Star health

DHAKA SUNDAY FEBRUARY 11, 2007

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Vitamins: Who need it and why?

STAR HEALTH DESK

Everyone needs vitamins. For many people — perhaps most people — taking a daily multivitamin is a harmless but, medically speaking, wasteful expense and effort.

One notable study found that average, healthy people taking a multivitamin each day were no healthier and lived no longer than healthy people who took no vitamins. Because vitamins are needed only in small amounts. Most people get more than enough from what they eat. For some, however, getting supplemental vitamins is truly vital, either because of people's choice of foods or because they are unable to absorb and digest one or more vitamins. Then again, taking too much of certain vitamins can actually be dangerous. The trick is sorting out who should take vitamin supplements to avoid illness and for whom it is unnecessary.

The 13 major vitamins include the water-soluble vitamins (thiamin, riboflavin, niacin, B6, folic acid, B12, pantothenic acid, biotin and C) and the fat-soluble vitamins (vitamin A, D, E and K).

Who need vitamin

When there is clear evidence of a vitamin deficiency, treatment decisions are generally easy. But when it comes to routine use of vitamin supplements, experts have come to different conclusions. And people often ignore expert recommendations anyway, taking vitamins that no medical professional has suggested and not bothering to take ones that may have been suggested as a preventive measure.

There is sound scientific evidence to support the regular use of certain vitamins by:

•**Pregnant women** — A daily prenatal vitamin is part of routine obstetric care. The most important component is folic acid (or folate), which can markedly reduce the risk of certain birth defects (including neural tube defects). In fact, women of childbearing age who might become pregnant are encouraged to take folic acid even before pregnancy.

•**Perimenopausal women** — Vitamin D (along with calcium) is recommended to prevent osteoporosis and other bone disease.

•**People with cardiovascular disease** — Folic acid (yes, again!) is recommended, especially for those with elevated homocysteine levels.

•**Vegetarians** — A multivitamin is recommended because certain vitamins, such as B12, are available only from animal sources. Strict vegans are particularly at risk. Riboflavin (vitamin B2), vitamin D and vitamin A are also concerns for those avoiding meat or animal products. One daily multivitamin will provide enough supplementation for all of them.

•**Smokers and heavy alcohol drinkers** — Extra vitamin C and folic acid may reduce the risk of disease for people who smoke and drink too much. In addition, people who drink excess alcohol are more prone to thiamin (vitamin B1), pyridoxine (vitamin B6) and riboflavin deficiencies. A daily multivitamin provides inexpensive nutritional insurance.

•**The elderly** — Because poor nutrition is common in this group, especially those who are sick and frail, vitamin deficiency is also common. A multivitamin is often recommended to prevent complications from deficiencies in vitamin D and B vitamins.

Too much of a good thing?

While intake of vitamins through diet or supplements is vital to life itself, there are limits. Consider the following potential consequences of long-term "megadose" vitamin therapy:

•**Vitamin A** — headaches, liver damage, blindness, bone fractures and death

•**Vitamin D** — kidney stones, kidney failure, weak muscles, bone pain, loss of appetite, vomiting and mental changes

•**Vitamin B3 (niacin)** — a flushing sensation, diarrhea, vomiting and liver damage

•**Vitamin B6** — nerve damage

•**Vitamin C** — headaches, diarrhea and kidney stones

MEDICAL ADVICE

Stopping aspirin abruptly risky for heart patients

People with coronary artery disease who are taking aspirin to thin the blood and thereby lower their odds of having a heart attack run the risk of having a major adverse cardiac event if they stop taking aspirin, according to a new report.

"Aspirin should not be discontinued even before surgery" in most cases, Dr. Giuseppe G. L. Biondi-Zoccai told, because the risk of excessive bleeding "is clearly overwhelmed" by the risk of developing a blood clot. The only exception might be intracranial surgery, and possibly prostate surgery.

Biondi-Zoccai from the University of Turin, Italy and colleagues reviewed six published studies to assess the hazards of discontinuing (or not adhering to) regular aspirin therapy for patients with or at risk for coronary artery disease.

In the pooled analysis, aspirin withdrawal or noncompliance was associated with a 3-fold increased risk of adverse events, the researchers report in the European Heart Journal.

On average, adverse events involving a blood clot occurred 10 days after stopping aspirin, the report indicates.

These findings suggest that when aspirin must be stopped because of highly invasive operations or because patients are at very high risk of bleeding, "the drug should be resumed well before that 8-10 days have elapsed," the researchers write.

Source: European Heart Journal

Your Doctor

Dr Md Shah Alam
Associate Professor
Department of Orthopaedics
Sir Salimullah Medical College and Mitford Hospital, Dhaka

Dear Doctor
I am a housewife of 42 years old. I have been suffering from waist pain since 1989 owing to slip down on the floor while I was carrying my youngest son.

The pain was gradually spreading and getting severe. So far I consulted a good number of medical specialists of Orthopaedic, Neuro medicine, physical medicine, pain management consultants who prescribed medicine and advised on the basis of my MRI shadow taken in 1998 and the advices were followed to the best of my ability.

