

# Health Concepts

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## Moderation is key to a healthy diet.

### PREFACE

A healthy diet is a complex topic. It is an individual's choice, and there are many factors that can affect it. Yes, the key driver for eating is hunger, but our food choices are not merely determined by physiological or nutritional needs. Some of the other determinants that influence what we choose to eat are biological factors (appetite, taste), economic factors (cost, availability, education, time), social factors (beliefs, culture, family, and peer influence), psychological factors (mood, stress, attitudes), and awareness factors (knowledge about nutrition, diet, and food). Anything that is said to be edible has some form of nutrient in it and helps provide us with energy to carry out different life processes. Eating a balanced diet that includes a variety of foods from all food groups can help maintain good health and reduce the risk of chronic diseases. The most important tip for a healthy diet would be to limit the intake of salt, sugar, and saturated fats.

Dear readers,

It has been a year since the first issue of *Health Concepts* was published. In this short time frame, the circulation of *Health Concepts* has tremendously increased. I would like to thank you, the readers, for your interest in the publication and the constant encouragement you continue to give me.

Dr. Y. Sreenivasa Varma

### NUTRITIONAL FACTS

चुकंदर (Hindi)  
பீட்ரூட் (Tamil)  
బీటూట్ (Telugu)



### BEETROOT

Beetroot scientifically known as *Beta vulgaris* is a root vegetable. There are numerous types of beetroot, many of which are distinguished by their color – yellow, white, pink, or dark purple. Beetroots are delicious raw but more frequently cooked or pickled. Their leaves – known as beet greens – can also be eaten.

Beetroots are a good source of essential nutrients like folate (vitamin B9), manganese, potassium, iron, and vitamin C. Beetroot is a good source of fiber, and many plant compounds like betanin, inorganic nitrate, and vulgaxanthin. Beetroots have a glycemic index (GI) score of 61, which is considered medium.

- **Lowers blood pressure** - likely due to increased levels of nitric oxide, which causes your blood vessels to relax and dilate
- **Cuts risk of heart disease** - Eating fruits and vegetables rich in inorganic nitrates may cut your risk of heart disease and stroke.
- **Increased exercise capacity** - nitrates can enhance physical performance, particularly during high-intensity endurance exercise. Increase stamina and boost oxygen use.
- **Helps in diabetes** - Beets contain an antioxidant called alpha-lipoic acid. This compound may help lower glucose levels and increase insulin sensitivity. Helpful for decreasing symptoms of peripheral and autonomic neuropathy.
- **Aids in digestion** - Fiber content in beetroot helps smooth digestion and gut health.
- **Cancer prevention** - Certain antioxidant compounds in beetroot like betanin can disrupt the cancerous mutations of cells.

**NOTE:** Consuming beetroot can lead to red, purple, or pink urine or stools. Although this may seem alarming, it should not be a cause for medical concern. Doctors refer to this as "beeturia." People prone to oxalate-type kidney stones should be careful not to consume too much of the beetroot.

### MEDICAL UPDATE

#### Blood Pressure (BP) Measurement

Ill-fitting BP measurement cuffs produce erroneous readings leading to inappropriate treatment strategies for hypertension (HT).

Persons with larger arms may be falsely diagnosed with high blood pressure because of a too-small cuff, leading to overprescribing of medications. Conversely, someone with smaller arms whose cuff is too big may present with an artificially low blood pressure.

### PREVENTIVE PEARLS

Conjunctivitis (Seasonal eye infection) is highly contagious and spreads by droplets, fomites, and hand-to-eye inoculation.

- Use hand sanitizer and/or wash your hands thoroughly after touching your eyes or nasal secretions.
- Avoid touching the noninfected eye after touching the infected eye.
- Avoid sharing towels or pillows.
- Avoid swimming in pools.
- Eyes should be kept free of discharge and should not be patched.
- Take rest at home to avoid spreading the infection.
- Cool washcloths applied to the eyes may help relieve local burning and itching.
- Antimicrobials are used for certain infections.
- Consult your Physician.

