# Cooking Club StudentHandbook 

Name: $\qquad$

School: $\qquad$

## TULSA HEALTH <br> Department

School Health Program

## Table of Contents

Lesson l: Veggies ..... 6
Lesson 2: Fruits ..... 18
Lesson 3: Grains ..... 30
Lesson 4: Dairy ..... 40
Lesson 5: Protein ..... 50

www.tulsaplay.org/staff

Recipes: Salmon Dip and other materials courtesy of FoodMASTER Curriculum; foodmaster.org

# Draw or write what you're most excited about for Cooking Club! 

## Rules and Procedures



## Veggies

## Vary your Veggies

Goal to eat 2 to $21 / 2$ cups of veggies per day!*

What counts as a cup?

- 1 cup raw or cooked vegetables
- 1 cup vegetable juice
- 2 cups raw leafy greens
*Goal of 2
cups of veggies
per day for
girls ages 9-13
and $2 \frac{1}{2}$ cups
for boys ages
9-13. You
may need to
be eating more if you're in sports.


## Enjoy veggies every day!

## Veggies are a good source of fiber!**

Focus on eating veggies with every meal or snack!
**Fiber is a form of a carbohydrate that cannot be broken down in your body. It helps you feel fuller longer, aids in digestion, and can help prevent disease!

## Ranch Dip

## Ingredients:

- 1/3 cup dry powdered buttermilk
- 2 tablespoons dried parsley
- $11 / 2$ teaspoons dried dill weed
- 2 teaspoons garlic powder
- 2 teaspoons onion powder
- 2 teaspoons dried onion flakes
- 1 teaspoon ground black pepper
- 1 teaspoon dried chives
- 1 teaspoon salt
- 1 cup plain Greek yogurt


## Directions:

1. Measure all dry ingredients into a small bowl. This will be everything except for the Greek yogurt.
2. Whisk all dry ingredients together until blended.
3. Measure out 1 cup of plain Greek yogurt into a medium sized bowl.
4. Measure out 1 tablespoon of the ranch mix into the medium bowl.
5. Using a whisk, mix together until well combined.
6. Measure out the remaining ranch mix into plastic containers to take home.
7. Ranch mix can be stored in the refrigerator for up to 3 months

# Guacamole 

## Ingredients:

- $1 / 2$ avocado
- $1 / 2$ tsp garlic powder
- $1 / 2$ tsp cumin
- 1 wedge of lime juice
- Assorted cut vegetables
- 1 Corn tortilla
- Cilantro


## Directions:

1. Wash cilantro and place in a bowl-have the kids remove the stems when they get it
2. Cut each avocado in half and put in a bowl for each child. Show them how to scoop it from the skin.
3. Have each student measure and add each ingredient and mash with fork.
4. Enjoy with vegetables and homemade corn tortilla chips.

# Eating Vegetables 

## Did you know that most of us need to eat more vegetables to be healthy?

Girls need to eat at least 2 cups of vegetables every day. Boys need to eat at least $21 / 2$ cups of vegetables every day. You can eat whole, mashed, sliced, fresh, frozen or canned vegetables. Be sure to vary your veggies. This means try to eat vegetables of every color and from every group each week. Remember the five groups of vegetables are roots, stems, leaves, fruits and flowers.

When you eat a variety of vegetables, you get a lot of vitamins and minerals. Vitamins and minerals help keep your body healthy and strong. For example, many green vegetables like broccoli and green beans have vitamin C. Vitamin C helps heal cuts and scrapes. Orange vegetables like carrots and sweet potatoes are full of vitamin A, which helps eyesight. Starchy vegetables like potatoes and lima beans are full of the mineral called potassium. Potassium keeps your nerves and muscles healthy. So remember to make 2-2 $1 / 2$ cups of vegetables part of your day.

## Taco 'Bout It

- In the reading, draw a box around how many cups of vegetables you should eat a day.
- Can you think of a mashed vegetable that we eat? What vegetable is it?
- Underline the sentence that tells what vitamin C helps your body do.
- What color are the vegetables that are full of vitamin A?


## Vegetable Jungle

## Did you know food scientists group vegetables based on where the vegetable grows on the plant?

Did you know that carrots are roots? Turnips and potatoes are roots too. The roots of all plants grow underground and store food to be used as energy.

Asparagus and celery are stems of plants. The stems are the long skinny parts of the plant that spurt up from the ground. Stems move the plant's food from one part to another. For example, stems move food from leaves to roots. We eat the leaves of plants all the time. Like stems, leaves grow above the ground. The green leaves are the food factories, using energy form the sun to make food for the plant.

Some vegetables are the fruits or flowers of the plant. Fruits grow above ground and hold the plant's seeds. Cucumbers and tomatoes are both vegetables that are fruits of plants. There are even vegetables that have tasty flowers. When you eat cauliflower and broccoli, you are eating tiny flowers.

Now you can classify vegetables into five groups based in the parts of the plant. Remember the five groups include roots, leaves, stems, fruits and flowers.

## Taco 'Bout It

- Circle a root vegetable listed in the reading.
- Draw a box around a stem vegetable.
- Can you think of a vegetable that is the leaf of a plant? Write it below.
- Do you think a pumpkin is the fruit or flower of the plant? Why?


