

## Should We Eat Fruit Before or After Meals?

It is believed that having fruit before a meal can improve the absorption of its vitamins and minerals. However, there is inadequate scientific evidence so far to show that nutrients in fruit are better absorbed if it is eaten on an empty stomach or before a meal. Therefore, the nutrient absorption does not differ significantly whether the fruit is eaten before or after a meal.

In principle, you can eat fruit at the time based on your own dietary habits. Eating fruit at different times of the day brings you different advantages. Fruit can replace energy-dense and high-fat snacks when it is eaten between two main meals. Although fruit contains fructose, its energy level is relatively lower as compared with other snacks in general (see Table 1). Besides, fruit is rich in dietary fibre which helps to enhance satiety and control weight. On the other hand, if you have fruit before or after a meal, vitamin C in fruit can improve the absorption of non-haem iron from plant sources such as wood ear, nuts and dried beans. It also helps to maintain good health.

Table 1: Comparison of Fruits and Less Healthy Snacks in Terms of Nutrients

Per 100g Nutrients	Apple (with skin)	Western pear (with skin)	Potato chips (barbeque flavor)	Chiffon cake	Cheese sandwich biscuit
Energy (kcal)	52	51	491	320	490
Total Fat (g)	0.2	Trace	32	22	24

Source: The Centre of Food Safety

Furthermore, adequate intake of fruit every day can reduce the risks of developing chronic diseases, such as cardiovascular diseases and colorectal cancer. Adults are recommended to eat at least two servings of fruit every day in different varieties to obtain various nutrients. One serving of fruit is approximately equivalent to:

- 2 pieces of small-sized fruit (e.g. kiwi fruit, plum)
- 1 piece of medium-sized fruit (e.g. apple, orange)
- 1/2 piece of large-sized fruit (e.g. banana, grapefruit, star fruit)
- 1/2 bowl of fruit cuts (e.g. watermelon, cantaloupe, honeydew melon)
- 1/2 bowl of mini-sized fruit (e.g. grapes, lychees, cherries, strawberries)
- 1 tablespoon of dried fruit without added sugar or salt (e.g. raisin, pitted prune)
- 3/4 glass of pure fruit juice\* without added sugar (e.g. fresh orange juice with pulp)

\*Pure fruit juice contains less dietary fibre, a much higher sugar content and less nutrients than whole fruit. Therefore, pure fruit juice in excess of 3/4 glass (180 ml) will still be counted as 1 serving of fruit only on the same day.

Remark: 1 bowl is about 250 to 300ml; 1 glass is about 240 ml; 1 tablespoon is about 15ml