



Exam Form # 4686 This exam is valid through August 31, 2012

Nutrition

Competency Exam

IT IS EXTREMELY IMPORTANT THAT YOU FOLLOW THE INSTRUCTIONS TO ACCURATELY COMPLETE YOUR ANSWER SHEET. IF YOUR ANSWER SHEET IS NOT COMPLETED PROPERLY, IT WILL NOT BE SCORED AND YOU WILL NEED TO RETAKE THE EXAM.

Directions for Taking the Exam

This exam is designed to test your understanding of Nutrition. It contains 85 multiple-choice questions. It is to your advantage to answer every question, even if you have to guess. Read each question in your exam booklet and decide which answer is best. Look carefully at your exam answer sheet, and when marking your answer sheet, be sure that the row number matches the number of the question you are answering. Make certain to darken the circle *completely*. If you decide to change an answer, erase the original answer completely. Incomplete erasing, stray marks, or multiple responses on the exam answer sheet could result in incorrect scoring. The Proctor is not allowed to discuss the contents of the questions with you at any time.

Preparing the Exam Answer Sheet

Make sure the side of the exam answer sheet that requires your name and address information is facing up. Print the requested information clearly in the row of appropriate boxes. Then completely darken the circles corresponding to the letter printed in the box. If the entire name is longer than the space provided, please abbreviate. Do not leave space between letters of your name. Multiple darkened responses within a row will be recorded as an error and may result in an incorrect spelling on your certificate.

 Fill in appropriate boxes by printing neatly, one character per space provided, being careful not to touch any of the lines. 	Correct		Correct	•
	Incorrect	JOHN	Incorrect	• 🗙 🗹 •

Note: Failure to accurately record information on the exam answer sheet will result in errors on your certificate. A fee of twenty dollars (\$20) is charged for corrections or reprints of certificates.

Exam Scoring and Certificates

Exams are scored by National Restaurant Association Solutions (NRA Solutions) within 10 business days from the date they are received.

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- A. Replace whole-fat milk with skim milk.
- B. Replace turkey bacon with pork bacon.
- C. Replace cocoa powder with chocolate.
- D. Replace turkey sausage with pork sausage.

2. The best temperature to taste hot food is between

- A. 70°F (21°C) to 135°F (57°C).
- B. 70°F (21°C) to 105°F (41°C).
- C. 41°F (5°C) to 165°F (74°C).
- D. 105°F (41°C) to 195°F (91°C).

3. What are home meal replacements?

- A. Food that has been fully prepared and is ready for re-heating
- B. A sit-down dinner at a local restaurant
- C. A new term for meals eaten in a chain restaurant
- D. A new way of offering family-style meals in a restaurant setting

4. Which labeling term implies that the food product is produced without pesticides or synthetic fertilizers?

- A. Organic
- B. Natural
- C. Grade A
- D. Locally Grown

5. The body's preferred sources of energy are

- A. protein and fats.
- B. carbohydrates and fats.
- C. proteins and amino acids.
- D. carbohydrates and amino acids.

- 6. Which method of preparation for vegetables consists of adding vegetables and a small amount of water to a sauté pan, covering, and cooking over high heat until the vegetable is tender?
 - A. Sweating
 - B. Blanching
 - C. Pan-steaming
 - D. Pan-frying
- 7. In order to lose one pound of weight, how many fewer calories per week are needed by a person?
 - A. 3000 calories
 - B. 1000 calories
 - C. 3500 calories
 - D. 2500 calories
- 8. What processing step can be taken to force fruit and vegetables to ripen?
 - A. Exposure to sunlight after picking
 - B. Holding under reduced air pressure
 - C. Treatment with ethylene gas
 - D. Spraying with enzymatic activators
- 9. Using vegetable shortening instead of animal shortening in a recipe could result in
 - A. higher saturated fat content.
 - B. less saturated fat content.
 - C. no change in saturated fat content.
 - D. higher trans fat content.

