



الثانية

## قائمة الاسئلة

## الأغذية الوظيفية والمكملات الغذائية - المستوى الرابع - قسم تغذية علاجية - كلية الطب والعلوم الصحية - برامج العلوم الطبية التطبيقية - الفترة

د/ نجيب يحيى لطف الصرمي

- 1) 1. What is the primary distinction between nutraceuticals and functional foods?
  - 1) Functional foods provide health benefits, while nutraceuticals do not.
  - 2) Functional foods are found only in Japan, while nutraceuticals are global.
  - 3) + Nutraceuticals are taken in capsules or pills while functional foodsare consumed as regular foods.
  - 4) Nutraceuticals are made from synthetic chemicals, and functional foods are natural
- 2) Which of the following is an example of a food rich in omega-3 fatty acids beneficial for heart health?
  - 1) Nuts
  - 2) + Salmon
  - 3) Onions
  - 4) Bananas
- 3) What type of functional food is primarily involved in promoting gut health by enhancing beneficial bacteria
  - 1) Functional lipids
  - 2) Antioxidants
  - 3) Phytochemicals
  - 4) + Probiotics
- 4) Which of the following is NOT one of the benefits of nutraceuticals?
  - 1) Increase the health value of our diet
  - 2) Have a psychological benefit from doing something for oneself
  - 3) Act as a substitute for conventional medication
  - 4) + Help us live longer
- 5) 5. What is the primary function of probiotics?
  - 1) To reduce cholesterol levels
  - 2) + To improve intestinal microbial balance
  - 3) To lower blood pressure
  - 4) To increase vitamin absorption
- 6) Which of the following is a benefit of consuming functional foods?
  - 1) Increasing harmful bacteria in the gut.
  - 2) + Reducing the risk for cardiovascular diseases.
  - 3) Raising blood pressure levels.
  - 4) Causing inflammation in the body.
- 7) . Which of these compounds is classified under 'Non-Nutrients'?
  - 1) + Flavonoids.
  - 2) Selenium.
  - 3) Vitamin E.
  - 4) Folate.
- 8) How do functional foods help support mental health?
  - 1) By causing free radical accumulation.
  - 2) By decreasing nutrient absorption.
  - 3) + By protecting the brain from free radical damage.
  - 4) By reducing the production of B vitamins.
- 9) Which part of cereals is predominantly made up of carbohydrates?
  - 1) The germ layer
  - 2) The bran layer
  - 3) + The endosperm
  - 4) The hull



- Which nutrient compounds in legumes are known for their health-promoting and disease-preventing properties?
  - 1) Simple carbohydrates
  - 2) Saturated fats
  - 3) Sugary compounds
  - 4) + Non-nutrient bioactive phytochemicals
- 11) How do saponins found in legumes benefit human health?
  - 1) They increase blood glucose levels.
  - 2) + They help protect the human body against cancers.
  - 3) They promote weight gain.
  - 4) They raise cholesterol levels.
- 12) What is one of the primary benefits of consuming fruits?
  - 1) + They provide plenty of soluble dietary fibers.
  - 2) They decrease calcium absorption.
  - 3) They are high in calories and fat.
  - 4) They are the main source of protein.
- Which of the following best describes the role of prebiotics in functional foods?
  - 1) They function mainly as a source of energy for the body.
  - 2) They are a type of protein that aids digestion.
  - 3) + They benefit microflora in the GI tract and support bifidobacteria growth.
  - 4) All of above
- 14) What are some health benefits associated with functional foods?
  - 1) They mostly help in muscle building and weight loss.
  - 2) + They act as antioxidants and have anticancer, antibacterial, and antiviral properties.
  - 3) Their primary benefit is to provide essential vitamins and minerals.
  - 4) They are limited to improving heart health only.
- 15) What defines bioactive compounds?
  - 1) + Compounds that induce biological activities in living things
  - 2) Compounds that have no effect on organisms
  - 3) Compounds found in non-living things
  - 4) Compounds that are only present in water
- 16) Where are bioactive compounds typically found?
  - 1) In non-food items
  - 2) + In small quantities in foods
  - 3) In large quantities in foods
  - 4) In the air we breathe
- 17) Why are bioactive compounds being intensively studied?
  - 1) To see if they can replace traditional medicine
  - 2) To understand their impact on the environment
  - 3) + To evaluate their effects on health
  - 4) To create new food additives
- 18) Where are bioactive compounds typically found?
  - 1) In non-food items
  - 2) + In small quantities in foods
  - 3) In large quantities in foods
  - 4) In the air we breathe
- 19) What is the main characteristic of bioactive compounds in foods?
  - 1) + They are extra nutritional constituents
  - 2) They are the main source of calories



