

“IMPORTANCE OF NUTRITION IN LIFE”

Dr.Pratibhapal, Assistant Professor

Department of Homescience

Gandhi Satabdi Smarak P G College Koilsa Azamgarh in Koilsa, Azamgarh ,UP

Ppal0875@gmail.com

Abstract

Nutrition simply means nourishment. The practise of nourishment extends beyond physical benefits into mental support. My dual roles as a company secretary with CPD certified nutritionist make me believe this subject holds critical importance for explaining nutritional value awareness to professionals as well as students. As a dynamic discipline I will analyse effective pointers in this document that I have studied. Every individual has basic knowledge of this topic yet applying these principles is the obstacle which humanity faces. I have selected this topic even though I work as a company secretary because I experienced various health problems that caused severe personal and professional difficulties.

Keywords: *Nutrition, Carbohydrates, Fats, Vitamins, Minerals, Weight management*

Introduction

Our body structures consist of multiple systems and organs that receive input from everything that surrounds us including our environment, contaminating particles in the air, our dietary choices and beverages, rest patterns, and our regular activities. The factors that impact our health exist in two categories with diet and eating habits being manageable elements despite environmental and other uncontrollable influences. When we consume food or drink our body decomposes the material for a successful absorption of vital minerals and vitamins together with fats proteins carbohydrates and water. These vital nutrients move through bloodstream transportation to power our body and maintain proper operation besides strengthening our tissues and contributing to growth development. The substances we ingest as food and beverage determine our body's ability to preserve health. Every person should understand the dietary value of nutritious food because both their health and fulfilment rely on this understanding.

The vital Nutrients that Contributes to Overall Good Nutrition

Proteins: Amino acids represent the fundamental components of our bodily structure while the number of essential amino acids amounts to 22. New tissue development and cell repair in the body requires protein's assistance while it protects body cells from damage. The production of various enzymes and different hormones throughout our body depends on proteins to perform their essential functions for sexual development and metabolic regulation. Excellent sources of protein exist in dairy products containing low fat content and split legumes, seeds and nuts, whole grains, soy and processed soy products, and green peas together with legumes.

Carbohydrates: Carbohydrates serve as the main power sources for human biological operation. Carbohydrates present in our food transform into glucose serving as energy for overall body functions. Body functions like cellular composition utilise the energy supplied by these foods. The

ingredients Carbon, Oxygen and Hydrogen form carbohydrates as a single unit. All fruits and vegetables together with breads and pastas as well as rice serve as great carbohydrate sources.

Fats: The body generates energy from fats as one of its dietary sources. Every one of us holds the common misunderstanding that fats create health risks. But it is not at all true. All fats are not bad. The protective insulation function of fats along with its support role for all body organs serves as essential protection from environmental changes along with internal body defence. Some good fat examples exist in avocado, dairy, fatty fishes, olive and coconut oil and similar items.

Vitamins: Humans require these compounds called vitamins that source from organic substances. The body depends on these compounds for its operation. The current world identifies chemical compounds through vitamin names. For proper body development and growth our bodies need these substances to function normally.

Minerals: Exceeding the body's limiting need for minerals is crucial because these substances enable the control of bodily procedures and the growth of tissue while making up essential components of our metabolism. The well-balanced healthy diet provides all necessary quantities for strengthening our immune system. The most important minerals that our bodies need include Calcium, Chromium, Chloride, Iodine as well as Iron and Fluoride.

Good Nutrition Boosts Your Health

Weight management

Just because most people confuse fad diets with weight loss does not mean that eating nutritious food is not the ideal method for weight management while also getting important nutrients for bodily needs. A vital first step toward maintaining ideal weight based on body composition includes replacing junk food with healthful foods to bypass the fad-diet trend.

Protecting you from chronic diseases

type-2 diabetes along with heart disease arise from deficient diets that lead people to become obese. One out of every nine Singaporeans has diabetes, making the importance of proper nutrition the highest ever before. People who follow whole food-based nutrition plans reduce their probabilities of developing diseases including kidney failure as part of a preventive strategy.

Strengthening your immune system

The proper working of our immune system depends on essential vitamins and minerals as functional components. A diverse healthy diet enables your immune system to achieve maximum performance while preventing disease development and immunodeficiency conditions.

Delaying the onset of ageing

Through the consumption of tomatoes and berries your body receives greater energy together with enhanced mental processing abilities while receiving defence from age-related deterioration.

Supporting your mental well-being

The consumption of appropriate food choices leads to increased happiness because phosphorus-rich substances found in protein-based foods increase mental well-being and reduce the risk for emotional problems. The right food choices help improve your mental health state and defend you from developing psychological disorders.

What steps should someone take to develop an operational nutrition plan? Healthy eating practises combine perfect portion sizes of nutrient-packed foods from multiple food groups with multiple preferred nutritious eating behaviours.

