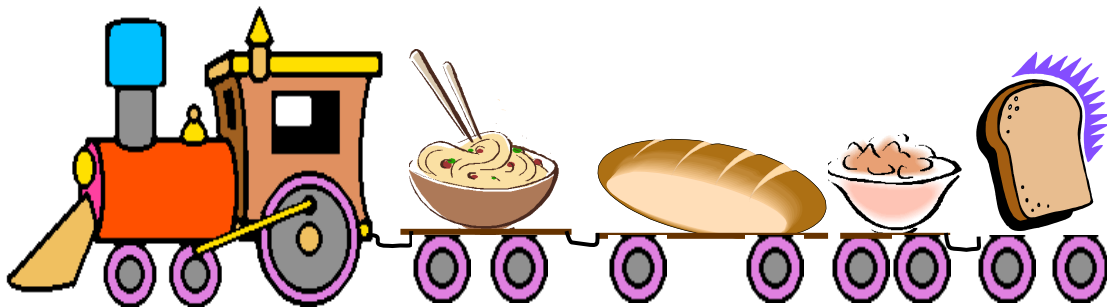


Child Nutrition & Wellness  
Kansas State Department of Education  
Presents

# **The Whole Grain Train, Get On Board!**



## **Training Manual**

A Class for CACFP Sponsors and Providers

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This class was developed by Child Nutrition & Wellness, Kansas State Department of Education. Class content and activities were adapted from the following sources:

- *The Whole Grain Choo-Choo Train Lesson Plan*, Mary Stickney, Florida Department of Health
- *The Whole Grain Choo-Choo Train*, Kathy Reeves, MS, RD, LD, Mary Stickney, MA, RD, LD, Diane Bowden, MPH, RD, LD, Illustrated by Rob Gelhardt, Florida WIC and Florida Department of Health.
- *Go With Whole Grains for Kids*, Bell Institute of Health and Nutrition, General Mills, <http://www.bellinstitute.com/ResourceDetail.aspx?ResourceId=717&PageId=81&SubPageId=65>
- USDA/FNS, *Whole Grains: Tips and Guidance for Moms* (4-19-12)
- Sarah Malburg, *A Preschool Theme on Bread & Baking*, 6/6/2012.
- *Go Whole Grains*, Culinary Course, KSDE
- *Hearty Whole Grain Breads*, National Food Service Management Institute, The University of Mississippi.
- Alastair Bland, *What Makes Whole-Grain Bread So Hard to Bake?*, Smithsonian.com, 9-25-2013.
- *Recipes from America's Breadbasket*, Kansas Wheat Commission
- *The Whole Grain Train, Get On Board*, KSDE
- *Culinary Techniques for Healthy School Meals*, National Food Service Institute, The University of Mississippi
- TeamNutrition.usda.gov, *Recipes for Healthy Kids Cookbook for Homes*
- *Facts About Kansas Wheat*, Kansas Wheat, [www.kansaswheat.org](http://www.kansaswheat.org)
- *Brown Rice Basics*, US Rice Federation
- *Oats*, Dictionary of American History | 2003 | Encyclopedia.com
- *Fun Facts About Corn*, Stumblerz.com, 3-17-2009
- GrainChain.com

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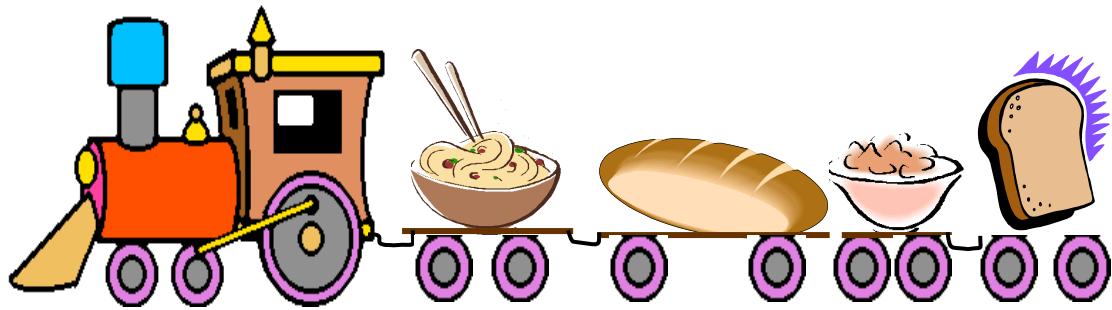
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The following person has been designated to handle inquiries regarding the non-discrimination policies at the Kansas Department of Education: KSDE General Counsel, Landon State Office Building, 900 SW Jackson Street, Suite 251, Topeka, KS 66612, (785) 296-3201.