- 3) They are harmful to health
- 4) They are not present in foods
- 20) What do bioactive compounds do in organisms?
  - 1) Slow down metabolism
  - 2) + Produce biological activities
  - 3) Cause no effect
  - 4) Increase body weight
- 21) What are prebiotics primarily composed of?
  - 1) Soluble vitamins
  - 2) Animal fats
  - 3) + Nondigestible food ingredients
  - 4) Digestible proteins
- 22) Which substance is mentioned as a prebiotic that reaches the colon essentially intact?
  - 1) Fructose
  - 2) + Inulin
  - 3) Proteins
  - 4) Sucrose
- 23) Which food is a common source of probiotics?
  - 1) Chicory root
  - 2) Jerusalem artichoke
  - 3) + Yogurt
  - 4) Raw oats
- What are some health effects of probiotics?
  - 1) + Alleviation of chronic intestinal inflammatory diseases
  - 2) Increase in muscle mass
  - 3) Improvement in eyesight
  - 4) Reduction in blood pressure levels
- 25) Which type of bacteria is NOT mentioned as having probiotic characteristics?
  - 1) + Escherichia coli
  - 2) Bifidobacterium breve
  - 3) Lactobacillus rhamnosus
  - 4) Lactobacillus reuteri
- What is the primary role of phytochemicals in plants?
  - 1) They produce seeds for reproduction.
  - 2) They help plants grow taller.
  - 3) They provide essential nutrients for plants.
  - 4) + They protect plants from damage.
- 27) Which phytochemical found in garlic is known for its anti-bacterial properties?
  - 1) Isoflavones
  - 2) Capsaicin
  - 3) + Allicin
  - 4) Saponins
- 28) How do antioxidants benefit human cells?
  - 1) They increase cell replication rates.
  - 2) They replace damaged cell walls.
  - 3) hey make cells grow larger.
  - 4) + They protect cells from oxidative damage.
- 29) What is one of the potential benefits of phytochemicals?
  - 1) They increase LDL cholesterol in the body.

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- 2) + They can stop a cell's conversion from healthy to cancerous.
- 3) They ensure complete prevention of cancer.
- 4) They are known to cause high blood pressure.
- 30) What do researchers currently know about the relationship between diet and cancer risk?
  - 1) Eating meat increases the risk of heart disease but not cancer.
  - 2) People who avoid phytochemicals have no risk of cancer.
  - 3) Only specific fruits affect cancer risk.
  - 4) + People who eat large quantities of fruits and veggies have reduced cancer risks.
- 31) What is the primary concept behind nutraceuticals?
  - 1) To act as a replacement for traditional medicine.
  - 2) + To focus on prevention.
  - 3) To provide energy quickly.
  - 4) To enhance taste and texture.
- 32) Which of the following activities are nutraceuticals known for?
  - 1) Increasing calorie consumption.
  - 2) + Enhancing health and preventing chronic illnesses.
  - 3) Improving food flavors.
  - 4) Reducing exercise requirements.
- 33) Which of the following is true about omega-3 fatty acids?
  - 1) They decrease protein absorption in the body.
  - 2) They are primarily found in dairy products.
  - 3) + They help reduce inflammation and the risk of heart disease.
  - 4) They increase the need for exercise.
- 34) How do omega-3 fatty acids impact cardiovascular health?
  - 1) They lead to high blood pressure.
  - 2) + They lower the risk of sudden death due to cardiac arrhythmias.
  - 3) They increase cholesterol levels.
  - 4) They cause blood clotting issues.
- 35) What is a benefit of DHA consumption mentioned in the text?
  - 1) It causes digestive issues in infants.
  - 2) + It may delay cognitive decline in neurodegenerative disorders.
  - 3) It decreases muscle growth.
  - 4) It improves skin hydration.
- 36) . What is a major dietary source of linoleic acid and its primary role in the human body?
  - 1) It is mostly found in plant sterols and is primarily used for cholesterol management.
  - 2) It is sourced from animal organs and assists in muscle growth and body weight loss.
  - 3) + It is a common dietary PUFA found in many foods and helps maintain membrane fluidity.
  - 4) It is primarily obtained from fish and seafood and works by lowering LDL cholesterol.
- 37) What does ADI stand for in the context provided?
  - 1) Advanced dietary information
  - 2) + Acceptable daily intake
  - 3) Average daily intake
  - 4) Annual dietary intake
- 38) What does 'Low recommended nutrient intake' refer to?
  - 1) A diet plan for weight loss
  - 2) + A guideline for minimal nutrient consumption
  - 3) A high-protein diet recommendation
  - 4) A suggestion for daily water intake
- 39) Why is the efficacy assessment of functional foods important?

