Foodie Fanatics

A Food Challenge Recipe Resource
Courtesy of: District IV 4-H Program
This resource is intended to provide Texas 4-H Nutrition project leaders with information to aid in helping 4-H youth prepare for the 4-H Food Challenge and other nutrition related competitions. While it is not the only resource to be used, it is a comprehensive guide that will ease 4-H project leaders in preparation for project meetings and practices.

Project leaders will find additional resources that they can add to this guide making it a growing resource to be used for many years within the counties. Please feel free to add to this resource guide as you find reliable tips and facts that will add to the quality of this guide.

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Recipe Creation for Food Challenge Practices

Sections 2 – 5:

Main Dish
Fruits & Vegetables
Breads and Cereals
Nutritious Snacks

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Cost per unit of food items (estimated)
Sample Grocery Receipts
Measure Equivalents
Common Cooking Terms
Food Challenge Sample Presentation Script for Group of 5
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Creating Recipe Resources

Food Fanatics – Food Challenge Recipe Resource

District IV 4-H Program
District IV Food Challenge Recipe Template

Specify Age Category – Junior, Intermediate, Senior, or Mixed

Specify Name of Category: (Nutritious Snacks, Breads & Cereals, Main Dish, or Fruits and Vegetables)

Clue: (A hint or tip that will give participants an inside clue to making the dish)

Ingredient List:
1 small onion (do not include chopped or minced)
1 pound ground meat
1 – 8 ounce can tomato sauce
Etc…
Please include any garnishes in the ingredient list, but do not specify “garnish.”

Do not include method of preparation, yield, cost per serving, or nutrition facts. The above is all you need on this one page.
Districit IV Food Challenge Recipe Template

**Real Name of Recipe**

**Specify Age Category** – Junior, Intermediate, Senior, or Mixed

**Specify Name of Category** (Nutritious Snacks, Breads & Cereals, Main Dish, or Fruits and Vegetables)

**Clue:** (A hint or tip that will give participants an inside clue to making the dish)

*Ingredients:*
1 small onion, chopped
1 pound ground meat
1 – 8 ounce can tomato sauce

*Method of Preparation:*
Please include the method of preparation or directions here. Any garnishing tips may also be included in this section. Also, any serving suggestions (“This recipe would be appropriate to serve with: a tossed green salad, piece of fruit, and glass of milk”).

*Yield: 4 servings*

*Cost per serving: $*

*Nutrition facts per serving:*
- Calories: 320
- Total Fat: 10g
- Cholesterol: 145mg
- Sodium: 128mg
- Total Carbohydrate: 2g
- Fiber: 0g
- Protein: 54g
Finding Additional Recipe Resources

Recipes for food challenge practices are simple and easy to create.
- First, remember the equipment included in the food challenge kits. Choose recipes that incorporate only the equipment available in the kits.
- Choose recipes for junior youth that are easy and have few ingredients, while intermediate recipes should incorporate increased difficulty, and senior recipes should demonstrate cooking techniques of variation in the recipe.
- Look for recipes that contain nutritional information, number of servings, and method of preparation.
- Two recipes should be prepared. One for youth participants including only: specific age category, specific name category, clue, and ingredients. The other recipe is for participants to see the correct name of the recipe and understand the method of preparation intended.
- Simply cut and paste recipes into a word processing document. Then, make two copies deleting any method of preparation instructions, change the title of the recipe, and add a clue.
- Clues should be vague but include a hint that encourages the correct cooking method or how the recipe is put together for serving (for example – if the recipe is a crepe the clue might be “A French rolled dish.”)
- Recipes can be found in cookbooks, grocery stores, websites, Extension resources, and many other places.
- Choose recipes that already have the nutritional information. The nutritional information included will allow youth to learn which foods have certain vitamins, minerals, and other nutritional components.
- Some sample recipes can be found at the following:
  - http://allrecipes.com
  - http://www.eatingwell.com
  - http://healthyliving.tamu.edu
  - www.cooks.com
**Skillet Gnocchi with Chard & White Beans**

**Junior**

**Main Dish**

Clue: A dumpling skillet dish tossed with vegetables!

**Ingredients:**
1 tablespoon plus 1 teaspoon extra-virgin olive oil, divided
1 16-ounce package shelf-stable gnocchi, (see Tip)
1 medium yellow onion, thinly sliced
4 cloves garlic, minced
1/2 cup water
6 cups chopped chard leaves, (about 1 small bunch) or spinach
1 15-ounce can diced tomatoes with Italian seasonings
1 15-ounce can white beans, rinsed
1/4 teaspoon freshly ground pepper
1/2 cup shredded part-skim mozzarella cheese
1/4 cup finely shredded Parmesan cheese

**Method of Preparation:**
Heat 1 tablespoon oil in a large nonstick skillet over medium heat. Add gnocchi and cook, stirring often, until plumped and starting to brown, 5 to 7 minutes. Transfer to a bowl.

Add the remaining 1 teaspoon oil and onion to the pan and cook, stirring, over medium heat, for 2 minutes. Stir in garlic and water. Cover and cook until the onion is soft, 4 to 6 minutes. Add chard (or spinach) and cook, stirring, until starting to wilt, 1 to 2 minutes. Stir in tomatoes, beans and pepper and bring to a simmer. Stir in the gnocchi and sprinkle with mozzarella and Parmesan. Cover and cook until the cheese is melted and the sauce is bubbling, about 3 minutes.

**Tip:** Look for shelf-stable gnocchi near other pasta in the Italian section of most supermarkets. Gnocchi is pronounce like “no-key.”

Yield: 6 servings.
Cost per serving: $1.98

**Nutritional Information:**
Calories: 325
Total Fat: 7 g
Saturated Fat: 2 g
Cholesterol: 8 mg
Sodium: 616 mg
Carbohydrates: 55 g
Dietary Fiber: 6 g
Protein: 14 g
Good source of Vitamins A & C, Calcium, and Iron.
Clue: A dumpling skillet dish tossed with vegetables!

**Ingredients:**
- 1 tablespoon plus 1 teaspoon extra-virgin olive oil, divided
- 1 16-ounce package shelf-stable gnocchi
- 1 medium yellow onion
- 4 cloves garlic
- 1/2 cup water
- 6 cups chard leaves or spinach
- 1 15-ounce can diced tomatoes with Italian seasonings
- 1 15-ounce can white beans
- 1/4 teaspoon freshly ground pepper
- 1/2 cup part-skim mozzarella cheese
- 1/4 cup Parmesan cheese
**Cheesy Pepper and Mushroom Omelet**  
*Intermediate*  
*Main Dish*  
Clue: Fast and Fluffy, that’s the rule!

**Ingredients:**  
- 4 whole eggs  
- 4 egg whites  
- 1/4 cup water  
- 1 green pepper, chopped  
- 4 mushrooms, sliced  
- 1/2 cup chopped onions  
- 1/2 cup Mild Cheddar Cheese, shredded  
- 1/2 cup salsa

**Method of Preparation:**

Beat whole eggs, egg whites, and water with whisk until well blended. Cook vegetables in a large non-stick skillet sprayed with cooking spray on medium-high heat 5 minutes or until crisp-tender. Remove from skillet; set aside. Add eggs to skillet; cover. Cook 6 minutes. Top half of omelet with pepper and mushroom mixture and cheese; fold in half. Cook, covered, 3 minutes or until cheese is melted. Serve topped with salsa.

Yield: 4 servings.  
Cost per serving: $1.65

**Nutritional Information:**  
- Calories: 170  
- Total Fat: 8 g  
- Saturated Fat: 3.5 g  
- Cholesterol: 220 mg  
- Sodium: 460 mg  
- Carbohydrates: 9 g  
- Dietary Fiber: 1 g  
- Protein: 14 g

Good source of protein, calcium and Vitamins A & C.
Main Dish

Intermediate
Main Dish
Clue: Fast and Fluffy, that’s the rule!

**Ingredients:**
- 4 whole eggs
- 4 egg whites
- 1/4 cup water
- 1 green pepper
- 4 mushrooms
- 1/2 cup onions
- 1/2 cup mild Cheddar Cheese
- 1/2 cup salsa
Skillet Rice with Shrimp
Senior
Main Dish
Clue: Perfect for a hurried weeknight!

Ingredients:
1 tablespoon extra-virgin olive oil
1 onion, chopped
1 green pepper, chopped
2 cloves garlic, finely chopped
1 cup uncooked rice
1 14-ounce can tomatoes
1 14-ounce can reduced-sodium chicken broth
1 tablespoon Worcestershire sauce
1 teaspoon dried thyme leaves
1/2 teaspoon salt
1 pound large frozen peeled cooked shrimp, thawed
1 cup frozen peas, thawed
1/4 cup chopped fresh parsley
Freshly ground pepper to taste
Hot sauce, (optional)

Method of Preparation:
Heat oil in a large nonstick skillet over medium heat. Add onions, bell pepper and garlic; cook, stirring with a wooden spoon, until the onions are soft, 3 to 5 minutes. Add rice to the skillet and cook, stirring constantly, for 1 minute.
Stir in tomatoes and their juices, broth, Worcestershire sauce, thyme and salt. Once the mixture begins to bubble and simmer, reduce the heat to low and cover the pan. Cook until the rice is tender and most of the liquid has been absorbed, about 20 minutes.
Gently stir in shrimp, peas and parsley. Cover and cook until the shrimp are heated through, 3 to 5 minutes. Season with salt and pepper before serving. Pass your favorite hot sauce alongside.

Yield: 4 servings, 1 ¾ cups each
Cost per serving: $3.87

Nutritional Information:
Calories: 429
Total Fat: 6 g
Saturated Fat: 1 g
Cholesterol: 174 mg
Sodium: 734 mg
Carbohydrates: 60 g
Dietary Fiber: 5 g
Protein: 32 g
Ingredients:
1 tablespoon extra-virgin olive oil
1 onion
1 green pepper
2 cloves garlic
1 cup uncooked rice
1 14-ounce can tomatoes
1 14-ounce can chicken broth
1 tablespoon Worcestershire sauce
1 teaspoon dried thyme leaves
1/2 teaspoon salt
1 pound large frozen shrimp
1 cup frozen peas
1/4 cup fresh parsley
Freshly ground pepper to taste
Hot sauce, (optional)
Cheesy Chicken Crepes
Mixed
Main Dish
Clue: Not a pancake, but close!

Ingredients:
CREPES:
1 cup milk
3 eggs
2/3 cup all-purpose flour
½ teaspoon salt
FILLING:
½ pound thinly sliced fresh mushrooms
1/3 cup sliced green onions
2 tablespoons butter
½ cup all-purpose flour
½ teaspoon salt
½ teaspoon pepper
¼ teaspoon garlic powder
¾ cup mayonnaise
2 cups milk, divided
1-1/2 cups (6 ounces) shredded cheddar cheese, divided
2 cups chopped cooked chicken
Red bell pepper

Method of Preparation:
• In a large bowl, combine the milk and eggs. Add flour and salt to milk mixture and mix well.
  Let stand for 15 minutes.
• Heat a lightly greased 8-in. nonstick skillet; pour ¼ cup batter into the center of skillet. Lift and tilt pan to evenly coat bottom. Cook until top appears dry; turn and cook 15-20 seconds longer. Remove to a wire rack. Repeat with remaining batter, greasing skillet as needed. When cool, stack crepes with waxed paper or paper towels in between.
• For filling, in a large skillet, sauté mushrooms and onions in butter until mushrooms are tender; set aside. In a 1-qt. saucepan, combine the flour, salt, pepper and garlic powder. Stir in the mayonnaise until blended. Cook over medium-low heat for 2-3 minutes.
• Gradually stir in 1-1/2 cups milk. Bring to a boil over medium-low heat; cook and stir for 2 minutes or until thickened. Add 1 cup cheese; stir until melted. Remove from heat; add chicken and the mushroom mixture.
• Spoon 1/3 cup chicken mixture down the center of each crepe. Roll up and place seam side down in a greased 13-in. x 9-in. baking dish. In a small saucepan, heat remaining milk and cheese over medium-low heat, until cheese is melted, stirring constantly. Pour over crepes.