# **The Whole Grain Train, Get On Board!**



**Administration**

**\* The Whole Grain Train, Get On Board! \***  
**Administration**  
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Signs (Welcome, Restroom, Arrow) ..... Page 5  
- *copies can be made as needed*

Are These Products Whole Grain Rich? Activity Labels..... Page 8  
- *black and white copies, print front to back, stapled in top left corner, 5 sets of 5 labels per trainer kit (provided by KSDE)*

Are These Products Whole Grain Rich? Answer Key..... Page 13  
- *color copy on white card stock paper, 1 copy per trainer kit (provided by KSDE)*

Getting Whole Grains on Board Menu Activity Answer Key ..... Page 14  
- *color copy on white card stock paper, 1 copy per trainer kit (provided by KSDE)*

Bread Making Sequence Cards ..... Page 15  
- *color copy on white card stock paper, printed on one side only, cut on solid lines to make 1 set of 7 cards per trainer kit (provided by KSDE)*

Participant Booklet ..... Separate Word File  
- *black and white copies, copy cover and Acknowledgments/Discrimination Statement page back-to-back on colored paper and remaining pages back-to-back on white paper, put blank colored page at end of packet, staple in top, left corner, one booklet per participant (provided by KSDE)*

Baking Bread with The Little Red Hen Lesson Plan ..... Separate Word File  
- *black and white copies, copy cover and Acknowledgments/Discrimination Statement page back-to-back on colored paper and remaining pages back-to-back on white paper, staple in top, left corner, one booklet per participant (provided by KSDE)*

Whole Grain Pasta Shapes and Numbers Lesson Plan ..... Separate Word File  
- *black and white copies, copy cover and Acknowledgments/Discrimination Statement  
page back-to-back on colored paper and remaining pages back-to-back on white paper,  
staple in top, left corner, one booklet per participant (provided by KSDE)*

Grains Galore Lesson Plan ..... Separate Word File  
- *black and white copies, copy cover and Acknowledgments/Discrimination Statement  
page back-to-back on colored paper and remaining pages back-to-back on white paper,  
staple in top, left corner, one booklet per participant (provided by KSDE)*

Whole Grain Choo-Choo Train Lesson Plan ..... Separate Word File  
- *black and white copies, copy cover and Acknowledgments/Discrimination Statement  
page back-to-back on colored paper and remaining pages back-to-back on white paper,  
staple in top, left corner, one booklet per participant (provided by KSDE)*

Whole Grains – Did You Know? Lesson Plan (for Adults)..... Separate Word File  
- *black and white copies, copy cover and Acknowledgments/Discrimination Statement  
page back-to-back on colored paper and remaining pages back-to-back on white paper,  
staple in top, left corner, one booklet per participant (provided by KSDE)*

