Jean Inman Registered Dietitian (RD) Domain 2 Practice Exam (Sample)

Study Guide

Everything you need from our exam experts!

Questions

1. What is the main risk factor for developing fatty liver in patients receiving parenteral nutrition?

A. Low protein intake

B. Excessive calorie intake

C. Low carbohydrate intake

D. High sodium intake

2. Phytochemicals, known to influence tumor development, are primarily found in which food categories?

A. Dairy products and frozen foods

B. Fruits, vegetables, and grains

C. Meat and poultry

D. Processed snacks and sweets

3. A family receiving food stamps often runs out of food by the middle of the month. What should you do for them?

A. Provide a list of low-cost meals

B. Obtain an emergency food voucher and refer them to EFNEP

C. Encourage meal planning

D. Advise them to apply for additional food assistance

4. Which analysis method is crucial for monitoring patients with special dietary needs?

A. Dietary intake evaluation

B. Your clinical observations

C. Calculating body mass index

D. Assessing socioeconomic factors

5. What is the appropriate dietary therapy following a Billroth II procedure?

A. High fat, low protein diet

B. High carbohydrate, low fiber diet

C. Decrease simple carbohydrates, high protein, moderate fat, B12 supplements

D. Standard balanced diet

6. What food should someone taking MAOI antidepressants avoid?

A. Salami

B. Cheddar cheese

C. Pepperoni

D. Chicken

7. Which nutrient is suggested to be included in a diet for patients with pancreatic insufficiency?

A. Refined sugars

B. Medium-chain triglycerides

C. Fiber supplements

D. High sodium foods

8. When evaluating dietary sources of iron, which one is the best choice?

A. Chicken breast

B. Black beans

C. Spinach

D. Lentils

9. When using anthropometric measurements, what is the most important factor to ensure accuracy?

A. Standardization of tools

B. Competence of the practitioner and calibration

C. Type of measurement taken

D. Frequency of assessments

10. How long can open tube feedings be kept before they must be disposed of?

A. 12 hours

B. 24 hours

C. 36 hours

D. 48 hours

Answers

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

Explanations

1. What is the main risk factor for developing fatty liver in patients receiving parenteral nutrition?

A. Low protein intake

B. Excessive calorie intake

C. Low carbohydrate intake

D. High sodium intake

The primary risk factor for developing fatty liver in patients receiving parenteral nutrition is excessive calorie intake. When patients are given parenteral nutrition, they receive nutrients directly into their bloodstream, bypassing the digestive system. If the caloric intake exceeds the body's energy needs, it can lead to the accumulation of excess energy in the form of fat in the liver, resulting in hepatic steatosis or fatty liver. In the context of parenteral nutrition, several factors must be carefully monitored, including the total caloric delivery. If the calories provided are significantly higher than what the patient requires for their metabolic needs, the liver is unable to properly metabolize this surplus, leading to fat deposition in liver cells. Other options like low protein intake, low carbohydrate intake, and high sodium intake do not have the same direct impact on fatty liver development as excessive calorie intake. While protein is vital for liver function, its deficiency is less commonly a direct cause of fatty liver compared to an overabundance of calories. Low carbohydrate intake usually does not lead to fatty liver if calories are still balanced, and while high sodium intake has its own health implications, it is not specifically a recognized risk factor for the development of fatty liver in this context. Thus, managing calor

2. Phytochemicals, known to influence tumor development, are primarily found in which food categories?

A. Dairy products and frozen foods

B. Fruits, vegetables, and grains

C. Meat and poultry

D. Processed snacks and sweets

Phytochemicals are naturally occurring compounds found in plants that have been shown to have protective effects against various diseases, including cancer. The primary food categories where phytochemicals are abundant include fruits, vegetables, and grains. These plant foods are rich in beneficial substances such as flavonoids, carotenoids, and polyphenols, which can help modulate cellular processes, reduce inflammation, and contribute to overall health. Fruits and vegetables, in particular, are well-known for their high concentrations of vitamins, minerals, and antioxidants, which enhance the body's ability to fight off diseases. Whole grains also provide essential nutrients and phytochemicals that are beneficial for health and may help lower the risk of tumor development. In contrast, dairy products, frozen foods, meat, poultry, and processed snacks generally contain fewer phytochemicals compared to plant-based foods. While some of these foods may contain beneficial nutrients, they do not typically provide the wide range of phytochemicals found in fruits, vegetables, and grains, making the latter the primary source for these protective compounds.