## Parts of the plant

Word Bank


## Parts of the plant

Next to each food, write the appropriate matching plant part from the word bank. Each plant part will be used more than once.

1. Onion $\qquad$
2. Broccoli $\qquad$
3. Carrot $\qquad$
4. Basil $\qquad$
5. Celery $\qquad$
6. Cucumber $\qquad$
7. Lettuce $\qquad$ 17. Potato $\qquad$
8. Garbanzo Beans $\qquad$ 18. Black Beans $\qquad$
9. Spinach $\qquad$
10. Butternut Squash $\qquad$

# Vegetable Rainbow 

## Did you know vegetables are red, orange, yellow, green, blue and purple in color because of compounds called pigments?

Pigments are the materials inside plants that make them colorful. Red, orange, yellow, green, blue and purple vegetables would not exist without pigments. In fact, without pigments leaves on trees would not be green in the summer and would not change colors in the fall.

Did you know that you can change the color of some vegetables by cooking them in acid or with a base? A chemical reaction between the acid or base and the pigment changes the color of the vegetable. For example, cooking broccoli in an acid turns the broccoli a dull green or brownish color. Most sour foods are acids. Lemon juice, vinegar and cream of tartar are all acids we use in the kitchen.

Kitchen bases like baking soda taste bitter. Cooking broccoli with baking soda makes the broccoli turn bright green. Bright green broccoli may look nice, but it feels mushy. Vegetables cooked in basic water (water plus baking soda) not only change colors, but also become mushy. Today you will use acids, bases and vegetables to do cooking chemistry!

## Taco 'Bout It

- In the reading, circle three acids and draw a box around one base.
- Fruit juices that are tart or sour like lemon juice are called acids. Can you list some other tart or sour fruit juices?
- How does broccoli look and feel when you cook it in a base?


# Scientific Inquiry: 

## Color Changes in Acids and Bases

Your Class will need:<br>8 cups of water<br>3 raw broccoli pieces<br>3 raw carrot pieces<br>3 red cabbage leaves<br>3 chunks of white onion<br>3 tablespoons of vinegar<br>3 tablespoons of baking soda

Your teacher will cook vegetables in an acid (vinegar) and in a base (baking soda). Look for any color changes. For each vegetable write down the raw color, color after cooked in an acid and color after cooked in a base.

|  | Color Cooked in Acid | Color Cooked in Base |
| :---: | :---: | :---: |
| Broccoli |  |  |
| Carrot |  |  |
| Red Cabbage |  |  |
| White onions |  |  |

Which vegetable's color is changed the least by acid and base? Why?

## Veggie Word Search!

F L OWERASQNPZSMAUKRBY
ZMVAGDDGMQMFROO I FOUG
CXVIXEMUEECELERYIOGT
P J J NARBSNTWVEALVHTWH
B I HRRPQUCYSVSVBNYMXM XOGXXCHRIXQEKZAIKHEX E B ZMGYIUJKUSEUSOEJZA LXMSENVOKHNBXDEKBAFP X ERU I NW I F TYMOPSEWUYM Q S TYSNTYTMNMR I WGMKSV J UKT F BWSCAULI F L OWERA ETWXUJWLUFMCOXJMJVUC ZLOLZCCCHIVIDMKTCCJ I Y X U U S Y EMO I HQNMH I WKUD Y N O O P W X Z D LKGMAKNOJNF LEAVESPOTATOSGUORMCK N J Q NVLKFDZRJGSTEMIGF TOXKPQPQMTXZZKQOXRHR C F I B ERN I Y JMSHIHQHVKQ QTCJNWTWTIYCABBAGEKV

| cauliflower | pigments | VitaminA | lettuce |
| :--- | :--- | :--- | :--- |
| cabbage | flower | leaves | celery |
| potato | fiber | seeds | stem |
| acid | root | base |  |

# Draw your Favorite Veggie or Veggie Recipe! 



## Fruits

## Focus on Whole Fruits!

Goal to eat $1 \frac{1}{2}$ cups of fruit per day!*

## What counts as a cup?

- 1 small apple
- 1 large orange
- 1 cup, whole or cut-up, grapes
- About 8 large strawberries
- $1 / 2$ cup dried fruit
*Goal of 1 1/2
cups of fruit
per day for
girls and boys
ages 9-13. You
may need to
be eating more
if you're in
sports.

Enjoy fruits every day!

# Focus on eating fruits with every meal or snack! 

Fruits can be enjoyed fresh, canned, frozen, dried, and more!

# Berry Smoothie 

## Ingredients:

- 1 cup frozen or fresh blueberries
- 1 cup frozen or fresh strawberries, sliced
- 1 cup yogurt, plain or vanilla depending on taste
- 1 banana
-1/4 cup oats
- $1 / 4$ cup water


## Directions:

Place all ingredients into blender. Blend until smooth. Can add more water as needed to achieve desired consistency. Enjoy!

# GreenPowerSmoothie 

Yield: Two 10oz smoothies

## Ingredients:

- 1 cup light vanilla Greek yogurt
- $1 / 2$ cup water
- 2 tablespoons oats
- $1 / 2$ cup frozen pineapple
- $1 / 2$ cup frozen peaches
- 1 medium banana ( $\sim 2 / 3$ cup sliced)
- 1 cup spinach


## Directions:

Place all ingredients into blender. Blend until smooth. Can add more water as needed to achieve desired consistency. Enjoy!

