Vitamins – To supplement or not?

Part 2

Read the text and answer questions 14-26

A.

Mineral, vitamin, and antioxidant health supplements make up a multi-billion-dollar industry in the United States alone, but do they really work? Evidence suggests supplementation is clearly indicated in special circumstances, but can actually be harmful in others. For the general population, however, supplements have negligible or no impact on the prevention of common cancers, cardiovascular diseases, cognitive decline, mortality, or any other major indicators of health. In pursuit of a longer, happier and healthier life, there are certainly better investments for most people than a tube of vitamin supplements.

B.

Particular sub-group of the population can gain a proven benefit from supplementation. Folic acid has long been indicated as a prenatal supplement due to its assistance in fetal cell division and corresponding ability to prevent neural tube birth defects. Since Canada and the United States decided to require white flour to be fortified with folic acid, spinal birth defects have plummeted by 75%, and rates of neuroblastoma (a ravaging form of infant cancer) are now 50% lower. In countries without such fortification, or for women on low-carbohydrate diets, a prenatal multivitamin could make the crucial difference. The United States Department of Health and Human Services has concluded that the elderly may also benefit from extra vitamin D – calcium can help prevent bone fractures, and zinc and antioxidants can maintain vision while deflecting macular degeneration in people who would otherwise be likely to develop this affliction.

C.

There is mounting evidence, however, for many people to steer clear of multivitamins. The National Institutes of Health has noted "disturbing evidence of risk" in tobacco users: beta-carotene, a common ingredient in multivitamins, was found over a six-year study to significantly contribute to higher lung cancer and mortality rates in smokers. Meanwhile, excessive vitamin A (a supplement often taken to boost the immune system) has been proven to increase women's risk of a hip fracture, and vitamin E, thought to improve cardiovascular health, was contraindicated in a study that demonstrated higher rates of congestive heart failure among such vitamin users. Antioxidant supplementation has no purpose nor does it achieve anything, according to the Food and Nutrition Board of the National Academy of Sciences, and the Medical Letter Group has gone further in suggesting

LIVEWORKSHEETS

they may interfere with treatment and promote some cancers. Antioxidants are generally regarded as counteracting the destructive effect of free radicals in the body, but according to the Medical Letter's theory, free radicals may also serve the purpose of sending a powerful signal to the body's immune system to fix the damage. By taking supplements, we risk undermining that message and upsetting the balance of antioxidants and free radicals in the body. The supplements counteract the free radicals, the immune system is not placed on alert, and the disease could sneak through the gates.

D.

One problem with supplementation by the tablet is the poor record on digestibility. These tablets are often stocked with metal-based minerals that are essentially miniature rocks, and our bodies are unable to digest them. Even the vitamin elements of these pills that are theoretically digestible are often unable to be effectively extracted by our bodies when they arrive in such a condensed form. In Salt Lake City, for example, over 150 gallons of vitamin and mineral pills are retrieved from the sewer filters each month. According to the physician's desk reference, only about 10% – 20% of multivitamins are absorbed by the body. The National Advisory Board is even more damning, suggesting that every 100mg of tablet corresponds to about 8.3mg of blood concentration, although noting that this can still potentially perform a helpful role in some cases. In effect, for every $100 you spend on vitamin supplements, over $90 of that is quite literally flushed down the toilet.

E.

A final argument against multivitamins is the notion that they can lead people – consciously or not – to the conclusion that supplementation fills in the gaps of an unhealthy diet and mops up afterwards, leaving their bodies none the wiser that instead of preparing a breakfast of fresh fruit and muesli, they popped a tiny capsule with coffee and a chocolate bar. In a seven-year study, however, the Heart Protection study did not find any positive outcome whatsoever from multivitamins and concluded that while vitamins in the diet are important, multivitamin tablets are safe but completely useless. There is evidently no shortcut around the task of buying, preparing, and consuming fresh fruit and vegetables every day. Boosting, supplementing, and fortifying products alter people's very perception of what healthy food is; instead of heading for the fresh produce aisle in the supermarket, they are likely to seek out sugary, processed foods with a handful of extra B vitamins as a healthy choice. We cannot supplement our way out of a bad diet.

LIVEWORKSHEETS

Questions 14-16

Choose the correct letters **A, B, C or D** on your answer sheet.

14 The writer does not recommend multivitamin supplementation for .....

- ○ pregnant women.
- ○ young children.
- ○ anyone prone to eye problems.
- ○ old people.

15 According to the writer, vitamin E has been shown to .....

- ○ lead to heart problems.
- ○ be good for heart health.
- ○ support the immune system.
- ○ have no effect.

16 The Medical Letter Group believes antioxidant supplementation .....

- ○ is ineffective in attacking free radicals.
- ○ alerts the immune system to the presence of free radicals.
- ○ attacks both free radicals and the immune system.
- ○ prevents the immune system from responding to free radicals.

Questions 17-21

Do the following statements agree with the information given in Reading Passage 2?
In boxes 17–21 on your answer sheet, choose

YES	if the statement agrees with the views of the writer;
NO	if the statement contradicts the views of the writer;
NOT GIVEN	if it is impossible to say what the writer thinks about this.

LIVEWORKSHEETS

17 Some multivitamin tablets have indigestible ingredients.

○ YES

○ NO

○ NOT GIVEN

18 Some individual vitamins are better absorbed than others in a tablet form.

○ YES

○ NO

○ NOT GIVEN

19 Our bodies cannot distinguish food-based from supplement-based vitamins.

○ YES

○ NO

○ NOT GIVEN

20 Multivitamins can lead to poorer overall eating habits in a person's life.

○ YES

○ NO

○ NOT GIVEN

21 People typically know that fortified processed foods are not good for them.

○ YES

○ NO

○ NOT GIVEN

LIVEWORKSHEETS

Questions 22-26

Classify the following groups of people according to whether they believe:

22	The United States Department of Health and Human Services
23	The National Institutes of Health
24	The Food and Nutrition Board of the National Academy of Sciences
25	The National Advisory Board
26	The Heart Protection Group

List of options

A. the supplementation may have a positive effect

B. the supplementation may have a negative effect

C. supplementation has no effect

LIVEWORKSHEETS