



Health Drink that Harms

**G**LUCOSE is a popular health drink all over the world. It is given to infants and children quite routinely; athletes favour it for its supposed energy-giving properties. A whole host of advertisements appear in newspapers and magazines, proclaiming the benefits of glucose. The medical profession too does its bit to promote glucose as a health supplement. As it turns out, such promotion is often at the cost of people's health since new research suggests that glucose is not only unnecessary but could have harmful effects if taken for prolonged periods.

The possible ill effects of glucose can be demonstrated by drawing a distinction between complex carbohydrates and glucose. When complex carbohydrates, which are found in wholesome food, are digested, they are broken down to glucose at a steady pace. The converted glucose from carbohydrates is thus absorbed slowly into the blood stream, maintaining a fairly constant blood sugar level. However, when glucose or simple forms of sugar drinks are directly taken, they are immediately absorbed into the bloodstream,

## Health

# Glucose can be Harmful

leading to a rapid rise in blood sugar level. The rapidity with which sugar floods the bloodstream is harmful rather than beneficial.

Fortunately, the body has a natural mechanism to counteract this rocketing sugar level. The cells in the pancreas immediately release insulin to bring down the blood sugar level. However, if the sugar levels in the body are too high for long stretches of time, the pancreas may begin to under or over produce insulin. If it produces too little insulin, it can result in diabetes. If it produces too much insulin, then low blood sugar or hypoglycaemia may result. Its manifestations are headaches, sleepiness and mood fluctuations.

There are several conditions that can arise as a consequence of high blood sugar. These are:

- Uncontrolled diabetes can eventually lead to blindness, severe heart damage and death.
- Cell damage in various parts of the body. Special cells in different parts of the body, such as the

eyes, kidneys and bloodstream will turn the glucose into fructose (another simple sugar) and then another form of sugar called sorbitol. Sorbitol has the tendency to crystallise with time and if this happens, it can damage the cells.

- Of late, excess sugar has also been linked to heart disease, damage to arteries and increased uric acid in the blood.

The effects of drinking glucose too often can be particularly deleterious for children whose organs are more delicate and vulnerable. If a child is given glucose frequently, then his delicate pancreas may react haphazardly to the stress by producing too much or too little insulin, thereby increasing the child's chances of developing hypoglycaemia or other related health problems. Giving sugared drinks such as glucose in a bottle to babies and young children also often leads to rampant dental caries. Furthermore, glucose drinks are just empty calories without nutrients — which puts them in the same category as junk foods.

The link between sugared drinks and dental damage was brought home sharply to a young mother in Germany. In 1986, she took Milupa, a baby food company, to court for marketing sugared herbal teas. She had been giving the product for nearly a year to her son, when he was still a baby. This had completely destroyed his teeth. He also had difficulties in speech, chewing and digestion as a result of this impairment.

It is obviously time that we learnt that even so-called health drinks should not be taken at their face value. □

