

SOUTH PLAINS - DISTRICT 2 4-H



DATE: September 10, 2013

TO: All South Plains District 2 County Extension Agents

SUBJECT: **2013-14 District 2 4-H Nutrition Quiz Bowl**

FROM: Andy Hart
Extension Program Specialist
4-H & Youth Development

Calley Runnels
Swisher County CEA-FCS
NQB Committee Chair

CONTEST DATE: Saturday, October 26, 2013
CONTEST LOCATION: Levelland High School, 1400 Hickory (Alamo and Hickory)
CHECK IN: 9:45 a.m.
CONTEST BEGINS: 10:30 a.m.
REGISTRATION VIA: Via 4-H Connect
4-H CONNECT OPENS: October 7, 2013
4-H CONNECT CLOSES: October 21, 2013
ENTRY FEE: \$10
CONTACT: Calley Runnels, (806) 995-3726



Please carefully read the enclosed guidelines, schedule, and assignments for the District 2 4-H Nutrition Quiz Bowl. **The time schedule for Nutrition Quiz Bowl will be similar to last year.** The Volunteer Leaders Nomination Form along with the District 2 4-H Nutrition Quiz Bowl Registration form are attached.

All District 2 F & N Quiz Bowl Entries and Registration Must Be Completed on 4-H Connect Between (Monday) October 7, 2013 and (Monday) October 21, 2013. Registration for District 2 F & N Quiz Bowl will close on Monday, October 21 and WILL NOT BE REOPENED AFTER THIS DEADLINE!!

The District 2 4-H Food & Nutrition Task Force workday will be Tuesday, October 22 at 9:00 a.m. in the classroom at the District Office.

South Plains - District 2 4-H
Texas A&M AgriLife Extension Service
1102 E FM1294 | Lubbock, Texas 79403-6653

Tel. 806.746.6101 | Fax. 806.746.4057 | d24-h.tamu.edu

Required information due to the District Office, Tuesday, October 22, 2013 by 9:00 a.m.

- **County Registration Forms**
- **Team Placards**
- **Volunteer Leaders Nomination Forms**

1. Schedule for the Day—October 26, 2013

- 8:00 a.m. Food Show/Nutrition Quiz Bowl Committee report to Levelland High School
- 9:45-10:00 a.m. Registration (One person from each county check in teams and pickup placards)
- 10:00 a.m. Orientation - All Contest Officials, except agents helping with food show (Moderators, Score Keepers, Judges, Timekeepers, Door Monitors)
- 10:30 a.m. Contest Begins
- 12:30-1:30 p.m. Break for lunch and food show awards
- 1:45 p.m. Quiz Bowl Rules Review
- 2:00 p.m. Contest Resumes

2. These Guidelines are in addition to those in the 4-H Food & Nutrition Quiz Bowl Guide:

- \$10.00 entry fee per participant. Entries and registration must be completed by each participant and certified by each county using 4-H Connect. Individuals may pay by credit card or County 4-H check.
- Use the attached District 2 4-H Nutrition Quiz Bowl Registration form to register your team.
- Each county may enter Junior, Intermediate, and Senior teams in the district contest. (There is no limit on the number of teams from each county in each division.)
- The Intermediate team may consist of both junior and intermediate 4-H age members.
- Age - Age will be based on 2013-2014 4-H year age requirements effective as of September 1, 2013.
 - **Junior** – 8 (and in the 3rd grade), 9, 10 as of August 31, 2013
Birth date is between September 1, 2002 – August 31, 2005
 - **Intermediate** – 11, 12, 13 as of August 31, 2013
Birth date is between September 1, 1999 – August 31, 2002
 - **Senior** – 14-18 as of August 31, 2013
Birth date is between September 1, 1994 – August 31, 1999
- A placard for each team member must be submitted with the completed registration form.

Instructions for Placard:

Use card stock weight paper, color coded (Pink – Junior Division, Yellow – Intermediate Division, and White – Senior Division). Print first name of each team member in landscape format using Times New Roman font and 150 pt. font size. Under first name of team member, also print county name in a 72 pt. font size. An example is attached for your convenience. Please use a binder clip to attach your placards to the registration.

- Each county is asked to nominate one individual to help at the District Contest. Send the volunteer leader nomination form to District 2 Office by October 22, 2013.
- Bracket position will be pre-determined randomly.
- Only one coach per team will be allowed in contest room. No study guides will be allowed in contest room during competition. There will be no scribing of questions during contest rounds.
- The final rounds will be public.

3. The 4-H Nutrition Quiz Bowl Study Guide can be found on the state FCS website at http://fcs.tamu.edu/food_and_nutrition/pdf/2014-quiz-bowl-study-guide.pdf
4. Awards will be given immediately following the final rounds in each age category. Medals will be given to the top three junior, intermediate and senior teams. The first, second, and third place senior teams will advance to State 4-H Roundup in June, 2014.

If you have questions concerning the District 2 4-H Nutrition Quiz Bowl, feel free to call Calley Runnels at (806) 995-3726. Thank you for your attention to these matters. We look forward to a quality 4-H youth development experience for everyone!

