



ISSN: 2456-0057  
IJPNE 2017; 2(2): 84-86  
© 2017 IJPNE  
www.journalofsports.com  
Received: 19-05-2017  
Accepted: 20-06-2017

**Sanjay**  
Assistant Professor, (Guest  
Faculty / Resource Person),  
Department of Physical  
Education I.G. University  
Meerpur, Rewari, Haryana,  
India

## Requirement of energy for a healthy life

**Sanjay**

### Abstract

This paper aims to bring in light the significance of proper nutrition and for a healthy lifestyle. The importance of balanced nutrition for the physical and mental growth of a human being has been discussed in this paper. It also accounts the details on energy and various impacts of a balanced and healthy diet on different parts of body. It also talks about the obesity and ways to fight against it.

**Keywords:** energy, obesity, health, balanced diet, nutrition

### Introduction

Good nutrition is essential throughout your entire life cycle. The right balance of nutrition is necessary for physical and mental growth and development, performance and productivity in daily living, and general health and wellbeing, particularly your ability to defend against and recover from illness and disease. The benefits of a healthy diet include increased energy and vitality, improved immune system function, control of weight gain and maintenance, and reduced risk of many chronic diseases.

Deficiencies, excesses and imbalance in dietary intakes all have the potential to produce negative effects on health which can lead to an array of diet-related disorders. Disorders of deficiency include scurvy (lack of vitamin c).

### Dietary Energy

Various nutritionists have described how a varied diet can provide our bodies with the energy and nutrients we need for an active health lifestyle. Simply put, the term “energy” represents the calories we consume from food and those burned through physical activity. Thus people who are more physically active in their work and daily routines and exercise training burn more calories than those who are less physically active and lead more sedentary lifestyles.

### Energy Balance

An important part of a healthy lifestyle is maintaining energy balance to prevent excessive weight gain over time. Weight gain is the result of an excess of energy intake over energy expenditure. The aim should be for energy in (calories consumed from food and drink) and energy out (calories burned through physical activity) to be in balance for weight maintenance. Weight gain will result when energy in over time is greater than energy out

Weight loss can be achieved when energy out is greater than energy in over time: this means increasing energy expenditure (more exercise) reducing energy intake (diet restriction) or a combination of both

### Development of Overweight and Obesity

Rates of obesity around the world have more than doubled since 1980 (Figure 1), though some countries have changed much more than others. These changes have coincided with a decline in physical activity and increased choice and availability of enjoyable foods.

**Correspondence**  
**Sanjay**  
Assistant Professor, (Guest  
Faculty / Resource Person),  
Department of Physical  
Education I.G. University  
Meerpur, Rewari, Haryana,  
India

