**Cure-all Pills: Myths or Reality?**

Browse the shelves of any health food shop or pharmacy and you’ll find dozens of dietary supplements—vitamins, antioxidants, minerals— along with a seemingly endless range of homeopathic remedies. There is always something new, some ‘miracle ingredient’ offering the promise of a longer, healthier, happier life. There are extracts of every kind of fruit and vegetable you can imagine—tomato, celery, carrot, papaya and cranberry—along with green tea potion, and vitamins A-K in every colour and form. And all of these supplements claim to assist us in the constant battle against ageing, cancer, cardio-vascular disease, and a cornucopia of other afflictions. However, recent research may show it is all too good to be true.

So how real are these claims? Vitamin tablets have been around forever, but antioxidants are the latest miracle cure; the question is, do they work? If the hype is true, then what antioxidants do is work to neutralise the free radicals in our bodies and later excrete them. Free radicals are atoms or molecules that have at least one unpaired electron and are therefore unstable and highly reactive. In animal tissue they are believed to accelerate the progression of cardio-vascular and age-related diseases, such as dementia and cancer. Antioxidants in fresh fruit and vegetables have been shown to combine with free radicals and neutralise them, preventing the oxidation which may lead to disease.

An apple a day keeps the doctor away’—if eaten alongside four other portions of fresh fruit and vegetables! It is clear that those who eat more fruit and vegetables—and the recommended daily intake is at least five portions—are less prone to disease and live longer, healthier lives. Over the last 20-30 years, scientists have worked to isolate the active ingredients in fruit and vegetables— believed to be the antioxidants—and have conducted controlled tests of antioxidants, which revealed that they do indeed appear to have the ability to halt some of the chemical processes that cause disease. Thus the multimillion dollar industry of bottled antioxidants to supplement the diets of the busy and the stressed was born.

Antioxidants were first cast into doubt during a major clinical trial in the US, in which a very common antioxidant, beta-carotene, also known as pro-vitamin A (found in yellow and green vegetables, milk and fish), was being tested for its efficacy against lung cancer in high-risk subjects. To the surprise and concern of the scientists conducting the experiment, those individuals taking the supplement—intended to reduce the risk of cancer—were at a significantly higher risk of developing lung cancer. This startling discovery led to the abandonment of the trials mid-way through the experimental process.

Since this experiment in the mid-90s, other studies have similarly indicated that antioxidants and vitamin supplements are of dubious health value at best, and may possibly be harmful. It seems that even common vitamin supplements such as vitamin C may, in large doses, actually exacerbate the risk of cardio-vascular disease or cancer.

As a result of these recent alarming studies, the US Food and Drug Administration (FDA) and its European equivalent, the European Medicine Agency (EMEA), have taken the decision to prohibit the production and sale of a number of the higher-dose supplements currently on the market.

Another aspect of the increasingly complex picture to take into account is that recent research findings have also called into question some previously held beliefs concerning free radicals. It is possible, some scientists believe, that free radicals actually play a role in preventing disease. Professor Jennifer Horton at the University of West Wyoming is one of a number of scientists who has found that in small amounts, the free radicals may help stimulate the antioxidant systems in our bodies. It is also becoming apparent that free radicals may play a fundamental role in the fight against disease; recent research in the UIC suggests that they kill off harmful bacteria and even cancerous cells.

Clearly, then, the use of bottled supplements with your diet is a practice to approach warily; and it is essential to keep abreast of new developments in research. Ironically, those health-conscious individuals who already eat large quantities of fresh fruit and vegetables, whose diet does not include junk food and who get plenty of regular exercise and have less need for dietary supplements tend to be the ones who are most likely to use them.

**Preparation task.** Match the words with their corresponding definition.

Homeopathy, supplement, cornucopia, hype, dementia, prone, dubious, exacerbate, stimulate, affliction

1.A medical natural treatment based on plants and minerals **Homeopathy**

2.Attempts to make people think something is good or important by talking about it a lot on television, the radio. **Hype**

3.To add something, especially to what you earn or eat, in order to increase it to an acceptable level **supplement**

4.Encourage and prompt something. **Stimulate**

5.Something that causes pain or suffering, especially a medical condition. **Affliction**

6.An illness that affects the brain and memory, and makes you gradually lose the ability to think and behave normally.  **Dementia**

7.Facing the possibility of suffering from something bad. **Prone**

8.Not right and honest**. dubious**

9.To worsen something and not to improve it. **Exacerbate**

10.A bunch of good happy things.  **Cornucopia**

**Task 2**. State whether these sentences are **TRUE/FALSE OR NOT GIVEN**

1 .Vitamin supplements bought from health food shops can differ from those available at pharmacies. **False**   
2. Antioxidants eliminate free radicals from the body. **True**   
3. After the release of Professor Horton’s study, the number of people taking vitamin supplements declined. **Not given**   
4 .The findings of studies into the effect of pro-vitamin A resulted in some US drug companies going on trial. **Not given**   
5. The FDA and the EMEA have jointly funded research into the safety of certain higher-dose vitamin supplements. **Not given**

6. Recent research suggests that small amounts of free radicals can help prevent disease. **True**

**Task 3**. Choose the correct letter **A, B, C or D**

1. When introducing his discussion on antioxidant diet supplements, the writer notes that

**A** most supplements sold in pharmacies or health food shops have at least some proven health benefits.

**B** very few diet supplements are regulated by government health agencies.  
**C** there is evidence that some dietary supplements can be bad for your health.   
**D** only a few products offer real protection against ageing, heart disease and cancer.

2. In the fourth paragraph, the writer’s main point is that

**A** very high doses of antioxidant supplements can harm the liver.

**B** US doctors prescribe pro-vitamin A to patients.  
**C** the clinical trials did not produce any conclusive results.  
**D** antioxidant supplements can increase the risk of some cancers.

3. According to the writer,

**A** recent studies have confirmed the benefits of antioxidants.  
**B** vitamin C supplements help to decrease the risk of heart disease.

**C** the European Union endorses some higher-dose vitamin supplements.  
**D** some governments have banned a number of higher-dose vitamin supplements.

4. The writer suggests that

**A** it is better to take vitamin supplements than not to take them.  
**B** it is important to be well-informed about vitamin supplements before taking them.

**C** people who exercise regularly should supplement their diets with vitamins.  
**D** vitamins and antioxidants are less effective when consumed as food.

**Task 4.** Complete the sentences below with words taken from the passage. Use **NO MORE THAN THREE WORDS** for each answer.

1. Professor Jennifer Horton says that small amounts of....Free radicals......may be beneficial for our bodies.

2. Some studies have indicated that vitamin supplements can be...harmful...................

3. Free radicals may have an important function in.. …..preventing disease .........................

4......health-conscious ............people tend to be the ones who use bottled supplements.

5. You should.....approach.............................the use of bottled vitamin supplements with caution.

**Answers**

C

D

D

B

False

True

Not given

Not given

Not given

True

Free radicals

Harmful

Fighting disease

Health conscious

Approach