



Vitamin and Supplement Questions

1. Sarah, a 30-year-old vegetarian, presented to her doctor with complaints of fatigue, weakness, and shortness of breath. Upon examination, she was found to have a low red blood cell count and low hemoglobin levels. Further laboratory tests confirmed that she was iron deficient. Sarah's vegetarian diet had not included enough iron-rich foods, and her body was unable to absorb the non-heme iron from plant-based sources efficiently. She was advised to increase her intake of iron-rich foods and consume them along with foods that enhance non-heme iron absorption. Sarah was advised to avoid consuming tea or coffee with her meals as they can inhibit iron absorption. What foods should Sarah eat when eating protein to increase the absorption of non-heme iron?

- A. Foods rich in vitamin C
- B. Foods rich in B12
- C. Foods rich in magnesium
- D. Foods rich in potassium

2. Which of the following is not considered an herbal anticoagulant?

- A. Turmeric
- B. Ginkgo biloba
- C. Ai Ye
- D. Dang Gui

3. John, a 55-year-old man, presented to his doctor with complaints of muscle pain, weakness, and fatigue. He reported that he had been taking Lipitor to manage his high cholesterol levels for the past six months. His symptoms had been gradually worsening over the past few weeks, and he was finding it difficult to perform his daily activities. Upon examination, John was found to have muscle tenderness and weakness, particularly in his arms and legs. His creatine kinase levels were also found to be elevated, which indicated muscle damage. Based on his symptoms and medical history, his doctor diagnosed him with statin-induced myalgia, a common side effect of statin medications. Which of the following supplements could he take that would counteract the side effects of Lipitor?

- A. Fish Oils
- B. 5HTP
- C. Dopamine
- D. CoQ10

4. Rachel, a 45-year-old woman, presented to her doctor with complaints of numbness and tingling in her arms and legs. She reported that she had been feeling this way for several weeks and her symptoms had been gradually worsening. She also mentioned that she had been experiencing fatigue, weakness, and difficulty sleeping. Upon examination, Rachel was found to have reduced reflexes, muscle weakness, and difficulty walking. Her doctor suspected that her symptoms might be due to a vitamin deficiency and ordered some laboratory tests. Which of the following would cause peripheral neuropathy?

- A. Vitamin D excess
- B. Vitamin B6 deficiency
- C. Vitamin B12 deficiency
- D. Vitamin A deficiency



5. Mary, a 38-year-old woman, underwent gastric bypass surgery to manage her obesity. Following the surgery, she experienced significant weight loss but also began experiencing symptoms such as fatigue, weakness, and shortness of breath. She also experienced numbness and tingling in her arms and legs, which gradually worsened over time. Upon examination, Mary's doctor found that she had low red blood cell count and low hemoglobin levels. Further laboratory tests revealed that Mary had a vitamin deficiency, which was likely caused by the gastric bypass surgery. The surgery had decreased the absorption of vitamin _____ in her body, leading to the deficiency.

- A. Vitamin B12
- B. Vitamin B6
- C. Vitamin B9
- D. Vitamin D

6. Place the name of the food in front of its drug interactions.

_____ contains compounds that can inhibit certain enzymes in the body, including CYP3A4, which is involved in the metabolism of many medications. This can result in higher levels of the medication in the body, increasing the risk of side effects. Some examples of medications that can interact with this food include statins, calcium channel blockers, and certain immunosuppressant drugs.

_____ is important for blood clotting. Consuming large amounts of this vitamin-rich foods, such as spinach, kale, and broccoli, can interfere with the effectiveness of anticoagulants like Warfarin and Coumadin, antibiotics like cephalosporins and quinolones, cholesterol-lowering drug, and Orlistat for weight loss.

_____ is substance that can interact with medications. It can increase the sedative effects of some medications, such as benzodiazepines and opioids, and can also interfere with the metabolism of certain medications, such as acetaminophen and some antibiotics.

_____ Some antibiotics, such as tetracycline and ciprofloxacin, can bind to calcium in these products and reduce their effectiveness. It's best to avoid consuming these products within two hours of taking these medications.

_____ can interfere with the absorption of certain medications, such as digoxin and lithium. It's best to take these medications on an empty stomach, or to separate them from these foods by a few hours.

_____ can interfere with the metabolism of certain medications, such as corticosteroids, resulting in higher levels of the medication in the body and increasing the risk of side effects.

_____ can interfere with the absorption of some medications, such as thyroid hormones and antibiotics, and can also increase the risk of side effects of some medications.

_____ contain high levels of potassium, which can interact with potassium-sparing diuretics, a type of medication used to treat high blood pressure and heart failure. This can result in high levels of potassium in the body, which can be dangerous.

High fiber foods	Caffeine	Alcohol	Licorice	Dairy products
Salt Vitamin K	Grapfruit			



7. Jane presented to her doctor with complaints of recurrent blood clots in her legs and lungs. She was diagnosed with a rare blood clotting disease called antithrombin III deficiency, which predisposes individuals to blood clotting disorders. Jane was prescribed warfarin, an anticoagulant medication, to prevent blood clots from forming. She was advised to have regular blood tests to monitor her warfarin levels and prevent complications associated with excessive bleeding. Which of the following can Jane take that will not have a drug-supplement interaction with her medication?