"Health is a matter of choice, not a mystery of chance."

-- Aristotle.

Plant-based diet

A plant-based diet is a diet consisting mostly or entirely of plant-based foods. This includes not only fruits and vegetables but also nuts, seeds, oils, whole grains, legumes, and beans. It doesn't mean that you never eat meat or dairy. Rather, you are proportionately choosing more of your foods from plant sources.

| Types of plant-based diet  |
|--|
| <b>Vegan</b> - excludes all types of foods that contain animal products and animal byproducts including meat, fish, dairy, and eggs. |
| <b>Vegetarian</b> - includes eggs and dairy foods, but no meat, poultry, fish, or seafood.   |
| <b>Pescatarian</b> - includes eggs, dairy foods, fish, and seafood, but no meat or poultry.  |
| <b>Flexitarian</b> - includes eggs, dairy foods, and occasionally meat, poultry, fish, and seafood.                                  |

The vegetarian diet group can be further categorised as

- 1.Lacto-ovo Vegetarian - one that excludes meat but still allows all types of dairy (lacto) products and eggs (ovo).
- 2.Ovo Vegetarian - includes eggs (ovo) but prohibits all dairy products, including milk, cheese, cream, ice cream, yogurt, and butter.
- 3.Lacto Vegetarian - includes dairy products (lacto) but excludes all types of eggs and foods that include eggs, including whole eggs, egg whites, mayonnaise, and baked goods that contain eggs.

The human body requires macronutrients (carbohydrates protein, and fats), micronutrients (vitamins and minerals), fluids, and fiber for all its metabolic activities and functioning.

Protein is necessary for critical processes such as immune function and cellular processes; thus, it is essential to consume enough protein daily.

Proteins are made up of amino acids. The human body uses about 20 different amino acids to build proteins, of which the body can make some amino acids itself, but you must get nine of them—essential amino acids—through your diet. Generally, animal proteins are known as complete proteins, meaning they contain all nine essential amino acids. Plant proteins are incomplete proteins and do not contain all the essential amino acids.

Compared with animal protein sources, plant protein sources are higher in fiber, vitamin C, and flavonoids (antioxidants), while animal protein sources are higher in vitamin B12, vitamin D, omega - 3 fatty acid DHA, heme-iron, zinc, and vitamin K2. Appropriate supplementation and the combination of various plant-based foods will help achieve nutritional completeness in the diet.

| Benefits of Plant-based diet  |
|-------------------------------|
| Boosts the immune system      |
| Reduce inflammation           |
| Maintain a healthy weight     |
| Improves gut health           |
| Lowers risk of cancer         |
| Reduces risk of heart disease |
| Blood sugar management        |
| Lower risk of obesity         |

Just because a food is plant-based doesn't automatically make it a nutritious choice. Plenty of ultra-processed foods, such as refined grains, sugars, and oils, are technically plant-based, but that doesn't mean they will have the same benefits as those that are minimally processed. For example, French fries or samosas are plant-based, but are they healthy?

The new whole-food, plant-based diet concept emphasizes plant-based foods while minimizing animal products and processed items.

| Steps to a healthy diet   |
|---|
| Emphasize on whole, minimally processed foods   |
| Limit or avoid animal products  |
| Focus on plants, including vegetables, fruits, whole grains, legumes, seeds, and nuts |
| Exclude refined foods, like added sugars, and processed oils                          |
| Promote locally sourced, natural food whenever possible                               |

A healthy diet should include fruit, vegetables, legumes (lentils and beans), nuts, and whole grains (unprocessed maize, millet, oats, wheat, and brown rice). At least 400 g (five portions) of fruit and vegetables per day (excluding potatoes, sweet potatoes, and other starchy roots) should be consumed.

END NOTE

Eating a variety of foods is important because no single food can provide all the nutrients that your body needs. Different foods have different nutrients. By eating a variety of foods, you can ensure that you are getting all the nutrients your body needs.

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