

Energy and balance



Energy Balance and Nutrients Determination of Energy The determination of the energy in the food involves the use of calorimetric bomb, which involves the determination of the number of calories in the foods. The calorimeter uses the principle of determining the volume of oxygen required to combust a substance of known weight. After the determination of the amount of oxygen, then the values gotten are computed and consequently the realization of the amount of energy in the substance. This is based on a number of factors of calorific value (Hervera, et al, 2008).

The determination of the amount of energy required in breaking the particles of the given food are to be pure. Contamination of the food portions interferes with the energy requirement in the oxidation of the food. The amount of energy required in the breakdown or oxidation of the foods, which contain the carbohydrates, proteins and fats, can be obtained by computation of the energy required in breaking these food components (Hervera, et al, 2008). The figures gotten are then computed and thus the energy requirement for the oxidation of the food can easily be determined.

There are specific values of energies required to break down the food components in the various portions. This implies that as the food increase in volume and mass, the amount of energy in them is higher than the ones outlined in the formulation of the energy determination in the foods contain. The determine values of the contained calories in the given foods and the feeding stuffs; will provide exact estimation of the energy present in the foods being tested. The higher the amount needed to oxidize the foods, the higher the number of calories in the foods under examination (Hervera, et al, 2008).

Nitrogen Balance

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Nitrogen balance is the measurement of the input nitrogen and the output of nitrogen within a given set of products in the production line. This involves the nitrogen being taken in by the organism and finding a possible amount of nitrogen the substance produces. The difference between the nitrogen intake and output will determine the amount of nitrogen that the substance is giving out to balance the surrounding (Moya, Tenorio & Bond, 2013).

Nitrogen balance can be portrayed in the Blood Urea Nitrogen and urea concentration in urine. The urea is a component of the nitrogen balance of the substance, organism, ecosystem or environments.

Energy Balance

Energy balances is the outcome of the comparison of the amount calories taken by a body and the amount of the elements or calories taken out. The energy in, involves the energy that is taken in through eating while the energy out can be defined by release of energy through physical activities. The breathing of the air in and out through the nostrils involves the burning of calories or even digesting the foods we eat. Almost all our activities that we get involve into imply the use of calories to the task of the generating adequate calories and injecting them within lines of consumption (Moya, Tenorio & Bond, 2013).

Nutrition involves the identification and consumption and the further process of ingesting of foods. Human nutrition involves; meal planning, preparation and economic involved in the preparation of the food. Nutrient is the component of the foods that are healthful that organism uses to survive and grow. Nutrients include the carbohydrates, proteins and fats within the different kinds of food. On the other hand, essential nutrient is the nutrient requisite for normal human body functions. These can include: vitamins, vital

fatty acids (Khan, Castro-Guerrero & Mendoza-Cozatl, 2014).

References

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