3. A family receiving food stamps often runs out of food by the middle of the month. What should you do for them?

A. Provide a list of low-cost meals

B. Obtain an emergency food voucher and refer them to EFNEP

C. Encourage meal planning

D. Advise them to apply for additional food assistance

Obtaining an emergency food voucher and referring the family to the Expanded Food and Nutrition Education Program (EFNEP) is a proactive way to address their immediate food insecurity. This option directly addresses the pressing need for food by providing a temporary solution that can prevent gaps in their food supply. Emergency food vouchers can provide access to resources that may assist in sustaining the family until their next benefits are issued. Additionally, the EFNEP is an educational program that empowers families with knowledge and skills related to nutrition, budgeting, and meal preparation. This can help them make better food choices, improve food management skills, and potentially reduce the likelihood of facing this situation in the future. By coupling immediate assistance with education, it supports both their current needs and long-term sustainability. The other options, while beneficial in different contexts, do not directly mitigate the urgent issue of running out of food in the middle of the month. Providing a list of low-cost meals or encouraging meal planning can be helpful strategies but may not be sufficient on their own to resolve food scarcity. Advising them to apply for additional food assistance might be a longer-term solution, but again, it does not provide immediate relief for their current situation.

4. Which analysis method is crucial for monitoring patients with special dietary needs?

A. Dietary intake evaluation

B. Your clinical observations

C. Calculating body mass index

D. Assessing socioeconomic factors

The analysis method that is crucial for monitoring patients with special dietary needs is dietary intake evaluation. This process involves systematically assessing what patients consume. It provides comprehensive insights into their nutritional status and helps identify specific dietary deficiencies or excesses that may impact their health. By evaluating dietary intake, dietitians can tailor nutrition interventions to meet individual needs, ensuring that any special requirements based on medical conditions or lifestyle factors are adequately addressed. This evaluation can include food frequency questionnaires, 24-hour dietary recalls, or food diaries, which allow for a detailed analysis of nutrient intake and dietary patterns. The other methods, while useful in their respective contexts, do not provide the same level of direct insight into specific dietary habits. Clinical observations can offer valuable information but lack the quantitative data that dietary intake evaluation provides. Calculating body mass index serves as a general guideline for assessing weight status but does not capture dietary habits or nutrient adequacy. Assessing socioeconomic factors can influence dietary choices but does not directly evaluate nutrient intake, making it less relevant for monitoring special dietary needs. Therefore, dietary intake evaluation stands out as the most critical method for addressing patients' unique dietary requirements.

5. What is the appropriate dietary therapy following a Billroth II procedure?

A. High fat, low protein diet

B. High carbohydrate, low fiber diet

C. Decrease simple carbohydrates, high protein, moderate fat, B12 supplements

D. Standard balanced diet

Following a Billroth II procedure, which involves the partial removal of the stomach and reconstruction that connects the remaining stomach to the small intestine, the body faces changes in digestion and nutrient absorption. The correct dietary therapy emphasizes a diet that is high in protein and moderate in fat while reducing simple carbohydrates. This approach helps to provide adequate nutrition while minimizing complications that arise from rapid gastric emptying, such as dumping syndrome. High protein intake is crucial because protein supports healing and helps maintain muscle mass, especially after surgical intervention. Moderate fat intake can provide calories without overwhelming the digestive system, as fat is digested more slowly compared to carbohydrates. Decreasing simple carbohydrates aids in preventing rapid spikes in blood sugar levels, which can lead to dumping syndrome, characterized by symptoms like nausea and diarrhea following meals. Additionally, individuals who have undergone this procedure often experience impaired absorption of vitamin B12, making supplementation necessary to prevent deficiencies. In contrast, a high fat, low protein diet could result in inadequate healing and nutrient retention. A high carbohydrate, low fiber diet may not address the specific absorption issues and could still contribute to digestive discomfort post-surgery. While a standard balanced diet is typically recommended for the general population, it does not take into account the specialized needs of patients post-B

6. What food should someone taking MAOI antidepressants avoid?

A. Salami

B. Cheddar cheese

C. Pepperoni

D. Chicken

Individuals taking MAOI (Monoamine Oxidase Inhibitor) antidepressants must exercise caution regarding their diet, particularly concerning foods that contain tyramine. Tyramine is a naturally occurring compound in various foods that can lead to hypertensive crises when consumed with MAOIs due to inhibited breakdown. Pepperoni, like salami and other fermented or aged meats, typically contains high levels of tyramine. This is due to the fermentation and aging processes that these meats undergo, which can increase tyramine levels significantly. Therefore, people on MAOIs should avoid pepperoni to prevent dangerous interactions that could potentially cause a spike in blood pressure. In contrast, while salami and cheddar cheese also contain tyramine, the mention of pepperoni aligns it more closely with typical dietary restrictions advised for MAOI patients. Chicken, being a fresh, non-aged meat, does not pose the same risk and is generally safe for individuals on these medications. Understanding the relationship between MAOIs and foods high in tyramine is critical for safety in managing diet while on these antidepressants.