- A. the food label lists whole wheat as the first ingredient.
- B. the color of the bread is the darkest brown.
- C. the bread is brown and includes wheat as part of its name.
- D. the whole wheat is described as stoneground.

11. How does offering water to a customer provide health benefits?

- A. It stimulates the brain to perceive more enjoyment of the meal.
- B. It has a significant role in metabolic processes.
- C. It has no health benefits, but is very courteous.
- D. It interferes with the absorption of fat.

12. How has the increase in meals consumed away from home impacted the foodservice industry?

- A. Restaurants have reported little change in customer requests.
- B. Consumers have started requesting healthier food choices.
- C. There are fewer career opportunities in the industry.
- D. Healthier food choices are requested but menus haven't changed.
- 13. For people wanting to lose weight, which nutrient should be limited since it has the highest potential for increasing the caloric content of a diet?
 - A. Protein
 - B. Carbohydrate
 - C. Lipid
 - D. Alcohol

14. The process by which food is propelled down the digestive tract by waves of involuntary contractions is

- A. mastication.
- B. aphagia.
- C. digestive wave.
- D. peristalsis.

15. One health problem that could occur with excessive protein intake is

- A. osteoporosis from an increase in calcium losses.
- B. gallbladder attacks from amino acid crystals.
- C. over-hydration from an increase in oxylate sources.
- D. pancreatic failure from too many amino acids.
- 16. What is the unit of measurement of energy needed to heat one kilogram of water by 1°C (2°F)?
 - A. Amine
 - B. Carbohydrates
 - C. Thermal point
 - D. Kilocalorie

17. A person following a lacto-ovo-vegetarian diet would eat which dish below?

- A. Scrambled eggs with onions and salsa, and a side of pork bacon
- B. An omelet with soy cheese, lean diced ham and peppers and a side of wheat toast
- C. A plain omelet with a side of fried potatoes and a side of turkey sausage links
- D. Scrambled eggs with reduced-fat cheese and mushrooms, and a side of fried potatoes

- A. contain more fat and less protein than lowdensity lipoproteins.
- B. reduce the need for fat- and cholesterolintake in the body.
- C. stimulate the liver to release cholesterol into the intestines.
- D. remove plaque from the artery walls and return it to be recycled.

19. What does CHO stand for in connection with carbohydrates?

- A. CHO is a shortened version of the word carbohydrate.
- B. CHO is an abbreviation for the chemicals that make up carbohydrates.
- C. CHO is an abbreviation for the three main groups of carbohydrates.
- D. CHO is short for Complex Hydrogen Oligosaccharides.

20. Which method is recommended for retaining vitamins and minerals?

- A. Soaking vegetable in salt water
- B. Boiling vegetable on high heat
- C. Stir-frying vegetables for a short time
- D. Deep-fat frying vegetables in light oil

21. In addition to meat, fish, and fowl, the lactovegetarian diet will also exclude

- A. bread.
- B. milk.
- C. eggs.
- D. tofu.

22. When changing from a prime cut of meat to a select cut of meat, can the recipe be prepared in the same method?

- A. Yes, there is no need to change the cooking methods.
- B. Yes, however the end product will have a noticeably less fat.
- C. No, the cooking method will always have to be changed to a moist method.
- D. No, the only way to prepare tough cuts is to use chemical tenderization.

23. According to the Competency Guide, achieving balanced nutrition on a menu is important because

- A. nutrition is not sensed during dining.
- B. demands for low-calorie, low-fat choices increase profits.
- C. customers need nutritious food that tastes good at a value.
- D. social needs for food at all ages are universal.

24. How do the color bands in the MyPyramid symbol suggest the need for proportionality in food?

- A. The darker color bands indicate a decrease in the amount of food consumed from that category.
- B. The wider color bands indicate an increase in the amount of food consumed from that category.
- C. The order of the color bands indicate the amount of food to be consumed from each category.
- D. The width of the color bands is the same for all people.

