



6 ESSENTIAL NUTRIENTS

- 1) **CARBOHYDRATES:** are the cornerstones of your diet, and are the primary energy source for the body fuelling anaerobic and aerobic exercise. Carbs regulate fat and protein metabolism.
Simple (sugars) carbs: fruit, fruit juices, milk, sugar, syrup, honey, jams and candy.
Complex (starch) carbs: breads/grains, cereals, vegetables, potatoes, pasta, rice and legumes.
Daily caloric intake/consumption: 50-60%, 5-7 grams per kg of body weight
 - 2) **PROTEINS:** are the building blocks of muscles, and are responsible for growth, maintenance and repair of all cells. Protein is a source of energy (inefficient) and can be used if inadequate carbs are available.
Choose lean/low fat sources: skinless chicken and turkey, beef, eggs, fish, beans, cheese, milk and tofu.
Daily caloric intake/consumption: 15-20%, 1.2-1.8 grams per kg of body weight
 - 3) **FATS (LIPIDS):** serve many roles within the body; a source of energy for aerobic exercise longer than 20 minutes duration, forms the basic structure of all cell membranes and acts as an insulator against heat loss.
Unsaturated Fats (poly & mono): olive, corn, canola oils.
Daily caloric intake/consumption: 20%
Saturated Fats: butter, lard, cuts of meat
*contributes to cholesterol levels, heart disease and some cancers.
Daily caloric intake/consumption: <10%
 - 4) **WATER:** it is the largest component of the body representing from 45-70% of your body weight. Water stabilizes body temperature and is an important nutrient for athletic/sport performance. Dehydration is the #1 cause of fatigue. Water suppresses the appetite naturally and helps the body to metabolize stored fat, it does not provide energy.
Daily intake/consumption: 10-12 cups, 2.5 – 3.0 litres
*re: caloric/energy expenditure.
 - 5) **VITAMINS:** are non-caloric organic substances that are essential for the body to function normally. Vitamins aid in the process by which other nutrients are digested, absorbed and metabolized. They do not provide energy.
e.g.: A, B complex, C, D, E
Daily intake/consumption: 1 multi-vitamin
 - 6) **MINERALS:** are inorganic substances that aid in muscle contractions (calcium) and many other body functions, they do not provide energy.
e.g.: sodium, magnesium, potassium, chromium.
Daily intake/consumption: 1 multi-mineral
- FIBER:** is the main contributor to the roughage content of your diet which helps to promote efficient intestinal functioning and also aids in the absorption of sugars into the blood stream
e.g.: bran, whole wheat grains, vegetables, fresh fruits.
Daily caloric intake/consumption: 25-30 grams
- CALORIES:** are measured from the carbs, protein and fat you intake/consume and expend/burn.
Carbs and protein contain 4 calories per gram and fats contain 9 calories per gram.
- METABOLISM:** your body is a machine, FOOD IS THE FUEL. The level of energy produced is measured in calories. **METABOLISM** is the process of converting food to fuel.