

Identifiable Symptoms of a Dietary Deficiency

Ombretta Para*

Department of Nutrition, University Hospital Careggi, Florence, Italy

Corresponding author: Ombretta Para, Department of Nutrition, University Hospital Careggi, Florence, Italy, E-mail: para.ombretta@gmail.com

Received date: January 05, 2024, Manuscript No. IPJCND-24-18762; **Editor assigned date:** January 09, 2024, PreQC No. IPJCND-24-18762 (PQ); **Reviewed date:** January 23, 2024, QC No. IPJCND-24-18762; **Revised date:** January 30, 2024, Manuscript No. IPJCND-24-18762 (R); **Published date:** February 07, 2024, DOI: 10.36648/2472-1921.10.2.113

Citation: Para O (2024) Identifiable Symptoms of a Dietary Deficiency. J Clin Nutr Die Vol.10 No.2: 113.

Description

Ascorbic acid is considered essential, meaning it must be ingested in sufficient quantities by humans and some other animal species, although certain animals and plants can synthesize it. Nutrients can be categorized as organic or inorganic: Organic compounds include most compounds containing carbon, while all other chemicals are considered inorganic. Inorganic nutrients encompass substances like iron, selenium and zinc, whereas organic nutrients include, among many others, energy-yielding compounds and vitamins.

Symptoms of nutritional deficiency

In numerous countries, regulations require macronutrients and micronutrients to be listed on food product labels. Excessive amounts of nutrients beyond the body's requirements may lead to adverse effects. Minerals are exogenous chemical elements essential for life. Although carbon, hydrogen, oxygen and nitrogen are essential for life, they are so abundant in food and beverages that they are not considered nutrients and there are no recommended intakes for these as minerals. Nitrogen requirements are met by protein, which is composed of nitrogen-containing amino acids. Sulfur is essential but does not have a recommended intake. Instead, recommended intakes are identified for the sulfur-containing amino acids methionine and cysteine. Inadequate amounts of essential nutrients or conditions that hinder absorption, result in a deficiency state that compromises growth, survival and reproduction. Consumer advisories for dietary supplement intake, such as the United States dietary reference intake, are based on deficiency outcomes and provide macronutrient and micronutrient guides for both lower and upper limits of intake. The essential nutrient elements for humans, listed by recommended dietary allowance expressed as a mass, are potassium, chloride, sodium, calcium, phosphorus, magnesium, iron, zinc, manganese, copper, iodine, chromium, molybdenum, selenium. Additionally, cobalt is a component of Vitamin B₁₂, which is essential. There are other minerals that are essential for certain plants and animals but may or may not be essential for humans, such as boron and silicon. An insufficient amount of a nutrient is a deficiency. Deficiencies can be due to various causes including a lack in nutrient intake, termed a dietary deficiency or any of several

conditions that impede the utilization of a nutrient within an organism. Some of the conditions that can impede nutrient utilization include issues with nutrient absorption, substances that cause a greater than normal need for a nutrient, conditions that cause nutrient destruction and conditions that cause greater nutrient excretion. Nutrient toxicity occurs when excess consumption of a nutrient causes harm to an organism. In the United States and Canada, recommended dietary intake levels of essential nutrients are based on the minimum level that will maintain a defined level of nutrition in an individual, a definition somewhat different from that used by the World Health Organization and Food and Agriculture Organization of a basal requirement to indicate the level of intake needed to prevent overtly necessary and clinically identifiable symptoms of a dietary deficiency.

Calcium and vitamin D

In establishing human nutrient guidelines, government agencies do not aim to determine amounts needed to avoid deficiency or maximum amounts to avoid the risk of toxicity. Essential fatty acids are fatty acids that humans and other animals must ingest because the body requires them for good health but cannot synthesize them. Only two fatty acids are known to be essential for humans: Alpha-linolenic acid, an omega-3 fatty acid and linoleic acid, an omega-6 fatty acid. An essential amino acid is an amino acid that is required by an organism but cannot be synthesized again by it and therefore must be supplied in its diet. Out of the twenty standard protein-producing amino acids, nine cannot be endogenously synthesized by humans: Phenylalanine, valine, threonine, tryptophan, methionine, leucine, isoleucine, lysine and histidine. A nutrient is a substance used by an organism to survive, grow and reproduce. The requirement for dietary nutrient intake applies to animals, plants, fungi and protists. Nutrients can be incorporated into cells for metabolic purposes or released by cells to create non-cell structures, such as hair, scales, feathers or exoskeletons. Some nutrients can be metabolically converted entirely to smaller molecules in the process of producing energy, such as for carbohydrates, lipids, proteins and fermentation products (ethanol or vinegar), leading to end products of water and carbon dioxide.