25. What is confit?

- A. Meat that has been salted, pressed, and dried
- B. Meat cooked and preserved in its own fat
- C. Dried meat that has been powdered or shredded
- D. Dried meat that is highly seasoned
- 26. What addition was made to the Nutrition Facts Panel starting on January 1, 2006?
 - A. Grams of omega-3 fats
 - B. Grams of unsaturated fats
 - C. Grams of trans fats
 - D. Grams of cholesterol

27. The sense of taste includes

- A. sweet, sour, smooth.
- B. spicy, acidity, flavor.
- C. sour, salty, bitter.
- D. smooth, spicy, sweet.

28. Menus that highlight the MyPyramid guidelines would include

- A. very little oil, smaller meat items and more vegetables, fruits and whole grains.
- B. very little oil, moderate meat items, and some vegetable, fruits and whole grains.
- C. a lot of oil, larger meat items and more vegetables, fruits and whole grains.
- D. moderate oil, moderate meat, moderate vegetables, fruits and whole grains.

29. Today, a new goal for chefs, recipe developers, and menu planners could be to

- A. produce great tasting dishes that meet criteria for healthy dining choices.
- B. keep the same great flavors but change to soy-based products.
- C. simplify current recipes so they can be copied at home by consumers.
- D. stick with classic cuisine regardless of nutritional value.

30. Which of the following causes denaturation of a food's protein structure during preparation?

- A. Dicing chicken breasts into cubes for a stir fry
- B. Flavoring a beef flank with a mixture of herbs
- C. Using a marinade of lemon juice on fish fillets
- D. Cooling a dish containing seafood
- 31. What is the diet recommended by the National Institutes of Health that is low in sodium but rich in sources of calcium, magnesium, and potassium?
 - A. H.E.A.R.T. B. D.A.S.H. C. L.I.F.E D. D.I.N.E.

32. A recipe that contains non-dairy food sources but is rich in calcium is

- A. baked potato.
- B. liver and onions.
- C. shrimp scampi.
- D. seasonal mixed greens.

- 33. A restaurant customer notifies their food server of an allergy to nuts and asks questions about food items on the menu. What should the server do?
 - A. Assure the customer that the restaurant never had a problem with allergens.
 - B. Get the manager and ask the customer to leave to avoid any problems.
 - C. Tell the customer that the recipes are not allowed to be given out.
 - D. Have someone knowledgeable about the recipes answer the questions.

34. What part of the chemical structure of amino acids makes each type different?

- A. The side chain of rings, chains, or more complex structures
- B. The organic acid group which has different amounts of carbons
- C. The shape of the chains in the hydrogen groups
- D. The number of nitrogen and hydrogen atoms in the amine group

35. What body organs alert the brain to the sensation of taste?

- A. Uvula and sensors in the nasal sinuses
- B. Occipital lobe and taste buds
- C. Papillae and olfactory receptors
- D. Olfactory receptors and mammal sensors

36. Reviews of the typical "American" diet reveal several problems including

- A. too many servings of vegetables.
- B. larger intakes of animal-protein food.
- C. decrease in simple-sugar food.
- D. reduction in calorie sources.

37. How can the culinary art of preparing food be combined with nutrition at the restaurant level?

- A. By changing to unprocessed ingredients and improving plating methods to enhance visual appeal
- B. By keeping recipes the same but using all low-fat ingredients and using visual menus
- C. By providing a larger vegetable serving with each dish and allowing diners to observe the cooking process
- D. By engaging all of the consumer's senses and using ingredients prepared by healthier cooking techniques

38. A skilled chef, sensitive to nutritional needs, can build flavor by

- A. adding additional sugar to meat.
- B. deep-frying vegetables.
- C. using fat-free marinades on meat items.
- D. using salt freely in all menu items.

