Human body needs nutrients to keep it functioning normally. These are needed to provide energy, regularize all the physiological processes of the body, minimize damage to various body parts and help in rejuvenating body’s cells and tissues. For all these functions, one needs nutrients like proteins, carbohydrates, vitamins, fats and minerals like iron, calcium, zinc etc.

Lack of any one or more of these nutrients causes specific deficiency symptoms and signs. Deficiency of iron and vitamin B12 can cause anemia, where the level of red blood corpuscles in the body is less than normal. This is manifested by weakness, body ache, breathlessness on exertion and palpitations. Chronic anemia can affect the heart causing chronic heart failure. Calcium deficiency causes softening of bones, pathological fractures, musculoskeletal pains and can affect rhythm of the heart. Dry brittle hairs, excess hair fall, swelling of feet and reduced immunity occur due to protein deficiency.

Deficiency of various vitamins manifests in various ways like vitamin A deficiency causes impaired night vision, Vitamin B. complex deficiency causes dryness of skin, abnormal sensations, e.t.c. Body’s ability to fight infections is reduced due to vitamin C. deficiency, whereas bones become weak due to vitamin D. deficiency. Even fat is necessary for the body. Lack of adequate amount of fat in the body causes weakness and even impairs various metabolic processes of the body. Fat is necessary for production of sex hormones and absorption of vitamins like vitamin A and E. Hence deficiency of fat can also cause hormonal disorders and symptoms of deficiency of vitamin A and E. Contribution of body fat in providing shape to the body and glow to the face is undisputed.

As deficiency of nutrients makes one sick, so does excess of nutrients. Excess of vitamins causes toxicity. Obesity occurs when calories are consumed in excess of their requirement. This becomes a precursor of many diseases like hypertension, heart diseases, e.t.c. It also predisposes one to early and more severe form of degenerative changes of joints mainly backbone, knees and hips.

Malnutrition of any kind can derange the hormonal balance of the body, causing menstrual disorders in LOLO women and reduced fertility in both genders. A beautiful skin needs many nutrients including vitamins, proteins and fats.
Malnutrition

Therefore, it is important for an individual to maintain a normal body weight, based on height and weight. It is calculated by the body mass index (BMI=weight in Kg./height in sq. meter). A BMI less than 18 indicates starvation and malnutrition, whereas BMI more than 25 indicates obesity. Diet is the first and most important factor in this regard. Diet should be balanced containing all essential nutrients. This includes fresh vegetables, fruits, milk and milk products, fish, whole grains and nuts. Ideally food should be freshly cooked, instead of processed, because nutrients are retained best in freshly prepared foods. Alcohol adds on to calories and provides no nutrition, hence best avoided. Same is for white sugar. Honey and other natural sweeteners like maple syrup should be preferred over white sugar, if one wants a sweet taste. An overweight person needs to reduce weight, whereas an underweight person has to add calories.

Role of physical exercise is equally important in maintaining normal body weight by burning calories not needed for the body. It can be of any form depending on age, physical build, stamina and one’s liking. One should not exercise beyond point of endurance. In fact, being physically active throughout the day is useful in keeping body fit by all means. If somebody exercises for 20-30 minutes each morning and then spends the entire day sitting, fat would tend to accumulate on abdomen and hips (central obesity). This is a risk factor for metabolic syndrome, where body cells become resistant to insulin, making one prone to diabetes, hypertension, lipid abnormalities and heart diseases.

To keep the body healthy, it should be nourished adequately.

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