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The Secret to Optimal Health: An Understanding of Balanced Diet

Gaurav Dhaked, Aarti Jangir and Bijaylaxmi Behera

Abstract

In order to maintain optimal health and wellness, it is imperative that the body receives the nutrients it requires from a balanced diet. This article discusses the elements of a balanced diet, how important it is to keep one's physical and mental health, doable ways to incorporate it into day-to-day activities and offers guidance on creating good eating habits. The disadvantages of dietary deficiencies are also covered. Individuals who understand the significance of a balanced diet can make educated food choices that will enhance their quality of life and lead to better health results. Optimal health is a goal that many strive to achieve, and understanding the concept of a balanced diet is crucial in this pursuit. A balanced diet is defined as one that provides the necessary nutrients in the right proportions to support overall health and well-being. By recognizing the significance of nutrient diversity and moderation, individuals can take charge of their health through informed dietary choices.

Introduction

Health as a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity (WHO, 1946). This concept recognizes that health is influenced by a variety of social factors, including economic stability, education, social and community context, health care access, and neighbourhood environment (Social Determinants of Health, 2024). A balanced diet should include a variety of foods from all food groups, ensuring adequate intake of essential nutrients (WHO, 2010). A balanced diet as one that includes a variety of foods from all food groups, ensuring that individuals receive the necessary nutrients for optimal health (U.S. Department of Agriculture, 2020). A balanced diet has become increasingly difficult to maintain in the fast-paced world of today. It is more crucial than ever to understand and follow the guidelines of a balanced diet in a setting where processed foods and convenience items are easily accessible. Maintaining a balanced diet is crucial. A mindful diet can enhance one's physical and mental well-being and lead a more colourful, energetic life. It provides the necessary nutrients for the body. It must be efficient, aid in the prevention of illness, and promote general physical and mental well-being. A varied diet with sensible serving sizes ensures that individuals receive adequ-

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amounts of fats, proteins, carbohydrates, ate vitamins, and minerals. This is known as a balanced diet. The 2017 National Health Policy advocated for a "Focus on Preventive and Promotive Health Care" and highlighted seven priority areas for enhancing environment for health through the social determinants of health initiatives. "Balanced and Healthy Diets" was one of these focused areas (National Health Policy - 2017). Population growth, demographic shifts, fast urbanization, and changes in lifestyle all contribute to the spread of bad food habits and physical inactivity, which leads to dietrelated chronic diseases. The low nutritional value, high salt content, and the levels of saturated and trans fats found in fast food are likely contributing factors to the increasing rates of hypercholesterolemia, hypertension, type II diabetes, obesity, and cardiovascular diseases in Western societies (Jahan et al., 2020).

We can say that there is a direct relationship between food and our bodies. Everything we ingest through food on a daily basis has an immediate effect on our bodies. Abalanced diet is fundamental to maintaining optimal body function and overall health. It offers the vital nutrients vitamins, minerals, proteins, carbs, and healthy fats that the body needs for energy production, growth, and repair. Every nutrient has a distinct purpose. For example, proteins are essential for tissue growth and repair, carbohydrates are the body's main source of energy, and fats support hormone production and cellular function. A balanced diet helps regulate body weight, supports the immune system, and reduces the risk of chronic diseases such as diabetes, heart disease, and obesity. A balanced diet promotes physical vitality, mental clarity, and emotional well-being by guaranteeing that the body receives a sufficient and diverse supply of nutrients. It cultivates this harmonious relationship between food consumption and physical well-being. In addition to highlighting the advantages of consuming a variety of food groups, the concept of a balanced diet also highlights the significance of portion control and moderation. It is well established that a diverse diet helps prevent nutrient deficiencies, fosters growth and development, and reduces the risk of chronic illnesses like obesity, diabetes, and cardiovascular issues. Thus, the functions of our bodies and the results of our health are directly impacted by the food we eat.

Elements of a Balanced Diet

Carbohydrates are the body's primary energy source. Foods high in carbs include fruits, vegetables, and whole grains. Whole wheat bread, oats, and brown rice are a few of these items. They also provide essential fiber, which aids in digestion and encourages good weight maintenance.