39. Which is a rich dietary source of omega-3 fatty acids?

- A. Whole grain cereals
- B. Corn oil
- C. Cold-water oily fish
- D. Sesame seed oil

40. Why do all carbohydrates have to be broken down into monosaccharides?

- A. Only a certain amount of monosaccharides are needed and the rest are excreted.
- B. The strong stomach acid breaks down carbohydrates to monosaccharides.
- C. The body will relate to monosaccharides like fiber and excrete them.
- D. Only monosaccharides can be absorbed through the intestinal wall.

41. Which is an example of physical loss during the harvesting steps?

- A. Sorting of eggs into sizes
- B. Trimming of stalks on broccoli
- C. Loss of vitamins during flash freezing of green beans
- D. Loss of nutrients during canning of tomatoes

42. Disease rates are called

- A. modified index rates.
- B. mortuary rates.
- C. maladjustment rates.
- D. morbidity rates.

43. Why are amino acids important for every age group?

- A. They are found in most food and provide more energy than carbohydrates.
- B. They are the best source of energy for the body.
- C. They provide nitrogen for human growth and body maintenance.
- D. They transfer oxygen to replenish the blood.

44. What is reduced or removed in eggsubstitute products?

- A. Water content
- B. Alpha-3 Fatty acids
- C. Cholesterol
- D. Leavening ability
- 45. For people with a high risk of heart disease, the America Heart Association recommends a LDL cholesterol level of less than
 - A. 100 mg/dL.
 - B. 140 mg/dL.
 - C. 160 mg/dL.
 - D. 200 mg/dL.

46. According to the USDA MyPyramid Food Guide, which food group should be increased in the daily diet?

- A. Vegetables
- B. Fruits
- C. Milk
- D. Oils

47. Foodservice establishments alter their methods of food preparation to accommodate consumers because

- A. healthier food choices are being required to stay within the food codes.
- B. many consumers make dining choices based on the healthier food offerings.
- C. manufacturers are changing over to healthier recipes, so there is no choice.
- D. higher prices can be charged for low-cost, low-labor food choices.

48. The hormones that are important in bloodsugar metabolism are insulin and

- A. glycogen.
- B. galactose.
- C. glucagon.
- D. dextrin.

49. What do carbohydrates add to a diet?

- A. The building block for cell membranes and muscle tendons
- B. A rich source of energy, fiber, vitamins, and minerals
- C. A source of ketones for the body's use
- D. Building blocks in the form of amino acids

- 50. Which layer of the digestive tract provides a passage for the blood vessels, nerves, and the lymphatic system?
 - A. Submucosa
 - B. Mucosa
 - C. Serosa
 - D. Epimucosa
- 51. A person with diabetes who appears irritable and weak about an hour before eating may be experiencing what medical symptom?
 - A. Hyperglycemia
 - B. Hypoglycemia
 - C. Ketosis
 - D. Ketoacidosis

52. What is the difference between fats and oils?

- A. Fats contain more kilocalories per gram and oils contain less kilocalories per gram.
- B. Fats are from plant sources and oils are harvested from animal sources.
- C. Oils will become more saturated when refrigerated, but fats do not change structurally.
- D. Oils are liquid at room temperature and fats are solid at room temperature.

53. How does the news media impact nutritional choices at the consumer level?

- A. By providing personal advice on nutrition habits to keep healthy
- B. By funding the scientific studies on nutrition
- C. By attending supermarket openings and giving samples of the latest products
- D. By doing reports on the health benefits of certain nutrients or types of food

54. Regional specialties and ethnic food items are available in most places today due to

- A. changes in farming production methods.
- B. limited transportation of food products.
- C. lack of national advertising by large companies.
- D. limited acceptance of different food by bordering regions.

55. A vegetarian diet that excludes many food items may lead to

- A. diseases cause by increased absorption of water.
- B. reduced absorption of proteins.
- C. diseases caused by vitamin deficiencies.
- D. increased availability of minerals from food.