7. Which nutrient is suggested to be included in a diet for patients with pancreatic insufficiency?

A. Refined sugars

B. Medium-chain triglycerides

C. Fiber supplements

D. High sodium foods

Medium-chain triglycerides (MCTs) are indeed suggested for patients with pancreatic insufficiency due to their unique properties that aid in digestion and absorption. People with pancreatic insufficiency have a reduced ability to produce enzymes necessary for the digestion of fats. MCTs are metabolized differently than long-chain triglycerides; they are more easily absorbed in the intestines and do not require bile salts for digestion. This makes MCTs an excellent choice for individuals who have difficulty digesting fats and helps to provide a source of calories without exacerbating malabsorption issues. Using refined sugars may not provide nutritional benefits and can lead to digestive issues when consumed in excess. Fiber supplements can be useful for some patients but can also increase gastrointestinal discomfort, especially if not introduced gradually. High sodium foods are generally not recommended as they can contribute to fluid retention and other cardiovascular problems, which are especially important to manage in patients with pancreatic conditions. Thus, medium-chain triglycerides stand out as a more appropriate dietary inclusion for patients facing the challenges of pancreatic insufficiency.

8. When evaluating dietary sources of iron, which one is the best choice?

A. Chicken breast

B. Black beans

C. Spinach

D. Lentils

The best choice for dietary sources of iron among the options provided is lentils. Lentils are an excellent source of non-heme iron, which is the type of iron found in plant-based foods. They provide a significant amount of iron per serving, along with other essential nutrients such as protein, fiber, and various vitamins and minerals. While black beans and spinach also contain iron, their bioavailability differs. Spinach, despite its well-known iron content, contains oxalates that can inhibit the absorption of iron. Black beans also offer iron, but lentils generally have a higher iron content and better absorption characteristics. Chicken breast, being an animal source, contains heme iron, which is more easily absorbed than non-heme iron. However, it does not match the iron content of lentils in a comparable serving size. For individuals, especially those following vegetarian or vegan diets, lentils serve as a superb option to help meet iron needs effectively.

9. When using anthropometric measurements, what is the most important factor to ensure accuracy?

A. Standardization of tools

B. Competence of the practitioner and calibration

C. Type of measurement taken

D. Frequency of assessments

The most crucial factor in ensuring the accuracy of anthropometric measurements is the competence of the practitioner and the calibration of the measuring instruments. A skilled practitioner is essential because anthropometric measurements can be influenced by the technique used and the experience of the individual conducting the assessment. Correct positioning, consistent measurement methods, and understanding how to interpret the data all rely on the practitioner's expertise. Additionally, calibration of the tools being used—such as scales and measuring tapes—ensures that they provide precise readings. Even the best practitioner can yield inaccurate results if the equipment is not correctly calibrated. Therefore, both practitioner competence and equipment calibration work hand in hand to achieve accurate anthropometric assessments, which are vital for making sound nutritional and health decisions. Other aspects, while important, do not have the same impact on accuracy. For example, standardization of tools is important to ensure consistency across different settings, but the accuracy of measurements begins with the user's competence and well-calibrated tools. Similarly, the type of measurement taken and frequency of assessments are relevant factors in a broader context but do not directly influence the immediate accuracy of the measurements being performed. This comprehensive focus on practitioner skill and calibration highlights why this answer holds the highest significance.

10. How long can open tube feedings be kept before they must be disposed of?

A. 12 hours

B. 24 hours

C. 36 hours

D. 48 hours

Open tube feedings should be discarded after 24 hours to ensure safety and prevent the risk of bacterial growth. This time frame is established as a guideline to maintain the quality and safety of the feeding formula once it has been exposed to the open environment. After 24 hours, the risk of contamination increases significantly, which could pose health risks to the patient receiving the feedings. While some formulations might have varying guidelines for specific conditions or circumstances, the 24-hour guideline is widely accepted in clinical practice for standard open tube feedings to optimize patient safety and nutrition. Therefore, choosing this option aligns with established protocols for handling enteral nutrition effectively.