

Assignment08

Phytonutrients

1. Phytonutrients are bioactive compounds in food that help by slowing down the aging process or helping reduce the risk of many diseases. They are substances that plants produce naturally that induce colour, aroma, texture and flavour, and phytonutrients are different from vitamins because they are not essential in keeping you alive.
2. Research is investigating how phytonutrients can protect against some cancers, heart disease, stroke, high blood pressure, cataracts, osteoporosis, urinary tract infections and other chronic health conditions. They may also serve as antioxidants, enhance immunity, enhance communications among body cells, cause cancer cells to die, detoxify carcinogens and repair damage to DNA that's caused by smoking and other toxins.
- 3.

| Phytonutrients | Food found in | Health Benefits |
|-----------------|---|--|
| Polyols | Some chewing gums, other foods such as sugar-free candy | May reduce risk of dental caries |
| Isothiocyanates | Broccoli (sprouts), cabbage, cauliflower, kale, horseradish | May enhance detoxification of undesirable compounds and bolsters cellular antioxidant defences |
| Phenolic Acids | Apple, citrus fruits, pears, some vegetables and coffee | Bolsters cellular antioxidant defences and supports maintenance of eye and heart health |

4. ORAC units is the Oxygen Radical Absorbency Capacity. They measure the overall antioxidant potential of fruits, vegetables, spices, herbs and other foods. The higher the ORAC score, the greater the antioxidant potential.

Vitamins and Supplements

1.
 - 1) Myth
 - 2) Fact
 - 3) Myth
 - 4) Myth
 - 5) Myth
 - 6) Myth
 - 7) Myth
 - 8) Myth
 - 9) Myth
 - 10) Myth

2. I got Question 2 wrong because I was incorrect in my terminology. I knew taking supplements would reduce the symptoms so I thought “prevent” is similar to “reduce”.

Question 1 is misunderstood because of advertising. They advertise it so taking supplements will help your diet, but people misunderstand that a “good” will cancel out their “bad”, and because they believe that, they can justify their bad diet.

3. The group I am picking is “someone on a restrictive diet”. Supplements can be a good idea for them since they may have trouble eating, maybe due to throat damage to keep up the calories, but then it could be harmful if they become reliant on taking supplements instead of actually eating.
4. I do not take any supplements, but these are the ones I am interested in:

Garlic

- a) The health benefit claim is that garlic reduces cholesterol levels, blood pressure and cancer risk and improves circulation and immune function.
- b) There are a few laboratory studies on this to provide sufficient evidence, but not concrete.
- c) The other factors you may have to be aware of is that garlic promotes an undesirable body odour, may cause stomach discomfort at high doses, avoid taking 7 days before surgery as it may increase bleeding and it may interfere with the effectiveness of oral contraceptives, certain drugs and anticoagulant medications.

Valerian

- a) The health benefit claim is that valerian enhances sleep and reduces stress and anxiety.
 - b) There is not much scientific evidence but if a person sleeps better, then it is safe to say that due to a better night’s sleep, you wake up feeling more refreshed and energised, hence reducing stress and anxiety.
 - c) The other factors you have to be aware of is that it may cause withdrawal symptoms if abruptly discontinued, morning drowsiness with high doses, taking valerian in an safe environment is essential and if you have St John’s wort, kava, L-tryptophan or alcohol, you shouldn’t be taking it.
5. I don’t think so because even if the food companies are following the laws and providing sufficient information on the package, advertisement and greed of unethical medical practice cause a lot of misinformation and they cannot be pinpointed as the source of blame because the information is technically there, just not learnt properly.