## Fruit Groups

## Did you know there aremany different types or groups of fruits?

Pomes, drupes, berries, melons and citrus fruits are all types or groups of fruits. All pomes hold their seeds in a little paper like core. Apples and pears are both pomes. Drupes are fruits with a single seed inside a hard pit. Did you know when you eat apricots, cherries and coconuts you're eating drupes?

Berries are small fruits with lots of seeds. The seeds can be on the inside or outside of the fruit. Strawberry seeds cling to the outside, while blueberry seeds sit inside the fruit. Blueberry seeds are so tiny you might not even see or feel them. Melons like berries have many seeds, but their seeds are always on the inside. Melons are much bigger than berries. They have a tough outside layer called a rind. Watermelon and honeydew are both melons.

Have you ever seen a lemon tree? Citrus fruits like lemons and limes grow on trees. They have many sections inside a peel. You may find seeds in some or all of the sections. Other fruits, like tropical fruits don't seem to fit into any of these groups. Bananas, papayas, mangos and pineapples grow near the equator where it's hot and are called tropical fruits.

## Taco 'Bout It

- In the reading, underline the sentence that lists the different types of fruits.
- Circle an example of a drupe.
- Draw a square around a berry.
- Draw a melon.
(Show the seeds by drawing the melon cut in half.)


## Scientific Inquiry: <br> Pomes, Drupes, Melons \& Citrus Fruit

Your group will need:

- Pictures of cherry, apple, cantaloupe, clementine, peach, and strawberry
- 1 package colored pencils

Start by matching the fruit group with its definition. In the blank, beside each fruit group, write the letter of the definition that best matches.
$\qquad$ Drupe
$\qquad$ Pome
$\qquad$ Berry
$\qquad$ Melon
___ Citrus fruit
B. Large fruit with lots of seeds
and a rind
C. Fruit with many sections inside a peel
A. Fruit with a paper-like core with seeds
D. Fruit with a single pit
E. Small fruit with lots of seeds

Look at the pictures and study your five fruits. Then draw a detailed picture of each fruit above the name. Be sure to show the seeds and both the inside and outside of the fruit.

Plum
Cantaloupe
Peach

Apple
Orange
Strawberry

## Fruit Facts

In the table below, state the facts about fruits such as the number and location of seeds and outside and inside color. Then decide if the fruit is a pome, drupe, melon or citrus fruit.

|  | Number of seeds/pit and location | Color of fruit (inside and outside) | Group name (pome, dupe, berry, melon, citrus fruit) |
| :---: | :---: | :---: | :---: |
| Plum |  | inside: <br> outside: |  |
| Apple |  | inside: <br> outside: |  |
| Cantaloupe |  | inside: <br> outside: |  |
| Orange |  | inside: <br> outside: |  |
| Peach |  | inside: <br> outside: |  |
| Strawberry |  | inside: <br> outside: |  |

# Create Your Own <br> Smoothie! 



## Fruit Anatomy!



## Fruit Word Search!

Z X O JMHFTTSLFCCQAWQ I J ENKUJCWEAMISXEZUOHWT E Y Q R X M J N S U T E D F J V M Y P C NFQORNVXBJWBNVXRXXAY D Z E P Z P D D CANTALOUPEIZ O I XO I I GDBAPOMETWFS I L C J O P A N U F U E CHCQ J X ZMGF AWCJMAEQMJROSPSQ IORU R D A O S TRAWBERRYNBJOAU PQRMYMXMPUMNYSVUZTPC B Q P M W S M P K P I A F X WMAHEZ NDVSHCTLIVLPNCVEVISY J D D K Q I R L W S K E CKBLQET F R A ERXTQNIWEHYBLOFOMC G Y W B CRWYRZUTMZCNNWLJ HXQ F DUQKD J W A A PKOKJLO I Q Q H D S Z N N O E Y B N E O GRNV N F K Z A F M E S O CAR P D R U P E W WTZRYHBLUEBERRYZWKDV WBLOHFYINKEBUNKCOBOD

| strawberry | cantaloupe | mesocarp | pineapple |
| :--- | :--- | :--- | :--- |
| endocarp | smoothie | blueberry | citrus |
| exocarp | grapes | drupe | berry |
| pome | melon | kiwi |  |

## Draw your Favorite Fruit or Fruit Recipe!



## Grains!

## Make Half Your Grains Whole Grains!

## Goaltoeat5-6ounceequivalents per day!* <br> What counts as an ounce equivalent?

- 1 slice of bread
- 1 cup ready-to-eat cereal
- $1 / 2$ cup cooked rice or pasta
-1/2 cup cooked cereal
*Goal of
5 ounce
equivalents
per day for
girls ages 9-13
and 6 ounce
equivalents
for boys ages
9-13. You
may need to
be eating more
if you're in
sports.


## Make at least half your grains whole grains!

## Grains are a good source of fiber!

Enjoy whole grains everyday!