Food energy can be calculated by determining the weight of its digestible nutrients—such as non-fibre carbohydrates, fats, proteins, and alcohols. For example, white bread that contains 12 grams of carbohydrates, 2 grams of protein, and 1 gram of fat provides approximately 67 kilocalories (280 kilojoules) of energy. Food composition charts and packaging labels are helpful tools for assessing the nutritional value and energy content of what we consume daily. Most traditional food items offer a mix of energy-giving nutrients along with essential vitamins, minerals, and water content. However, table sugar and vegetable oil are notable exceptions, as they primarily consist of pure sucrose and fat, respectively, without significant additional nutrients. The energy value and nutrient content of some common foods

food	energy (kcal)	carbohydrate (g)	protein (g)	fat(g)	water (g)
135 g)					
green peas, frozen, boiled (1/2 cup, 80 g)	62	11.4	4.1	0.2	63.6
cabbage, red, raw (1/2 cup shredded, 35 g)	9	2.1	0.5	0.1	32.0
orange, navel, raw (1 fruit, 131 g)	60	15.2	1.3	0.1	113.7
apple, raw, with skin (1 medium, 138 g)	81	21.0	0.3	0.5	115.8
white sugar, granulated (1 tsp, 4 g)	15	4.0	0	0	0

The consumption of protein energy ranges from 8 to 16 percent within most countries but nations differ greatly in their dietary fat and carbohydrate levels. Amidst prosperous communities the percentage of dietary energy comes from protein at 12 to 15 percent and from carbohydrate at 50 to 60 percent while the remaining 30 to 40 percent comes from fat intake. The majority of dietary energy in poorer agricultural communities comes from cereals while protein together with fat supply only low amounts of energy. The body possesses exemplary adaptive abilities that enable

it to live healthily with different diets ranging from diverse nutritional compositions. Multiple eating patterns produce specific health outcomes based on their composition.

Body Mass, Body Fat, and Body Water

All elements present in human bodies can also be found within food although each person's genetic makeup and life experiences produce distinct proportional makeup. A lean healthy male body consists mainly of 68% water and holds equal amounts of 16% protein and 16% fat alongside 6% minerals and fewer than 1% carbohydrates. Vitamins and several other substances make up minimal quantities in the body. Women typically have larger body fat reserves together with slightly reduced amounts of other substances than men do. Lean body mass together with body tissues and water contents move back and forth to maintain homeostasis while external and internal conditions adjust. The human body continuously shifts tissue composition because breaking down processes through catabolism run parallel with rebuilding processes through anabolism at specific speeds. Body tissues such as digestive tract lining regenerate every 3-4 days as red blood cells survive 120 days before complete renewal and all connective tissues need many years for total regeneration. The visual observation of body fat is untrustworthy as a measurement method but trained personnel can perform basic assessments. Several precise body composition assessment tools including underwater weighing, total body potassium evaluation and dual-energy X-ray absorptiometry (DXA) exist on the market but they come with high costs. The clinical practise predominantly uses less precise anthropometric measurements performed by skinfold callipers at body points because they are more accessible. Two medical technologies which help estimate body fat include bioelectrical impedance and near-infrared interactance. Computation of body composition relies on the application of low-level electric currents and infrared light which target the biceps area. Scientists analyse body compartments mainly through studies that take place on deceased human subjects.

Conclusion

The human body adopts predictable physical alterations depending on life milestones like child development and pregnancy and lactation stages and ageing periods which require various nutrient amounts during distinct phases of life. Physical exercise helps slow down muscle tissue reduction

and reduces body fat accumulation that typically happens with ageing. Each day requires 1500 calories distributed into 4 to 6 food consumption periods. A healthy diet involves consuming proper calories while avoiding excessive portions at meals because we naturally compensate for missed food intake but drawing daily caloric intake from nutritious sources. Fruits and vegetables must make up about fifty percent of our food intake and we should consume items from all rainbow colours. Our daily calorie consumption should consist of two parts: proteins from meat, chicken and fish, legumes, nuts and dairy amounts to a quarter while another quarter should be whole grains and starch vegetables. The remaining two quarters can consist of natural fat and sugar rather than food additives. Fats and sugars that benefit our health derive from proteins combined with avocados and olive oil as well as

References

1. Carpenter, K. J. (1994). *Protein and energy: A study of changing ideas in nutrition*. Cambridge University Press.
2. Curley, S., & Mark. (1990). *The natural guide to good health*. Lafayette, LA: Supreme Publishing.
3. Galdston, I. (1960). *Human nutrition: Historic and scientific*. New York: International Universities Press.
4. Gratzer, W. (2006). *Terrors of the table: The curious history of nutrition* (Rev. ed.). Oxford University Press.
5. Lwoff, A., van Niel, C. B., Ryan, P. J., & Tatum, E. L. (1946). Nomenclature of nutritional types of microorganisms. *Cold Spring Harbor Symposia on Quantitative Biology*, 11(5th ed.), 302–303. Cold Spring Harbor, NY: The Biological Laboratory.
6. Whitney, E., & Rolfes, S. R. (2013). *Understanding nutrition* (13th ed., pp. 667, 670). Wadsworth, Cengage Learning.
7. Lindemann, W. C., & Glover, C. R. (2003). *Nitrogen fixation by legumes*. New Mexico State University.
8. Mahan, L. K., & Escott-Stump, S. (Eds.). (2000). *Krause's food, nutrition, and diet therapy* (10th ed.). Philadelphia, PA: W.B. Saunders Harcourt Brace.
9. Thiollot, J.-P. (2001). *Vitamines & minéraux*. Paris: Anagramme.