







# The Sugar Myth

Sugar is a simple carbohydrate. Each gram of sugar provides 4 kcal of energy. Amongst all carbohydrates, glucose is the most readily available form of energy for the brain. While consuming sugar alone will not directly lead to diabetes, we should reduce the intake of sugar to no more than 10% <sup>1</sup> of our daily energy intake required in a balanced diet. Take an adult with a daily energy intake of 2,000 kcal as an example. His or her daily sugar intake should be less than 50 grams, which is approximately 10 teaspoons of sugar.

When we talk about sugar, however, many of us know that excessive sugar intake will lead to health problems such as weight gain and tooth decay. With a wide range of products available in the market, are there any 'healthier' sugar options?

#### • Granulated Sugar

Granulated sugar is the most commonly used sugar. It is extracted from sugar cane and produced after refinement. Granulated sugar is widely added to food, including candies, cakes, pastries, fruit-flavoured drinks and soft drinks. As granulated sugar has undergone refinement, every 100 grams of granulated sugar contains over 99% of sucrose with only traces of minerals.

### • Brown Sugar

Same as granulated sugar, brown sugar is extracted from sugar canes. As the number refinement process is less than granulated sugar, brown sugar retains a greater amount of raw materials from sugar canes. In this regard, brown sugar contains more calcium, potassium and iron than granulated sugar <sup>2</sup>. However, as these minerals can be obtained from our daily diet, we do not have absorb them from brown sugar.

Regardless of brown or granulated sugar, each gram of these sugars contains 4 kcal of energy. Therefore, over-eating either kind of sugar will lead to excessive energy intake, which may increase the risk of obesity.

#### Honey

Stored in beehives, honey is a substance made by bees after collecting from nectar. Each gram of honey contains 3 kcal of energy and traces of vitamins, minerals and amino acids <sup>2</sup>. Since honey contains more water, it contains less energy than granulated and brown sugar. However, we usually add a larger amount of honey than ordinary sugars to our food or drinks. Thus, we may easily consume excessive energy if we don't pay attention to the portion.









## • Sweeteners

Low-calorie sweeteners contain very little or no energy and are generally added to sugar-free chewing gum, candies and diet soft drinks. The sweet flavour of different kinds of sweeteners varies, but it is usually much sweeter than granulated sugar. As only a small amount of sweeteners is used, the energy of food added with sweeteners is less than that with sugar <sup>3</sup>. Nonetheless, frequent consumption of sweetener may develop the adverse eating habit of sweet tooth. We should, therefore, avoid the excessive intake of sweetener.

All in all, there is no so-called 'healthier' sugar available in the market. No matter which kind of sugar, excessive intake of sugar could lead to excessive energy intake or the development of sweet tooth in eating habits. Hence, controlling the portion of sugar is the key.

- <sup>1</sup> The World Health Organization
- <sup>2</sup> The Nutrient Data Laboratory, the US Department of Agriculture
- <sup>3</sup> The Centre for Food Safety

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