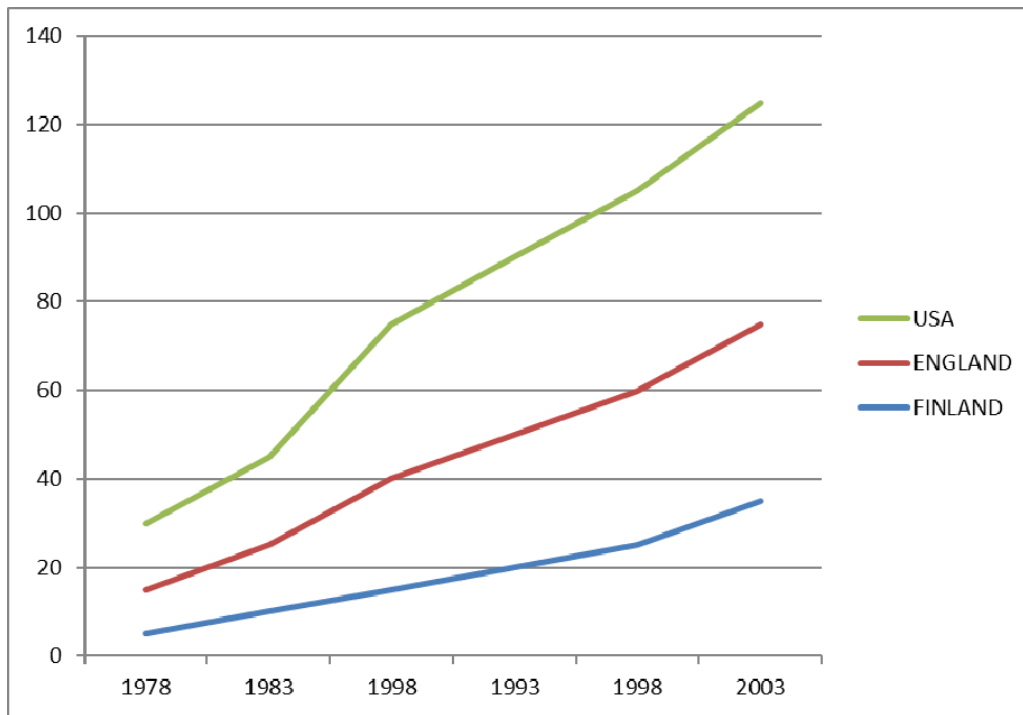


Fig 1



Fig 2

**Are you a Healthy Weight?**

A good way for adults to check if they are a healthy weight is to use the Body Mass index (BMI). The calculation divides your body weight in kilograms by your height in metres squared. You can check this online at various websites, including:

BMI is used to calculate whether a person is underweight, a healthy weight, overweight or obese for their height. It can indicate whether you're at increased risk of the serious health problems that are linked to being overweight, such as Type 2 diabetes, heart disease and certain cancers. BMI allows for natural variations in body shape, giving a health weight range for a particular height.

BMI between 18.5 – 24.9: you are in the healthy range  
 BMI score of 25 or more: your BMI is above the ideal range and this score means you may be overweight.

BMI of 30 or more: you are officially classified as obese  
 For adults who are overweight or obese, losing even a little excess weight has health benefits. Physical activity is an important part of losing weight, in combination with eating fewer calories.

**Maintaining a Healthy Weight**

At the individual level, you can achieve energy balance and a healthy weight by:

- Limiting energy intake, especially intake from fats
- Limiting the intake of sugars
- Limiting intake of alcohol
- Replacing some of the above with fruit and vegetables, as well as beans, pulses, whole grains and nuts
- Engaging in regular physical activity

For more information, see Section 5 below and also see the list of information sources at the end of the booklet, especially NHS Choices and the Food Fact Sheets of the British Dietetic Association.

**How Much Energy do I Need?**

Energy requirements are highly dependent on body size and on habitual physical activity.

Because of this, it is hard to make recommendations that are meaningful on an individual basis. What we can say is that if you are overweight, you should eat less and/or exercise more than you have been doing.

**Managing your energy balance in real Life**

Eating just 150 calories more a day than you burn lead to an extra 2.3 kg body weight over 6 months. That is a gain of 4.5 kg a year and 45 kg over 10 years!

If you don't want this weight gain to happen, or you want to lose any extra weight you are carrying. You can either reduce your ENERGY IN or increase your ENERGY OUT. Doing both is the best way to achieve and maintain a healthy body weight.

At rest, you will be using energy at a rate of about 1 – 1.2 calories per minute, which is equivalent to about 1400 to 1700 calories per day. All exercise increases the rate of energy expenditure. Walking or jogging requires about 1 kcal per kg of body weight per km covered. Note that heavier people burn

more energy at the same speed and that the amount of energy needed depends on distance covered but not on speed. So if you weigh 70 kg and walk slowly (3 km per hour) you will use up about 105 calories in a 30 min walk, but if you weigh 100 kg. You will use about 150 calories. As you get fitter and progress to jogging. You might cover 4 km if you still go out for the same time (ie 30 minutes): now you will use about 280 calories of your body weight is 70 kg and 300 calories if you weigh 100 kg. Note that the highly trained athlete with a body weight of 70 kg who can cover 10 km in 30 min will use about 700 calories in the same time. No wonder highly trained endurance athletes eat so much!

All other activities will increase ENERGY OUT, depending on the intensity and the time spent. Dancing can be as good as jogging or tennis, for example.

### **Conclusion**

One therefore can conclude that: Good nutrition is highly important throughout our entire life cycle. The appropriate amount of nutrition is necessary for physical and psychological growth and development. There are a lot of benefits of a healthy diet including increased energy and vitality, improved immune system function, control of weight gain and maintenance, and reduced risk of many chronic diseases and innumerable other.

### **References**

1. <http://www.nhlbisupport.com/bmi/bmi-m.htm>
2. <http://www.eatright.Org/Public>
3. <http://www.bda.uk.com/foodfacts/index.html>
4. <http://www.dietwatch.com>
5. <http://www.nutrition.org.uk/>