Yield: 6 servings
Cost per serving: $1.79

Nutrition facts per serving:
Calories: 317; Total Fat: 22g; Cholesterol: 107 mg; Sodium: 443 mg
Total Carbohydrate: 14 g; Fiber: 1g; Protein: 15g
Clue: Not a pancake, but close!

Ingredient List:
1 cup milk
3 eggs
2/3 cup all-purpose flour
½ teaspoon salt

½ pound fresh mushrooms
1/3 cup green onions
2 tablespoons butter
½ cup all-purpose flour
½ teaspoon salt
½ teaspoon pepper
¼ teaspoon garlic powder
¾ cup mayonnaise
2 cups milk, divided
1-1/2 cups (6 ounces) cheddar cheese, divided
2 cups cooked chicken
Red bell pepper
Simple Saute'ed Spinach
Junior
Fruit and Vegetable
Clue: Saute’ed Popeye’s Favorite Side Dish

Ingredient List:
2 tablespoons extra-virgin olive oil
4 cloves garlic, thinly sliced
20 ounces fresh spinach
1 tablespoon lemon juice
¼ teaspoon salt
¼ teaspoon crushed red pepper

Method of Preparation:
Heat oil in a saucepan or Dutch oven over medium heat. Add garlic and cook until beginning to brown, 1 to 2 minutes. Add spinach and toss to coat. Cover and cook until wilted, 2 to 5 minutes. Remove from the heat and add lemon juice, salt and crushed red pepper. Toss to coat and serve immediately.

Yields: 6 servings
Cost per serving: $.79

Nutrition facts per serving:
Calories: 68
Total Fat: 5g
Cholesterol: 0mg
Sodium: 172mg
Total Carbohydrate: 4g
Fiber: 2g
Protein: 3g
Junior
Fruit and Vegetable
Clue: Saute'ed Popeye’s Favorite Side Dish

Ingredient List:
2 tablespoons extra-virgin olive oil
4 cloves garlic
20 ounces fresh spinach
1 tablespoon lemon juice
¼ teaspoon salt
¼ teaspoon crushed red pepper
Fruits & Vegetables

Snow Pea, Orange & Jícama Salad
Intermediate
Fruit & Vegetable
Clue: Partially cooked, but mainly served raw!

Ingredients

4 cups snow peas (about 12 ounces), trimmed
2 oranges
2 tablespoons extra-virgin olive oil
1 tablespoon white-wine vinegar
1 tablespoon minced shallot
1 teaspoon sugar
1/4 teaspoon salt
1/2 small Jícama, peeled and cut into matchsticks (about 1 cup)

Method of Preparation:

Bring 1 inch of water to a boil in a saucepan fitted with a steamer basket. Steam snow peas until tender-crisp, about 3 minutes. Drain.

Cut peels and white pith from oranges. Working over a bowl, cut the segments from surrounding membranes. Squeeze the peels and membranes over the bowl to extract about 3 tablespoons juice before discarding them. Transfer the segments with a slotted spoon to a small bowl. Whisk oil, vinegar, shallot, sugar and salt into the juice. Return the segments to the bowl along with the snow peas and Jícama; toss with the dressing.

Yields: 4 servings.
Cost per serving: $1.87.

Nutrition facts per serving:

138 calories; 7 g fat (1 g sat, 5 g mono); 0 mg cholesterol; 17 g carbohydrates; 1 g added sugars; 3 g protein; 5 g fiber; 150 mg sodium; 302 mg potassium.

Additional nutrition information: Vitamin C (132% daily value), Vitamin A (17% dv)
Intermediate
Fruit & Vegetable
Clue: Partially cooked, but mainly served raw!

Ingredients

4 cups snow peas
2 oranges
2 tablespoons extra-virgin olive oil
1 tablespoon white-wine vinegar
1 tablespoon shallot
1 teaspoon sugar
1/4 teaspoon salt
1/2 small Jicama
Tofu & Broccoli Stir-Fry

Ingredients

1/2 cup vegetable broth or reduced-sodium chicken broth
1/8 cup Apple Cider vinegar
1/8 cup water
3 tablespoons reduced-sodium soy sauce
3 tablespoons cornstarch, divided
2 tablespoons plus 1 teaspoon sugar
1/4 teaspoon crushed red pepper, or more to taste
1 14-ounce package extra-firm water-packed tofu, drained
1/4 teaspoon salt
2 tablespoons canola oil, divided
1 tablespoon minced garlic
1 tablespoon minced fresh ginger
6 cups broccoli florets
3 tablespoons water

Method of Preparation

Combine broth, apple cider vinegar, 1/8 cup of water, and soy sauce, 1 tablespoon cornstarch, sugar and crushed red pepper in a small bowl. Set aside.

Cut tofu into 3/4-inch cubes and pat dry, then sprinkle with salt. Place the remaining 2 tablespoons cornstarch in a large bowl. Add the tofu; toss gently to coat. Heat 1 tablespoon of oil in a large nonstick skillet or wok over medium-high heat. Add the tofu; cook, undisturbed, until browned, about 3 minutes. Gently turn and cook, stirring occasionally, until browned all over, 2 to 3 minutes more. Transfer to a plate.

Reduce heat to medium. Add the remaining 1 tablespoon oil, garlic and ginger; cook until fragrant, about 30 seconds. Add broccoli and water; cover and cook, stirring once or twice, until tender-crisp, 2 to 4 minutes. Stir the reserved broth mixture and add to the pan. Cook until the sauce has thickened, 1 to 2 minutes. Return the tofu to the pan; toss to combine with the broccoli and sauce.

Yields: 4 servings.
Cost per serving: $2.94.

Nutrition facts per serving:
Per serving: 258 calories; 13 g fat (1 g sat, 9 g mono); 0 mg cholesterol; 23 g carbohydrates; 7 g added sugars; 14 g protein; 4 g fiber; 544 mg sodium; 539 mg potassium.
Clue: Marinated protein source adds protein to a vegetable side dish to make a complete meal.

Ingredients
1/2 cup vegetable broth or reduced-sodium chicken broth
1/8 cup Apple Cider vinegar
1/8 cup water
3 tablespoons reduced-sodium soy sauce
3 tablespoons cornstarch, divided
2 tablespoons plus 1 teaspoon sugar
1/4 teaspoon red pepper
1 14-ounce package extra-firm water-packed tofu
1/4 teaspoon salt
2 tablespoons canola oil, divided
1 tablespoon garlic
1 tablespoon fresh ginger
6 cups broccoli florets
3 tablespoons water
Fruit Filled Whole Wheat Crepes
Mixed
Fruits & Vegetables
Clue: The French roll these!

Ingredients

1/2 cup whole-wheat flour
1/2 cup all-purpose flour
1 teaspoon sugar
1/4 teaspoon salt
3 large eggs
1/2 cup 1% milk
2 teaspoons butter, melted, or canola oil
1/2 cup seltzer water, or club soda
1/4 cup orange juice, divided
2 tablespoons cornstarch
4 cups diced rhubarb, (1 pound)
1 cup strawberries, hulled and sliced
1/4 cup dried apricots, chopped
1/2 cup sugar

Method of Preparation

Combine whole-wheat flour, all-purpose flour, sugar (if using), salt, eggs, milk and butter (or oil) using a whisk or fork until smooth, scraping the sides of the dish as you mix.

Slowly whisk seltzer water (or club soda) into the crepe batter. Lightly oil a small nonstick skillet; heat the skillet over medium-high heat. Ladle about 2 tablespoons batter into the skillet with a small ladle or measuring cup; immediately tilt and rotate the pan to spread the batter evenly over the bottom.

Cook the crepe until the underside is lightly browned, about 30 seconds. Using a small metal spatula or a fork, lift the edge of the crepe, quickly flip it. Cook until the second side is lightly browned, about 20 seconds longer. Slide the crepe onto a plate.

If serving immediately, fill and roll or fold the crepe. Continue to cook crepes with the remaining batter, oiling the pan as needed and stacking crepes as you go.

Mix 2 tablespoons orange juice and cornstarch in a small bowl. Combine rhubarb, strawberries, dried apricots, sugar and remaining 2 tablespoons orange juice in a saucepan; bring to a simmer over medium heat, stirring occasionally. Cook, stirring often, until the rhubarb is tender, 4 to 6 minutes. Add the cornstarch mixture and cook, stirring constantly until thickened, about 1 minute.
Fruits & Vegetables

Yields: 16 crepes.
Cost per serving: $3.17.

Nutrition facts per serving:

**Per crepe:** 49 calories; 2 g fat (1 g sat, 0 g mono); 41 mg cholesterol; 6 g carbohydrates; 2 g protein; 1 g fiber; 53 mg sodium; 24 mg potassium.
Fruits & Vegetables

Mixed
Fruits and Vegetables
Clue: The French roll these!

Ingredients

1/2 cup whole-wheat flour
1/2 cup all-purpose flour
1 teaspoon sugar
1/4 teaspoon salt
3 large eggs
1/2 cup 1% milk
2 teaspoons butter, or canola oil
1/2 cup seltzer water, or club soda
1/4 cup orange juice, divided

2 tablespoons cornstarch
4 cups diced rhubarb
1 cup strawberries
1/4 cup dried apricots
1/2 cup sugar
Orange French Toast
Junior
Bread & Cereal
Clue: The French used this treat of a recipe to remoisten day old bread!

Ingredients:
4 slices multigrain bread
2 eggs
3/4 cup milk
1 teaspoon orange juice
2 teaspoons grated orange zest
1 teaspoon vanilla extract
1 teaspoon white sugar
1/4 teaspoon salt
1/2 teaspoon ground cinnamon
1/4 tablespoon ground nutmeg
2 teaspoons light butter
Powdered sugar or maple syrup

Method of Preparation:
Place bread in a flat bottomed dish. Whisk together the eggs, milk, orange juice, orange zest, vanilla, sugar, salt, cinnamon, and nutmeg in a mixing bowl. Pour egg mixture over bread, and refrigerate until bread absorbs the liquid, about 10 minutes. Melt butter in a large non-stick skillet over medium heat. Place bread into skillet. Cook until golden, about 3 minutes per side.

Yield: 2 servings.
Cost per serving: $.39

Nutritional Information:
Calories: 323
Total Fat: 14.1 g
Saturated Fat: 5.2 g
Cholesterol: 241 mg
Sodium: 681 mg
Carbohydrates: 31.7 g
Dietary Fiber: 4.6 g
Protein: 16.9 g

Good source of Niacin, Folate, Thiamin, Calcium, and Iron.
Junior
Bread & Cereal
Clue: The French used this treat of a recipe to remoisten day old bread.

