

MAIL TODAY

Common prescription and over the counter medicines can cause serious nutritional deficiencies and it is important to know how to counter these

BY MEGHANIE DUTTA LINGAM

FOR SOME aspirin is the magic pill, for others it is combifam. Reaching for one of these is almost an involuntary reaction, so conditioned are we to the feeling of relief that washes over us once we have the little white pill in our palms! Medicines are certainly useful in our lives, even though they may have harmful side-effects.

What most of us don't know, however, is that many of the pills we pop regularly create nutritional deficiencies in our bodies. Several common drugs — both prescription and over-the-counter — can rob the body of essential vitamins and minerals, adding to existent health problems or causing new ones. In fact, many of the side-effects of these drugs are an outcome of the way they interfere with nutrients in the body. Drugs affect nutrients in three primary ways — by destroying the natural and beneficial bacteria in the gut, by putting pressure on the liver and by blocking cellular normal absorption of nutrients.

DIGENE DEPLETES VITAMIN B

Gorging on kebabs with butter *naan*, or a cheesy pepperoni pizza may be your idea of paradise, even though you know it is likely to lead to indigestion and heartburn. In fact your bottle of Digene is now a permanent fixture in the bathroom cabinet. What could settle that bloated feeling better, you may think. But what we are going to tell you about this, and other drugs that reduce the acid secreted by the tummy and relieve the pain of heartburn and indigestion may actually propel you to toss it out! In the process of making the intestinal tract less acidic, such medications inhibit the absorption of various vitamins and minerals.

"The stomach needs a certain amount of acid for proper absorption of nutrients into the body. An excess of antacids can drastically reduce the natural amount of acid required for the gut to assimilate nutrients such as zinc, magnesium and vitamin B12" says Dr Monika Mahajan, senior consultant, internal medicine, Max Superspeciality.

Aluminium and magnesium based antacids in particular can bond with calcium and prevent its absorption. Low calcium levels increase the risk of weak bones and osteoporosis. Zinc is already a poorly absorbed mineral and taking antacids decreases its absorption even further. Since this mineral plays an important role in the synthesis of DNA crucial for cell division, growth and repair, low zinc levels can cause complications during pregnancy. Vitamin B12 is necessary for the proper functioning of the nervous system and a drop in the body levels can cause irreversible neurological changes leading to memory loss.

To counter these deficits, it is best to take supplements. Experts also suggest measures that will stop the production of acid in the first place. These include eating small meals several times a day, avoiding liquids with meals that tend to dilute digestive juices, and avoiding foods that aggravate symptoms of heartburn.

PROBIOTICS WORK WONDERS

Broad spectrum antibiotics destroy the beneficial gut bacteria that facilitate digestion and protect against infection. Disruption of the flora of these friendly bacteria — Lactobacillus — can cause diarrhoea. Those sensitive to certain antibiotics like Penicillin may even develop allergies to them.

Doctors say that while the antibiotics target specific bacteria, they cannot be made specific to harmful ones. "It is not possible to develop an antibiotic that kills only the pathogens that cause infections and spares the normal favourable bacteria," explains Dr Haresh Sidhwa, senior consultant, internal medicine, Fortis hospital.

Friendly bacteria grow in millions in the intestines and are in charge of purging out all potential germs and preventing infections. When antibiotics destroy friendly bacteria, potential germs can seize the opportunity and grow more easily. "This is why antibiotic therapy often results in thrush, a fungal infection caused by *Candida* bacteria," explains Dr Sidhwa. People tend to take antibiotics at random, creating a disturbance in the normal bacterial population of their tummies, and even building up resistance against the drug.

In addition, antibiotics cause deficiencies of vitamins K and B complex and reduce the absorption of calcium, magnesium, potassium and folic acid. To replenish friendly bacteria, doctors recommend eating yoghurt (it contains *Lactobacillus* bacteria) and taking supplements of *Lactobacillus* available commercially during treatment. Supplements of B complex and a multivitamin are also recommended.

REPLENISH what they deplete



MODEL: SATYAM GUPTA, LOCATION: ANKIT HEALTHCARE, PHOTO: RAMISH SHARMA

VIT SUPPLEMENTS ARE A MUST

Anti-diabetes medication is taken by people with Type I diabetes to reduce blood sugar levels in the body. But aside from reducing glucose levels, these also reduce folic acid and vitamin B1. According to a study published in *Diabetologia*, 30 per cent of diabetics had malabsorption of vitamin B12. Withdrawing the medication resulted in normal absorption of the vitamin in only half of the patients. The rest had permanently low B12 absorption. A depletion of vitamin B12 and folic acid can lead to anaemia, and also increase the level of homocysteine, a naturally occurring amino acid in blood plasma known to increase chances of heart disease, stroke, Alzheimer's and osteoporosis.

Most diabetes drugs inhibit the processing of antioxidant coenzyme Q10, which plays a critical role in the protection of DNA, which forms the genetic code. By interfering with this antioxidant the drugs may increase the risk of DNA mutations leading to cancer. Low levels of coenzyme Q10 may lead to high blood pressure, congestive heart failure, low levels of energy and a weakened immune system. Once the immune system is weakened with the loss of the antioxidant potential of coenzyme Q10, opportunities for free radical damage and accelerated aging can arise.

If you're taking any glucose lowering pills, doctors suggest taking a good, high-potency multivitamin or mineral supplement to counteract nutrient depletion.

TAKE B COMPLEX WITH HRT

Birth control pills and estrogen also result in the depletion of folic acid and vitamin B12. They also deplete other B group vitamins, zinc and manganese. Estrogen is generally prescribed as part of hormone replacement therapy (HRT) to menopausal women when levels of naturally produced estrogen drop. It tackles symptoms of hot flashes and preserves bone mass.

Estrogen hormones produced by ovaries also increase the body's absorption of magnesium into the bones. This may sound like a good thing, but every imbalance has health repercussions. Increased magnesium absorption by the bones reduces blood levels of magnesium, altering the ratio of calcium to magnesium. The result is increased blood coagulation and a higher risk for blood clots which can lead to heart attacks or stroke. Estrogens also boost sodium levels and subsequently, fluid retention increases.

Doctors recommend a strong multivitamin supplement as well as a capsule of B complex. Getting regular tests done to assess bone density is advised if you are on long term HRT.

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