

By MONALISA DAS

AS CHILDREN, most of us were obliged to drink milk. Even though we protested our way through the mandatory two daily glasses, we ended up downing them nevertheless. Imagine the plight of a child who feels ill every time she tastes milk. This is what happened to five-year-old Shruti who would often throw up at the first sip.

Despite her mother Vinisha's efforts to create different milky concoctions in the hope that they may appeal, nothing worked. When Vinisha mentioned this to the family doctor, he shrugged her concerns aside as those of an over-concerned parent. But Shruti's complaints of stomach ache, frequent burping and tummy upset continued and she was taken for a check-up. It turned out that she had lactose intolerance – a condition in which the person cannot digest milk. This is caused by the lack of an enzyme called lactase. All dairy products were cut out of her diet and her condition improved within a month.

Along with lactase, there are various other enzymes that play a key role in our metabolism. "Right from maintaining the blood flow to oxygen circulation or even digestion, our bodies cannot function without these enzymes," says Dr S K

LIST OF DRUGS TO AVOID IS MY LIFESAVER

FIFTEEN year-old Sahil Dogra discovered that he had G6PD deficiency when he reacted to antibiotics prescribed for fever. This sort of enzyme deficiency is common and occurs among 400 million people worldwide. Those with this deficiency react to certain drugs which lead to excessive loss of red blood cells, causing health complications such as jaundice, anaemia and kidney failure. In Sahil's case, as long as he is careful to avoid these drugs, he can continue to lead a pretty normal life.

SHEKHAR YADAV



Thakur, senior consultant, gastroenterologist, Moolchand Hospital. These are broadly classified into digestive and metabolic ones. Digestive enzymes help in the breakdown and absorption of food into the bloodstream. A unique enzyme is needed to digest each nutrient or type of food that we consume. So, while protease enzyme is needed to digest proteins, amylase is needed for the digestion of carbohydrates and lipase helps in the breakdown of fats. Along with the digestive enzymes produced by our body, we need enzymes from other sources too. These are called food enzymes that are derived from food sources, largely raw fruits, vegetables, and supplemental sources. These are essential as they simplify the digestion process.

In the absence of any of these enzymes, the body can't digest a particular nutrient, leading to health complications. For instance, lipase deficiency causes loss of fats in the faeces, a condition known as steatorrhea. "This further leads to weakness, weight loss and bone pain," says Dr Thakur. Someone with lipase deficiency may end up with cholesterol problems and diabetes too. However, lactose intolerance tops the list of enzyme deficiencies.

LACTOSE INTOLERANCE

"LACTOSE intolerance is one of the most common digestive enzyme deficiencies in India. Most of us develop temporary milk intolerance at some stage of our lives," says Dr Krishan Chugh, HOD, department of paediatrics, Sir Ganga Ram Hospital. Milk contains lactose sugar that needs to be broken down into glucose and

galactose for digestion. This is done by an enzyme called lactase that's present in our small intestine. When this enzyme is lacking, lactose gets carried in its full form to the large intestine. There it breaks down into lactic acid and acetic acid instead, creating gastric problems. "This causes bloating, gas problems, abdominal pain, nausea, and loose motions," says Dr Suranjit Chatterjee, senior consultant, internal medicine, Indraprastha Apollo Hospital.

Recovery largely depends on the degree of deficiency. "Lactose intolerance can be classified into primary and secondary types. The former is congenital that's present in the person since birth. It's a permanent condition and the person has to follow a lactose-free diet all his life. The latter is a temporary condition which doesn't last for more than a few weeks," says Dr Rajiv Chhabra, HOD, paediatrics, Artemis Hospital. Primary lactose intolerance

is a rare condition though. "Someone with this condition has to rely on soy milk and hydrolysed protein or protein supplement to make up for the lack of dairy products," says Dr Chhabra. Secondary lactase deficiency is temporary and could be a result of prolonged intake of antibiotics, or due to intestinal infections or some injury to the small intestine. "At times, even chemotherapy, excessive usage of some drugs, steroids and exposure of radiation in

WHEN A SIP CAN MAKE YOU SICK



Halle Berry



Victoria Beckham



Jessica Simpson