56. Which is a source of alpha-linolenic acids?

- A. Corn oil
- B. Sesame seed oil
- C. Flaxseed oil
- D. Cottonseed oil
- 57. What is the name of the document that focuses on food choices and reducing the risk of chronic diseases and is published jointly by the Department of Health and Human Services and the USDA?
 - A. Guidelines for Healthy Americans
 - B. Recommended Dietary Guidelines
 - C. Dietary Guidelines for Americans
 - D. Healthy Food, Healthy Bodies

58. Which process could be used in genetic modification of plants and animals?

- A. Contra breeding
- B. Selective breeding
- C. Recombinant DNA technology
- D. Modified selection

- A. the fruit was grown using approved agricultural methods.
- B. the fruit was grown without pesticides or synthetic fertilizers.
- C. the fruit has not been genetically modified.
- D. nothing; the term "natural" is legally meaningless.

60. What is a benefit of having a versatile menu based in the seasonal harvest?

- A. The extra cost for purchasing seasonal items is always passed on to customers.
- B. There is less hassle by using local farmers compared to finding a certified vendor.
- C. Reduced handling allows products to retain more nutrients.
- D. Seasonal products always require less preparation and cut staffing cost.

61. A certified nutrition professional most likely to modify and analyze recipes for nutritional content is a(n)

- A. ACF-certified chef.
- B. corporate chef.
- C. registered dietitian.
- D. food scientist.

62. When thinking about nutrition science, it should be taken into account that

- A. the nutrition principles of today are dynamic and are influenced by research findings.
- B. nutrition information does not impact daily life.
- C. the nutrition information that is learned today is permanent and unchanging.
- D. nutrition research is usually done in an unscientific manner to prove a certain food is good for you.

63. On the Nutrition Facts panel, the amount of nutrients per serving is listed as the

- A. largest portion size that is healthy to eat at once.
- B. amount eaten to meet weekly intake guidelines.
- C. portion of the serving suggested for different age groups.
- D. metric measure of the portion size.

64. What is the difference between organic and conventional food products?

- A. Conventional food products are not grown using approved methods.
- B. Organic foods are only grown on small independent farms.
- C. Certified organic products meet the requirements of some government or independent organization.
- D. Conventional food products contain fewer nutrients than organic foods.

65. What information is needed to calculate the Body Mass Index level?

- A. Measurements of weight in kilograms and width of the wrist
- B. Measurements of weight in pounds and height in inches
- C. Circumference of waist and hips
- D. Size of the wrist, waist, and upper part of the arm

66. How can nutrition information be passed to consumers in a restaurant on a daily basis?

- A. By keeping a book of recipes for consumers to read
- B. By having a corporate chef on staff
- C. By hiring a research chef to analyze the menus
- D. By training service staff on how menu items are prepared

67. What can happen if a person's diet is missing food sources of an essential amino acid?

- A. No reactions will be noticed since the body will have to switch over to its protein balance sources.
- B. No reactions will be seen since the body can break down other sources of amino acids to create them.
- C. Some functions of the body will be slowed since the body will not be able to substitute another amino acid for the missing one.
- D. Severe reactions can occur since the loss of the proteins will leave the body in a state of rapidly declining health.

68. Some fruits and vegetables are harvested early and treated with ethylene gas in order to

- A. preserve the natural color.
- B. reduce the numbers of parasite growth.
- C. force-ripen them for delivery.
- D. break down the fiber content.

