

IMPORTANCE OF NUTRITION IN LIFE

Dr.Pratibhupal ,Assistant Professor

Department of Homescience

Gandhi SatabdiSmarak P G College KoilsaAzamgarh in Koilsa, Azamgarh ,UP

Ppal0875@gmail.com

Abstract

Nutrition simply means nourishment. Its not just nourishing your body but mind too. Being a company secretary by profession and also a CPD certified nutritionist too, I believe this topic is of utmost important to let people understand the importance of nutrition in our life especially for the professionals as this platform is mostly sought and referred by the professionals fraternity or the students community too. Although nutrition is a dynamic discipline, I shall restrict in this writeup only the effective pointers which I have analyzed. This topic may be known to almost every individual but having known and actually incorporating in our daily schedule is the challenging aspect of mankind. Even me being a company secretary at the forefront I choose this topic to bring in front of you all because I have personally fought with many health issues and hormonal imbalances which had adverse impact on my personal as well as professional life.

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

Introduction

Our body is a mix of complex system and organs that perhaps gets affected by everything and anything around us – the environment we live in, pollution, the food and drinks that we consume, our sleeping ways, the way we involve in daily activities and all. Some of these factors are beyond the reach of our control, whereas, certain things are absolutely within the parameters of our control, like our diet and food choices. Whenever we eat or drink something, our body processes them and absorbs the simple yet essential minerals, vitamins, fats, proteins, carbohydrates and even the water from these foods and drinks and converts them into our blood and provides us the energy, so that it could keep us healthy and growing. The nutrition levels in food and drinks that we consume are vital to our health. It directly impacts our body and health both. It is why, the importance and need of nutritious foods is to be known by all, so that we all could live a healthy and happy life.

The vital Nutrients that Contributes to Overall Good Nutrition

Proteins: Proteins are the building blocks of what we are made of – amino acids. There are 22 different kinds of amino acids that our body requires to operate optimally. It helps building and repairing new tissues and damages cells of the body. Proteins also helps in creating different types of hormones and enzymes in our body which play crucial roles like that of sexual growth and metabolism. Some great food sources are low-fat dairy and dairy products, lentils, nuts and seeds, whole grain foods, soy and tofu, green peas and legumes.

Carbohydrates: They are the source of energy to the human body. The carbohydrates in foods that we eat are converted into glucose to be used as an energy source in our body. This energy is used by the body for its various functions like cellular constitution. The combination of Carbon, Oxygen and Hydrogen collectively makes up carbohydrates. Fruits and vegetables of all types, breads, pastas and rice are great sources of carbs.

Fats: Fats too provides the body energy. We all have a misconception about fats being unhealthy and bad. But it is not at all true. All fats are not bad. Fats insulates the body by providing us the much needed protection against external factors like changes in environment and also provides support and protection to all our organs in the body. Examples of healthy fats are avocado, dairy, fatty fishes, olive and coconut oil and alike.

Vitamins: Vitamins are compounds that are organic in nature. These compounds plays crucial role in the functionality of the body. In present world a chemical compound is known by name of vitamin. These are required by our body to develop and grow in a normal manner.

Minerals: Though these are required by the body in trace quantities, these are vital in regulating our body processes and developing new tissues. It helps boosting our immunity and we get all of the required quantities from balanced and healthy diet. Some crucial minerals are Calcium, Chromium, Chloride, Iodine, Iron and Fluoride.

Good Nutrition Boosts Your Health

Weight management

A lot of us mistakenly associate weight loss with fad diets, but eating a nutritious diet is really the best way to go about maintaining a healthy weight and at the same time attaining the necessary nutrients for healthy body function. Swapping unhealthy junk food and snacks out for nutritious food is the first step to keeping your weight within a healthy range relative to your body composition, without the need to jump on the fad-diet bandwagon.

Protecting you from chronic diseases

Many chronic diseases such as type-2 diabetes and heart disease are caused by poor nutrition and obesity. With 1 in 9 Singaporeans suffering from diabetes, the emphasis on good nutrition is higher than ever. Taking a preventive approach with a whole food-based nutrition plan also reduces the risk of developing other related diseases such as kidney failure.

Strengthening your immune system

Our immune system requires essential vitamins and minerals in order to function optimally. Eating a wholesome and varied diet ensures your immune system functions at peak performance and guards against illnesses and immunodeficiency problems.

Delaying the onset of ageing

Certain types of food such as tomatoes and berries can increase vigour and improve cognitive performance, all the while protecting your body against the effects of ageing.

Supporting your mental well-being

Eating the right foods can actually make you happier – nutrients such as iron and omega-3 fatty acids found in protein-rich food can boost your mood. This contributes to better overall mental well-being and protects you against mental health issues.

So, how does one build a sensible nutrition plan then? Healthy eating is all about eating balanced proportions of nutrient-rich foods from the various food groups, as well as adopting several healthy eating habits.