According to the MRI report, pain was due to L5 disc herniation/prolepses. As per doctors advice, I took medicine regularly specially pain killers and followed other suggestions like doing light physical exercises, use of hot water bags if needed, occasionally taking physiotherapy and traction. I also refrained from bending down, carrying of weighty belongings and limited movement etc. I passed the last long years with moderate pain throughout the body.

Currently, I have been suffering from severe pain since last one month not only in the waist but also on many parts like waist, neck, legs, knee, shoulder and other joints. It is difficult for me even doing minor household works including cooking.

Under these circumstances, I shall be grateful if you please suggest the treatment of my current problem together with a response to my following quarries –

•Do you please think that appropriate treatment is possible in the country?

•I want to consult the renowned medical specialists for above mentioned causes, but who are the appropriate for my onward consult.

•I prefer to constitute a medical board of specialised doctors if needed. But how and who are the appropriate doctors as per your suggestion.

•Do you suggest for lumber disc operation and how far it is successful in our country returning into normal life free from pain obligation for a patient like me?

With regards
Mrs Nazia Akhter
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Answer:

First I assure you that your conditions are fully treatable and you need not constitute a medical board neither go abroad.

According to your elaborate story it is clear that you have been suffering for a long time and traditional treatment have gone in vain. In this situation, you most likely need lumber disk operation (since MRI report revealed L5 disk herniation).

It should be preferably done by a spinal surgeon and it is quite possible in our country. If the operation is done by a competent surgeon there is almost no risk.

Immediately consult with a spinal surgeon. S/he can give you more appropriate and effective treatment guideline. Best of luck.

Send health related queries (either in English or Bangla) to Your Doctor, Star Health, The Daily Star, 19, Karwan Bazar, Dhaka 1215 or e-mail your problem

HEALTH TIPS

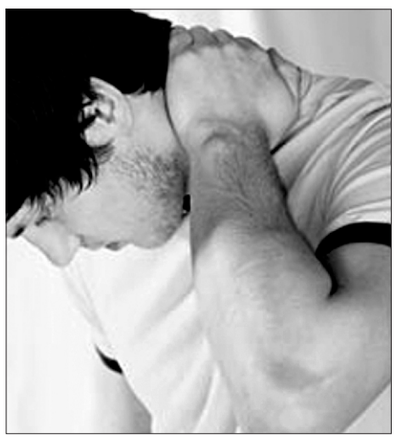
Sleep pillow plus exercise best for neck pain

Sleeping with a neck support pillow and doing neck exercises can help ease chronic neck pain, Canadian researchers report.

"Our results indicate that subjects with chronic neck pain should be treated by health professionals trained to teach both exercises and the appropriate use of a neck support pillow during sleep; either strategy alone will not give the desired clinical benefit," Dr. Hugh A. Smythe at the University of Toronto, Ontario, and colleagues conclude.

Neck pain is fairly common and usually gets better on its own, but cases that last longer than two months can become chronic.

To investigate, the researchers randomly assigned 151 men and women with chronic neck pain to one of four groups: a control group that received massage and hot or cold packs; a group given the control treatment plus exercise; a group given the control treatment and instructed to sleep with a neck-supporting pillow; and a group given all three treatments.



The neck exercises took 5 to 10 minutes, and involved isometric movements of the head, neck and shoulders. Study participants began by performing the exercises under a trained physiotherapist's supervision and were eventually able to do them on their own at home. By week 12 of the study, people who used the pillow and exercised reported their neck pain was significantly improved, while there was no improvement among the other three groups.

People in the study had relatively mild pain, so it is possible the findings may not extend to people with severe neck pain due to fibromyalgia, the authors note.

Source: Journal of Rheumatology

Advance Market Commitment for vaccines to combat deadly disease in poor nations

US$1.5-billion pilot programme expected to save 5.4 million lives, protecting children from pneumonia, meningitis

STAR HEALTH REPORT

Canada, Italy, Norway, Russia, the United Kingdom and the Bill & Melinda Gates Foundation committed US$1.5 billion on Friday last to launch the first Advance Market Commitment (AMC) to help speed the development and availability of a new vaccine which is expected to save the lives of 5.4 million children by 2030, says a press release.

The AMC pilot represents the first step in a historic effort to create a market for life-saving vaccines for children in the world's poorest countries. The new initiative will target pneumococcal disease, a major cause of pneumonia and meningitis that kills 1.6 million people every year.

The pilot will provide 7 to 10 years of funding to support the development of future vaccines against pneumococcal disease and will include provisions to assure the long term sustainable supply and price for the poorest countries.

"With the launch of the first AMC, we can save lives and we will do it with the investment and expertise of industry," said World Bank President Paul Wolfowitz. "The key aim is to accelerate the production of viable and urgently needed vaccines for the poorest countries where thousands of children die every day from diseases that can be prevented."

The AMC for pneumococcal disease will offer an improved market for vaccines now in development. Vaccines are bought only if they meet pre-determined standards of efficacy and safety, and if developing countries ask for them.

