FFA Milk Quality CDE Practice Test (Sample)

Study Guide

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Questions

1. What survey is based on United States cheese plants that make 80-85 percent of the bulk cheddar?

A. NASS Cheddar Cheese Price survey

B. USDA Cheese Production survey

C. American Cheese Institute survey

D. National Dairy Market survey

2. What benefit does homogenization provide to milk?

A. Increases shelf life

B. Reduces fat content

C. Prevents cream separation

D. Enhances flavor profile

3. What is the minimum milk fat percentage in heavy cream (whipping cream)?

A. 28

B. 36

C. 40

D. 42

4. Approximately what percentage of the total cheese production in the U.S. is accounted for by Wisconsin?

A. 20%

B. 23%

C. 26%

D. 30%

5. The Standard of Identity for ice cream requires that it contain a minimum of _____ percent milk fat.

A. 5

B. 10

C. 15

D. 20

6. What is required for a Federal Milk Marketing Order to gain support?

A. Three-quarters of the consumers

B. Two-thirds of the affected producers

C. State government approval

D. Majority of retailers

7. What water-soluble vitamin is not found in significant amounts in milk?

A. Vitamin B12

B. Folate

C. Ascorbic acid

D. Nicotinic acid

8. What do Federal Milk Marketing Orders not impose?

A. Price controls on dairy products

B. Sanitary restrictions on production

C. Labeling requirements for milk

D. Quality standards for dairy exports

9. What type of milk is used for ice cream production?

A. Heavy cream

B. Evaporated milk

C. Skim milk

D. Whole milk

10. Aflatoxins found in dairy feeds are produced by which organism?

A. Bacteria

B. Mold

C. Yeast

D. Parasites

Answers

1. A
2. C
3. B
4. C
5. B
6. B
7. C
8. B
9. A
10. B

Explanations

1. What survey is based on United States cheese plants that make 80-85 percent of the bulk cheddar?

A. NASS Cheddar Cheese Price survey

B. USDA Cheese Production survey

C. American Cheese Institute survey

D. National Dairy Market survey

The NASS Cheddar Cheese Price survey is specifically designed to gather data from a significant portion of cheese plants in the United States that are responsible for producing the bulk of cheddar cheese. This survey focuses on pricing trends and production volumes, providing valuable insights into the cheddar cheese market. By concentrating on the cheese plants that account for 80-85 percent of bulk cheddar production, the survey ensures that the information reflects the most relevant and impactful portion of the market, thereby helping stakeholders make informed decisions regarding pricing and production practices. In contrast, the USDA Cheese Production survey is broader and includes various types of cheese beyond just cheddar, while the American Cheese Institute survey may provide industry insights but does not have the same targeted focus on cheddar pricing. The National Dairy Market survey encompasses a wider range of dairy products without the specific emphasis on cheddar cheese production that the NASS survey offers.

2. What benefit does homogenization provide to milk?

A. Increases shelf life

B. Reduces fat content

C. Prevents cream separation

D. Enhances flavor profile

Homogenization is a mechanical process that breaks down fat molecules in milk into smaller, more uniform sizes. This process ensures that the fat is evenly distributed throughout the milk, which prevents the cream from separating and rising to the top. By keeping the fat particles suspended in the liquid, homogenization creates a stable emulsion, resulting in a consistent texture and appearance. This is particularly important for consumer acceptance, as most people prefer milk that is creamy but homogeneous in appearance without any visible layers of cream. The other options, while they may touch on related aspects of milk processing, do not accurately describe the primary benefit of homogenization. For example, while homogenization can contribute to a longer shelf life by ensuring a more uniform distribution of fat that can impact microbial stability, its main function is not to directly increase shelf life. Additionally, homogenization does not reduce fat content, nor is it primarily intended to enhance the flavor profile of milk. Instead, by creating a uniform distribution of fat, homogenization allows consumers to enjoy milk that maintains a consistent taste and texture.

3. What is the minimum milk fat percentage in heavy cream (whipping cream)?

A. 28

B. 36

C. 40

D. 42

Heavy cream, also known as whipping cream, must have a minimum milk fat percentage of 36% to be categorized as such. This fat content is crucial because it affects the cream's ability to whip and hold air, which are essential characteristics for making whipped toppings, desserts, and other culinary applications. A fat content lower than 36% would classify the product as light cream or half-and-half rather than heavy cream. Therefore, the correct answer is based on the recognized standards in dairy classifications, which identify 36% as the threshold for heavy cream.

4. Approximately what percentage of the total cheese production in the U.S. is accounted for by Wisconsin?

A. 20%

B. 23%

C. 26%

D. 30%

Wisconsin is known as a significant player in the cheese production industry in the United States, often referred to as the "Dairy State." This state contributes approximately 26% of the total cheese production in the U.S., which highlights its importance in the dairy economy. The state's favorable climate, rich soil, and long history of dairy farming make it an ideal location for cheese production. Wisconsin is home to many artisanal cheese makers as well as large-scale dairy operations, which collectively boost its cheese output. Knowing that Wisconsin holds this substantial percentage is essential for anyone studying milk quality and cheese production, as it emphasizes the state's role in influencing trends, standards, and quality practices in the industry.

