughly 181 micrograms of copper, making it one of the healthiest tropical fruits. It is noteworthy that the bromelain component found in pineapple fruit sets it apart. This mixture of enzymes aids in the digestion of proteins and has anti-inflammatory qualities [8].

Watermelon: A fruit high in vitamin A and C, as well as numerous health-promoting antioxidants like lycopene, carotenoids, and cucurbitacin E, one cup of watermelon provides the body with about 7% of the daily required intake of copper and pantothenic acid, 5% of the daily required intake of biotin, and 4% of the daily required intake of vitamins B1 and B6 [9].

Bananas: High potassium concentration helps regulate blood pressure and heart rate. This makes bananas unique. A medium-sized banana provides around 33% of the daily recommended consumption of vitamin B6 and roughly 422 milligrams of potassium [7]. It makes up 11% of the dietary allowance for vitamin C. In addition, a variety of minerals are present, including manganese, copper, and magnesium. A few bioactive substances are also present, including carotenoids and phenolic compounds[10].

Avocado: Unlike other fruits that are high in carbohydrates, avocado is primarily composed of healthful fats and is low in carbs.[6] Avocados stand out for having a high vitamin and mineral content. Examples of these include potassium, which lowers blood pressure, and lutein, one of the beneficial components. Folic acid, which helps to preserve the body's cells during pregnancy, is beneficial for the eyes. Avocados are also a good source of vitamin C, vitamin E, and B, which lowers the risk of infection and sickness, as well as several naturally occurring chemical compounds that lower the risk of cancer. It's worthwhile. It is notable because avocados don't have a lot of sugar in them, It includes dietary fiber, which prolongs the sense of fullness[10].

Oranges: Rich in vitamins and minerals, oranges are round-shaped citrus fruits with a sweet flavor. (7) Vitamin C, which supports and strengthens immunity, is present in modest servings of oranges in amounts more than the daily recommendation. Oranges are a good source of calcium. Moreover, potassium, vitamin B1, and vitamin B9 are useful for strengthening bones [11].

Apples: Among the most well-known fruits, apples are particularly healthy since they are rich in potassium, vitamin C, vitamin K, dietary fiber, and a little quantity of other vitamins, such as vitamin B [5].

Pomegranate: Pomegranates are among the fruits that are rich in nutrients. This is because it has a high concentration of polyphenols and antioxidants, which help lower the body's risk of oxidative stress-related illnesses. It's important to remember that a single serving of pomegranates has about 80 micrograms of vitamin K [7].

Mango: Considered one of the fruits strong in vitamin A, vitamin B6, and vitamin K, which aids in blood clotting, mango fruit is distinguished by its high vitamin C content [5]. Mangos are rich in nutrients and dietary fiber. such as potassium, calcium, and magnesium, which support blood vessel health and heart, muscle, and nerve function regulation [12].

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Durian: Often referred to as the "king of fruits," durian is one of the greatest fruits to include in your diet to lower your risk of atherosclerosis [5]. This is because it is high in vitamin C and includes flavonoids, carotenoids, and polyphenols [13].

#### Conclusions:

Since a healthy diet comprises the five food groups—fruits, vegetables, legumes, grains, and dairy products—such as milk, cheese, yogurt, and their substitutes, lean meat, fish, eggs, tofu, and nuts—recommendations for fruit consumption are among the best ways to keep your body in good health. Though it is important to note that the ideal quantity of fruits consumed varies depending on a number of factors, including age, gender, and physical activity, adults are generally advised to eat what they do not eat [14]. 50 servings of 80 grams each, or less than 400 grams of fruits and vegetables each day.

This is almost equivalent to a tennis ball in terms of fruit, at one piece. A serving of fruits is equivalent to one cup, if its amount is measured at that level [15].

Fruits are abundant in vitamins, water, and carbs like sugar and fiber, to name a few. Add to it their naturally sweet taste and low calorie count. Recall that fruits come in a variety of colors and varieties, each of which has a unique combination of vitamins and other nutrients. Consequently, diversification is advised. For maximum quality and nutritional value, select seasonal fruits when consuming them.

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