Ingredients:
4 slices multigrain bread
2 eggs
3/4 cup milk
1 teaspoon orange juice
2 teaspoons orange zest
1 teaspoon vanilla extract
1 teaspoon white sugar
1/4 teaspoon salt
1/2 teaspoon ground cinnamon
1/4 tablespoon ground nutmeg
2 teaspoons light butter
Powdered sugar or maple syrup
Oatmeal Pancakes with Buttermilk Syrup
Intermediate
Bread & Cereal
Clue: Flap Jacks with Syrup

Ingredients:
1 cup whole wheat flour
1 cup old-fashioned oats
1/4 cup wheat germ
1/4 cup instant nonfat dry milk powder
1 tablespoon brown sugar
1 teaspoon baking soda
2 eggs
2 cups buttermilk
1/4 cup vegetable oil

BUTTERMILK SYRUP:
1 cup sugar
1/4 cup butter or margarine
1 tablespoon light corn syrup
3/4 cup buttermilk
1 teaspoon vanilla extract

Method of Preparation:

In a large bowl, combine dry ingredients. In another bowl, beat eggs, buttermilk and oil; mix well. Stir into dry ingredients just until blended. Pour batter by 1/4 cupfuls onto a lightly greased hot skillet; turn when bubbles form on top of pancakes. Cook until second side is golden.

Meanwhile, for syrup, combine sugar, butter and corn syrup in a saucepan. Bring to a boil over medium heat; boil and stir for 5 minutes or until golden brown. Remove from the heat; stir in buttermilk and vanilla. Let stand 5 minutes. Stir; serve with pancakes.

Yield: 4 servings.
Cost per serving: $1.58

Nutritional Information:
Calories: 388
Total Fat: 7.5 g
Saturated Fat: 2 g
Cholesterol: 162 mg
Sodium: 482 mg
Carbohydrates: 64 g
Dietary Fiber: 5 g
Protein: 18 g
Intermediate
Bread & Cereal
Clue: Flap Jacks with Syrup

Ingredients:
1 cup whole wheat flour
1 cup old-fashioned oats
1/4 cup wheat germ
1/4 cup instant nonfat dry milk powder
1 tablespoon brown sugar
1 teaspoon baking soda
2 eggs
2 cups buttermilk
1/4 cup vegetable oil

1 cup sugar
1/4 cup butter or margarine
1 tablespoon light corn syrup
3/4 cup buttermilk
1 teaspoon vanilla extract
**Stuffed Portobello Mushrooms with Farro**

**Senior**

Bread & Cereal

Clue: Italian whole grain, much like rice!

**Ingredients:**
- 6 4-inch-diameter Portobello mushrooms, stemmed
- 4 tsp. olive oil, divided
- 2 leeks, white and pale green parts thinly sliced (2 cups)
- 6 cloves garlic, minced (2 Tbs.)
- 1 1/2 Tbs. chopped fresh thyme
- 1 lb. fresh baby spinach
- 4 oz. fresh goat cheese, softened
- 2 Tbs. pine nuts
- 1 cup Farro
- 2 tsp. grated lemon zest
- 2 tsp. lemon juice

**Method of Preparation:**
Preheat a skillet and spray with cooking spray. Spray mushroom caps with cooking spray, and sprinkle gill sides with salt and pepper, if desired. Arrange mushrooms gill-sides down in skillet. Cook until mushrooms begin to soften. Turn mushrooms over.

Remove mushroom caps and set aside. In skillet heat 2 teaspoons oil in large skillet over medium heat. Add leeks, garlic, and thyme, and sauté 4 minutes, or until leeks are tender. Add 2 large handfuls spinach at a time, and cook 8 to 10 minutes, or until spinach is wilted and most liquid has evaporated, stirring often.

Stir in goat cheese and pine nuts until cheese is melted. Remove from heat, and season with salt and pepper, if desired. Fill mushrooms with spinach mixture, mounding on top and packing filling down with spoon.

Cook farro in large saucepan of boiling salted water 20 minutes, or until just tender, stirring occasionally. Drain. Transfer to large bowl. Stir in lemon zest, lemon juice, and remaining 2 tsp. olive oil. Season with salt and pepper, if desired. To serve, spoon 1/2 cup farro mixture onto each plate; top with 1 stuffed mushroom.

**Yield:** 6 servings.
**Cost per serving:** $3.29

**Nutritional Information:**
- Calories: 285
- Total Fat: 10 g
- Saturated Fat: 3 g
- Cholesterol: 9 mg
- Sodium: 323 mg
- Carbohydrates: 41 g
Bread & Cereal

Dietary Fiber: 8 g
Protein: 13 g
Senior
Bread & Cereal
Clue: Italian whole grain, much like rice!

**Ingredients:**
6 4-inch-diameter Portobello mushrooms
4 tsp. olive oil, divided
2 leeks
6 cloves garlic
1 1/2 Tbs. fresh thyme
1 lb. fresh baby spinach
4 oz. fresh goat cheese
2 Tbs. pine nuts
1 cup Farro
2 tsp. lemon zest
2 tsp. lemon juice
Fennel & Chicken Flatbread
Mixed
Bread & Cereal
Clue: Usually unleavened dough recipe!

**Ingredients:**
- 2 teaspoons extra-virgin olive oil
- 1 bulb fennel, quartered, cored and thinly sliced, plus 1 tablespoon chopped feathery tops for garnish
- 1 red bell pepper, thinly sliced
- 8 ounces boneless, skinless chicken breast, very thinly sliced crosswise
- 4 6-1/2-inch whole-wheat pitas, or eight 4-inch whole-wheat pitas
- 1 cup shredded provolone cheese
- Freshly ground pepper, to taste

**Method of Preparation:**

Heat oil in a large nonstick skillet over medium heat. Add fennel and bell pepper and cook, stirring often, until the vegetables begin to soften, about 5 minutes. Add chicken and cook another 5 minutes, stirring often, until the vegetables are tender and the chicken is cooked through. Remove all from skillet.

Spray skillet with non-stick cooking spray. Place pitas in the skillet and top each with an equal portion of the chicken and vegetable mixture. Sprinkle with cheese and pepper. Let cheese melt on top of each pita. Sprinkle with fennel tops and serve warm.

Yield: 4 servings.
Cost per serving: $3.86

**Nutritional Information:**
- Calories: 447
- Total Fat: 13 g
- Saturated Fat: 6 g
- Cholesterol: 6 mg
- Sodium: 660 mg
- Carbohydrates: 53 g
- Dietary Fiber: 10 g
- Protein: 10 g
Mixed
Bread & Cereal
Clue: Usually unleavened dough recipe!

Ingredients:
2 teaspoons extra-virgin olive oil
1 bulb fennel
1 red bell pepper
8 ounces boneless, skinless chicken breast
4 6-1/2-inch whole-wheat pitas, or eight 4-inch whole-wheat pitas
1 cup provolone cheese
Freshly ground pepper, to taste
Cherry Cream Cheese

Junior
Nutritious Snacks
Clue: Spreadable treat!

**Ingredients:**
4 ounces (1/2 cup) reduced-fat cream cheese (Neufchâtel)
1/4 cup chopped pitted fresh cherries or thawed and drained frozen cherries
1 1/2 teaspoons confectioners’ sugar
Pinch of ground allspice
2 whole wheat bagels or 4 whole graham crackers

**Method of Preparation:**
Combine cream cheese, cherries, sugar, and allspice in a small bowl.
Serve with whole wheat bagels or graham crackers.

Yield: 4 servings (2 Tablespoons per serving).
Cost per serving: $.65

**Nutritional Information:** Bagels and/or graham crackers not figured into nutritional information!
Calories: 65
Total Fat: 5 g
Saturated Fat: 3 g
Cholesterol: 17 mg
Sodium: 76 mg
Carbohydrates: 3 g
Dietary Fiber: 0 g
Protein: 2 g
Intermediate
Main Dish
Clue: Spreadable Treat!

**Ingredients:**
- 4 ounces (1/2 cup) reduced-fat cream cheese (Neufchâtel)
- 1/4 cup chopped pitted fresh cherries or thawed and drained frozen cherries
- 1 1/2 teaspoons confectioners’ sugar
- Pinch of ground allspice
- 2 whole wheat bagels or 4 whole graham crackers
Guacamole Deviled Eggs
Intermediate
Nutritious Snacks
Clue: Discard what should not be used to make this tasty snack!

Ingredients:
6 large eggs
3 avocados, diced (about 3 cups)
1 cup tomato salsa
1 tablespoon lemon juice
1/4 teaspoon salt
Kosher salt & cracked black pepper, to taste

Method of Preparation:

Place eggs in a single layer in a saucepan; cover with water. Bring to a simmer over medium-high heat. Reduce heat to low and cook for at least 10 minutes. Remove from heat, pour out hot water and run a constant stream of cold water over the eggs until completely cooled. Cut each egg in half; remove and discard yolks. Set aside.

Using a masher, mash diced avocados in a medium bowl. Add salsa, lemon juice and salt; stir to combine.

Fill each half with 2 teaspoons guacamole. Sprinkle with salt and pepper.

Yield: 6 servings.
Cost per serving: $1.13

Nutritional Information:
Calories: 151
Total Fat: 11 g
Saturated Fat: 2 g
Cholesterol: 0 mg
Sodium: 331 mg
Carbohydrates: 8 g
Dietary Fiber: 5 g
Protein: 5 g
Nutritious Snacks

Intermediate
Nutritious Snacks
Clue: Discard what should not be used to make this tasty snack!

**Ingredients:**
6 large eggs
3 avocados, diced (about 3 cups)
1 cup tomato salsa
1 tablespoon lemon juice
1/4 teaspoon salt
Kosher salt & cracked black pepper, to taste
Steak & Boursin Wrapped Bells

Senior
Nutritious Snacks
Clue: Ready to party? Few ingredients to a great snack!

**Ingredients:**
16 thin slices deli roast beef
1 cup light Boursin cheese, divided
4 ounces bell pepper, thinly sliced

**Method of Preparation:**

Spread each steak slice with 1 teaspoon Boursin cheese and top with bell pepper slices. Roll the steak around the bell pepper slices.

Yield: 16 servings.
Cost per serving: $1.09

**Nutritional Information:**
Calories: 37
Total Fat: 2 g
Saturated Fat: 1 g
Cholesterol: 13 mg
Sodium: 34 mg
Carbohydrates: 1 g
Dietary Fiber: 0 g
Protein: 5 g
Nutritious Snacks

Senior
Nutritious Snacks
Clue: Ready to party? Few ingredients to a great snack!

**Ingredients:**
- 16 slices deli roast beef
- 1 cup light Boursin cheese
- 4 ounces bell pepper
Turkey, Corn, & Sun-Dried Tomato Wraps
Mixed
Nutritious Snacks
Clue: ½ for a snack, or whole for a meal!

**Ingredients:**
1 cup corn kernels, fresh or frozen (thawed)
1/2 cup chopped fresh tomato
1/4 cup chopped soft sun-dried tomatoes
2 tablespoons canola oil
1 tablespoon red-wine vinegar or cider vinegar
8 thin slices low-sodium deli turkey (about 8 ounces)
4 8-inch whole-wheat tortillas
2 cups chopped romaine lettuce

**Method of Preparation:**

Combine corn, tomato, sun-dried tomatoes, oil and vinegar in a medium bowl.
Divide turkey among tortillas. Top with equal portions of the corn salad and lettuce. Roll up.
Serve the wraps cut in half, if desired.