The energy provided by a well-digested food can be estimated if the gram amounts of energy-yielding substances (non-fibre carbohydrate, fat, protein, and alcohol) in that food are known. For example, a slice of white bread containing 12 grams of carbohydrate, 2 grams of protein, and 1 gram of fat supplies 67 kilocalories (280 kilojoules) of energy. Food composition tables (see table) and food labels provide useful data for evaluating energy and nutrient intake of an individual diet. Most foods provide a mixture of energy-supplying nutrients, along with vitamins, minerals, water, and other substances. Two notable exceptions are table sugar and vegetable oil, which are virtually pure carbohydrate (sucrose) and fat, respectively.

The energy value and nutrient content of some common foods

food	energy (kcal)	carbohydrate (g)	protein (g)	fat(g)	water (g)
Source: Jean A.T. Pennington, Bowes and Church's Food Values of Portions Commonly Used, 17th ed. (1998).					
whole wheat bread (1 slice, 28 g)	69	12.9	2.7	1.2	10.6
white bread (1 slice, 25 g)	67	12.4	2.0	0.9	9.2
white rice, short-grain, enriched, cooked (1 cup, 186 g)	242	53.4	4.4	0.4	127.5
lowfat milk (2%) (8 floz, 244 g)	121	11.7	8.1	4.7	17.7
butter (1 tsp, 5 g)	36	0	0	4.1	0.8
cheddar cheese (1 oz, 28 g)	114	0.4	7.1	9.4	10.4
lean ground beef, broiled, medium (3.5 oz, 100 g)	272	0	24.7	18.5	55.7
tuna, light, canned in oil, drained (3 oz, 85 g)	168	0	24.8	7.0	50.9
potato, boiled, without skin (1 medium,	117	27.2	2.5	0.1	103.9

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

Throughout most of the world, protein supplies between 8 and 16 percent of the energy in the diet, although there are wide variations in the proportions of fat and carbohydrate in different populations. In more prosperous communities about 12 to 15 percent of energy is typically derived from protein, 30 to 40 percent from fat, and 50 to 60 percent from carbohydrate. On the other hand, in many poorer agricultural societies, where cereals comprise the bulk of the diet, carbohydrate provides an even larger percentage of energy, with protein and fat providing less. The human body is remarkably adaptable and can survive, and even thrive, on widely divergent diets. However, different dietary patterns are associated with particular health consequences.

Body Mass, Body Fat, and Body Water

The human body consists of materials similar to those found in foods and however, the relative proportions differ and according to genetic dictates as well as to the unique life experience of the individual. The body of a healthy lean man is composed of roughly 68 percent water, 16 percent fat, 16 percent protein, 6 percent minerals, and less than 1 percent carbohydrate, along with very small amounts of vitamins and other miscellaneous substances. Females usually carry more fat and slightly less of the other components than do males of comparable weight.

The body's different compartments—lean body mass, body fat, body water—are constantly adjusting to changes in the internal/ external environment so that a state of dynamic equilibrium (homeostasis) is maintained. Tissues in the body are continuously being broken down (catabolism) and built up (anabolism) at varying rates. For example, the epithelial cells lining the digestive tract are replaced at a dizzying speed of every three or four days, while the life span of red blood cells is 120 days, and connective tissue is renewed over the course of several years.

Although estimates of the percentage of body fat can be made by direct inspection, this approach is imprecise. Body fat can be measured indirectly using fairly precise but costly methods, such as underwater weighing, total body potassium counting, and dual-energy X-ray absorptiometry (DXA). However, more practical, albeit less accurate, methods are often used, such as anthropometry, in which subcutaneous fat at various sites is measured using skinfold calipers;

bioelectrical impedance, in which resistance to a low-intensity electrical current is used to estimate body fat; and near infrared interactance, in which an infrared light aimed at the biceps is used to assess fat and protein interaction. Direct measurement of the body's various compartments can only be performed on cadavers.

Conclusion

The structure of the body tends to change in somewhat expected ways over the course of a lifetime—during the growing years, in pregnancy and lactation, and as one ages—with communicate changes in nutrient needs during separate phases of the life cycle . Regular exercise can help attenuate the age-related loss of lean tissue and increase in body fat. People need to consume around 1500 calories a day, usually across 4 to 6 meals. Eating the healthy diet means not going over that amount too often, trying not to leave meals, because we tend to over compensate for it later, and to get our daily calorie allowance from the right foods. Around the half of what we eat should be fruit and vegetables in a wide range of colours – the broader the rainbow the better. Then around a one quarter of our intake should come from proteins like meat, chicken, fish, legumes, dairy and nuts, and around a quarter from carbohydrates like whole grains and starchy vegetables. We can eat very little fat or sugar that has been added to food and instead get both our fats and energy intake from the sources we mention above. Healthy fats are coming from proteins and things like avocados and olive oil, while healthy sugars come from fruit and dairy products.

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