This is your authorization to attend the District 2 4-H Nutrition Quiz Bowl on October 26, 2013, in Levelland and charge expenses to your regular monthly travel account.

cc: Michael Clawson, DEA
Angela Burkham, North Region RPD-FCS

Enclosures

Agent/Volunteer Assignments 2014 4-H Nutrition Quiz Bowl

District 2 4-H Food & Nutrition Task Force:

Calley Runnels, Co-Chair (NQB)	Felice Acker, Co-Chair (FS)
Wendy Scott, Vice Chair (NQB)	Kathy Carr, Vice Chair (FS)
Becky Wilmeth, Chair (FC)	Marsha Blair
Mary Collier	Shana Fleming
Amy Kress	Perry Schaffer
Nancy McDonald	Courtney Levens
Audra Graves	Deana Sageser
Kay Davis	

NOTE: CEAs in below-mentioned counties please submit names of your volunteers to Calley Runnels by October 22 at 9:00 a.m.

Door Monitors: 1 Hale County Volunteer
1 Garza County Volunteer
1 Bailey County Volunteer
1 Lamb County Volunteer

Responsibilities:

- Make sure only officials, contestants, and one coach per team are in the contest room (except in last round, which is open to public).
- Let teams know when it is their turn to compete.
- Update the bracket as the contest progresses.
- Responsible for general information such as bathroom locations and schedule.
- Help gather teams for their turn.

Registration: District 2 4-H Program Specialist and District 2 4-H Council Members

Agent Judges: Perry Schaffer (Junior)
Nancy McDonald (Intermediate)
Kay Davis (Senior)
Mary Collier (non-winners)

Volunteer Judges: Lamb County
Hockley County
Lubbock County
Terry County

Moderators: Julie Smith (Junior)
Kathy Carr (Intermediate)
Ronda Alexander (Senior)
Wendy Scott (non-winners)

Time Keepers: Becky Wilmeth (Junior)
Shana Fleming (Intermediate)
Amy Kress (Senior)
Audra Graves (non-winners)

Official Scorekeepers (Form which must be certified at end of each contest by team captains):

Mandi Seaton (Junior)
Ashley Piercy (Intermediate)
Courtney Levens (Senior)
Marsha Blair (non-winners)

Unofficial Scorekeepers (White Board): Andy Hart
Amber Parkinson
Felice Acker
Hale County Volunteer

Provide Buzzer Board: Floyd County
Gaines County
Lubbock County
Lamb County
Hockley County

Provide Resource Materials: Swisher County
Lamb County
Floyd County
Bailey County
Hockley County

Bracket: Calley Runnels

**DISTRICT 2 4-H
NUTRITION QUIZ BOWL
REGISTRATION**

**Due October 22, 2013 by 9:00 a.m.
at the District Office
NO LATE ENTRIES!**

_____ **Junior**
_____ **Intermediate**
_____ **Senior**

County _____

AGE REQUIREMENTS

Age will be based on 2013-2014 4-H year age requirements effective as of September 1, 2013.

- **Junior** – 8 (and in the 3rd grade), 9, 10 as of August 31, 2013
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TEAM MEMBERS

	Name	Address	Date of Birth MM/DD/YY	Competing in Food Show
1.				<input type="checkbox"/> Yes <input type="checkbox"/> No
2.				<input type="checkbox"/> Yes <input type="checkbox"/> No
3.				<input type="checkbox"/> Yes <input type="checkbox"/> No
4.				<input type="checkbox"/> Yes <input type="checkbox"/> No

(Name of Coach)

(Name of Alternate Coach)

Approval to enter district contest _____ (CEA Signature)

Date: _____

County _____

VOLUNTEER LEADERS NOMINATION FORM
(Due October 22, 2013 with team entry materials at the District Office)

Each county is asked to submit the name, address, and phone number of one qualified volunteer to assist with the Nutrition Quiz Bowl. Check assignment page for responsibilities. If your county is listed, the volunteer that you submit will be used to fill that assignment. If your county is not listed, we still need you to submit a volunteer's name for other possible responsibilities.

CONTACT THESE PEOPLE TO ASSURE THEIR AVAILABILITY. After October 22, 2013, volunteers will receive a communication confirming their needed assistance.

NOTE: PLEASE SUBMIT AS MANY AS POSSIBLE!

VOLUNTEER

Name _____ Would like to help as:
Address _____
Phone _____
E-mail _____

VOLUNTEER

Name _____ Would like to help as:
Address _____
Phone _____
E-mail _____

VOLUNTEER

Name _____ Would like to help as:
Address _____
Phone _____
E-mail _____

NOTE: Placard for each team member must be submitted with registration. Please follow placard instructions on page 2 of letter.

Placard Example

Gayla
Lubbock Co.