Yield: 8 servings (1/2 a wrap each).
Cost per serving: $1.51

**Nutritional Information:**
Calories: 161
Total Fat: 6 g
Saturated Fat: 1 g
Cholesterol: 17.5 mg
Sodium: 341 mg
Carbohydrates: 17.5 g
Dietary Fiber: 2 g
Protein: 9.5 g
Nutritious Snacks

Intermediate
Nutritious Snacks
Clue: ½ for a snack, whole for a meal!

**Ingredients:**
1 cup corn kernels
1/2 cup fresh tomato
1/4 cup sun-dried tomatoes
2 tablespoons canola oil
1 tablespoon red-wine vinegar or cider vinegar
8 thin slices low-sodium deli turkey (about 8 ounces)
4 8-inch whole-wheat tortillas
2 cups romaine lettuce
Additional Resources

Food Challenge
Recipe Resource

District IV 4-H Program
Cost Per Unit of Food Items

It takes time to gather all the data to calculate the cost of recipes. Remember food costs change, so update on a regular basis and feel free to add to this list.

This list is strictly a guide to assist project leaders in teaching youth recipe cost calculation.

First, you will need to know how much the item cost, then how many are contained in the packaged item. Once you know this, you simply divide the total cost of the item by the number contained in the package. The number found will give you the cost per unit of the item. You then know how much each item cost.

For example, a carton of eggs cost $2.19, there are 12 eggs in the carton, therefore you would divide 12 into 219 and the cost would be .18 cents for each egg. If you use 3 eggs in a recipe, 3 times .18 cents = .54 cents for the eggs in the recipe. Make sense? If not, practice and it will soon!

Have youth visit the grocery store as a field trip and fill in prices for items or change items to fit the prices in their area.

MEATS:

- Boneless, Skinless Chicken Breasts = $4.49 per lb.
- Medium Gulf Shrimp, Shell-On = $6.99 per lb.
- T-Bone or Bone-In Rib Eye Steak = $8.99 per lb.
- Bratwurst = $3.79 per package
  - 5 Bratwursts per package = $0.76 each
- Ground Sausage = $2.79 (package contains 16 ounces) = $0.174
- Bacon =
- Ground Beef =
- Other foods in the meat group? =

BREAD & CEREALS:

- Rice = White = , Brown =
- Pasta =
- Quinoa =
- Rolls =
- Buns =
- One loaf white bread = $0.89
  - 22 slices per loaf = $0.0404 per slice of white bread
Additional Resources

FRUITS:

- Bag of Apples =
  - X apples in bag =
- Bag of Oranges =
- Mango =
- Strawberries =
- Lemon =
- Banana =
- Kumquat =
- Pears =
- Limes =
- Raspberries =
- Blueberries =

VEGETABLES:

- Sweet Potato =
- Bag of Potatoes =
- Green Bell Pepper =
- Red Bell Pepper =
- Orange Bell Pepper =
- Yellow Bell Pepper =
- Jalapeno Pepper =
- Other Peppers =
- Yellow Onion =
- Green Onions =
- Brussel Sprouts =
- Green Beans =
- Mushrooms =
- Zucchini =
- Bag of Carrots =
  - X carrots in bag =
- Other foods in the vegetable group? =

DAIRY:

- CHEESE:
  - American Cheese slices =
  - American Cheese block =
  - Cheddar Cheese slices =
  - Cheddar Cheese block =
  - Monterey Cheese block =
  - Parmesan Cheese grated =
  - Parmesan Cheese block =
  - Cottage Cheese Carton =
Ricotta Cheese Carton =

- EGGS:
  - $1.24 per dozen
  - $1.24/12 = $0.103 per egg

- MILK:
  - Skim Milk =
  - Whole Milk =
  - Chocolate Milk =
  - Yogurt =
  - Drinkable Yogurt =

- Other foods in the dairy group? =

STAPLES:

- BROWN SUGAR:
  - 1 lb. brown sugar = $0.89
  - 2.25 cups packed brown sugar = 1 lb.
  - $0.89 / 2.25 cups = $0.395 per cup of brown sugar
  - $0.024 per Tablespoon, $0.0082 per teaspoon

- FLOUR:
  - $1 for a bag of 5 lbs., so $0.20 = 1 lb.
  - 1 sifted cup = 115 grams
  - 1 lb. = 454 grams, so 5 lbs. = 2270 grams of sifted flour
  - 2270 grams / 115 grams = 19.73 cups of sifted flour in a 5-lb. bag
  - 19.73 cups / 5 lbs. = 3.94 cups per lb.
  - $0.20 per pound / 3.94 cups = $0.05 per cup of sifted flour

- GRANULATED SUGAR:
  - 5-lb. bag for $1.89
  - $1.89 / 5 = $0.378 per pound of sugar
  - 2.25 cups = 1 lb.
  - $0.378 / 2.25 = $0.168 per cup of sugar

- MARGARINE/BUTTER:
  - $0.50 for a pack of 4 sticks
  - 1 stick = 1/2 cup
  - 1 stick = $0.125

- MILK-(RECONSTITUTED POWDERED MILK):
  - $12.99 for 20 quarts
  - 4 quarts in 1 gallon, so that’s $12.99 for 5 gallons, or $2.598 per gallon
  - There are 16 cups in one gallon
  - $2.598 / 16 cups = $0.162 per cup of milk

- PEANUT BUTTER:
Additional Resources

- 18 oz. cost $1
- 18 oz. container holds 32 Tablespoons, or 96 teaspoons
- $1 / 32 T = $0.031 per Tbsp. peanut butter, or $0.01 per tsp.

SEASONINGS:
*Most seasonings account for a few cents in the total cost of a recipe. Youth should know the more seasoning you add to a recipe the more cents should be added into the total cost of the recipe. General rule: .02 to .03 cents per ½ teaspoon, .04 to .06 cents per 1 teaspoon and so forth. Youth should be mindful of the total cost of the seasoning and the quantity in the container.*

- SALT:
  - I bought a 26-ounce container of iodized salt for $0.33
  - The nutrition label says there are 491 servings of 1/4 teaspoon portions of salt in the container
  - 491 x .25 teaspoons = 122.75 teaspoons in the container
  - $0.33 / 122.75 tsp = $0.0026 per teaspoon of salt
  - 3 tsp = 1 T
  - 1 Tablespoon of salt = $0.0078

Prices will change with inflation and vary from store to store. Do not use this as an exact guide it is only a resource for you to gauge prices and give an insight to estimating cost associated with foods for recipe calculations.
### Sample – Grocery Receipt

Hog Heaven Grocery

<table>
<thead>
<tr>
<th>Items bought:</th>
<th>Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 quart milk</td>
<td>2.09</td>
<td></td>
</tr>
<tr>
<td>1 carton eggs</td>
<td>2.19</td>
<td></td>
</tr>
<tr>
<td>1 pound all-purpose flour</td>
<td>1.19</td>
<td></td>
</tr>
<tr>
<td>Salt (26 ounces)</td>
<td>.39</td>
<td></td>
</tr>
<tr>
<td>1 pound mushrooms</td>
<td>2.33</td>
<td></td>
</tr>
<tr>
<td>1 bunch green onions (12 to a bunch)</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td>1 pound butter (4 sticks)</td>
<td>2.97</td>
<td></td>
</tr>
<tr>
<td>Pepper (8.75 ounces)</td>
<td>1.17</td>
<td></td>
</tr>
<tr>
<td>Garlic powder (25 ounces)</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td>Mayonnaise (1 pint)</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td>1 pound cheddar cheese (16 ounces)</td>
<td>3.50</td>
<td></td>
</tr>
<tr>
<td>White chicken breast (12.5 ounces)</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td>White chicken breast (12.5 ounces)</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td>Red bell pepper</td>
<td>.50</td>
<td></td>
</tr>
</tbody>
</table>

Total Cost of Dish (Total sum of Your Cost Column)  

Cost per serving (Total of Dish divided by Number of servings)
**Sample Grocery Receipt**  
**Savings R Great Grocery**

<table>
<thead>
<tr>
<th>Items bought:</th>
<th>Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zucchini</td>
<td>.47__</td>
<td>__________</td>
</tr>
<tr>
<td>Broccoli</td>
<td>1.56__</td>
<td>__________</td>
</tr>
<tr>
<td>Green bell pepper</td>
<td>.89__</td>
<td>__________</td>
</tr>
<tr>
<td>Small onion</td>
<td>.33__</td>
<td>__________</td>
</tr>
<tr>
<td>Carrots (8 to package)</td>
<td>2.09__</td>
<td>__________</td>
</tr>
<tr>
<td>10-inch whole wheat tortillas (12 per package)</td>
<td>2.00__</td>
<td>__________</td>
</tr>
<tr>
<td>8 ounces low-fat cheddar cheese</td>
<td>2.50__</td>
<td>__________</td>
</tr>
<tr>
<td>1 jar salsa (16 ounces)</td>
<td>2.67__</td>
<td>__________</td>
</tr>
</tbody>
</table>

Total Cost for entire dish (Total sum of Your Cost Column)  __$_______

Cost per serving (Total of Dish divided by Number of servings)  __$_______
### Sample Grocery Receipt

**Fresh Market Grocery**

<table>
<thead>
<tr>
<th>Items bought</th>
<th>Price</th>
<th>Your Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eggs (carton of 12)</td>
<td>1.56</td>
<td></td>
</tr>
<tr>
<td>Bottle of Water (16 ounces)</td>
<td>1.19</td>
<td></td>
</tr>
<tr>
<td>Green bell pepper</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>1 pound package mushrooms (16 ounces)</td>
<td>2.99</td>
<td></td>
</tr>
<tr>
<td>1 bunch green onions (12 to a bunch)</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td>1 pound of cheddar cheese (16 ounces)</td>
<td>4.57</td>
<td></td>
</tr>
<tr>
<td>1- 16 ounce jar salsa</td>
<td>3.45</td>
<td></td>
</tr>
</tbody>
</table>

Total cost for entire dish (Total sum of Your Cost Column) __$_________

Cost per serving (Total of Dish divided by Number of servings) __$_________
# Measure Equivalents

## Common Kitchen Equivalents

<table>
<thead>
<tr>
<th>Standard</th>
<th>Equivalent</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>One pinch or dash</td>
<td>1/16 teaspoon</td>
<td></td>
</tr>
<tr>
<td>1 teaspoon</td>
<td>5 ml</td>
<td>1/6 ounce</td>
</tr>
<tr>
<td>1 tablespoon</td>
<td>3 teaspoons</td>
<td>1/2 ounce</td>
</tr>
<tr>
<td>1/4 cup</td>
<td>4 teaspoons</td>
<td>2 ounces</td>
</tr>
<tr>
<td>1/3 cup</td>
<td>5 1/3 teaspoons</td>
<td>3 ounces</td>
</tr>
<tr>
<td>1/2 cup</td>
<td>8 teaspoons</td>
<td>4 ounces</td>
</tr>
<tr>
<td>1 gill</td>
<td>1/2 cup</td>
<td>4 ounces</td>
</tr>
<tr>
<td>1 cup</td>
<td>16 tablespoons</td>
<td>8 ounces</td>
</tr>
<tr>
<td>1 pint</td>
<td>2 cups</td>
<td>16 ounces</td>
</tr>
<tr>
<td>1 quart</td>
<td>4 cups</td>
<td>32 ounces</td>
</tr>
<tr>
<td>1 quart</td>
<td>2 pints</td>
<td>32 ounces</td>
</tr>
<tr>
<td>1 gallon</td>
<td>4 quarts</td>
<td>128 ounces</td>
</tr>
<tr>
<td>1 peck</td>
<td>8 quarts</td>
<td></td>
</tr>
<tr>
<td>1 bushel</td>
<td>4 pecks</td>
<td></td>
</tr>
<tr>
<td>1 pound dry measure</td>
<td>16 ounces</td>
<td></td>
</tr>
</tbody>
</table>