## Alphabet Pancakes

## Ingredients:

- 3/4 cup plain yogurt
- 1 1/2 cups milk
- 2 eggs
- 3 Tbsp. Oil
- 1 1/2 cups whole wheat flour
- 3/4 tsp. baking powder
- 3/4 tsp baking soda
- Pinch salt
- Syrup or yogurt and fruit for a topping


## Directions:

1. In a small bowl, stir together flour, baking powder, baking soda and salt.
2. In a large bowl, combine and mix yogurt, milk, eggs and oil.
3. Add about $1 / 3$ of the dry ingredients at a time to the wet ingredients by whisking until it is all combined.
4. Fill empty squeeze bottles with batter. Cut nozzle off to enlarge if necessary.
5. Heat greased skillet over medium heat.
6. For each pancake, squeeze batter from the bottle onto the skillet surface, making letters of the alphabet.
7. Cook pancakes 2 minutes or until bubbles start appearing on surface, then turn and cook the other side.
8. Serve with your favorite fruit and yogurt or syrup.

## Chocolate Sun Butter <br> 

These chocolate peanut butter no-bake energy bites taste just like a cookie, although they are full of protein and naturally sweetened.

Prep: $15 \mathrm{mins} \quad$ Cook: $0 \mathrm{mins} \quad$ Total: 15 mins

## Ingredients:

- 1 cup (dry) oatmeal (I used old-fashioned oats, although use gluten-free oats if making this GF)
- $2 / 3$ cup toasted unsweetened coconut flakes
- 1/2 cup Sun Butter
- 1/2 cup ground flax seed
- 1/3 cup honey or agave nectar
- $1 / 4$ cup unsweetened cocoa powder
- 1 tablespoon chia seeds (optional)
- 1 teaspoon vanilla extract


## Directions:

1. Stir all ingredients together in a medium bowl until thoroughly mixed. Cover and chill in the refrigerator for at least half an hour, (or freezer for $10-15$ minutes) to make the mix easier to handle and mold.
2. Once chilled, roll into balls of whatever size you would like. (Mine were about 1" in diameter.) Store in an airtight container and keep refrigerated for up to 1 week.
3. Makes about $20-25$ balls.
*If the mix seems to dry, add in an extra tablespoon or two of honey or sun butter. If the mix seems too wet add extra oatmeal.

## Selecting Cereal

## Did you know some breakfast cereals are healthier than others?

Almost half of all Americans start their day with a bowl of cereal. However, some people choose healthier cereals than others. Eating whole grain breakfast cereals is a great way to fuel your body for the day.

Whole grains have all three healthy parts of the grain including the bran, endosperm, and germ. Cereals made from whole wheat, rice, corn or oat grains are full of starch, fiber, vitamins, and minerals. Starch gives you energy for the day. Fiber keeps your digestive system clean and healthy. And vitamins and minerals are needed to keep you healthy.

Sadly some cereals are not made from whole grains and may have too much added sugar. In fact, 816 million pounds of sugar are added to breakfast cereal each year. That's a lot of sugar. You can use the Nutrition Facts label to help you choose healthier cereals. Look for cereals with more fiber, less sugar and whole grain ingredients. If a whole grain is an ingredient, you'll see the word "whole" before the grain on the ingredient list. For example, look for "whole wheat" or "whole grain rolled oats" on ingredient lists. In today's lesson, you will practice choosing healthier breakfast cereals.

## Taco 'Bout It

- In the reading, circle three parts of a whole grain.
- Underline the sentence that tells what you should look for in a healthy cereal.
- Which is a whole grain choice? (Circle one.)

Wheat Whole wheat Multi-Grain

## Parts of a Grain!



## Scientific Inquiry:

Cereal Nutrition Facts
Look at the Nutrition Facts on the food labels. Fill out the table below.