2013-2014 SOUTH PLAINS DISTRICT 2 4-H FOOD AND NUTRITION QUIZ BOWL

October 26, 2013
Levelland High School
1400 Hickory
Levelland, Texas

Participant Guide

1. Study Guide:

The 4-H Nutrition Quiz Bowl Study Guide can be found on the state FCS website at http://fcs.tamu.edu/food_and_nutrition/pdf/2012-quiz-bowl-study-guide.pdf

2. Eligibility and Age Criteria:

Membership – the contestant must be enrolled and actively participating as a 4-H member.

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Intermediate teams may consist of both junior and intermediate 4-H age members. Teams with both intermediate and junior members will compete in the intermediate age division.

3. Registration and Entry Materials:

\$10.00 entry fee per participant. Entries and registration must be completed by each participant and certified by each county using 4-H Connect. Individuals may pay by credit/debit card or County 4-H check.

4. Schedule for the Day

8:00 a.m.	Food Show/Nutrition Quiz Bowl Committee report to Levelland High School
9:45-10:00 a.m.	Registration (One person from each county check in teams and pickup placards)
10:00 a.m.	Orientation - All Contest Officials, except agents helping with food show (Moderators, Score Keepers, Judges, Timekeepers, Door Monitors)
10:30 a.m.	Contest Begins
12:30-1:30 p.m.	Break for lunch and food show awards
1:45 p.m.	Quiz Bowl Rules Review
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5. Contest Information

Bracket position will be pre-determined randomly. Only one coach per team will be allowed in contest room. No study guides will be allowed in contest room during competition. There will be no scribing of questions during contest rounds. Final rounds will be public.

6. Awards:

Awards will be given immediately following the final rounds in each category. Medals will be given to the top three junior, intermediate and senior teams. The first, second, and third place senior teams will advance to state Roundup in June 2014.

7. Information:

If you have questions concerning the District 2 4-H Nutrition Quiz Bowl, contact your County Agent or Calley Runnels, D-2 4-H Nutrition Quiz Bowl Chair at 806-995-3726.

8. References: To address the identified objectives, teams and coaches should consult with the references below. For each objective, at least one appropriate reference is given.

The names of the references are abbreviated as follows:

1. ADA American Dietetic Association's Complete Food and Nutrition Guide, **4th edition**
Roberta Larson Duyff, MS, RD, CFCS
2012, John Wiley & Sons, Inc.
ISBN 978-0-470-91207-2

2. FOOD = AAFCO Food: A Handbook of Terminology, Purchasing, and Preparation, 11th edition. American Association of Family and Consumer Sciences; 2006, ISBN 0-8461-0005-3

3. Texas A&M AgriLife Extension Service Publications

Nutrient Needs at a Glance L-1875 and Safe Home Food Storage B-5031
<https://agrilifebookstore.org/>

4. USDA MyPlate (USDA)

<http://www.choosemyplate.gov/healthy-eating-tips/ten-tips.html>

Focus on these tip sheets:

Choose MyPlate

Got Dairy Today?

Be Food Safe

Add more Vegetables to Your Day

With Protein Foods, Variety is Key

Focus on Fruits

Healthy Eating for Vegetarians

Make Half Your Grains Whole

Salt and Sodium

<http://www.cnpp.usda.gov/Publications/MyPlate/GettingStartedWithMyPlate.pdf>

5. Dietary Guidelines for Americans Executive Summary (DGA)

<http://www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/PolicyDoc/ExecSumm.pdf>

After each objective the preferred reference is listed. **For official Quiz Bowl contest rules, consult the Texas 4-H Quiz Bowl Guide (4H 3-2.030)**

9. Objectives

Disclaimer: The objectives listed are designed to help 4-H members study for the state 4-H Food and Nutrition Quiz Bowl. **In no way is this to be viewed as the list of questions that will be asked.** Questions will be based on the concepts and objectives outlined in the guide.

Category I: Basic Nutrition

A. Carbohydrate

1. Know the energy content of carbohydrates. (**ADA**, 59)
2. Compare simple versus complex carbohydrates. Be able to give examples of each. (**ADA**, 55-57)
3. Discuss the popular myths about sugar (example: sugar causes hyperactivity). (**ADA**, 59-61)
4. Discuss lactose intolerance with respect to signs/symptoms, cause, and recommended treatment. (**ADA**, 560-564)
5. Define fiber and be able to distinguish between soluble, insoluble, beta glucan, and whole grain forms. Be able to list/identify food sources of each type of fiber as well as discuss their health benefits. (**ADA**, 63-69)
6. According to the American Dietetic Association, how many grams of fiber should adults try to include in their diets? Discuss what might happen if too much fiber is consumed. (**ADA**, 72-73)
7. Discuss ways a healthy person can increase the amount of fiber in his/her diet. (**ADA**, 72-78)
8. According to the Institute of Medicine, what percentage of our energy should come from carbohydrates? (**ADA**, 69)
9. Understand the roles that added sugars play in food. What types of foods are likely to contain added sugars? (**ADA** 75-76)
10. Discuss the link between dietary carbohydrates and the development of tooth decay (caries). (**ADA** 61-63)
11. What words on a food label, other than "sugar," indicate that a food has added sugar? (**ADA**, 79-80)