**Abbreviations:**
- tsp = teaspoon
- t = tablespoon
- oz = ounce
- c = cup
- pt = pint
- qt = quart
- bu = bushel
- lb = pound

## Liquid (Fluid) Measure Equivalents

<table>
<thead>
<tr>
<th>Fluid (oz)</th>
<th>fl dram</th>
<th>fl drams</th>
<th>gill</th>
<th>c</th>
<th>pt</th>
<th>qt</th>
<th>gal</th>
<th>l</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.125 oz</td>
<td>1 fl dram</td>
<td>60 minims</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 oz</td>
<td>8 fl drams</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 oz</td>
<td>1 gill</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 oz</td>
<td>1 c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 oz</td>
<td>2 c</td>
<td>1 pt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32 oz</td>
<td>4 c</td>
<td>2 pt</td>
<td>1 qt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.8 oz</td>
<td>4.23 c</td>
<td>2.1134 pt</td>
<td>1.0567 qt</td>
<td>0.264 gal</td>
<td>1 l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>128 oz</td>
<td>16 c</td>
<td>8 pt</td>
<td>4 qt</td>
<td>1 gal</td>
<td>3.7853 l</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4032 oz</td>
<td>1 bbl</td>
<td>3.94 pt</td>
<td>7.875 qt</td>
<td>31.5 gal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8064 oz</td>
<td>1 hhd</td>
<td>7.875 pt</td>
<td>15.75 qt</td>
<td>63 gal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Abbreviations:**
- fl = fluid
- oz = ounce
- c = cup
- pt = pint
- qt = quart
- gal = gallon
- bbl = barrel
- hhd = hogshead
- l = liter
### Metric Equivalents, Liquid or Fluid Measure

<table>
<thead>
<tr>
<th></th>
<th>Or</th>
<th>Dry</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 centiliter</td>
<td></td>
<td>0.6102 cubic inches</td>
<td>0.338 ounces</td>
</tr>
<tr>
<td>1 deciliter</td>
<td>10 centiliters</td>
<td>6.102 cubic inches</td>
<td>.0845 gill</td>
</tr>
<tr>
<td>1 liter</td>
<td>10 deciliters</td>
<td>0.908 quart</td>
<td>1.0567 quarts</td>
</tr>
<tr>
<td>1 decaliter</td>
<td>10 liters</td>
<td>9.08 quarts</td>
<td>2.64 gallons</td>
</tr>
</tbody>
</table>

cl = centiliter  
dl = deciliter  
l = liter  
dal = decaliter 
cu in = cubic inch  
oz = ounce  
qt = quart  
gal = gallon
Common Cooking Terms

Below is a list of cooking terms most commonly found in a recipe.

**Bake**
To cook in the oven. The cooking of food slowly with gentle heat, causing the natural moisture to evaporate slowly and concentrating the flavor.

**Basting**
To brush or spoon liquid fat or juices over meat during roasting. Adds flavor and will prevent it from drying out.

**Batter**
A mixture of flour, fat and liquid that is thin enough in consistency to require a pan to encase it. Used in such preparations as cakes and some cookies. A batter is different from dough, which maintains its shape.

**Beat**
To smooth a mixture by briskly whipping or stirring it up with a spoon, fork, wire whisk, rotary beater or electric mixer.

**Bind**
To thicken a sauce or hot liquid by stirring in ingredients such as eggs, flour, butter or cream.

**Blackened**
A popular Cajun-style cooking method in which seasoned foods are cooked over high heat in a super-heated heavy skillet until charred on the outside.

**Blanch**
To boil briefly to loosen the skin of a fruit or a vegetable. After 30 seconds in boiling water, the fruit or vegetable should be plunged into ice water to stop the cooking action and then the skin easily slices or peels off.

**Blend**
To mix or fold two or more ingredients together, to obtain equal distribution throughout the mixture.

**Boil**
To cook food in heated water or other liquid that is bubbling vigorously.

**Braise**
A cooking technique that requires browning meat in oil or other fat and then cooking slowly in liquid. The effect of braising is to tenderize the meat.
Broil
To cook food directly under the heat source.

Broth or Stock
A flavorful liquid made by gently cooking meat, seafood or vegetables (and/or their by-products, such as bones and trimming) often with herbs, in liquid (usually water).

Brown
A quick saute’, pan/oven broiling, or grilling method, done either at the beginning or end of meal preparation, often to enhance flavor, texture or eye appeal.

Brush
Using a pastry brush to coat a food such as meat or bread with melted butter, glaze or other liquid.

Butterfly
To cut open a food such as pork chops down the center without cutting all the way through and then spread apart.

Caramelize
Browning sugar over a flame with or without the addition of some water to aid the process. The temperature range in which sugar caramelizes, approximately 320° to 360°. This can also be done with fruits and vegetables in a skillet meaning until browned and the sugars from the food caramelize into a glaze.

Chiffon
Pie filling made light and fluffy with stabilized gelatin and beaten egg whites.

Chop
To cut into irregular pieces.

Coat
To evenly cover food with flour, crumbs or a batter.

Combine
To blend two or more ingredients into a single mixture.

Core
To remove the non edible centers of fruits such as pineapples.

Cream
To beat vegetable shortening, butter or margarine, with or without sugar, until light and fluffy. This process traps air bubbles, later used to create height in cookies and cakes.
Crimp
To create a decorative edge on a piecrust. On a double piecrust, this also seals both crust edges together.

Crisp
To restore the crunch to foods; vegetables such as celery and carrots can be crisped with an ice water bath and foods such as stale crackers can be heated in a medium oven.

Cure
To preserve or add flavor with a soaking ingredient, usually salt, spices and/or sugar is used.

Custard
A mixture of beaten egg, milk and possibly other ingredients such as sweet or savory flavorings, which is cooked with gentle heat, often in a water bath or double boiler. As pie filling, custard is frequently cooked and chilled before being layered into a pre baked crust.

Dash
A measure approximately equal to 1/16 teaspoon.

Deep-fry
To completely submerge the food in hot oil.

Deglaze
To add liquid to a pan in which foods have been fried or roasted, in order to dissolve the caramelized juices stuck to the bottom of the pan.

Dice
To cut into cubes.

Direct Heat
A cooking method that allows heat to meet food directly, such as grilling, broiling or toasting.

Dot
To sprinkle food with small bits of an ingredient such as butter to allow for even melting.

Dough
A combination of ingredients including flour, water or milk and sometimes, a leavening agent, producing a firm but workable mixture, mostly for making baked goods.

Dredge
To sprinkle lightly and evenly with sugar or flour. A dredger has holes pierced on the lid to sprinkle evenly.
Drizzle
To pour a liquid such as a sweet glaze or melted butter in a slow, light trickle over food.

Drippings
Used for gravies and sauces. Drippings are the liquids left in the bottom of a roasting or frying pan after meat is cooked.

Dust
To sprinkle food lightly with spices, sugar or flour. A light coating of food.

Entree
A French term that originally referred to the first course of a meal served after the soup and before the meat courses. In the United States it refers to the main dish of a meal.

Fillet
To remove the bones from meat or fish for cooking.

Firm-ball stage
In candy making, the point where boiling syrup dropped in cold water forms a ball that is compact yet gives slightly to the touch.

Flan
An open pie filled with sweet or savory ingredients; also, a Spanish dessert of baked custard covered with caramel.

Fold
To cut and mix lightly with a spoon to keep as much air in the mixture as possible.

Fry
To cook food in hot cooking oil, usually until a crispy brown crust forms.

Garnish
A decorative piece of an edible ingredient such as parsley, lemon wedges, croutons or chocolate curls placed as a finishing touch to dishes or drinks.

Glaze
A liquid that gives an item a shiny surface. Examples are fruit jams that have been heated or chocolate thinned with melted vegetable shortening. Also, to cover a food with a liquid.

Grate
To shred or cut down a food into fine pieces by rubbing it against a rough surface.

Grease
To coat a pan or skillet with a thin layer of oil. Virgin olive oil is one of the best to use.
Grind
To mechanically cut a food into small pieces.

Knead
To work dough with the heels of your hands in a pressing and folding motion until it becomes smooth and elastic.

Marinate
Coat or immerse foods in an acidic-based liquid or dry rub, to tenderize and add flavor before cooking and eating.

Mash
To beat or press a food to remove lumps and make a smooth mixture.

Meringue
Egg whites beaten until they are stiff, then sweetened. Can be used as the topping for pies or baked as cookies.

Mince
To chop food into tiny irregular pieces.

Mix
To beat or stir two or more foods together until they are thoroughly combined.

Moisten
Adding enough liquid to dry ingredients to dampen but not soak them.

Pan Fry
To cook in a hot pan with small amount of hot oil, butter or other fat, turning the food over once or twice.

Poach
To simmer in liquid.

Puree
To mash or sieve food into a thick liquid.

Reduce
To cook liquids down so that some of the water evaporates.

Saute’
To cook food quickly in a small amount of oil in a skillet or frying pan over direct heat.
Scald
Cooking a liquid such as milk to just below the point of boiling; also to loosen the skin of fruits or vegetables by dipping them in boiling water.

Score
To tenderize meat by making a number of shallow (often diagonal) cuts across its surface. This technique is also useful in marinating, as it allows for better absorption of the marinade.

Sear
Sealing in a meat's juices by cooking it quickly under very high heat.

Season and Seasoning
To enhance the flavor of foods by adding ingredients such as salt, pepper, oregano, basil, cinnamon and a variety of other herbs, spices, condiments and vinegars.

Also, to treat a pot or pan (usually cast iron) with a coating of cooking oil and then baking it in a 350° oven for approximately 1 hour. This process seals any tiny rough spots on the pan's surface that may cause food to stick.

Set
Let food become solid.

Shred
To cut or tear into long narrow strips, either by hand or by using a grater or food processor.

Sift
To remove large lumps from a dry ingredient such as flour or confectioner's sugar by passing them through a fine mesh. This process also incorporates air into the ingredients, making them lighter.

Simmer
Cooking food in a liquid at a low enough temperature so that small bubbles begin to break the surface. A very low boil.

Skim
To remove the top fat layer from stocks, soups, sauces or other liquids such as cream from milk.

Steam
To cook over boiling water in a covered pan, this method keeps foods' shape, texture and nutritional value intact better than methods such as boiling.
**Additional Resources**

**Steep**
To soak dry ingredients such as tea leaves, ground coffee, herbs, spices, etc, in liquid until the flavor is infused into the liquid.