| Frosted Flakes | Fruit <br> Loops | Frosted <br> Mini Wheats | Wheat <br> Chex | Cheerios |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Nutrition Facts | Nutrition Facts | Nutrition Facts | Nutrition Facts | Nutrition F | Facts |
| 14 servings per container | 1 servings per container | 9 servings per container | 8 servings per container | 8 servings per container |  |
| Serving size $\quad 3 / 4 \mathrm{Cup}$ (31g) | Serving size $\quad 1$ box (27g) | Serving size 21 Biscuits (54g) | Serving size $\quad 3 / 4$ cup (47g) | Serving size | 1 cup (30g) |
| Amount Per Sering <br> Calories 120 | Amount Per Serving <br> Calories 100 | Amount Per Sering <br> Calories 190 | Amount Per Serving <br> Calories 160 | Amount Per Serving Calories | 120 |
| Total Fat 0g \% \% Dily vatue | (rotal Fat 19. | Total Fat $19 \times$ | \% \% Dily vaice |  | * |
| Staturated Fat 0 O ( $0 \%$ | Saturated Fat 0 O | Ster |  |  | $3 \%$ $2 \%$ |
| 边 |  |  |  | Staralea fat 0.49 |  |
| Cholesterol Omg 0\% | Cholestero Omg 0\% | Polyunsaturated Fat 0.5 g | Cholesterol Omg 0\% | Cholesterol Omg | 0\% |
| Sodium 150mg $\quad 7 \%$ | Sodium 125mg ${ }^{\text {m }}$ | Cholesterol Omg $\quad 0 \%$ | Sodium 270mg ${ }^{\text {a }}$ | Sodium 270.mg | 12\% |
| Total Carbohydrate 28g $\quad 10 \%$ | Total Carbohydrate 24g ${ }^{\text {2 }}$ | Sodium 0 mg ( $0 \%$ | Total Carbohydrate $39 \mathrm{~g} \quad 14 \%$ | Total Carbohydrate 22 g | 8\% |
| Dietary Fiber 19 4\% | Dietary Fiber 3g $\quad 11 \%$ | Total Carbohydrate 46g $\quad 17 \%$ | Dietary Fiber 6g $\quad 21 \%$ | Dietary Fiber 3g | \% |
| Total Sugars 12g | Total Sugars 11 g | Dietary Fiber $\mathrm{6g}_{\mathrm{g}}$ | Total Sugars 59 | Total Sugars 1 g |  |
| Includes 15g Added Sugars 30\% | Includes 10 g Added Sugars $\quad 20 \%$ | Total Sugars 11 g | Includes 0 g Added Sugars $\quad 0 \%$ | Includes Og Added Sugars | 5 0\% |
| Protein 19 2\% | Protein 1 g ( ${ }^{\text {2\% }}$ | Includes 89 Added Sugars | Protein 5 g - 10\% | Protein 49 | 3\% |
| Vitamin D 2mog 100\% | Vitamin D 1.6mog ${ }^{\text {a }}$ | Protein 59 | Vitamin D 2mog $\quad 10 \%$ | Vitamin D omog | 0\% |
| Calcium omg $\quad 0 \%$ | Calcium omg $0 \%$ | Vitamin D Omog 0\% | Calcium 130mg | Calcium 52 mg | 4\% |
| rron $4.5 \mathrm{mg}{ }^{\text {a }}$ 25\% | Iron 3.6 mg - 20\% | Calcium 0 mg ( $0 \%$ | Iron 14.4mg | Iron 5.4mg | 3\% |
| Potassium 47mg 0\% | Potassium Omg 0\% | roon 16.2mg ${ }^{\text {a }}$ | Potassium 235 mg - $4 \%$ | Potassium Omg | 0\% |
|  | "The \% Daily Value (DV) tells you how much a nutrient in a serving of food contributes lo a daily diet. 2,000 calories a day is used for general nutrition advice. | Potassium 282 mg ( |  | "The \% Daily Value (DV) tells you how mu serving of lood contributes lo a daily diet. day is used for general nutrition advice. | ch a nutrient in a 2,000 calories a |


|  | $\begin{array}{c}\text { Calories } \\ \text { per serving }\end{array}$ |  |  |  |  |  | $\begin{array}{c}\text { Fiber } \\ \text { grams per serving }\end{array}$ |  | $\begin{array}{c}\text { Sugar } \\ \text { grams per serving }\end{array}$ | $\begin{array}{c}\text { Whole grain } \\ \text { ingredients? } \\ \text { yes or no }\end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |$\}$

1. Circle the cereal with the least sugar.
2. Put a star by the cereal with the most fiber.
3. List the cereals in order from most to least fiber.
a. $\qquad$
b.
c. $\qquad$
d. $\qquad$
e. $\qquad$
4. List the cereals in order from most to least sugar.
a. $\qquad$
b. $\qquad$
c. $\qquad$
d. $\qquad$
e. $\qquad$
5. Which cereal do you think is the healthiest choice? Why?

## Grains Word Search!

Y Z L M S K R W N L W S M I K E B K S T SEPJOATMEALBOJWAAPNZ BWMLTUYGPQQNRCAPNHZ I VQZTVMOZBIEEOOMGSPMM GVHCKBHBVUMNZOWCSUJF HNNHJHUKHHXDDWDNUFHX KWCQMWXTI I FROOTLRXJT ZSTHGKSCRWDVFWS I E I J J HVPZZWHOLEWHEATPCSCD FBBZPPJRBHQED I QEELQE G I URPOVNRJWGLGJZPRVJ KMBCESPHARLZYUSVRAMF CAVEKAZCNVBTMGERMRNH Z Y O S RWD YOTWOKMK I B P LO S GNQODHQHRORTRQPFOH I KKSGPJTEZGNTOQTURDMV Z C Q VVFEVARVIOKMY I OGR LETEJTSUTTKLPNNLKNGR GMCBARLEYVQLMDCKTJOX RRNMOXGJBCMAEGKRMZMA

| whole wheat | endosperm | brown rice | buckwheat |
| :--- | :--- | :--- | :--- |
| tortilla | noodles | popcorn | quinoa |
| oatmeal | barley | fiber | bread |
| germ | bran | corn |  |

# Draw Your Favorite Whole-Wheat or Whole-Grain Food or Meal! 



## Dairy!

Move to Low-Fat or Fat-Free Milk or Yogurt!

## Enjoy low fat dairy everyday!

Goal to eat/drink 3 cups of dairy per day!

## What counts as a cup?

- 1 cup (8oz) milk
- $1 \frac{1}{2}$ ounces of hard cheese (cheddar, mozzarella, swiss, parmesan)
- 2 ounces processed cheese (cheese slice)


## Dairyisagoodsourceofcalcium,potassium, and vitamin D!

## Focus on eating dairy that is not sweetened with added sugar!

*Goal of 3 cups per day for girls and boys ages 9-13.
You may need to be eating more if you're in sports.