Proteins: Found in plant and animal sources (such as legumes, beans, nuts, and seeds) and animal sources (such as meat, fish, and dairy), proteins are necessary for the development, maintenance, and repair of body tissues. A comprehensive amino acid profile is ensured by including a range of protein sources.

Fats: Good fats are necessary for energy and help in the absorption of several vitamins (A, D, E, and K).



Good fats can be found in nuts, seeds, avocados, olive oil, and fatty seafood like salmon. The usual sources of trans and saturated fats in processed foods should be minimized.

Minerals and vitamins: These micronutrients are essential for a number of body processes, such as the production of energy, healthy bones and immunological response. A broad range of these nutrients can be obtained by eating a colourful assortment of fruits and vegetables.

Water: Although it is sometimes disregarded, water is crucial for sustaining metabolic processes and staying hydrated. It is essential for general health to consume enough water each day.

Stay active: A minimum of 60 minutes of moderate to vigorous-intensity exercise should be encouraged on a daily basis. More than 60 minutes of physical activity involves enhanced fitness and health. These activities should be done three times a week or more to include muscle and bone strengthening.



Figure 1: Healthy Food Plate for the day, totalling 2000 Kcal

The Advantages of a Balanced Diet

Weight management: Eating a variety of nutrientdense foods in moderate portions helps people maintain a healthy weight and prevent obesity.

Lower Risk of Chronic Illnesses: A balanced diet helps lower the risk of developing diabetes, heart disease, some cancers, and other chronic conditions. Foods like fruits, vegetables, and whole grains that are high in antioxidants and have anti-inflammatory qualities have a protective effect.

Better Mental Health: The brain's health is greatly influenced by nutrients. A well-balanced diet has the potential to improve mental health in general, mood, and cognitive performance.

Enhanced Energy Levels: Eating a healthy diet gives you the energy you need for everyday tasks and can help you perform better physically overall.

Improved nutrients intake: Providing the appropriate balance of essential nutrients in the correct proportions.

How to Eat a Balanced Diet by Following These Useful Tips

Portion control: The ideal composition of a nutritious meal plate is 50% fruits and vegetables, 25% grains, 25% protein source, and maintaining balance and avoiding overeating can be achieved by being aware of serving sizes and making necessary portion adjustments.

Variety is Key: To guarantee a complete nutrient intake, try to eat a broad variety of foods from all food groups.

