How Does Human Metabolism Work?

Metabolism refers to all types of changes which occur to food nutrients after absorption by the alimentary tract, and to the cellular activity involved in utilizing these nutrients. These changes result in the combustion of food stuffs with the release of energy in the form of heat and chemical energy such as ATP, called energy metabolism.

Human metabolism is basically made up of three parts:

- **Resting Metabolism** 70%
- **Thermic effect of food** 10%
- **Physical activity** 20-25%

1. **Resting Metabolic Rate (RMR) called (Basal Metabolism)**
   This is the amount of calories needed to run all essential functions and chemical reactions while in a rested and quiet state. RMR is the largest part of total metabolism and accounts for 65 - 75% of calories burned in a day.

2. **Thermic Effect of Food (called Specific Dynamic action)**
   The body uses energy to digest and absorb the nutrients present in the food we eat. The rate of energy used for the TEF is about 10%, it can be increased depending on the composition of each meal.

3. **Physical activity**
   The amount of energy the body burns during daily activities such as exercise, recreation, work, housework, etc. Daily physical activities account for 20 - 40% of calories burned each day. **This part will vary depending on the individual and how active they are each day. A sedentary person will require less calories to maintain weight than a busy worker in a construction site!**
   It is here where we can have the greatest effect on metabolism. The intensity, frequency and duration of any activity all have an effect on metabolism.

References:

1. [www.weightlossforall.com/metabolic-rate.htm](http://www.weightlossforall.com/metabolic-rate.htm)