## Puddin'

## Ingredients:

- 1 box instant pudding
- 1 cup milk
- Medium bowl
- Whisk
- 4 4oz. cups
- $1 / 4$ cup frozen or fresh fruit


## Directions:

1. If using frozen fruit, thaw first
2. Add instant pudding and milk to bowl
3. Whisk until smooth
4. Portion into cups
5. Refrigerate for at least 5 minutes.
6. Top with fruit
7. Enjoy!

## Ice Cream in a Bag

## Ingredients:

- Ice cubes
- 1 cup half and half or whole milk
-1/2 cup kosher salt
- 2 tablespoons sugar
- $1 / 2$ teaspoon vanilla extract
- 1 pint-size Ziploc bag
- 1 gallon-size Ziploc freezer bag
- Any favorite ice cream mixins'


## Directions:

1. Find a partner.
2. Combine half and half or whole milk, sugar, and vanilla extract in the pint-size bag. Seal the bag tightly, making sure to have as little air as possible in the bag, so that none of the liquid will leak out.
3. Fill the gallon-size Ziploc bag halfway with ice cubes. Sprinkle kosher salt over the ice cubes.
4. Insert the pint-size bag filled with ingredients into the bag of ice and salt. Seal the gallon-size Ziploc bag. If the bag begins to leak, double bag it to reduce mess.
5. Shake the bag for 5-10 minutes until the ice cream mixture begins to harden. Feel the small bag to determine the consistency of your ice cream. Once satisfied with consistency, remove the small bag from the bag of ice.
6. Split the ice cream between you and your partner. Enjoy!

## Many Milks

## Did you know there are many different kinds of milk?

Around the world, people drink many different kinds of milk including cow milk, goat milk, buffalo milk and camel milk. In the United States, "milk" usually means cow milk. You can easily find different types of cow milk at the grocery store. For example, you can buy whole milk, $2 \%$ milk, $1 \%$ milk and skim milk.

No other single food can match the nutrition of milk! Milk is full of calcium, which helps build strong bones. It is also packed with other nutrients your body needs. These include protein, carbohydrates, phosphorous, riboflavin, vitamin A and vitamin D.

Sadly, some people cannot drink regular milk without getting sick. They may be able to drink soy milk, rice milk, or lactose-free milk. Soy milk and rice milk don't come from cows or any other animals. Instead, they are made from plants. Calcium is usually added to these milks. Lactose-free milk is made from cow milk but has an added ingredient that makes it easier to digest. Enjoy tasting many milks.

## Taco 'Bout It

- In the reading, circle the nutrient that helps build strong bones.
- Draw a box around two milks that do not come from animals.
- What kinds of milk have you tasted?


## Scientific Inquiry:

## Comparing Milk

Use the Nutrition Facts on the milk food labels below to fill in the table on the next page.



| Skim Milk | Soy Milk |
| :---: | :---: |
| Nutrition Facts | Nutrition Facts |
| Serving Size: 1 cup | Serving Size: 1 cup |
| Servings Per Container: 8 | Servings Per Container: 8 |
| Amount Per Servings <br> Calories 80 | Amount Per Servings Calories 100 |
| Calories from Fat 0 | Calories from Fat 22 |
| $\begin{gathered} \text { \% Daily } \\ \text { Value } \end{gathered}$ | $\begin{gathered} \text { \% Daily } \\ \text { Value } \end{gathered}$ |
| Total Fat $0 \mathrm{~g} \quad 0 \%$ | Total Fat $\quad 2.5 \mathrm{~g} \quad 4 \%$ |
| Saturated Fat $0 \mathrm{~g} \quad 0 \%$ | Saturated Fat 0g 0\% |
|  | Trans Fat 0 g 相 $0 \%$ |
| Cholesterol <5 mg 0\% | Cholesterol 0 mg 0\% |
| Sodium $\quad 130 \mathrm{mg}$ 5\% | Sodium $\quad 90 \mathrm{mg}$ 4\% |
| Total | Total |
| Carbohydrate $12 \mathrm{~g} \quad 4 \%$ | Carbohydrate 16 g 5\% |
| Dietary Fiber 0 g ( $0 \%$ | Dietary Fiber 2 g ( $0 \%$ |
| Sugars $\quad 12 \mathrm{~g}$ | Sugars $\quad 8 \mathrm{~g}$ |
| Protein $\quad 8 \mathrm{~g}$ | Protein $\quad 4 \mathrm{~g}$ |
| Vitamin A 10\% | Vitamin A 6\% |
| Calcium 30\% | Calcium 30\% |
| Vitamin C 4\% | Vitamin C 4\% |
| Iron $0 \%$ | Iron 0\% |
| *Percent Daily Values are based on a 2,000 calorie diet | *Percent Daily Values are based on a 2,000 calorie diet |


|  | Calories per serving | Fat grams per serving | Calcium percent daily value |
| :---: | :---: | :---: | :---: |
| Whole Milk |  |  |  |
| 2\% Milk |  |  |  |
| Skim Milk |  |  |  |
| Soy Milk |  |  |  |

Draw a star beside the milk that has the least amount of fat.
List the kinds of milk in order from least fat to most fat.