12. Discuss the artificial sweeteners including acesulfame K, aspartame, saccharin, sucralose, tagalose, and neotame including sweetness compared to sugar, caloric content, and use in cooking. (ADA, 80-87)

B. Protein

1. Discuss the energy content of protein. (ADA, 90)
2. Discuss the functions of protein. (ADA, 89-90)
3. What are complete and incomplete proteins? What are food sources of these types of proteins? (ADA, 89)
4. Generally speaking, what percentage (range) of our calories should come from protein? (ADA, 90)
5. How might protein help someone manage their weight? (ADA, 90)
6. Understand the difference between essential and non-essential amino acids. (ADA 88-89)

C. Fat

1. Understand the importance of dietary fat. (ADA, 99-101)
2. Know the energy content of dietary fat (kcal/gram). (ADA, 100)
3. Know the difference between saturated, monounsaturated, polyunsaturated, omega-3, and trans fatty acids including food sources and potential effects on blood lipids. (ADA, 104-110, 120)
4. Explain the difference between dietary cholesterol and blood cholesterol. Identify food sources that contain high amounts of cholesterol. (ADA, 114- 115)
5. Explain the recommendations for dietary cholesterol. (ADA, 68)
6. Distinguish between saturated-fat-free, low saturated fat, fat-free, low-fat, light, low-fat meal, lean, extra lean, cholesterol-free, and reduced fat foods. (ADA, 121)
7. What are phytosterols? How might phytosterols be beneficial to someone with high cholesterol? (ADA, 112)

D. Vitamins

1. Describe the differences between water-soluble and fat-soluble vitamins. (ADA, 123)
2. Discuss the fat-soluble vitamins (A,D,E,K) with respect to their major functions, what happens if you consume too much of the vitamin (excess/toxicities), and what happens if you don't get enough (deficiencies). Be able to identify major food sources of each fat-soluble vitamin. Are there any fat-soluble vitamins that can be made by our body? If so, which ones and how? (ADA,123-130; **Texas A&M AgriLife Extension Service** L-1875, Nutrient Needs at a Glance)
3. Discuss the water-soluble vitamins (B-vitamins and C) with respect to functions, signs of a deficiency, and signs of toxicities. Be able to identify major food sources of

each water-soluble vitamin. Are there any water-soluble vitamins that can be made by our body? If so, which ones and how? (**ADA**, 130-139; **Texas A&M AgriLife Extension Service**, L-1875 Nutrient Needs at a Glance)

E. Minerals

1. Discuss the following minerals with respect to (1) functions in the body, (2) signs of a deficiency, (3) what happens if you consume too much of the mineral, (4) and major food sources of that mineral: calcium, phosphorus fluoride, iodine, iron, potassium, selenium, sodium, magnesium, chloride, chromium, and zinc. (**ADA**, 139-152; 159-168; **Texas A&M AgriLife Extension Service** L-1875 Nutrient Needs at a Glance)

F. Fluids

1. What role(s) does water play in the body? (**ADA**, 169-170)
2. How much water is in the average body? (**ADA**, 169)
3. Generally speaking, how long could a person live without water? (**ADA**, 169)
4. Discuss the general recommendation for water/fluid intake and the factors that may affect that recommendation. (**ADA**, 170-173)
5. Know the difference(s) between hard and soft water. (**ADA**, 175)
6. Bottled water can be one of several types. What is the difference between artesian water, mineral water, purified water, sparkling water, and spring water? Which government agency regulates bottled water? (**ADA**, 173-177)
7. How much water (per person, per day should) you keep on hand in case of an emergency? (**ADA**, 175)

G. Food additives and biotechnology

1. Be able to discuss the difference between enriched and fortified foods. (**ADA**, 131,214)
2. Which government agency is responsible for the regulation of food additives? (**ADA**, 217-218)
3. When discussing food additives, what is meant by the initials *GRAS*? (**ADA**, 217)
4. Discuss the following categories of food additives with respect to their function(s) in food preparation/processing: (**ADA**, 213-217)
 - (a) emulsifiers (b) anti-caking agents (c) humectants
 - (d) leavening agents (e) pH control agents (f) sulfites
 - (g) thickeners/stabilizers (h) anti-oxidants (i) citric acid
 - (j) anti-microbial agents (k) sodium nitrite (l) tocopherols
 - (m) calcium propionate (n) maturing/bleaching agents (o) flavor enhancers
 - (p) carrageenan
5. What is irradiation? Know the types of foods commonly irradiated and why. How are irradiated foods identified? (**ADA**, 213)

6. What types of pesticides are used to protect crops? Which government agency monitors pesticide residues in food? (ADA, 219-222)
7. What is meant by the term "organically grown?" What are the benefits of organically produced food? (ADA, 223-224)
8. What are the proposed benefits of genetically modified foods? (ADA, 225-227)

