

Expert Review of the Safety of Aspartame CPE Quiz Answers

1. **The program discusses findings from an expert panel review on aspartame safety. Which of the following statements is not true about this review?**

CORRECT ANSWER is c. The Food and Drug Administration **did not** mandate the expert panel review on aspartame safety.

2. **Which of the following statements about the Acceptable Daily Intake (ADI) is true?**

CORRECT ANSWER is d. All of the statements are true. The ADI is the amount of an ingredient considered safe to consume every day for a lifetime without any adverse effects; exceeding the ADI does not mean adverse health effects will occur; and the ADI is set by determining a consumption level of an ingredient that has no effect in animal studies (the “No Observed Effect Level” or NOEL) and dividing by a safety factor of at least 100.

3. **Which of the following steps did the expert panel use to assess aspartame safety?**

CORRECT ANSWER is d. Steps A and C. The expert panel assessed aspartame safety through a literature review of all **human and animal** scientific studies related to aspartame safety, except those on sensory properties, product applications and potential health benefits; and by assessing current consumption levels using recent NHANES data, including estimates of the aspartame content of food products determined through industry data, literature reports and conservative assumptions about the aspartame content of products.

4. **Which of the following statements about the expert panel’s assessment of aspartame consumption levels is false?**

CORRECT ANSWER is c. The assessment found that among the heaviest users (95th percentile), aspartame consumption was about **27% of the ADI**.

5. **Which statement about the ADI for aspartame is false?**

CORRECT ANSWER is a. The U.S. Food and Drug Administration set the ADI for aspartame at **50 mg/kg of body weight** for adults.

6. **Which of the following statements about aspartame metabolism is true?**

CORRECT ANSWER is d. All of the statements are true. Protein-rich foods such as milk, cheese and meat contribute several times more of the amino acids aspartic acid and phenylalanine to the diet than does aspartame; the digestion of a medium banana yields about the same amount of methanol as a 12-ounce serving of an aspartame-sweetened soft drink (about 20 milligrams), and aspartame never leaves the intestinal mucosal cells. The only components that enter the bloodstream are methanol and the two amino acids, aspartic acid and phenylalanine.

7. **Which of the following statements about methanol metabolism is false?**

CORRECT ANSWER is a. Adults can safely consume up to **2 grams** of methanol because it is rapidly metabolized to CO₂ and water.

8. **Studies of healthy adults and infants given large doses of aspartame showed significant increases in blood levels of methanol and formic acid.**

CORRECT ANSWER is b. False. Studies of healthy adults and infants given large doses of aspartame **did not** show significant increases in blood levels of methanol and formic acid.

9. Which of the following statements about the expert panel's findings on aspartame and cancer risk is true?

CORRECT ANSWER is d. The expert panel found that numerous long-term animal studies assessing cancer risk, including studies with aspartame intake levels over 4,000 mg/kg, found no evidence of carcinogenic or cancer promoting effects; several small-scale epidemiological studies and a recent large-scale study by the National Cancer Institute found no association between aspartame consumption and brain tumors in humans; and the expert panel agreed with conclusions by the FDA and European Food Safety Authorities that recent animal studies by the European Ramazzini Foundation in Italy, which reported that aspartame increased cancer in rats, had numerous methodological and interpretation errors, did not provide credible evidence that aspartame is carcinogenic, and did not warrant a further review of aspartame's safety or revision of the ADI.

10. Which of the following was not one of the findings from the expert panel's review?

CORRECT ANSWER is b. Aspartame was **not** found to affect learning and behavior in children and adults, except in one small study.

11. Following their review, the panel's overall conclusion was that aspartame is a thoroughly-studied sweetener with a long history of safe use in the food supply and can help reduce the caloric content of a wide variety of foods.

CORRECT ANSWER is a. True. Following their review, the panel's overall conclusion was that aspartame is a thoroughly-studied sweetener with a long history of safe use in the food supply and can help reduce the caloric content of a wide variety of foods.

12. The individuals on the expert panel were not told who funded the review, nor were the names of the panel's experts revealed to the company that funded the review, until after the manuscript of the panel's findings had been submitted for publication.

CORRECT ANSWER is a. True. The individuals on the expert panel were not told who funded the review, nor were the names of the panel's experts revealed to the company that funded the review, until after the manuscript of the panel's findings had been submitted for publication.