Plan Your Meals: Making healthier food choices



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Elements		Food source	Work	Deficiency or excess symptoms
Carbohydrates		Potatoes, jaggery, bananas, and whole grains	Energy generation	Weakness results from deficiency, and obesity is caused by overabundance.
Protein		Pulses, Egg, Meat, Mushroom, Soybean	Muscle or body building	Kwashiorkor disease is brought on by deficiencies. Excess causes the body to get agitated.
Fat		ghee, oil, meat	Energy generation and the composition of the body	Weakness stems from insufficiency, whereas excess leads to obesity.
Vitamin A (Retinol)		Dark green leafy and yellow/orange vegetables,yellow fruits	Immunity, growth, reproduction, and vision	Night blindness is a result of deficiency.
	Thiamine (Vitamin B ₁)	Leafy greens, pork, and whole and enriched grains	Energy metabolism	Problems with neurological function
	Riboflavin (Vitamin B ₂)	Milk products, whole and enriched grain products	Convert protein, lipids, and carbs into glucose to produce energy.	Skin and mouth inflammation
	Niacin (Vitamin B ₃)	Protein-rich foods, whole and enriched grain products	increasing the efficiency of digestion, the body's ability to properly absorb dietary juices, and the removal of waste from the intestines	Pellagra, digestive tract problems, fatigue, insomnia, apathy, and later confusion and memory loss
Vitamin B	Pantothenic acid (Vitamin B ₅)	Virtually all meals, but particularly meats, avocados, and broccoli	Metabolism of proteins, fats, and carbohydrates	Upper respiratory infections, scorching feet, agitation, vomiting, and stomach aches
	Pyridoxine orpyridoxal or pyridoxamine (Vitamin B ₆)	Foods high in protein	Metabolism of fats and proteins	Microcyticanaemia, anomalies in electroencephal- ography, and tongue swelling or glossitis
	Folate or folic acid (Vitamin B ₉)	Fortified grain products, legumes, vegetables	Aids in cellular DNA synthesis and B_{12} activation	Weakness, exhaustion, mouth sores and neurological problems
	Cyanocobalmine (Vitamin B ₁₂)	Fish, meat, poultry, eggs, and dairy products	Promotes the synthesis of new DNA, activates folate, and shields nerve cells	Weak muscles, numbness, dizziness, nausea, difficulty walking, exhaustion, and elevated heart rate
Vitamin C (Ascorbic acid)		Lemon, Amla, and Tomato	Immune system, collagen formation, antioxidants, and healthy gums	Deficit leads to scurvy
Vitamin D (Calciferol)		Sunlight, dry fruits, liver, eggs, and fatty fish	Growth and preservation of bones, as well as calcium absorption	Insufficient bone mass results in osteomalacia, calcium imbalance, and rickets.
Vitamin E (Tocopherol)		Wheat germ, fruits, vegetables, and cucumber	Healthy procreation, antioxidant; shields the membranes of cells	Fertility is hampered by deficiencies. breakdown of red blood cells and injury to the nerves
Vitamin K (Phylloquinone)		Liver, dark green vegetables, fenugreek, milk, and spinach	Formation of blood clots	Deficit does not cause blood clots to form.
Minerals	Calcium	Foods fortified with calcium, such as soy products, dairy products like milk, yoghurt, and cheese, and, to a lesser extent, some leafy green vegetables, nuts and seeds	Develop and preserve a robust heart, bones, muscles, and nervous system.	Causing numbness and tingling in your fingers, weak nails, sluggish hair growth, frail, thin skin, muscle soreness, and spasms.



	Phosphorus	Meats and poultry, fish, eggs, dairy products, nuts, legumes, vegetables, and grains	Enzyme activation, bone and tooth formation	Muscle aches and cramps, problems with cognition, your fingers are numb and tingly.
	Iodine	Fenugreek, iodized salt	Thyroid gland	Fatigue, weight gain, and swollen neck
	Iron	Brinjal,spinach,green leafy vegetables	Formation of hemoglobin	Lack results in blood loss.
Minerals	Copper	Potatoes, cashew nuts, oysters, mushrooms, and sunflower seeds	Red blood cell synthesis and maintenance of neuronal cells, immunological system, and antioxidant	Low white blood cell count, irregular heartbeat, anaemia, low body temperature, osteoporosis, bone fractures, loss of skin pigmentation, and thyroid issues
	Zink	Meat, fish, oysters, and shellfish	Contributes to the immune system, cell proliferation, division, wound healing, and carbohydrate breakdown.	Inflammation, gastrointestinal problems, sexual dysfunction, and stunted growth
Water			Temperature regulator, lubricant/shock absorber, transportation vehicle, and chemical reaction medium	low to non-existenturine production, a weak and fast pulse, sunken eyes, dry lips, poor skin turgor, and cold hands and feet

and resisting the urge to eat fast food or unhealthy snacks can both be accomplished by preparing meals in advance.

Observe Your Body: Acknowledge the signs of hunger and fullness sent by your body, and eat when you're hungry and stop when you're satisfied.

Conclusion

A balanced diet is essential for preserving health and warding off illness. People can enjoy a healthier lifestyle and improve their well-being by including a variety of foods and nutrients in their daily meals. A balanced diet must be achieved and maintained through nutrition education and thoughtful food selection. His secrets to optimal health lie in the understanding and practice of a balanced diet. By embracing a variety of nutrientrich foods and practicing mindful eating, individuals can significantly enhance their health and wellbeing. The journey to a balanced diet is not about achieving perfection but rather making informed

choices that contribute to long-term wellness. As we move forward in our health journeys, let us prioritize nutrition and cultivate habits that promote a healthier, happier life.

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