Your Health

By Dr Paul Roumeliotis

BMI Is an Important Measure of Health

Obesity levels are now at epidemic proportions. As a result, it is often in the news and the term BMI is referred to very frequently. So what is BMI? The Body Mass Index or BMI is used to assess the weight status of individuals. The BMI is a calculation based on the weight and height of a person. Health care professionals can determine the BMI through various tables or even thorough specific online or computer-based calculators. Mathematically, the BMI is the weight over the square of the height and is one of the best ways to indirectly measure total body fat.

Today, whether one is considered overweight or obese depends on the BMI. In adults, the weight status based on the BMI is as follows:

- BMI less than 18.5 = Underweight
- BMI 18.5 - 24.9 = Normal
- BMI 25 - 29 = Overweight
- BMI over 30 = Obese

In children, the BMI varies with the age and sex of the child. The BMI in children is called BMI-for-age. The BMI value itself is plotted on a specific BMI chart. Just like the height and weight growth charts parents are familiar with, the BMI charts also contain a series of lines which indicate specific percentiles. For example, if a 10 year-old boy's BMI is 18, this places him at the 75th percentile. This means that compared to other kids his age, 75% have a lower BMI than him. In children, instead of looking at the actual BMI value, we focus on the specific percentile of the BMI according to age and gender. BMI percentiles indicate the following:

- BMI-for-age less than the 5th percentile means underweight
- BMI-for-age 85th to 95th percentile means the child is at risk for overweight
- BMI-for-age greater than 95th percentile means the child is overweight

Why is the BMI important?

In children, recent studies have shown that cardiac disease risk factors are associated with the BMI-for-age. 60% of children aged 5 to 10 years with a BMI-for-age greater than the 95% had at least one obesity-related condition such as high blood pressure, high cholesterol, or high insulin levels (an indication of type 2 diabetes). 20% of these children had 2 or more such abnormalities. This is alarming, as we know that obesity does cause a host of problems in adults, but now it is known that the same effects can be seen in young children. This is why public health specialists have sounded the alarm on childhood obesity. This is not to say that overweight or obese adults are not at risk; they are, and the risk increase as the BMI increases. However, the younger one develops complications such as diabetes and heart problems the poorer is one's outlook for living a long and healthy life.

In conclusion, the BMI is a very useful tool in evaluating weight status of an individual and is being increasingly used by health professionals for both adults and children.

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