# Lesson Outline

| Topic   | Estimated Time |
|---|----------------|
| Welcome and Introduction<br>Class Overview  | 5 minutes      |
| Lesson 1: Why and What of Whole Grains <ul style="list-style-type: none"> <li>• The Health reasons for getting on board with whole grains.</li> <li>• All 3 parts of a whole grain.</li> <li>• The Difference between whole grain, whole grain rich and whole grain added.</li> <li>• How to read and use labels to select whole grain rich foods.</li> <li>• Activity 1: Are These Whole Grain Rich?</li> </ul>  | 35 minutes     |
| Lesson 2: Get on Board the Whole Grain Train - Menus <ul style="list-style-type: none"> <li>• Practice replacing refined grain menu items with whole grain options.</li> <li>• Learn how to adapt recipes to include whole grains.</li> <li>• Receive whole grain recipe ideas.</li> <li>• Activity 2: Getting Whole Grains on Board – Breakfast Menu</li> <li>• Activity 3: Getting Whole Grains on Board – Lunch, Supper and Snack Menu</li> <li>• Activity 4: Simple Taste Test</li> </ul> | 55 minutes     |
| Lesson 3: All Aboard the Whole Grain Train <ul style="list-style-type: none"> <li>• Learn It Live It Lesson Plans               <ul style="list-style-type: none"> <li>○ Whole Grain Choo Choo Train</li> <li>○ Making Bread with The Little Red Hen</li> <li>○ Whole Grain Pasta Shapes and Numbers</li> <li>○ Whole Grains Galore</li> <li>○ Whole Grains Did you Know? (Adults)</li> </ul> </li> <li>• Activity 5: Making Bread</li> </ul>   | 20 minutes     |
| Conclusion & Wrap-up  | 5 minutes      |
| <b>TOTAL TIME</b>   | <b>2 hours</b> |

# **Facility Requirements**

## **Classroom:**

- Comfortable chairs and tables for all trainees that can be moved or arranged for small group work
- Blank wall or space for a screen at the front of the room
- Table located near the blank wall or screen for the trainer's materials

## **Audio-Visual Equipment:**

- Data projector/computer
- Screen (if the classroom does not have a blank wall at the front of the room)

# Supplies Needed

| Item  | Description  | Amount Needed      | Provided by     |
|---|--|--------------------|-----------------|
| Pencils   | For participants who did not bring one               | 12 each            | KSDE or Trainer |
| Labels  | Are These Products Whole Grain Rich? Activity Labels | 5 sets of 5 labels | KSDE or Trainer |
| Bread Making Sequence Cards   | See Administration                                   | 1 set of 7         | KSDE            |
| <b>Optional Items for Taste Testing Activity</b><br>(See trainer notes for additional information about this activity)  |  |                    |                 |
| <ul style="list-style-type: none"> <li>• Whole grain crackers</li> <li>• Whole grain bread</li> <li>• Whole grain dry cereal</li> <li>• Microwavable instant brown rice or brown rice mix</li> <li>• Pasta Salad made with whole grain pasta, vegetables and low fat dressing</li> <li>• Rice pudding made with brown rice</li> <li>• Cold salads made with whole grains as cost allows (quinoa, barley)</li> <li>• Napkins</li> <li>• Soufflé cups or 2 ounce drinking cups</li> <li>• Plastic spoons</li> </ul> |  |                    |                 |



# Preparation and Set-Up Instructions

## For Organizer

- Copy Participant Booklets.
- Copy and assemble Activity 1 – Are These Products Whole Grain Rich? Activity Labels.
- Copy and cut Activity 5: Bread Making Sequence Cards for 1 set of 7 cards.