69. What causes the main reaction in processing food by freeze-drying?

- A. The cooking of the food product under pressure and then blast chilling
- B. The addition of reduced air pressure during the freezing process
- C. The freezing of a product after it has been cooked into a reduction
- D. The reduction of temperature that causes the product to instantly freeze

70. Which of the following cooking techniques is NOT considered low-fat?

- A. Grilling
- B. Deep-frying
- C. Stir-frying
- D. Poaching

71. What part of the chemical structure of unsaturated fats makes them more prone to rancidity?

- A. Double bonds located between the carbons atoms
- B. More hydrogen in the molecules
- C. Carbon chain length
- D. Bonds that are easily broken under heat

72. Why are the levels for acceptable macronutrient distribution range set as percentages?

- A. These requirements are a basis for planning various calorie reduction diets.
- B. The amounts are based on set calorie levels for general population needs.
- C. Studies show that people understand the information better in this format.
- D. The amounts are based on total energy intake for the individual.

73. A healthy diet should include

- A. balance, variety, and moderation.
- B. overuse of dietary supplements.
- C. following popular fad diets that offer quick weight loss.
- D. following a diet higher in saturated fat and cholesterol.

74. Which factor requires the biggest expenditure of an individual's daily energy needs?

- A. Energy used for digestion of food
- B. Energy used during exercise
- C. Energy needed for the body at rest
- D. Energy needed during sickness

- 75. While it may be necessary to cook tough cuts of meat using a moist-cooking method such as braising, what added benefits come from this process?
 - A. It allows for safe, quick cooking of these cuts.
 - B. The fat renders and adds flavor and moisture to the dish.
 - C. It increases the nutrient level of the meat.
 - D. The cooking process converts saturated fat into unsaturated fat.

76. What is the study of the chemical and physical reactions that occur in food called?

- A. Biotechnology
- B. Food science
- C. Biochemistry
- D. Culinology

77. How can a cook demonstrate implementation of nutrition principles?

- A. Request that menus show lists of ingredients.
- B. Change the menu to follow food trends.
- C. Switch from cooking oils to fats.
- D. Modify a recipe to reduce the amount of salt.

78. How do vitamins impact metabolism in the body?

- A. Excess vitamins can be converted to enzymes that are more effective at burning lipids.
- B. Fat-soluble vitamins allow lipids to be absorbed into the intestine and excreted out of the body.
- C. Vitamins allow the body to alter its need for energy sources by slowing reaction times.
- D. Vitamins act as co-enzymes to activate or speed up chemical reactions.

79. Nutrition is best defined as the

- A. way food can be prepared in order to be healthier.
- B. hormones in food that adjust a human's metabolism.
- C. study of nutrients and how they interact in the body.
- D. study of changes in people's eating patterns.

80. What is the basic chemical difference between vitamins and minerals?

- A. Potential for toxicity versus being harmless
- B. Water soluble versus fat soluble
- C. Complex structures versus simple structures
- D. Organic versus inorganic

81. What is the basic difference between type 1 and type 2 diabetes?

- A. The types of carbohydrates to be eaten in a day
- B. The type of diets that are recommended to be followed
- C. The method that the body uses to metabolizes carbohydrates
- D. The amount of the hormone insulin produced by the body

82. What is an acceptable replacement for flour and fat-based roux?

- A. Roasted and grilled meat drippings
- B. Cornstarch and water slurry
- C. Unskimmed beef stock
- D. Pureed cottage cheese

83. What is chyme?

- A. The secretion released by the gallbladder
- B. The liquid that results from food processed in the stomach
- C. The enzyme that allows for the breakdown of lipids
- D. The waste product from digestion that forms into feces

84. What adjustment can a foodservice establishment take to help retain nutrients during the cooking of its food?

- A. Change to large-batch preparation of vegetables and hold them on the steam table.
- B. Pre-cut vegetables for the week and keep them in water.
- C. Convert to advance preparation for all vegetable dishes.
- D. Prepare only as many vegetables as necessary and serve them as soon as possible.

85. A child or teen with a weight that ranks at the 85th to 95th percentile level for Body Mass Index is considered

- A. at risk for overweight.
- B. overweight.
- C. borderline obese.
- D. at risk for morbid obesity.