In the poorest regions of the world, two to three million children die of preventable diseases every year. Donor nations that are helping to meet the goal of reducing by two-thirds the number of deaths among the world's most vulnerable children.

Julian Lob-Levyt, executive secretary of the GAVI (Global Alliance for Vaccine and Immunisation), noted that an early version of pneumococcal vaccine is being widely used in developed countries with striking success in preventing disease. However, he added, manufacturers lack the capacity to provide a vaccine well-suited to the developing world on a large scale, and extended protection vaccines are needed to bring pneumococcal disease under control in developing countries.

An independent expert committee, with representation from developing and industrialised countries, recommended that pneumococcal disease be the target of the initial AMC pilot. Going forward, the AMC will be overseen by an independent assessment committee, which will set and monitor standards for the vaccines.

The World Health Organisation will facilitate the establishment of the target product profile and assess the quality, safety and immunogenicity of AMC vaccines. The GAVI Alliance and the World Bank will be responsible for supporting the programmatic and financial functions of the AMC.

"We expect that new pneumococcal vaccines will reach developing countries by 2010, at least 10 years earlier than if the AMC were not available," Lob-Levyt said. "Today's decision will save lives by bolstering efforts to prevent this disease, while paving the way for future AMCs focused on other deadly diseases."

Did you know?

Pupil size hints a future woes for young diabetics

Tests of pupil function, as an indicator of how well the automatic nervous system is working, may help predict how likely young diabetics are to develop "microvascular disease" – that is disease of the small blood vessels – as many diabetic do.

Australian researchers found that small pupil size in adolescents with type 1 diabetes predicted deterioration of the retina, or retinopathy, and also microalbuminuria, 12 years later.

Microalbuminuria is a complication of diabetes marked by small amounts of the protein albumin in urine. It is the first sign of kidney disease and a marker of increased risk of heart disease.

Dr. Ann M. Maguire, of The Childrens Hospital at Westmead, Sydney, and colleagues examined data on 335 adolescents with type 1 diabetes who had undergone tests of cardiovascular and pupillary regulation by the so-called autonomic nervous system in the early 1990s.

Some 12 years later, attempts were made to contact these subjects and ultimately 137 participated in the follow-up study.

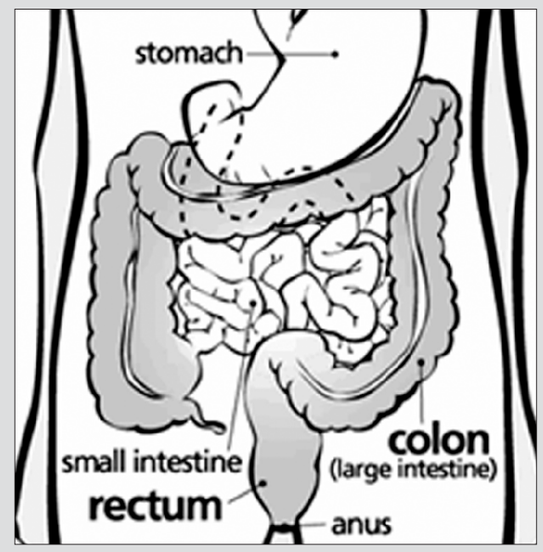
Of these participants, 10 percent of patients had had severe retinopathy that required laser therapy, 15 percent had moderate retinopathy and 44 percent had mild retinopathy. In all, 19 percent had microalbuminuria.

While there was no relationship between baseline cardiovascular tests and the development of complications, the team found that small pupil size – a marker of early nerve damage – at baseline was independently associated with the development of microalbuminuria and retinopathy.

"These patients," Maguire concluded, "may represent a high-risk group who would benefit from more intensive insulin therapy. We recommend further research to determine if improved (blood sugar) control when pupil abnormalities first appear would improve the condition and lead to fewer complications."

Source: Diabetes Care January 2007

Medical Update



Vitamin D may cut risk of colorectal cancer

Taking 1,000 to 2,000 international units (IU) of vitamin D each day may safely reduce the risk of colorectal cancer, according to pooled data from published studies.

The current findings contradict some prior individual studies that found that vitamin D intake did not seem to protect against colorectal cancer. However, it is possible that the dose may simply have been too low to provide a benefit, researchers say.

The present analysis, reported in the American Journal of Preventive Medicine, included data from five studies that looked at the association between blood levels of 25-hydroxy-vitamin D, which provides a good estimate of vitamin D levels in the body, and colorectal cancer risk.

Dr. Edward D. Gorham, from the Naval Health Research Center in San Diego, California, and colleagues found that as blood levels of vitamin D rose, the risk of colorectal cancer fell. Risk was reduced by 54 percent in groups with the highest vitamin D levels relative to those with the lowest levels.

In the final analysis, a blood level of 33 nanograms per milliliter (ng/mL) or higher was associated with a 50 percent decreased risk of colorectal cancer relative to a level of 12 ng/mL or lower.

The researchers believe that the target blood levels could be achieved with intake of 1,000 to 2,000 IU of vitamin D per day. Moreover, they note that the National Academy of Sciences has established that a dose of 2,000 IU/day is safe.

Source: American Journal of Preventive Medicine