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- 1) It reduces the cost of functional foods.
- 2) It promotes the sales of functional foods.
- 3) It simplifies the production of functional foods.
- 4) + It establishes scientific validity and builds consumer confidence.
- Which of the following methods is considered the gold standard for evaluating the efficacy of functional foods?
  - 1) Animal Studies
  - 2) Epidemiological Studies
  - 3) + Human Clinical Trials
  - 4) In Vitro Studies
- 41) What is the main role of evidence-based research in the context of functional foods?
  - 1) + To ensure health claims are supported by rigorous scientific methods.
  - 2) To simplify consumer decisions regarding functional foods.
  - 3) To market functional foods to consumers.
  - 4) To increase the price of functional foods.
- 42) What role does the gut microbiome play in the bioavailability of functional food compounds?
  - 1) It only filters out harmful compounds.
  - 2) + It influences absorption, transformation, and excretion.
  - 3) It monitors the presence of bioactive compounds.
  - 4) It enhances the taste of food.
- Which of the following benefits is associated with daily supplementation of omega-3 fatty acids?
  - 1) A) Increased muscle mass
  - 2) B) Improved digestion and gut health
  - 3) + C) Reduced risk of cardiovascular events
  - 4) D) Lowered blood sugar levels
- What role can functional foods play in the food industry?
  - 1) A) Decrease the cost of food production
  - 2) B) Extend the shelf life of food products
  - 3) C) Make food products more visually appealing
  - 4) + D) Enhance nutritional value of food products
- Why is adequate protein intake crucial for the body?
  - 1) Because it helps to absorb all vitamins and minerals.
  - 2) Because it is the only source of energy for the body.
  - 3) Because it is required for hydration.
  - 4) + Because it supports the growth, repair, and maintenance of body tissues.
- 46) Which of the following is NOT a primary role of proteins in the body?
  - 1) Supporting the growth and repair of tissues.
  - 2) Providing building blocks for muscle development.
  - 3) Forming enzymes and hormones.
  - 4) + Balancing body hydration levels.
- What are enzymes, and what is their role in the body?
  - 1) + Enzymes are proteins that act as catalysts for biochemical reactions.
  - 2) Enzymes are carbohydrates that provide energy.
  - 3) Enzymes are vitamins that support immune function.
  - 4) Enzymes are minerals that build bone strength.
- 48) What roles do proteins play in the human body?
  - 1) Proteins only help break down nutrients.
  - 2) Proteins are only involved in hormone production.
  - 3) Proteins are related solely to growth and development.