H. Dietary Guidance (Dietary Guidelines and MyPlate)

1. According to the USDA and the USDHHS, what percentage of American households have difficulties in acquiring enough food to meet their needs? (DGA)
2. The Dietary Guidelines for Americans are targeted towards individuals of a certain age. What is that age range? (DGA)
3. What mineral is often consumed in excess? (DGA)
4. What are the current sodium intake recommendations and how do they differ for African Americans and individuals with certain chronic diseases? (DGA)
5. According to the Dietary Guidelines for Americans, what are the current recommendations for saturated fat and cholesterol? (DGA)
6. Understand the type and amount of fish that a pregnant woman can eat and why. Also, be able to list those species of fish that a pregnant woman should not consume. (DGA)
7. Describe vitamin recommendation(s) for individuals 50 years of age and older (DGA).
8. Understand the food groups featured in MyPlate including: (a) the amount needed for one ounce of grains or protein foods; (b) the amount of fruits, vegetables, or milk foods that equal one cup; and (c) recommendations specific to each food group. (USDA)
9. Be able to identify sources of whole grains and explain how to increase whole grains in one's diet. (USDA)

Category II: Food Preparation Skills and Storage

Note: Proper food preparation and storage requires skills and knowledge in food safety. Therefore, many of these objectives address food preparation/storage and food safety.

A. Milk & Milk Products

1. Understand the recommended guideline(s) for the storage of butter, including temperatures and length of time. (FOOD, 64; Texas A&M AgriLife Extension Service B-5031, Safe Home Food Storage)
2. Natural cheese, processed cheese, and cream - know the different categories and the standards that must be met. (FOOD, 64-65)
3. Understand the recommended guideline(s) for the storage of cheese, including temperatures and length of time. (FOOD 64-65)
4. Why is milk homogenized? (FOOD, 67)

5. Discuss the benefits of milk pasteurization. (**FOOD**, 67)
6. Understand the recommended guideline(s) for the storage of milk, yogurt, and buttermilk including length of time. (**FOOD**, 69; **Texas A&M AgriLife Extension Service** B-5031, Safe Home Food Storage)
7. Explain the differences between ice cream, ice milk, and sherbet. (**FOOD**, 69-70)

B. Meat/Fish/Poultry/Eggs

1. Compare roasting, oven broiling, and grilling as dry heat cooking methods. (**FOOD**, 77)
2. Discuss the three methods of cooking in liquid. (**FOOD**, 81)
3. Discuss how to determine the degree of doneness (using a meat thermometer) for beef, lamb, veal, pork, and ham. (**FOOD**, 82)
4. Discuss using the microwave to cook meats, including methods to promote even cooking. (**FOOD**, 84)
5. Describe methods for determining freshness of fresh finfish, fresh shellfish, and frozen fish. (**FOOD**, 85-86)
6. Understand the recommended guidelines for the storage of fish products, including the amount of time products can be refrigerated/frozen before use and proper storage and thawing methods. (**FOOD**, 86-87; **Texas A&M AgriLife Extension Service** B-5031, Safe Home Food Storage)
7. Describe how to determine if fish is properly cooked. Include a general method to estimate the amount of time needed to cook fish. (**FOOD**, 88-89)
8. Understand the recommended guidelines for the storage of poultry products including the amount of time turkey and chicken products can be refrigerated/frozen before use, and proper storage and thawing methods. (**FOOD**, 92-96; **Texas A&M AgriLife Extension Service** B-5031, Safe Home Food Storage)
9. Discuss the whipping properties of eggs and describe the conditions for getting the best results. (**FOOD**, 98)
10. Discuss the use of microwaves for preparing eggs. Include situations where caution should be used. (**FOOD**, 98)
11. Discuss the proper care and handling of eggs. (**FOOD**, 98)
12. What is the purpose of "beating" egg whites when preparing omelets? (**FOOD**, 98)
13. What is the proper procedure(s) for handling and storing frozen egg products, liquid egg products, and dried egg products? (**FOOD**, 99-100)
14. Identify the refrigerator storage times for ground beef. (**FOOD**, 76)

C. Fruits

1. Discuss different uses for apples, including examples of specific types of apples for each use. (**FOOD**, 101)
2. Understand the recommended guidelines for the storage of fresh fruits, including methods to achieve and maintain ripeness/freshness. (**FOOD**, 102-103; **Texas A&M AgriLife Extension Service**, B-5031, Safe Home Food Storage)
3. Discuss what to look for and what to avoid when choosing apples, avocados, bananas, blueberries, cantaloupes, grapefruit, grapes, honeydew, kiwifruit, oranges, peaches, pears, strawberries, and watermelon. (**FOOD**, 103-107)
4. Understand how fruit fits into MyPlate recommendations. (**MyPlate**)

D. Vegetables

1. Be able to identify cruciferous vegetables. (**FOOD**, 108)
2. Understand the recommended guidelines for the storage of canned, frozen, and dried vegetables including best storage temperatures and length of time. (**FOOD**, 108-109; **Texas A&M AgriLife Extension Service**, B-5031 Safe Home Food Storage)
3. Understand the recommended guidelines for the storage of fresh vegetables, including best storage temperatures to maintain freshness and length of time. (**FOOD**, 110-114; **Texas A&M AgriLife Extension Service**, B-5031 Safe Home Food Storage)
4. Discuss what to look for and what to avoid when choosing asparagus, broccoli, corn, lettuce, peas, peppers, potatoes, squash, and tomatoes. (**FOOD**, 109-113)
5. Discuss what determines the amount of time needed to cook a vegetable. (**FOOD**, 114)

