

# 7 KEY NUTRIENTS IN FOODS



*All Rights Reserved. No parts of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of AGRIHORTICO*

**© 2019 Agrihortico Digital Publishing**

## WHAT ARE CARBOHYDRATES?

Carbohydrates are a vital component of a balanced diet. It is the major source of energy in a diet; hence known as 'energy foods'. Starchy grains such as rice and wheat are rich in carbohydrates. Starchy vegetables such as potatoes are rich source of carbohydrates. Presence of carbohydrates and energy release potential is proportionate to each other. Too much of anything is too bad. While sufficient carbohydrates must be present in a right diet, its surplus must be avoided. Carbohydrate overload increases bodily stress and as a result occurrence of life style diseases such as type 2 diabetes and heart ailments may be enhanced.



## CARBOHYDRATES AND ENERGY

A right diet is high in nutritional value and provides sufficient calories of energy for bodily functions. All foods, whether carbohydrates, fats or proteins, contain calories, i.e. provide energy. Calorie is a unit of measure of energy. A successful diet program contains right measures of energy. It is all about balance: that is, balance between the calories consumed and the calories required by a body to perform its functions. Surplus calorie consumption results in overweight and insufficient consumption of calorie results in underweight. Both the extremes need to be avoided while planning a balanced diet.



## FATS

Fats are a group of chemical compounds present in the human body.

### TYPES OF FATS

SATURATED FATS	UNSATURATED
'Bad' fat	'Good' Fat
Animal-Origin	Plant-Origin
Increases Blood Cholesterol and Heart Ailments	Lower Blood Cholesterol



## WHAT ARE FATTY ACIDS?

Fat metabolism within the human body releases fatty acids. In other words, fats contain fatty acids. Two types of fatty acids are there: saturated and unsaturated. A right diet avoids foods high in saturated fatty acids. Two types of unsaturated fatty acids are there: PUFA (poly unsaturated fatty acids) and MUFA (mono unsaturated fatty acids). While having a right diet, follow the MUFA (mono unsaturated fatty acid) rule. Vegetables rich in MUFA are considered as one of the healthiest foods. Most of the best anti-ageing foods contain MUFA.



## VITAMINS

We need vitamins in small quantities for healthy living and staying fit. Vitamins are required to regulate body metabolism and tissue building. Requirement of vitamins increases with the increase in age. Insufficient amount of vitamins in the body results in vitamin deficiency diseases.

There are fat-soluble and water-soluble vitamins.



## **TYPE OF VITAMINS**

### **Fat Soluble Vitamins**

Vitamin A, D, E, and K (ADEK) are fat-soluble vitamins. That means, surplus consumption of these vitamins gets deposited in body fat and therefore daily consumption of these vitamins are not required.

### **Water Soluble Vitamins**

Vitamin B and C are known water-soluble vitamins. Body cannot store water soluble vitamins such as vitamin B and Vitamin C and therefore any surplus amount is eliminated from body through urine. Daily consumption of these vitamins is essential to stay healthy and young. Water-soluble vitamins may get destroyed while cooking. Hence vegetables containing vitamin B and Vitamin C must be cooked by steaming or grilling rather than by boiling or deep frying.

## MINERALS

Minerals are essential elements that are required by a human body in minute quantities to perform its metabolic functions as well as for healthy growth and development. Minerals such as potassium, calcium, sodium, iron, magnesium, phosphorus, chlorine etc help in body fluid movement and tissue building. When a human body does not have sufficient amount of minerals, its deficiency is manifested in human body as diseases.



## IMPORTANT MINERALS

A list of the important minerals and the recommended daily intake of these minerals by a healthy adult is given below:

Mineral	Unit: Mg
Potassium	2000
Calcium	1000
Phosphorus	700
Sodium	500
Magnesium	310 (women)-420 (men)
Zinc	12-15
Iron	10-15
Manganese	2.0-5.0
Copper	1.5-3.0

## PROTEINS

Protein is a macronutrient that is essential to building muscle mass. Protein is found throughout the body—in muscle, bone, skin, hair, and virtually every other body part or tissue. It makes up the enzymes that power many chemical reactions and the hemoglobin that carries oxygen in your blood. Protein is made from twenty-plus basic building blocks called amino acids.

there are some of the delicious foods that are high in protein. These are: Eggs, Almonds, Chicken Breast, Oats, Cottage Cheese, Greek Yogurt, Milk, Broccoli, Lean Beef, Tuna, Quinoa, Whey Protein Supplements, Lentils, Ezekiel Bread, Pumpkin Seeds, Turkey Breast, Fish of all types, Shrimp, Brussels Sprouts and Peanuts.



## SUGARS

Sugars are the smallest and simplest type of carbohydrate. They are easily digested and absorbed by the body. There are two types of sugars, and most foods contain some of each kind. Simple sugars are called *monosaccharides* and include glucose, fructose, and galactose. Sugars that contain two molecules are called disaccharides and include sucrose, lactose and maltose. Naturally occurring sugars are found in a variety of foods, including: dairy products, fruits, vegetables, 100% fruit and vegetable juice.



## DIETARY FIBRES

Dietary fibre is a type of carbohydrate that cannot be digested by our bodies' enzymes. It is the portion of plant-derived food that cannot be completely broken down by human digestive enzymes. Dietary Fibres helps to control blood sugar level. Dietary fibres are mainly found in fruits, vegetables, wholegrains and legumes.



**FOR FURTHER INFO...**

*Visit Our Website at*

**<https://agrihortico.com>**

*Or*

*Contact us at*

**[info@agrihortico.com](mailto:info@agrihortico.com)**

**[agrihortico@gmail.com](mailto:agrihortico@gmail.com)**

