

Get Buzzy with the Fizzy ...

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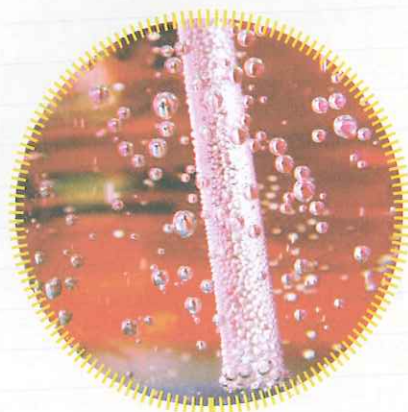
Fizzy Drinks

The word 'fizzy' means having a lot of bubbles. A fizzy soft drink is essentially a non-alcoholic sugary beverage (飲料) that is carbonated, of which the most typical example is Coca-cola. The name used for such drinks varies from place to place. In the USA, it is commonly called 'soda' while in Britain, people are used to calling it 'pop'.

Carbonated water was invented in 1767 by an Englishman named Joseph Priestley, who successfully experimented with infusing (注入) carbon dioxide into water. His invention has changed our drinking habits ever since.

Today, all fizzy drinks are made by mixing pressurized carbon dioxide gas into pure water. This process is known as carbonation. When the bottle is opened, the pressure is released and bubbles are formed.

Besides carbonated water, another main ingredient of fizzy drinks is sugar. Most sodas have 8 - 12% sugar content, thus often blamed for such health problems as dental decay, obesity and diabetes.



Instant-Freeze Coca-cola

神奇凝冰可樂



When Instant-freeze Coca-cola was launched on the market, it instantly became the latest craze (狂熱). This Coca-cola freezes the moment you open the bottle and give it a little shake.

The trick can be explained by the concept of 'freezing-point depression'. The presence of chemical compounds in a liquid will depress (降低) its freezing point. The more compounds a liquid contains, the lower its freezing point is. While pure water freezes at 0 degree Celsius, Coca-cola freezes at a lower temperature (around -2 degree Celsius) because it contains compounds like sugar, flavourings and dissolved carbon dioxide.

In fact, Instant-Freeze Coca-cola is just ordinary Coke except that it is stored at a temperature slightly lower than -3 degree Celsius. Under this condition, the Coke will not freeze because of the large amount of dissolved carbon dioxide it contains. When the Coke is taken out of the freezer and its cap loosened, pressure is released. With less dissolved carbon dioxide in the liquid, along with a sudden rise in the freezing point, the Coke turns into slush (沙冰). Shaking the bottle slightly will speed up (加快) the process, giving it a magical effect.

Make Your Own Instant-Freeze Coca-cola at Home



- Chill a plastic bottle of Coke in the freezer for about 2 hours.
- Check the Coke every 30 minutes to make sure that it has not frozen.
- Take it out, loosen the cap and shake it a little bit.
- Sit back and watch your Coke freeze in 2 seconds.