E. Grain Products

1. Discuss the difference between cornmeal, enriched cornmeal, corn grits, hominy, and cornstarch. (**FOOD**, 119)
2. Understand the recommended guidelines for the storage of grain and cereal products including refrigeration/freezing and length of time. (**FOOD**, 122-124; **Texas A&M AgriLife Extension Service**, B-5031 Safe Home Food Storage)
3. Compare the following types of flour: all-purpose, bread, semolina, soy enriched, and self-rising. (**FOOD**, 121-123)

F. Fats and Oils

1. What is the definition of a fat? (**ADA**, 55) What is the definition of oil? (**ADA**, 56)
2. Discuss the origin and uses of animal fat shortenings (lard, tallow). (**FOOD**, 128; **Texas A&M AgriLife Extension Service**, B-5031 Safe Home Food Storage)
3. Discuss the differences among canola oil, olive oil, tropical oils, sesame oils, and marine oils including any distinguishing nutritional factors and reasons for use. (**FOOD**, 128-131)

4. Discuss the recommended guidelines for the storage of various fats, vegetable shortening, and oils. (**FOOD**, 132)
5. Discuss the definition of smoke point (pertaining to fats and oils) and its importance when frying with fats and oils. (**FOOD**, 132)
6. Identify how a roux is made. (**FOOD**, 62)

G. Food Preservation

1. Explain the differences between hot pack and raw pack methods of packing tomatoes and other vegetables and fruits into jars. (**FOOD**, 170)
2. Differentiate between jelly, jam, freezer jam, conserves, marmalade, preserves, and fruit butter. (**FOOD**, 172-173)
3. Discuss how to package fruits and vegetables for freezing. What types of food should not be frozen? (**FOOD**, 175-178)
4. Can an individual use a microwave oven to dry fruits? Why or why not? (**FOOD**, 167)
5. Discuss characteristics of a quality freezer container that should be used when freezing foods. (**FOOD**, 175)
6. What are the 2 types of canners used for home food preservation? (**FOOD**, 168-170)
7. When canning low acid foods, what type of canner should be used? (**FOOD**, 167-170)
8. How often should a consumer test the accuracy of a pressure canner dial gauge? What determines if/when the pressure gauge should be replaced? (**FOOD**, 168)
9. Discuss tips to follow when drying, canning, and freezing to ensure a safe and quality product. (**FOOD**, 167-178)
10. Identify methods to store dried food. (**FOOD**, 167-173)

H. Weights, Measures, and Can Sizes

1. Understand the common units of weight and volume. Be able to convert from one unit to another (e.g. 16 tablespoons = 1 cup). (**FOOD**, 38-39)
2. Know the approximate measure (in cups) of commercial sized cans. (**FOOD**, 165-166)

I. Miscellaneous

1. Describe the differences between raw sugar, granulated white sugar, powdered sugar, and brown sugar including uses for each. (**FOOD**, 125)
2. What is yeast, how does it work, and in what forms can it be purchased? (**FOOD**, 134)
3. Identify/define the following food science terms: antioxidant, carotenoids, chlorophyll, dehydration, denaturation, hydration, kilocalorie, kosher, pickling, rancidity, smoke point. (**FOOD**, 50-52)
4. Identify/define the following foods and cooking terms: julienne, lukewarm, meringue, puree, a la carte, al dente, a la king, almandine, au jus, baklava, bisque,

bouillabaisse, bouillon, bratwurst, caviar, chitterlings, chorizo, crepes, du jour, entree, hassenspeffer, hollandaise sauce, kim chee, luau, hor d' oeuvres, matzos, pareve, pita, roux, sushi. (FOOD, 53-63)

Category III: Nutrition and Health

A. Obesity

1. What is Body Mass Index (BMI), how is it calculated and what do the numbers mean? (ADA, 22)
2. Name the health risks associated with being overweight or obese? (ADA, 23-25)
3. What is obesity? What are your chances of becoming obese if one of your parents is obese? How many calories make up one pound of fat? (ADA, 29)
4. Understand the meaning of the following terms often found on food labels: calorie free, reduced, high, good source, light, healthy, lean, low calorie, reduced or fewer calories, lite, and low calorie meal. (ADA, 40)

B. Blood Pressure/Heart Disease

1. List risk factors for developing heart disease. Why should we be concerned about heart disease? (ADA, 583-584)
2. What is cholesterol, and how is it connected to heart disease? (ADA, 585-592)
3. Discuss the differences between HDL- and LDL-cholesterol. (ADA, 585-592)
4. How can someone increase their HDL blood level and decrease their LDL-blood level? (ADA, 586)
5. What are some dietary factors that can lead to elevated cholesterol levels? Which factor(s) is/are most significant? (ADA, 585-592)
6. What are triglycerides? What causes blood triglycerides to become elevated? What are some ways to reduce triglycerides? (ADA, 585-592)
7. What is high blood pressure (also known as hypertension)? What are some of the health risks associated with high blood pressure? (ADA, 593)
8. What are risk factors for developing high blood pressure? (ADA, 593-595)
9. As a general guideline, what nutrient may be responsible for increasing blood pressure in some hypertensive individuals? How much of this nutrient should your diet be limited to in order to serve as a precaution against high blood pressure? (ADA, 594)
10. There are some nutrients that may help promote optimal blood pressure if they are consumed in adequate amounts. What are they? (ADA, 596)
11. How can a person lower their risk for developing high blood pressure? (ADA 596-597)