- A. Vitamin C
- B. Guarana
- C. Omega 3 fatty
- D. Grapefruit

8. Which of the following is not an indication for CoQ10?

- A. Statin induced myopathy
- B. Male infertility
- C. Aging
- D. Anxiety and insomnia

9. Which of the following is not an indication for Fish Oils?

- A. Cardiovascular Health
- B. Muscle Relaxation
- C. Brain Function
- D. Depression and anxiety

10. Which of the following indications is Not an indication or SAME?

- A. Cardiovascular disease
- B. Liver disease
- C. Depression
- D. Osteoarthritis

11. Which of the following is not a drug-herb or herb-herb interaction for Ginkgo biloba?

Anticoagulants Anticonvulsants Antigout Antidepressants
Blood pressure medications Diabetic medications Blood thinners St. John's wort

12. Which mineral initiates muscle contractions and relaxation?

- A. Calcium
- B. Potassium
- C. Magnesium
- D. Zinc



13. Which of the following drug classes is not contraindicated to take with Kava?

- A. Sedatives and CNS depressants
- B. Alcohol
- C. Antidepressants
- D. Antidiabetics
- E. Antipsychotics
- F. Diuretics

14. Which of the following side effects is not a side effect for Guarana?

- A. Anxiety and restlessness
- B. Insomnia
- C. Headaches
- D. Upset stomach

15. Which of the following herbs supplements or vitamins ***does not*** affect the cytochrome P450 enzyme system which is responsible for metabolizing many drugs, herbs and other substances in the body?

St. John's Wort Chamomile Grapefruit Goldenseal Echinacea Panax Ginseng

16. Which of the following substances should not be taken at the same time as oral medications as it may reduce absorption?

- A. Grapefruit
- B. Psyllium
- C. Vitamin K
- D. Fish Oils

17. Victoria, a 26-year-old woman, suffers from anorexia nervosa. She presented to the emergency room with complaints of fatigue, weakness, unexplained bruising all over her body and blue spots on her shin. She reported that she had been feeling this way for several weeks and her symptoms had been gradually worsening. She also mentioned that she had been experiencing pain in her joints. Upon examination, Victoria was found to have tender gums that bled easily. She has several loose teeth. Further laboratory tests were ordered, which revealed a low red blood cell count, low hemoglobin levels, and elevated white blood cell count. Her vitamin C levels were also found to be extremely low. Based on the findings, what is the best diagnosis for Victoria?

- A. Beri Beri
- B. Liver toxicity
- C. Multiple myeloma
- D. Scurvy

18. Logan, a 45-year-old man, presented to the emergency room with complaints of weakness, tingling, and numbness in his hands and feet. He reported that he had been consuming alcohol excessively for the past few years and had not been eating a balanced diet. His symptoms had been gradually worsening over the past few months and had started affecting his ability to walk and



perform his daily activities. Upon examination, Logan was found to have muscle weakness and wasting in his hands and feet. His reflexes were also reduced, and he had difficulty walking due to balance problems. Additionally, he had developed an irregular heartbeat, and his blood pressure was low. Further laboratory tests were ordered, which revealed a low red blood cell count, low hemoglobin levels, and elevated lactate levels. His vitamin B1 levels were also found to be extremely low. Based on these findings, what is the most likely diagnosis for Logan?

- A. Beri Beri
- B. Ariboflavinosis
- C. Cheilosis
- D. Alcoholic anemia

19. Which of the following drugs/vitamins WILL NOT potentiate a drug-vitamin interaction with Vitamin E?

- A. Anticoagulants, Antiplatelets
- B. Chemotherapy and radiation drugs
- C. Vitamin K
- D. Vitamin A

20. Which of the following food, herbs or supplements can injure the Liver if taken with statin drugs?

- A. Melatonin
- B. Black cohosh
- C. CoQ10
- D. Grapefruit

21. Which of the following is not a condition that is helped with Ashwagandha?

- A. Stress
- B. Bipolar
- C. Hyperglycemia
- D. Diarrhea

22. Which of the following does not have a potential side effect with Selenium?

- A. Warfarin
- B. Levothyroxine
- C. Cisplatin
- D. Aspirin

23. 5-HTP should not be taken with antidepressant drugs as it?

- A. Decrease Serotonin in the brain.
- B. Increases serotonin in the brain.
- C. Increases dopamine in the brain.
- D. Decreases dopamine in the brain.



24. Which of the following medication is safe to take with SAME?

- A. Plavix
- B. Zoloft
- C. Prozac
- D. Metformin

25. Which of the following medication is safe to take with red yeast rice?

- A. Mevacor (lovastatin)
- B. Zoloft (sertraline)
- C. Dilantin (phenytoin)
- D. Tylenol (acetaminophen)

26. Patients are advised not to consume caffeine when taking which of the following herbs/supplements?

- A. Vitamin E
- B. Echinacea
- C. St. John's wort
- D. Red yeast rice

27. What is the ratio of Huang Lian (*Coptidis Rhizoma*) to Wu Zhu Yu (*Evodiae Fructus*) in Zuo Jin Wan (*Left Metal Pill*)?

- A. 2:1
- B. 3:6 or 3:5
- C. 12:1 or 6:1
- D. 10:1

28. What is the ratio of Gui Zhi to Bai Shao in the formula Xiao Jian Zhong Tang (*Minor Construct the Middle Decoction*)?

- A. 1:2
- B. 2:3
- C. 2:1
- D. 5:1

29. What is the ratio of Gui Zhi to Bai Shao in the formula Gui Zhi Tang (*Cinnamon Twig Decoction*)?

- A. 1:1
- B. 1:2
- C. 2:3
- D. 4:5