## least fat

Did any kind of milk have less than $30 \%$ of the Daily Value of calcium? If so, which one?

If you drink whole, $2 \%$, or $1 \%$ milk, do you think you can switch to skim milk?

## Mmmm Creamy

## Did you know fat adds flavor to food?

Fat adds flavor to foods like ice cream and has a good mouth feel. Mouth feel is simply how a food feels in your mouth. Fat feels smooth, creamy and moist in your mouth. Low-fat foods sometimes have a bad mouth feel. They may feel dry or gritty. When people talk about mouth feel, they often mention ice cream.

Ice cream is a tasty treat, but it is usually high in fat. The fat separates the ice crystals in ice cream and keeps them from growing bigger. Higher fat ice creams have more fat and have smaller ice crystals. The tiny ice crystal

Ice crystals in
low-fat ice cream

feel smooth and creamy. In general, the more fat in an ice cream, the smoother and fuller it will taste.

Many companies make healthier ice creams with less fat and calories. Unfortunately, using less fat changes the taste and mouth feel of ice cream. Reduced-fat and fat-free ice creams have less fat to separate ice crystals. Therefore, the crystal can grow bigger and make ice cream feel grainy and thin. In today's lesson, you will taste different ice creams to see how different amounts of fat can change the mouth feel.


## Taco 'Bout It

In the reading, underline the sentence that tells what mouth feel means.

Circle the thing that separates ice crystals and keeps the crystals from growing bigger.

Why would companies want to make an ice cream with less fat than regular ice cream?

## Dairy Word Search!

E Z C H F S G CHEDDAROEWFYF Y L X UC PD I L I S PKHOOURET ULHPOQLJXYUUODVFCBQE G S R DTUUNS B GQUDCSZETW X T I DTBAPTJAVJQGSAQHM NXTGADHAVDVGTBWSQIUO M X X F GRJRMVGGPQHKGCPS ORBZENMMLWMUBKO I I UOP ZDVACICECREAMBLMZZTR ZNYVHEMSZPZMLDEMOZAY A Z Y G E Y V A Y Q H Q J L M I I D S J
R Q W C E P K N W Y V Z B L I LYZ S P E J MASVRNLHINHHLKAVIV
LYVSEAEOQMTRVWKWWSUY L O X O B S H U TVARNVHOYVMV A GNYSBYPSEMKZVYYXAXF CUZMNQDCWQ I VOCALCIUM ERBIEABWITNNNRMDSWDS F T B L B MOTSEDGLPCEWDXV B S UKDJYDS LOWFATMILKW

| Cottage cheese | Low fat milk | Potassium | Whole milk |
| :--- | :--- | :--- | :--- |
| Vitamin D | Mozzarella | Ice cream | Skim milk |
| Calcium | Cheddar | Parmesan | Protein |
| Soy milk | Yogurt | Swiss |  |

## Draw Your Favorite Dairy Food or Meal!



## Protein!

## Vary Your Protein Routine!

# Goal to eat 5 ounce equivalents per day! 

## What counts as an Ounce equivalent?

- 1 ounce of meat, poultry, or fish
- 1/4 cup cooked beans
- 1 egg
- 1 tablespoon peanut butter
- $1 / 2$ ounce of nuts or seeds

Enjoy lean protein everyday!

## Protein is a good source of iron!

## Protein is used by your body to build and repair tissue!

*Goal of 5 ounce equivalents per day for girls and boys ages $9-13$. You may need to be eating more if you're in sports.

# Eggs in Bread 

## Ingredients:

- 1 slice whole wheat bread
- 1 egg
- 1 tsp. soft butter
- Pinch salt
- Pinch pepper


## Directions:

1. Spread a small amount of butter on both sides of bread
2. Make a hole in the middle of the bread (about 2 inches in diameter) using a cookie cutter or by ripping with your fingers
3. Place bread on hot skillet
4. Break an egg into a small bowl and pour into the hole in the bread
5. Cook until the egg white turns white
6. Flip bread and continue to cook until the yolk is firm
7. Add seasoning and enjoy!

## Salmon Dip

## Ingredients:

- Salmon: 1, 6-7oz pouch or can
- 4oz light cream cheese
- $1 / 4$ cup chunky salsa
- 3/4 cup vegetables (celery, cucumbers, or carrots)
- 25 whole grain crackers


## Directions:

1. Pour the salmon into the mixing bowl. Add the cream cheese.
2. Measure the salsa and chopped vegetables. Add to the mixing bowl.
3. Stir the mixture with the fork.
4. Use a table knife to put salmon spread on crackers.

## Something is Fishy

## Didyouknow therearedifferenttypesoffish?

Worldwide people eat more than 1000 different kinds of fish. Fish live in streams, rivers, ponds, lakes and oceans. You can divide fish into two groups called finfish and shellfish. Finfish have bony skeletons and include fish like catfish, flounder and salmon. Shellfish have soft bodies inside a shell or exoskeleton. Shellfish are divided into two more groups. The first group is called mollusks. They have one body section covered by a shell. Clams and scallops are mollusks. Crustaceans are the second group of shellfish. They have many body parts surrounded by a hard outer covering called an exoskeleton. Crabs, lobster and shrimp are crustaceans.