C. Cancer

1. What is cancer? What are some of the known risk factors? (ADA, 598)
2. Discuss the role antioxidants play in combating free radicals/oxidation. (ADA, 599)

3. What are phytonutrients/phytochemicals? In what foods would you find the following phytochemicals and how might they be beneficial to our health: beta carotene, lutein, lycopene, anthocyanins, flavanols, soy protein, phytoestrogens. (ADA 154-157)

D. Osteoporosis

1. What is osteoporosis? How is it diagnosed? (ADA, 615,618)
2. What are the dietary and non-dietary risk factors associated with osteoporosis (ADA, 616-617)
3. Why are women more likely to develop osteoporosis? (ADA, 616)
4. How might caffeine, alcohol, and smoking impact calcium absorption? (ADA, 618)
5. What is considered to be the recommended adequate intake (AI) of calcium for different ages and stages of life? Be able to identify food sources of calcium. (ADA, 617-618)
6. What are the advantages of getting calcium from dairy foods rather than from fortified foods and/or supplements? What are the general guidelines for using calcium supplements? (ADA, 618 635-636)

E. Diabetes

1. What is diabetes? What are some of the symptoms? (ADA, 606)
2. Compare and contrast the different types of diabetes (Type 1, Type 2, Gestational). (ADA, 605-606)
3. What are risk factors for developing Type 2 diabetes? (ADA, 606)
4. What health problems can be associated with diabetes if the disease is not controlled? (ADA, 606)
5. Discuss the importance of meal timing, testing blood sugar levels, physical activity, and maintaining a healthy weight for good control of diabetes. (ADA, 607-615)

F. Feeding Infants and Children

1. What is colostrum? How does it protect a newborn from infections? (ADA, 421-422)
2. What is the minimum age that infants are ready to begin eating solid foods? (ADA, 436-437)
4. What is the minimum age that iron-fortified cereals and strained fruits and vegetables should be introduced to infants? (ADA, 438)
5. Why should infants not be given solid foods from a bottle? (ADA, 437)
6. What type of cereal is least likely to cause an allergic reaction in infants? (ADA, 438)
7. Why should infants not be fed directly from a jar? (ADA, 444)
8. Why is it not safe to give infants honey before their first birthday? (ADA, 440)

9. Certain foods should not be given to children under 4 years of age because they can cause choking. What are those foods? (ADA 444-446)

G. Nutrition for Older Adults

1. There are several risk factors for poor nutrition that have been identified for older adults. Be able to list them. (Hint: DETERMINE) (ADA, 527)
2. Why are the following nutrients important for older adults: protein, calcium, vitamin D, iron, Vitamin A, folate, vitamin B6 and B12, and zinc? (ADA, 518-522)
3. How does an older person's sense of thirst change? (ADA, 522-523)

H. Anemia

1. What is anemia, and what are some of its symptoms? (ADA, 623)
2. What nutrient deficiencies are linked to anemia? (ADA, 624-626)
3. Discuss possible reasons why young to middle-aged women need more iron in their diets than men. (ADA, 624)
4. Discuss good food sources of iron; compare heme vs. non-heme sources. (ADA, 150-151)
5. What is a good way to improve absorption of iron from plant sources? (ADA, 151)

I. Vegetarian Diets

1. Compare lacto-ovo vegetarian, lacto-vegetarian, flexitarian, and vegan diets. (ADA, 254)
2. A vegan diet that is not well planned may be lacking in several nutrients. What are these nutrients? (ADA, 255-257)
3. Discuss the potential health benefits from eating a vegetarian diet. (ADA, 254-255)

J. Dietary Supplements

1. Who might benefit from a vitamin and/or mineral supplement? (ADA, 632-633)
2. Define "ergogenic aid" and be able to give examples of supplements advertised as ergogenic aids. (ADA, 558-559)
3. How are dietary supplements regulated (think Dietary Supplement Health Education Act)? What are the roles of the FDA and FTC in relation to dietary supplements? (ADA, 641-643)
4. What information is required on the label of a dietary supplement? (ADA 652-654)

K. Food Allergies

1. What is the difference between a food allergy and a food intolerance? (ADA, 560)
2. Which foods are most likely to cause allergic reactions in adults and in children? How long do food allergies last? (ADA, 571, 579)
3. What are the three most common symptoms of a food allergy? (ADA, 571)