5. The Standard of Identity for ice cream requires that it contain a minimum of _____ percent milk fat.

A. 5

B. 10

C. 15

D. 20

The correct choice is 10 percent milk fat because the Standard of Identity for ice cream, as established by the Food and Drug Administration (FDA), specifies that ice cream must contain a minimum of 10 percent milk fat. This regulation ensures that the product meets certain quality and richness parameters, contributing to its texture, flavor, and overall sensory experience. Ice cream's creaminess and mouthfeel are significantly influenced by the fat content; hence, maintaining a standard minimum is crucial for producing a product that aligns with consumer expectations and industry standards.

6. What is required for a Federal Milk Marketing Order to gain support?

A. Three-quarters of the consumers

B. Two-thirds of the affected producers

C. State government approval

D. Majority of retailers

To gain support for a Federal Milk Marketing Order, it is essential to have the backing of two-thirds of the affected producers. This requirement reflects the importance of ensuring that those directly involved in the production of milk are in favor of any regulatory changes affecting their livelihoods and market conditions. The rationale behind needing a supermajority of producers stems from the goal of achieving a consensus among those who will be directly impacted by the order. By requiring two-thirds support, the policy aims to balance interests and ensure that the measures implemented are broadly accepted by the producers who will bear the consequences of these regulations. The other options do not apply here because the Federal Milk Marketing Order process specifically emphasizes the need for producer support. Consumers, state governments, or retailers may have interests in the outcome or potential impacts of such orders, but it is the producers whose endorsement is critical for the establishment of a Federal Milk Marketing Order.

7. What water-soluble vitamin is not found in significant amounts in milk?

A. Vitamin B12

B. Folate

C. Ascorbic acid

D. Nicotinic acid

Ascorbic acid, commonly known as Vitamin C, is the water-soluble vitamin that is not found in significant amounts in milk. While milk provides a variety of essential nutrients, including some B vitamins like B12 and folate, it is relatively low in Vitamin C. This is particularly important for people who rely on milk as a dietary staple, as they may need to obtain Vitamin C from other sources such as fruits and vegetables. In contrast, Vitamin B12 is naturally present in milk and dairy products, making it an important source for individuals who consume these foods. Folate, another B vitamin, is found in lesser amounts in milk but still contributes to the overall nutrient profile. Nicotinic acid, also known as niacin, is another B vitamin that can be found in dairy, although it may not be as significant as in other food sources. This knowledge highlights the importance of maintaining a balanced diet to ensure adequate intake of all essential vitamins, particularly those not abundant in milk.

8. What do Federal Milk Marketing Orders not impose?

A. Price controls on dairy products

B. Sanitary restrictions on production

C. Labeling requirements for milk

D. Quality standards for dairy exports

Federal Milk Marketing Orders are established to regulate the supply and pricing of milk in specific regions of the United States. They primarily focus on ensuring that dairy farmers receive a fair price for their milk while balancing the supply and demand in the market. While Federal Milk Marketing Orders impose price controls on dairy products, labeling requirements, and quality standards to ensure that milk marketed to consumers meets certain safety and quality benchmarks, they do not set specific sanitary restrictions on production. Sanitary regulations are typically under the jurisdiction of other agencies, such as the Food and Drug Administration (FDA), which oversees food safety regulations and sanitary conditions for food production. This distinction clarifies that while Federal Milk Marketing Orders play a crucial role in the marketing and pricing aspects of dairy products, they do not directly govern the sanitation practices involved in the production process itself.

9. What type of milk is used for ice cream production?

A. Heavy cream

B. Evaporated milk

C. Skim milk

D. Whole milk

Heavy cream is the type of milk used for ice cream production because of its high fat content, which typically ranges from 36% to 40%. This fat content is essential for creating the smooth, creamy texture that is characteristic of high-quality ice cream. The fat also contributes to a richer flavor and better mouthfeel. When ice cream is made, the fat must be properly emulsified with air and other ingredients to achieve the desired consistency. Heavy cream acts as a base in many ice cream recipes, providing the necessary richness and contributing to the overall stability of the frozen dessert. In contrast, while whole milk can be used in ice cream making, it does not provide the same level of creaminess or indulgence due to its lower fat content, which typically ranges around 3.25%. Skim milk and evaporated milk also fall short in delivering the creamy texture and richness that heavy cream provides. Hence, heavy cream is the preferred choice for producing ice cream that is both flavorful and has a desirable texture.

10. Aflatoxins found in dairy feeds are produced by which organism?

A. Bacteria

B. Mold

C. Yeast

D. Parasites

Aflatoxins are toxic compounds that are produced by certain species of mold, specifically Aspergillus species, such as Aspergillus flavus and Aspergillus parasiticus. These molds are often found in contaminated agricultural products, including grains and nuts, which are commonly used as feed for dairy animals. When dairy cattle consume feed contaminated with these molds, aflatoxins can enter their milk, posing health risks to both animals and humans consuming the dairy products. Understanding the source of aflatoxins is crucial in dairy farming because it highlights the importance of proper feed management and monitoring to reduce the risk of contamination. Effective practices can help ensure the safety and quality of milk for consumers.