**Stewing**
Browning small pieces of meat, poultry or fish, then simmering them with vegetables or other ingredients in enough liquid to cover them, usually in a closed pot on the stove, in the oven or with a slow cooker.

**Stir-Fry**
The fast frying of small pieces of meat and vegetables over very high heat with continual and rapid stirring.

**Thin**
To reduce a mixture's thickness with the addition of more liquid.

**Toss**
To thoroughly combine several ingredients by mixing lightly.

**Vinegarette**
A general term referring to any sauce made with vinegar, oil and seasonings.

**Whip**
To incorporate air into ingredients such as cream or egg whites by beating them until light and fluffy; also refers to the utensil used for this action.

**Whisk**
To mix or fluff by beating; also refers to the utensil used for this action.

**Zest**
The thin brightly colored outer part of the rind of citrus fruits. They contain volatile oils used as a flavoring.
**Sample Presentation Script (for 5 youth)**

**Food Challenge – Team Outline**

Decide who the team captain will be. This person needs to be able to speak well and think on their feet. Choose carefully. It should be a team decision.

Introduce yourselves individually at the beginning.

“Hello, we are the _____team name_____ from ________________ County. My name is _____________, and my name is ______________, etc…

It is okay to shake the judges hands if you wish, but it is not required, and do not do this if you wear gloves.

Then the team captain will start:

We actually became a team because? (Tell why you organized the team) We had a county organizational meeting and our county food challenge leader helped us to organize in teams. Our county agent met with us briefly to describe the food challenge and give us materials for study. Once we got our food challenge kit, we started practicing right away.

We love doing this and have learned a lot about nutrition and food safety. In our practices we made some dishes like: (give examples of practice dishes you made).

This year we have had ___number___ practice sessions with our adult leader to prepare for the competition.

What we have prepared for you today is: Name your dish!
Knowledge of MyPlate

Our dish fits nicely into MyPlate because it includes several of the food groups and it is versatile.

The main ingredient is ________________ which fits into the ________________ group. We need ________________ from the ________________ group daily. A (amount from MyPlate) serving which would be one serving from this group.

Our dish also includes ________________ which fits into the ________________ group. We need (amount from MyPlate) from the ________________ group daily.

This dish also has ________________ in it consisting of: ________________. These fit into the ________________ group on MyPlate. We need (amount from MyPlate) each day.

Other ingredients used in our dish include seasonings such as: salt, butter, pepper, garlic powder, and etc.….

Seasonings are important because they add flavor but when adding salt, one must watch the sodium amounts. Most Americans only need 2300 milligrams of sodium a day but get way more.

To cut fat, sodium, or calories we suggest ________________, you won’t taste a difference.

Our ____ name of recipe again ________ recipe provides ___ servings and one will get ___ servings from the meat and beans group, ___ serving from the vegetable group, ___ serving from the grains group, and ___ servings from the dairy group. This is why this dish is perfect.
Additional Resources

**Nutrient Knowledge**

The main nutrient in our dish would be (Protein) from the _______________ which helps to build blood, and builds and repairs body tissue. Protein supplies food energy at 4 calories per gram. If there is a lack of protein in the diet people can suffer fatigue, loss of appetite, edema, and poor growth.

Another nutrient in our dish is (Fats) from the _______________ which supplies a large amount of energy to the body in a small amount of food. Fats supply energy as well at 9 calories per gram. Fats supply essential fatty acids that are needed for proper use and storage of fat in our bodies. If there is a lack of fats in the diet people can suffer eczema, retarded growth, diarrhea, and lost of hair.

And lastly, we have the nutrient (Carbohydrates) from the _______________ which helps the body use other nutrients and supplies 4 calories per gram to all body cells. And if there is a lack of carbohydrates in the diet one can suffer a loss of energy, fatigue, and ketosis, which is a condition caused by abnormal burning of fat in the body.

Of the water soluble vitamins our dish provides: Vitamin C – _______________; Vitamin B1 – _______________; Vitamin B2 – _______________; Niacin – _______________; Vitamin B6 – _______________; Vitamin B12 – _______________.

Of the fat soluble vitamins our dish provides: Vitamin A – _______________; and Vitamin D – _______________.

Minerals included in our dish consist of: Calcium – _______________; Chromium – _______________; Iodine – salt; and Iron – _______________.

We also have a trace amount of Electrolytes in our dish from the salt we added.

Substitutions that would make our dish healthier might be to use: ____________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Instead of using salt to season the food we might add seasonings such as basil, cayenne pepper, chives, dill weed, parsley, or rosemary to name a few.
Additional Resources

Food Preparation and Safety

In making our dish, we had to think and plan carefully to assure everything got done in a timely manner as this dish was difficult or if it was easy, say so.

First, we used our hand sanitizer to clean our hands and our disinfectant wipes to clean the table. Then we opened our grocery sack to reveal the recipe and the ingredients.

Tell the judges what each person did to prepare the dish. The steps used in preparation and the food safety regarding temperatures, keeping hot foods hot and cold foods cold and what you did to avoid cross contamination.

If you know temperatures, tell the judges the internal cooking temperature for your dish. Also, you might mention the temperature danger zone and the importance of keeping foods out of the temperature danger zone.

Then tell us how you decided to garnish your dish and why?

After our dish was complete, we let the burners and pans cool down before placing them back into our kit and dirty dish container. We then disinfected our table again, and used our hand sanitizer.

Our food should be refrigerated or frozen within two hours if not eaten.
Additional Resources

**Menu Planning, Garnishing, and Serving Size Information**

Our dish can be served for ____ what meals _____ and it is normally served as a main dish, side dish, appetizer, or bread and cereal?

Tell what you might serve with it to make a complete meal – add a fruit, glass of milk, or protein source?

Tell us how you garnished it. We fanned a strawberry? We layered blah blah, or we sprinkled the plate with?

The total cost of our dish is $_______ and our dish serves ___ people making the cost per serving $_____. One serving would consist of 1 pancake, one cup, ½ cup, or what?

Thank you for listening to our presentation today, and are there any questions?
Games

Nutrition Related Group Games

1. **Food Charades** *(preschool and school age)*

   The object of this game is to act out preparing a food or recipe. Either the project leader can act out the activity and the children can guess, or the children can play charades. Here are some suggestions for charades:

   - Baking a Cake
   - Making a Salad
   - Making a Sundae
   - Popping Corn
   - Cleaning an Oven
   - Setting a Table
   - Peeling a Banana
   - Stuffing a Turkey
   - Washing Dishes

2. **Chicken Soup** *(school age)*

   The object of this game is for the youth to correctly guess the ingredients, which make up a particular recipe. They may have eaten a variety of foods, but have little knowledge of the various food items that go into a particular recipe. Here are some examples of recipes that contain many ingredients. It is a good idea to write out the recipes in advance.

   - Chicken Soup
   - Baked Ziti
   - Tossed Salad
   - French Toast
   - Meatloaf
   - Lasagna

   Place a pot in the front of the room. Give each child a piece of paper and a pencil. Choose one of the foods above and ask the children to write down one ingredient he or she thinks goes into making that recipe. The project leader will ask each child to name the ingredient. If it is correct, they place their paper in the pot. After each child has given their ingredient, the project leader will tell the children if any ingredients are missing. If any are missing, ask the children to guess the missing ingredients. When the recipe is complete, the project leader can review the ingredients and discuss the preparation.
3. **Going Blank** (school age)

One person is chosen to be "IT". The group stands in a circle. The person who is "IT" stands in the center, points to anyone in the circle, and names a food group (bread, fruit, vegetable, meat, milk). The person picked must name a food in that group within three seconds. If he or she cannot name a group, they sit down. As the games continues, the person who is "IT" must keep moving quickly around the circle. Children should take turns being "IT."

4. **Bread and Butter** (school age)

In advance, make a list of paired food items. Write the name of each item on a 8x11 piece of paper. Here are some suggested pairs:

- Bread and Butter
- Corned Beef and Cabbage
- Cheese and Crackers
- Milk and Cookies
- Icing and Cake
- Hamburger and French Fries
- Salt and Pepper
- Spaghetti and Meatballs
- Lettuce and Tomato
- Rice and Beans
- Peanut Butter and Jelly
- Meat and Potatoes

Gather all children with their backs facing the leader. Tape a sheet of paper onto each child's back so they do not know their own word. The child must try to find the person with the mate to his/her word by asking questions. No player can ask another what their word is or say any part of the word in their description. Try to come up with some of your own food combinations.
5. **The Nosey Nose** (preschool)

Line up an array of food items that have a variety of smells. Try to use at least one food from each group of the MyPlate Food Guide. For example:

- Lemon Juice
- Tomato Sauce
- Hard Boiled Egg
- Raw Onion
- Green Pepper
- Strawberries
- Cheese
- Salad Dressing
- Tuna Fish
- Peanut Butter

Children have to close their eyes and try to guess what is in the cups by smelling. They then can talk about the food and name the food group it belongs in.

6. **It's in the Bag** (preschool and school age)

Gather various food items such as:

- Orange
- Onion
- Banana
- Grapes
- Apple
- Lettuce
- Garlic
- Carrot
- Peach
- Pepper
- Kiwi
- Tomato

Place each item in a separate small bag. Pass the bag around and have each child silently touch the item. Guesses can begin after all children have had an opportunity to touch each food.
Additional Resources

7. **What Vegetable (or food) Am I?** (school age)

   Tape a picture of a food item on the back of a child. He/she should not see what the food item is. The child turns around and shows the other children the picture. The child then has to ask questions of the group until he/she can guess what food is on his/her back.

   Taken from "Healthy Heart Snack Choices," a facts sheet from the Cornell Cooperative Extension; Cornell University, Plainview, New York

   Add to this list of games by coming up with your own food related games.
Having the right kitchen tools can make cooking easier and more fun! However, you don't need every tool in the store. Before you buy that next piece of kitchen equipment, check the following tips and suggestions.

Share this list with a son, daughter or friend who is just beginning to purchase cooking equipment. Choosing cook's tools is somewhat subjective and a matter of preference. Use this list to help decide which tools will best fit your needs.

**BAKEWARE – General Tips**

- Foods absorb more heat and bake faster in a glass or dark metal container than a shiny metal one and may be done in less time. If substituting a dark metal or glass pan for a shiny metal pan, some bakers recommend reducing the oven temperature by 25°F to make up for this faster baking time.

- Foods brown more in glass and dark metal baking pans than in shiny metal ones. Some cooks bake cookies and cakes in shiny metal pans as they prefer a lighter brown color for these foods. When baking pies and breads, darker pans or glass pans may be preferable. Some people choose glass over dark metal as it is easier to see how a food is browning.

- A nonstick finish on pans can be harmed if you cut foods while they’re still in this type of pan.