4. Understand gluten intolerance; what it is and how it is treated. (ADA, 564-567)

Category IV: Consumer Information

A. Food Label

1. What is meant by % daily value? (ADA, 279-280)
2. Health claims on food labels are regulated by which government agency? (ADA, 281)
3. Discuss the features of the Nutrition Facts panel. (ADA, 278-281)
4. Why might % Daily Values not apply to everyone? (ADA, 279)
5. What determines the order of the ingredient list? (ADA, 280)
6. Why is it important to list ingredients on the food label? (ADA, 280-281)
7. How do structure/function claims differ from health claims on food labels? (ADA, 281-282)
8. Identify and discuss kosher and halal symbols, including the meaning of the symbol. (ADA, 284)
9. Discuss health warnings for food allergens and special conditions that might appear on the food label. (ADA, 282-283)
10. What are the differences between foods labeled "100% organic," "organic," and "made with organic ingredients"? (ADA, 283)

B. Food Standards

1. What does the USDA shield on a carton of eggs mean? (FOOD, 96-97)
2. How is the size of an egg determined? (FOOD, 96-97)

C. Miscellaneous

1. Discuss the purpose of the Universal Product Code. (ADA, 284)
2. When evaluating nutrition information on a web site, what are some things one should look for to make sure the web site is credible? (ADA, 664-667)

Category V. Kitchen and Food Safety

A. Food Safety at the Grocery Store

1. Know the difference between the following terms commonly found on food packages (ADA, 283):
 - a. "sell-by" or "pull" date
 - b. "use by" or "best if used by (before) date"
 - c. "pack date"
2. After purchasing perishable foods at a grocery store, they should be stored within a certain amount of time to maintain safety. What is the recommended length of time? (ADA, 314)

B. Foodborne Illness

1. Which groups of individuals are most susceptible to a foodborne illness? What are some common symptoms of a foodborne illness? (ADA, 314-319)
2. What is the "Danger Zone?" How does temperature play a role in preventing foodborne illness? What does freezing do to bacteria? (ADA 316-317)
3. What do bacteria need to survive and multiply? (ADA, 316-317)
4. Be familiar with the following bacteria with respect to: (a) where they are found, (b) foods that are commonly associated with the bacteria, (c) how the illness is transmitted, (d) ways to prevent foodborne illnesses associated with the different bacteria: (ADA, 317-321)
 - a. Salmonella
 - b. Campylobacter jejuni
 - c. Clostridium perfringens
 - d. Staphylococcus aureus
 - e. Listeria monocytogenes
 - f. Clostridium botulinum
 - g. Escherichia coli
 - h. Vibrio vulnificus
 - i. Yersenia enterocolitica
5. List common food safety mistakes or unsafe food handling practices. (ADA, 323-327)
6. Why should a consumer not roast meat at low oven temperatures (less than 325 degrees F) for long periods of time or even overnight? (ADA, 338)
7. To what temperature should leftovers be reheated? (ADA, 341)
8. Refrigerators should be kept within what recommended temperature range? (ADA, 328)
9. How should food that may be contaminated be handled? (Texas A&M AgriLife Extension Service, B-5031, Safe Home Food Storage)
10. How might a person become infected with Hepatitis A? (ADA, 322)
11. How might someone contract trichinosis (Trichinella spiralis)? (ADA, 323)
12. How might a person become infected with the parasite toxoplasmosis? Know direct and indirect methods of exposure to this parasite. Who is at special risk? (ADA, 323)
13. Know/understand the situations for which a person should see a doctor due to a suspected foodborne illness. (ADA, 323)
14. Discuss what a consumer should do if his/her freezer stops. How do you know whether to refreeze or discard meat, poultry, vegetables, or cooked foods? (ADA, 333-335)

C. Keeping Your Kitchen Safe From a Foodborne Illness

1. Know the steps for proper hand washing. (ADA, 323-325)
2. Define cross contamination. Give an example of how this may occur. (ADA, 326-327)
3. Know the proper temperatures for storing food in the pantry, refrigerator, and freezer. (ADA, 327-333)

4. What types of dishes are not safe for use with food and why? (**ADA**, 328)
5. What is the best method for storing cooked foods so they are cooled rapidly?
(**ADA**, 32; **Texas A&M AgriLife Extension Service B-5031 Safe Home Food Storage**)
6. Where is the best place in the refrigerator to store raw meat, fish, poultry, and eggs and why? (**ADA**, 329)
7. What is "freezer burn" and how does it affect food? (**ADA**, 329)
8. Understand basic principles of safe food preparation and service. (**ADA**, 335-345)
9. Understand how to tell when an egg is properly cooked based on the method used.
(**ADA**, 340-341)
10. When is it safe to re-freeze a frozen food that has been partially thawed?
(**ADA**, 335)
11. What are the four main principles of Fight Bac! (**FOOD**, 49)
12. Understand the guidelines for using a slow cooker to cook foods safely.
(**ADA**, 337-338)
13. If a container is not labeled "microwave safe" how can you determine if it is safe to use in the microwave? (**ADA**, 341)
14. When cooking or reheating foods in the microwave, what is the purpose of "standing time"? (**ADA**, 341)