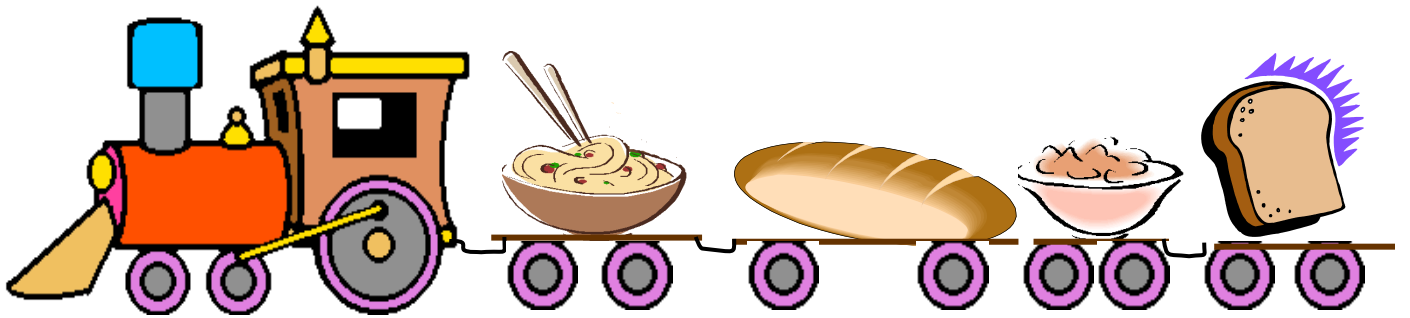
## For Host Site

- Ensure that the classroom is clean and meets the requirements.
- Ensure that the audio-visual equipment is in good working condition.

## For Trainer

- Read class notes in advance and prepare.
- Determine how large/small your groups for Activity 1 will be. 5 sets of labels are provided. If you have a large group of participants, additional sets of labels may need to be copied.
- Optional: Set up table and supplies for taste testing activity.