Shellfish (crustacean)


Finfish


Shellfish (mollusk)

There are lots of reasons to eat fish. Fish are a good source of protein and healthy fats called omega-3 fatty acids. Studies by scientists show that omega-3 fatty acids are good for the heart. Fatty fish like salmon, sardines and herring are high in omega-3 fatty acids. In today's lesson, you will learn how to select fish that are high in omega-3 fatty acids.

## Taco 'Bout It

- In the reading, circle the two main groups of fish.
- Draw a box around examples of shellfish.
- Underline the sentence that lists fish that are high in omega-3 fatty acids.
- Guess how many times a week you should eat fish:


# Double and Triple Recipes 

|  | Single <br> Recipe (1x) | Double Recipe (2x) | Triple Recipe (3x) |
| :---: | :---: | :---: | :---: |
| Salmon | 1 pouch 6-7 oz. |  |  |
| Cream Cheese | 4 oz . |  |  |
| Chunky Salsa | 1/4 cup |  |  |
| Vegetables | 3/4 cup |  |  |
| Crackers | 25 |  |  |

## Circle your answer:

Have you ever eaten salmon before?
Yes
No
Did you like the salmon spread?
Yes
No
Do you think the salmon spread is healthy?
Yes No

# Egg-Ceptional Eggs 

## Did you know that eggs have more parts than just the shell, white and yolk?

Eggs have many parts surrounded by a shell. These parts include an outer membrane, inner membrane, white, vitelline membrane, yolk and chalazae. The egg shell is porous, which means it has thousands of tiny pores or holes. The tiny holes are almost invisible. But air and smells can still move in and out of eggs through the pores.

Right under the shell are two thin skins or membranes that surround the egg white. They are called the outer and inner membranes. After an egg is laid, the inner membrane shrinks but the outer membrane doesn't shrink. A gap or air space forms between the two membranes.


The egg white is high in protein and lies right under the inner membrane. A third membrane is called the vitelline membrane. It separates the egg white from the egg yolk.

The yolk looks like a small yellow ball in the center of the egg. All of the fat of an egg is found in the yolk, plus some protein and other nutrients. The chalazae are two thick white strings that stick out of both ends of the egg yolk. They hold the yolk in the center of the egg. Today, you will explore the parts of an egg.

## Taco 'Bout It

- In the reading, underline the sentence that lists many parts of an egg.
- Draw a picture of a porous egg.
- Which part has the most fat? (circle one)

The egg white
The egg yolk

## Egg Anatomy!



# Crack The Protein Group Code! 

| $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ | $\mathbf{E}$ | $\mathbf{F}$ | $\mathbf{G}$ | $\mathbf{H}$ | $\mathbf{I}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| $\mathbf{J}$ | $\mathbf{K}$ | $\mathbf{L}$ | $\mathbf{M}$ | $\mathbf{N}$ | $\mathbf{O}$ | $\mathbf{P}$ | $\mathbf{Q}$ | $\mathbf{R}$ |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| $\mathbf{S}$ | $\mathbf{T}$ | $\mathbf{U}$ | $\mathbf{V}$ | $\mathbf{W}$ | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |  |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |  |

1. $\overline{19} \frac{}{1} \frac{}{12} \frac{}{13} \frac{}{15} \frac{}{14}$
2. $\frac{}{19} \frac{}{8} \frac{-}{5} \frac{}{12} \frac{}{12} \frac{-}{6} \frac{}{9} \frac{}{19} \frac{}{8}$
3. $\overline{20} \frac{}{15} \frac{}{6} \frac{}{21}$
4. 


5.

6.

7. $5-$


$$
\overline{5} \frac{-}{17} \frac{}{21} \frac{}{9} \frac{}{22} \frac{}{12} \frac{}{5} \frac{}{14} \frac{}{20} \frac{}{19}
$$

## Protein Word Search!

G B P L P L K K L Y M I P H F J P M F T Z C B HQ PKYJRHWI JTSEQRA LBKHEEVRCRPPRTNWLFFT EAVZGADHCCBFOANBUNSC DKPFLNEURCPENXXQRIZK ENVEAUGOUDHUADCEBYCG WT J ENTGQSOO I KNAO I DET CNJBIBSTTISJCXSRXGAN L X DWQUFQAWUTHKKGAZDV V Z K W T T B TCXVLLPEPSUVR DMHSKTFIETATVGGNBVBA COSEEEFRAASNWQ I DXLIA U L M B K R B M N N K S G X H I S W I E TLUEZTXMKIAIBYJZFVHJ OUSEE I UZHMHUMMUS I S C P F S C F VWENFACYDRNONLOJ UKLE JNDTALUVCJUWF JZ I SAENUTSWRSUWORGUI ERC PYSGYXPFFIOBZFNHSTAA ENXLNUVPAAHTXEKNHHED

| PEANUT BUTTER | CRUSTACEAN | ANIMALS | CHICKEN |
| :--- | :--- | :--- | :--- |
| MUSCLES | FINFISH | MOLLUSK | BEANS |
| BEEF | IRON | HUMMUS | NUTS |
| EGGS | TUNA | TOFU |  |

## Draw Your Favorite Protein Food or Meal!