<table>
<thead>
<tr>
<th>KITCHEN TOOL</th>
<th>DESCRIPTION/USE</th>
<th>TIP(S)</th>
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<tbody>
<tr>
<td>Baking Sheets</td>
<td>A jelly roll pan is a large flat baking sheet with approximately 1-inch sloping sides. A cookie sheet has one or more turned up edges that are less deep than the sides of a jelly roll pan. A jelly roll pan may be substituted for a cookie sheet, but a jelly roll can’t be baked on a cookie sheet. Used for: Cookies, Biscuits, Breads, Pizza.</td>
<td>Purchase a baking sheet that is at least 2 inches smaller on each side than the inside of the oven. This promotes even heat circulation.</td>
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<tr>
<td>KITCHEN TOOL</td>
<td>DESCRIPTION/USE</td>
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</table>
| Bread Pans (sometimes called “loaf” pans) | Two 9- x 5-inch bread pans | Used for:  
- Yeast breads & quick breads  
- Meatloaf  
- Pound cakes | • If you don’t have a bread pan, shape yeast breads and bake directly on a cookie or jelly roll sheet. |
| Cake Pan | | | • A 2-inch high pan will help insure your cakes don’t overflow the pan.  
- Use two 8 x 8 x 2-inch square pans or two 9 x 2-inch round pans as a substitute for a 13 x 9 x 2-inch pan. |
| Cake Pan | • Two 8- or 9-inch square cake pans  
- One 13 x 9-inch baking dish  
**Optional:** Two 9-inch round cake pans | Used for:  
- Cakes  
- Brownies  
- Rolls  
- Casseroles  
- Fruit crisps  
- Frozen desserts (if made of freezer-safe material) | |
| Casserole Dishes (with oven-proof lids) | One to three casserole dishes with a size range of ½ to 3 quarts, depending on your cooking needs. | • Usually a deep, round container with handles and an oven-proof lid  
• Used mainly for baking combinations of foods such as meats, vegetables, pasta, rice, etc. that are mixed together with some type of sauce. Frequently served as a “one-dish meal.” | • Casseroles typically are prepared in ceramic or glass bakeware. These materials retain heat well and are ideal for baking and serving casserole dishes. |
| Cooling Rack | One or more large or two or more smaller cooling racks | • Used to cool foods after removing them from a heat source.  
• Available in round, square, and rectangular shapes.  
• Made of closely placed metal wires on short feet that raise it above the countertop. This structure allows air to circulate and cool the food. | • Purchase a cooling rack with sturdy wires that won’t sag under the weight of heavier foods. |
| Muffin Tin | (also referred to as muffin pan)  
12-cup (2 1/2-inches across the top of the cup is standard size) | • A pan containing individual cups  
• Used for:  
- Muffins  
- Cupcakes  
- Mini-meatloaves  
- Some types of rolls, such as clover-leaf rolls  
- Individual quiches | • A standard muffin tin has cups of about 1/2-cup capacity and is the size most often used in recipes. |
| Pie Plate | One 9-inch pie plate | • A round pan with sloping sides  
• Used for:  
- Pies, quiches  
- Rolls  
- Deep-dish pizzas | • A 9- by 1 1/2-inch pie plate holds about 5 cups while an 8- by 1 1/2-inch pie plate holds about 4 cups. |
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<th>KITCHEN TOOL</th>
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<tbody>
<tr>
<td>Blender</td>
<td>• A blender works well for puréeing ingredients, such as for soups, and is terrific for making smoothies and milkshakes.</td>
<td>• Though more expensive, glass and stainless steel containers are more durable than plastic ones. One benefit of glass vs. steel is seeing what you’re doing.</td>
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<td></td>
<td>• Buy a heavy-duty blender if you want to crush ice. Some people like an immersion or hand-held “stick” blender for pureeing soups in the pot or whipping hot chocolate.</td>
<td>• As a general guideline, never fill the container more than about 2/3 full.</td>
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<td>• If you’ll be blending small volumes of food, buy a blender that is tapered at the bottom. A blender forces food up against the blender walls where it is re-directed back down on the blades and blended until the desired consistency. In a blender that is wide at the bottom, small volumes of food will remain in the bottom of the container and won’t undergo this mixing process.</td>
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<tr>
<td>Colander</td>
<td>• A bowl-shaped container with holes used for draining liquids from solids, such as water from pasta. Made from a variety of materials, including stainless steel, plastic and wire mesh</td>
<td>• Look for a colander that feels solid and stable when set on a surface.</td>
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<tr>
<td>(sometimes referred to as a “strainer” or “sieve;” see “strainer” for more information)</td>
<td>• Usually have a footed or ring-type base at the bottom.</td>
<td></td>
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<tr>
<td>Cutting Board</td>
<td>• Plastic cutting boards are easier to keep clean as they can be run through the dishwasher.</td>
<td>• Avoid cross-contamination when cutting different foods for the same meal. This is especially important if cutting raw meats, poultry or seafood and then cutting ready-to-eat foods. Two possibilities are:</td>
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<td>• Look for a type of plastic cutting board that won’t dull your knives. Usually, it will state this on the packaging materials. Glass or acrylic plastic cutting boards can dull knives.</td>
<td>• Wash cutting board with hot soapy water and hot rinse water between uses.</td>
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<td>• Purchase more than one cutting board.</td>
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<td>• If your cutting board doesn’t have non-skid materials on the underside, use a damp towel underneath to prevent it from moving while cutting.</td>
</tr>
<tr>
<td>Grater</td>
<td>• Used for shredding hard foods, such as cheese and carrots, into small particles. Available in several shapes and sizes.</td>
<td>• Buy a stainless steel grater to avoid problems with rusting.</td>
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<td>• A box-type grater with a handle at the top may be the most multi-purpose, having several sizes of holes. To avoid nicked fingers, buy one with a wide base that sits stably on a surface.</td>
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<tr>
<td>KITCHEN TOOL</td>
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<tr>
<td>Kitchen Timer</td>
<td>A digital timer is battery-operated. It is helpful to have one that times in seconds as well as minutes and hours. Helpful to have a timer that continues to count after alarm has sounded. A manual wind-up timer generally is less expensive than a digital one. However, it may offer fewer features and doesn’t count in seconds.</td>
<td>If timing several things tasks at one time, may be helpful to have more than one timer. Or, purchase a timer that tracks 2 or more things at a time.</td>
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**KNIVES – General Tips**

Three basic kitchen knives that cover most cutting tasks are a chef’s knife, a paring knife and a serrated bread knife.

To help prolong the life of your knives:

- Many knife companies recommend against washing knives in the dishwasher. This may damage the blade. Wooden handles may not hold up well when washed in a dishwasher. Always dry the knife before storage.
- Follow manufacturer's directions for sharpening knives. A sharp knife cuts better and is safer than a dull knife. There is a tendency to use too much force with a dull knife, lose control and get cut.
- Avoid cutting on hard surfaces that dull the edge of your knife, such as glass or acrylic plastic cutting boards. Softer cutting boards, such as polyethylene plastic cutting boards, are much easier on knives. Look for boards that say they won’t dull knives.

Store knives in a storage system that keeps the blades separate and clean. Do not throw them together in a drawer where they can bump against each other and possibly damage or dull the blades. It is harder to keep knives clean in a knife block as the slits in the block can’t be washed.

Never put a knife in a dishpan with other dishes as it is easy to accidentally cut your finger.

Most home knife sharpeners aren’t intended for use with knives with serrated edges. Check manufacturer’s directions before sharpening a knife with a serrated edge. Serrated knives are used on foods requiring more of a sawing motion. They undergo less wear and tear because of their design and generally need less sharpening.

<table>
<thead>
<tr>
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</table>
| Chef's Knife (also called a French Knife) | Slices, minces and chops foods. Use to cut fresh fruits, vegetables, and herbs. Can be used to cut raw meat and carve or slice cooked meat. Has broad, tapered shape and fine sharp edge. Blade ranges from 6 to 12 inches, measures at least 1-1/2 inches at widest point and is designed to rock on a cutting board as it cuts food. | For most people, an 8-inch chef’s knife is easy to handle. When purchasing, consider:  
- Does it feel comfortable when you hold it?  
- Can you easily manage it when going through the motions of slicing and chopping?  
- Does the blade feel solid, not lightweight and flimsy?  
- Always use with a cutting board.  
- To prevent vegetables and fruits from slipping on a cutting board, cut these foods in half before slicing or chopping further. Then place the cut side on the board. This helps anchor foods firmly on your cutting board and helps protect against cutting yourself.  
- Often faster to use than a food processor. |
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<tr>
<th>KITCHEN TOOL</th>
<th>DESCRIPTION/USE</th>
<th>TIP(S)</th>
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<tbody>
<tr>
<td>Paring Knife</td>
<td>• Use for small, detailed work such as:</td>
<td>• Choose a blade size that feels comfortable in your hand.</td>
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<tr>
<td></td>
<td>- Peeling fruits and vegetables</td>
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<tr>
<td></td>
<td>- Sectioning orange</td>
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<tr>
<td></td>
<td>- Slicing garlic</td>
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<tr>
<td></td>
<td>- Coring a tomato</td>
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<tr>
<td></td>
<td>• Blade ranges from 3- to 4- inches.</td>
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<tr>
<td>Serrated Bread Knife</td>
<td>• Tooth-like edge saws through foods with a hard exterior and a soft interior</td>
<td>• Definitely use a long, serrated knife such as a bread knife for</td>
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<td>such as:</td>
<td>cutting large foods like a watermelon or a cantaloupe. Some people</td>
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<td></td>
<td>- Breads and cakes</td>
<td>try to cut large melons with a chef’s knife, which can slip easily</td>
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<td>- Whole fruits such as oranges and other citrus fruits, melons and</td>
<td>on these foods.</td>
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<td></td>
<td>- tomatoes</td>
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<td></td>
<td>- Hard-shelled squash</td>
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<td></td>
<td>• Can also be used to:</td>
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<td></td>
<td>- Shred cabbage &amp; lettuce</td>
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<td>- Carve or slice cooked meat</td>
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<td>• A common size for most tasks is a 9- to 10-inch blade.</td>
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<tr>
<td>Measuring Cups, Dry</td>
<td>• Usually comes in set of four and include a 1/4-, 1/3-, 1/2- and 1-cup</td>
<td>• Measuring cups with handles are convenient for scooping out</td>
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<td>measure. Some sets include additional sizes.</td>
<td>ingredients such as sugar, oatmeal, etc.</td>
</tr>
<tr>
<td>Measuring Cups, Liquid</td>
<td>• Have a pour spout and a space above the last measuring line so liquids don’t</td>
<td>• Never substitute a dry measuring cup for a liquid measuring one.</td>
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<td>spill during measuring and pouring.</td>
<td>It is easy to spill fluids when a dry measuring cup is filled to</td>
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<td>• Made of a see-through material, such as glass and plastic, for ease and</td>
<td>the top. Most dry measuring cups are made of a material that can’t</td>
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<td>accuracy in measuring.</td>
<td>be seen through for measuring.</td>
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<td></td>
<td>• Use the size of liquid measuring cup closest to the size you are</td>
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<td></td>
<td></td>
<td>measuring for most accuracy.</td>
</tr>
<tr>
<td>Measuring Spoons</td>
<td>• Usually comes in set of four and include a tablespoon and a 1-, 1/2-, and</td>
<td>• Convenient to have two sets to eliminate need to rewash them in the</td>
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<tr>
<td></td>
<td>1/4-teaspoon.</td>
<td>middle of food preparation.</td>
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<tr>
<td></td>
<td>• Used for measuring small amounts of both liquid and dry ingredients.</td>
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<tr>
<td>Mixer</td>
<td>• A stand mixer generally works better than a handheld mixer for mixing heavy</td>
<td>• Always turn the mixer off before scraping down the sides of a bowl.</td>
</tr>
<tr>
<td>(Stand Mixer/Handheld Mixer)</td>
<td>batters and doughs like bread dough and stiff cookie batters.</td>
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<td>• Stand mixers may be more expensive than handheld ones.</td>
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<td>DESCRIPTION/USE</td>
<td>TIP(S)</td>
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| Mixing Bowls                 | • Frequently purchased in a set of 3 or more bowls. Sizes range from 1 quart to 5 or more quarts.  
• Typically available in glass, plastic and metal. Plastic bowls are unsuitable for beating egg whites as it is hard to wash away any fat that has been in the bowl and this may lessen the volume of the beaten eggs. | • If buying just one set, metal bowls may be most versatile. Buy stainless steel bowls; they don’t react to acid like aluminum bowls do.  
• Stainless steel bowls adapt well to temperature changes:  
  o Add ice and water and use as an “ice bath” to cool foods like hard-cooked eggs.  
  o Use on top of a saucepan as a double boiler. Note: the bowl will get very hot, so use hot mitts when touching. |
| Mixing Spoons, Large         | • Use a solid mixing spoon for stirring ingredients either at the kitchen counter or the stove.  
• Use a slotted spoon when you need to let liquid drain from food, such as removing browned, crumbled ground beef from a pan. | • Look for a spoon that is easy to handle as mixing spoons are usually around 12 inches long.  
• If you’ll use the spoon for stirring at the stove, look for a type of material that is heat resistant, such as stainless steel, some of the newer heat-resistant nylon spoons and wood. For stainless steel spoons, look for a spoon with a handle that won’t get hot.  
• For stirring in nonstick cookware, use a nonstick or wooden spoon to avoid damaging the nonstick surface.  
• If using a wooden spoon, be sure it is in good condition and not cracked or rough on the surface, making it hard to clean. |
| Pastry Blender (also called a pastry cutter or a dough blender) | • Used for cutting cold fat, such as butter or shortening, into a flour mixture.  
• Consists of 5 to 6 U-shaped, sturdy steel wires or blades attached to a handle.  
• Typically used when making pastry dough, such as pie crusts.  
• Often used in making crumb crusts and biscuits. | • For easier mixing, cut cold fat into chunks before blending. |