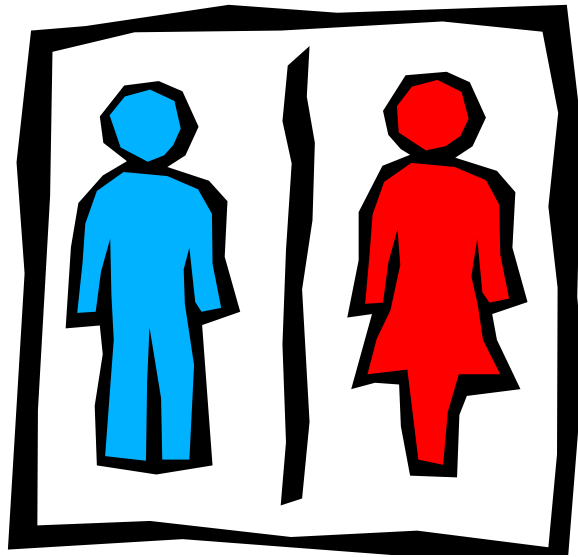
# Welcome to

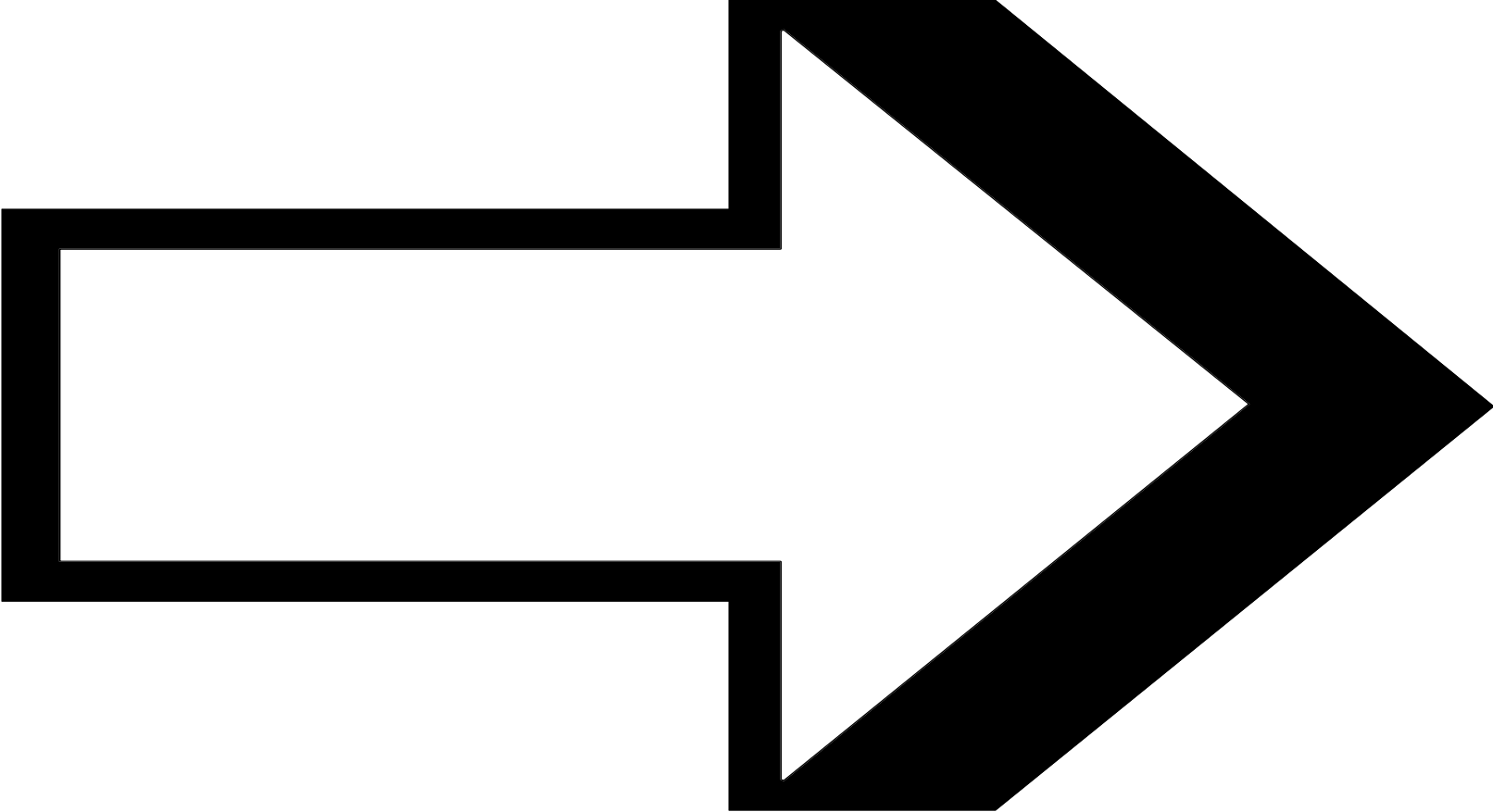


# The Whole Grain Train, Get on Board!

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# Restrooms





## Are These Products Whole Grain Rich? Activity Label

### Label 1: Whole Wheat Bread

#### Nutrition Facts

Serving Size: 1 slice (28 g)

Calories 69

Protein (g) 4

Carbohydrate (g) 12

Dietary Fiber (g) 2

Sugars (g) 2

Total Fat (g) 1

Saturated Fat (g) 0

*Trans* Fat (g) 0

Cholesterol (mg) 0

Sodium (mg) 132

Vitamin A 0%

Vitamin C 0%

Iron 4%

Calcium 3%

Diets rich in whole grain foods and other plant foods, and low in total fat, saturated fat and cholesterol may reduce the risks of heart disease and certain cancers.

**Ingredients:** Whole wheat flour, water, corn syrup, wheat gluten, yeast, contains 2% or less of each of the following: honey, partially hydrogenated soybean oil, salt, dough conditioners (may contain one or more of each of the following: mono- and diglycerides, ethoxylated mono- and diglycerides, calcium and sodium stearoyl lactylates, calcium peroxide, calcium carbonate), whey, yeast nutrients (mono-calcium phosphate, calcium sulfate, ammonium sulfate), distilled vinegar, cornstarch.

## Are These Products Whole Grain Rich? Activity Label

### Label 2: Seven Grain Bread

*Made with whole grains, 8.5 g whole grains per serving*

*No trans fat*

*Seven wholesome grains with a touch of molasses*

#### **Nutrition Facts**

Serving Size: 1 slice (41 g)

Calories 109

Protein (g) 5

Carbohydrate (g) 20

Dietary Fiber (g) 2

Sugars (g) 3

Total Fat (g) 2

Saturated Fat (g) 0

*Trans* Fat (g) 0

Cholesterol (mg) 0

Sodium (mg) 172

Vitamin A 0%

Vitamin C 0%

Iron 6%

Calcium 4%

**Ingredients:** Enriched wheat flour [flour, malted barley flour, reduced iron, niacin, thiamin mononitrate (vitamin B1), riboflavin (vitamin B2), folic acid], water, whole wheat flour, soy, high fructose corn syrup, cracked wheat, molasses, raisin juice concentrate, soybean oil, yeast, whole-grain barley, salt, nonfat milk, whole rye flour, wheat gluten, whole-grain triticale, whole-grain millet, oats, ground corn, monoglycerides, soybeans, brown rice, grain vinegar, calcium sulfate, flaxseed, ascorbic acid (dough conditioner), soy lecithin.