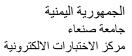


- 4) + Proteins help break down nutrients, regulate processes, and produce hormones.
- 49) Which of the following describes peptides correctly?
  - 1) Peptides are large molecules unrelated to proteins.
  - 2) Peptides are not composed of amino acids.
  - 3) Peptides are long chains of amino acids.
  - 4) + Peptides are short chains of amino acids linked by peptide bonds.
- 50) Which of the following roles do peptides NOT perform?
  - 1) Function as hormones or neurotransmitters
  - 2) + Serve as primary energy currency in cells
  - 3) Possess antimicrobial properties
  - 4) Act as signaling molecules
- 51) What are the components that make up nucleotides?
  - 1) Phosphate group, lipid, and ribosome
  - 2) Nitrogenous base, lipid, and amino acid
  - 3) + Nitrogenous base, sugar molecule, and phosphate group
  - 4) Sugar molecule, amino acid, and nitrogenous base
- 52) Which peptide is known to promote feelings of satiety?
  - 1) ATP
  - 2) Ghrelin
  - 3) + Peptide YY (PYY)
  - 4) Insulin
- 53) Which cellular process is NOT powered by ATP?
  - 1) Muscle contraction
  - 2) Active transport across cell membranes
  - 3) Enzyme reactions
  - 4) + DNA replication
- What is one way nucleotides support the immune system?
  - 1) They assist in digestion of fats.
  - 2) They neutralize toxins in the bloodstream.
  - 3) They cool down body temperature.
  - 4) + They are involved in the activation and regulation of immune cells.
- 55) Which vitamin and mineral pair is primarily involved in converting food into energy?
  - 1) Vitamin D and phosphorus
  - 2) Vitamin A and calcium
  - 3) Vitamin C and magnesium
  - 4) + B vitamins and iron
- Which combination of micronutrients is crucial for maintaining healthy bones and teeth?
  - 1) Vitamin A, vitamin E, and iron
  - 2) Vitamin C, zinc, and selenium
  - 3) Vitamin B6, vitamin B12, and magnesium
  - 4) + Calcium, vitamin D, and phosphorus
- 57) Which of the following are sources of Vitamin C?
  - 1) Bread, pasta, and rice
  - 2) Milk, cheese, and yogurt
  - 3) Fish, meat, and eggs
  - 4) + Citrus fruits, berries, and tomatoes
- 58) What is one function of Vitamin C in the body?
  - 1) Regulates blood sugar levels
  - 2) + Acts as a powerful antioxidant



- 3) Produces red blood cells
- 4) Digests carbohydrates quickly
- 59) Which of the following foods is a good source of Vitamin C?
  - 1) Sunflower seeds
  - 2) + Berries
  - 3) Egg yolks
  - 4) Mackerel
- What is one primary function of Vitamin D in the human body?
  - 1) + Promoting calcium and phosphorus absorption for bone health
  - 2) Producing collagen in connective tissues
  - 3) Synthesis of red blood cells
  - 4) Neutralizing harmful free radicals
- 61) What symptom might indicate a Vitamin E deficiency?
  - 1) Increased susceptibility to infections
  - 2) Slow wound healing
  - 3) Gum disease
  - 4) + Muscle weakness
- Which vitamin is essential for preventing neural tube defects during pregnancy?
  - 1) Riboflavin (B2)
  - 2) Niacin (B3)
  - 3) + Folate (B9)
  - 4) Thiamine (B1)
- What is a potential toxicity symptom of consuming high doses of Vitamin B6?
  - 1) Megaloblastic anemia
  - 2) Cracked lips
  - 3) + Nerve damage
  - 4) Pellagra
- Which of the following is NOT a function of calcium?
  - 1) Muscle function
  - 2) + Increase in blood sugar levels
  - 3) Blood clotting
  - 4) Nerve transmission
- What symptom is associated with calcium deficiency in children?
  - 1) Anemia
  - 2) Liver damage
  - 3) + Rickets
  - 4) Hypercalcemia
- Which source of magnesium is NOT mentioned in the text?
  - 1) Bananas
  - 2) + Apples
  - 3) Almonds
  - 4) Spinach
- What bodily function is primarily supported by ATP production?
  - 1) Heart rhythm regulation
  - 2) Mood stabilization
  - 3) Bone density maintenance
  - 4) + Energy production
- Which of the following foods is NOT a typical source of zinc?
  - 1) + Potatoes

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- 2) Pumpkin seeds
- 3) Beef
- 4) Cheese
- What are common symptoms of selenium toxicity?
  - 1) Dry skin and brittle nails
  - 2) Increased appetite and weight gain
  - 3) Shortness of breath and chest pain
  - 4) + Garlic breath odor and hair loss
- 70) How does vitamin C affect iron absorption in the body?
  - 1) Prevents iron from being absorbed
  - 2) Has no effect on iron absorption
  - 3) Reduces absorption by oxidizing iron
  - 4) + Increases absorption by reducing non-heme iron