**POTS AND PANS – General Tips**

Start your collection of pots and pans by buying just the basics. Add more as needed. In determining the size of a skillet, measure across the TOP of the skillet if the size isn’t given. Choose pots and pans made of heavy-gauge materials — thicker, heavier-weight pots and pans spread and hold heat more evenly than thinner, lighter weight pans. Look for heat-resistant handles for ease-of-use at the stove. Here are five pots and pans to get you started.

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| Fry pan       | • Especially good for delicate quick-cooking foods that don’t need much browning, such as:  
  o Omelets  
  o Scrambled and fried egg  
  o Delicate light fish | • Purchase an oven safe fry pan for extra versatility and use.  
• Use nylon cooking utensils with nonstick cookware to avoid scratching the finish. |
<p>| 10-inch fry pan |                                                                                  |                                                                        |</p>
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| Sauté Pan (with lid)      | • Varies from a fry pan in the angle of its sides. A fry pan has sloping slides while a sauté pan has fairly straight or slightly curved sides that are usually higher than those of a fry pan and allow it to hold more food.   | • Purchase a sauté pan with a lid so you can add liquids after foods are browned and simmer them with the lid on.  
• As a general rule, a sauté pan without a nonstick surface browns food better than a pan with a nonstick surface.  
• To help keep food from sticking in a sauté pan without a nonstick coating, preheat the pan with a thin coating of fat before adding the food. |
| 12-inch sauté pan         | • Especially good at browning foods quickly in a small amount of fat.                                                                                                                                               |                                                                                                                                                                                                            |
| Saucepan (with lid)       | • Deep, round pans with a long handle. Come in various sizes. Usually come with a tight-fitting lid. Uses include cooking:  
  o Vegetables  
  o Sauces  
  o Soup  
  o Rice  
  o Hard-cooked eggs | • Consider buying a double boiler insert to cook more heat-sensitive foods, such as stirred custard, over simmering water. A double boiler fits inside the top part of the saucepan.                                      |
| 3- to 4-quart saucepan AND|                                                                                                                                                                                                                     |                                                                                                                                                                                                            |
| 1 1/2- to 2-quart saucepan|                                                                                                                                                                                                                     |                                                                                                                                                                                                            |
| Dutch Oven (with lid)     | • A large pot with a tight-fitting lid and a handle for lifting on each side. Uses include:  
  o Soups and stews  
  o Deep-frying  
  o Cooking pasta  
  o Braising or roasting meat | • If you make larger amounts of food at a time, buy the 8-quart size.                                                                                                                                          |
| 6- to 8-quart Dutch oven  |                                                                                                                                                                                                                     |                                                                                                                                                                                                            |
| Rolling Pin               | • Used for rolling out dough, such as cookie, pie, biscuit or yeast dough. Can be used to crush crackers.                                                                                                        | • Unless rolling very delicate dough, such as pastry dough, heavier rolling pins tend to work best. Their weight helps produce smooth dough with less effort.                                                |
| Sifter                    | • Sifts ingredients such as flour and powdered sugar.  
• Some recipes call for sifting together dry ingredients, such as flour, salt, baking powder, baking soda, etc. to help combine them.  
• Usually made of stainless steel or plastic. Avoid aluminum sifters as they may rust.  
• Two common ways sifters work are:  
  o Turning a crank-type handle.  
  o Squeezing a trigger-type handle. | • Before buying a sifter, go through the motions of using the sifter to see how it feels. If it is hard to turn or squeeze, it may tire your hand if you do much sifting.  
• A “fine mesh strainer” also may be used to sift ingredients. See “strainer” for more information. |
|                           |                                                                                                                                                                                                                     |                                                                                                                                                                                                            |
SPATULAS – General Tips

Spatulas are flat, narrow kitchen utensils that come in a variety of materials and shapes. Here are some of the most common ones and their uses.

Softer plastic and rubber spatulas are used for mixing and folding ingredients. Flexible spatulas with a long, rectangular blade are used for spreading frosting, leveling off ingredients and removing foods like brownies from pans; the blade is frequently made of metal.

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| **Cake Spatula**  
(sometimes called a straight-edged spatula) | • Flexible metal spatula with a long, flat, rectangular blade.  
• Uses include:  
  o Spreading frosting  
  o Leveling off the tops of measured ingredients, especially those in dry measuring cups | • A straight-edged knife can be substituted for a cake spatula for leveling off ingredients.  
• A table knife or a rubber spatula can be substituted for a cake spatula for frosting a cake. |
| **Pie Spatula**  
(also called a pie server) | • Flexible metal spatula with a triangular shaped blade that will fit under a slice of pie  
• Uses include lifting and serving:  
  o Pieces of pie  
  o Sections of cakes | • A pie spatula or “pie server” may have more of bend in the end of the blade near the handle than a “cake server.” However, most styles also may double as a cake server. |
| **Rubber Spatula**  
(sometimes referred to as a “rubber scraper”) | • Rubber and silicone spatulas come in a variety of shapes and sizes:  
  o Used for tasks as scraping the sides of bowls or pans, folding mixtures together and stirring ingredients  
  o Rounded on one or both sides of their head to aid in scraping and stirring  
• Spoon spatulas, sometimes called spoonulas, are a cross between a spoon and a spatula and may become a favorite tool for mixing foods.  
• The most common size of spatula has a head of about 2- by 3-inches. | • When purchasing a rubber or silicone spatula or spoon spatula, choose one with a head that is both firm and flexible so it can conform to the mixing bowl, yet still mix heavy batters. Look for a sturdy but comfortable handle.  
• Check for the degree of heat resistance. Today, many spatulas, will resist heat of 400°F or higher, making them suitable for stirring at the stove.  
• Check if you can put the whole spatula in the dishwasher. For some spatulas with a wooden handle, you may need to remove the handle and wash just the head in the dishwasher. |
| **Strainer, Fine Mesh**  
(also called a sieve; sometimes referred to as a colander – see “colander” for more information) | • Strains liquids and semi-liquids such as chicken stocks, lumpy gravy, seeds from fruit sauces, etc.  
• Can be used to sift flour and powdered sugar. | • Buy a stainless steel rather than an aluminum strainer that can become discolored if used with a food containing acid.  
• A strainer with a handle on one end and a hook on the other that can rest over a pan or bowl is most convenient to use.  
• Start by buying a multi-purpose, medium-size strainer, about 7- to 9-inches across. Add more sizes as the need arises. |
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| Thermometer, Dial or Digital Instant-Read Food Thermometer | • Not designed to stay in food during cooking. Use at end of cooking period.  
• Insert the full length of the sensing area, usually 2 to 2 1/2 inches for dial and 1 or less for digital thermometers (check manufacturer’s directions).  
Insert so the sensing area is in the center of the thickest part of the food and not touching bone, fat or gristle.  
• About 15 to 20 seconds required for the temperature to be accurately displayed on a dial thermometer and about 10 seconds on a digital thermometer. | • For a thin food, such as a hamburger patty or boneless chicken breast, it may be necessary to insert the thermometer sideways with the sensing area in the center.  
• Frequently not dishwasher-safe. Wash by hand with hot soapy water and hot rinse water before and after use. |
| Tongs                                  | • Use to move and transfer hot foods, such as:  
  o Frying chicken  
  o Turning food in the oven  
  o Removing food from the grill  
• Shorter tongs used for most indoor cooking tasks. Longer tongs often used for outdoor grilling to avoid getting hands near the fire. | • Metal, spring-loaded tongs with scalloped edges are most common type.  
• Tongs that don’t lock in the closed position can be held shut with a thick rubber band for an easier fit in a drawer.  
• Test several types of tongs before purchasing to see if they feel comfortable to use. |
| Turner (most common type is a pancake turner) | • Used for lifting/turning and removing foods such as pancakes, hamburgers, cookies and eggs.  
• Come in many sizes and shapes and are most often made of nylon or stainless steel. | • Some have holes or slots in the head section for draining off liquids or fats when lifting foods.  
• Purchase a nylon-type turner for use in nonstick cookware to avoid scratching the nonstick surface. |
| Vegetable Peeler                        | • Several uses:  
  o Remove thin skins, such as on apples, potatoes and carrots.  
  o Slice off thin sections of cheese.  
  o Shave chocolate for chocolate curls.  
• Generally, less food beneath the skin is removed with a vegetable peeler than with a knife.  
• Less chance of getting cut with a vegetable peeler than with a knife. | • Most come with blades that swivel rather than remain stationary. Swivel blade tends to be easier to use.  
• The are two main types of peelers in relation to the position of the blade  
  o Blade in a straight line with the handle.  
  o Blade at right angles to handle:  
    ▪ Called “Y” or “harp” peeler because of shape  
    ▪ More common in Europe |
| Wire Whisks (also called wire whips)     | • Match size and shape of whisks to the task. Some whisks are longer and narrower -- others are like big balloons.  
• Use balloon-type to beat a lot of air into a mix, such as whipped cream or meringue.  
• Use narrow whisks work for soups, sauces and mixing salad dressings. | • Choose whisks with the area sealed where wires go into the handle to prevent food from becoming trapped. These whisks may be more expensive, but will probably last longer and cost less over time.  
• Look for “dishwasher safe” whisks to save time and help assure thorough cleaning. |
For more information on how you can be involved with the Texas 4-H Food Challenge, contact your local, district, or state 4-H office.

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