## Are These Products Whole Grain Rich? Activity Label

### Label 3: Honey Graham Crackers

*Now more whole grains*

#### **Nutrition Facts**

Serving Size: 2 squares (14 g)

Calories 59

Protein (g) 1

Carbohydrate (g) 11

Dietary Fiber (g) 0

Sugars (g) 4

Total Fat (g) 1

Saturated Fat (g) 0

*Trans* Fat (g) N/A

Cholesterol (mg) 0

Sodium (mg) 85

Vitamin A 0%

Vitamin C 0%

Iron 6%

Calcium 0%

**Ingredients:** Enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate [vitamin B1], riboflavin [vitamin B2], folic acid), sugar, graham flour (whole-grain wheat flour), soybean oil, high fructose corn syrup, partially hydrogenated cottonseed oil, honey, leavening (baking soda, calcium phosphate), salt, artificial flavor, soy lecithin- an emulsifier, cornstarch.

## Are These Products Whole Grain Rich? Activity Label

### Label Four: Whole-Grain Crackers

*Made with whole grains*  
*5 g whole grain per serving*  
*0 g trans fat per serving*

#### **Nutrition Facts**

Serving Size: 7 crackers (31 g)

Calories 140

Protein (g) 2

Carbohydrate (g) 21

Dietary Fiber (g) 1

Sugars (g) 4

Total Fat (g) 6

Saturated Fat (g) 1

*Trans* Fat (g) 0

Cholesterol (mg) 0

Sodium (mg) 260

Vitamin A 0%

Vitamin C 0%

Iron 6%

Calcium 2%

**Ingredients:** Enriched flour (wheat flour, niacin, reduced iron, thiamine mononitrate [vitamin B1], riboflavin [vitamin B2], folic acid), soybean oil, whole-grain wheat flour, sugar, defatted wheat germ, cornstarch, malt syrup (from barley and corn), high fructose corn syrup, salt, monoglycerides, leavening (calcium phosphate and/or baking soda), vegetable color (annatto extract, turmeric oleoresin), soy lecithin. BHT added to packaging material to preserve freshness.



## Are These Products Whole Grain Rich? Activity Label

### Label 5: Whole-Grain Pasta

*Excellent source of fiber*



*who*

#### **Nutrition Facts**

Serving Size: 2 oz

Calories 180

Protein (g) 6

Carbohydrate (g) 42

Dietary Fiber (g) 6

Sugars (g) 1

Total Fat (g) 1

Saturated Fat (g) 0

*Trans* Fat (g) 0

Cholesterol (mg) 0

Sodium (mg) 0

Iron 10%

Thiamin 35%

Riboflavin 15%

Niacin 20%

Folate 30%

Not a significant source of vitamin A, vitamin C, and calcium.

**Ingredients:** Whole wheat durum flour, semolina, soybean oil, salt, monoglycerides.

# Are These Products Whole Grain Rich?

## Answer Key

Instructions: List the label and name of the product. Work as a group to decide if the product is whole grain rich and why or why not.

| Product               | Whole Grain Rich? | Why or Why Not?  |
|-----------------------|-------------------|--|
| Whole Wheat Bread     | <b>Yes</b>        | <b>Whole wheat flour is first ingredient and contains the FDA-approved health label.</b> |
| Seven Grain Bread     | <b>No</b>         | <b>First ingredient is enriched wheat flour.</b>   |
| Honey Graham Crackers | <b>No</b>         | <b>Enriched Flour is the first ingredient.</b>   |
| Whole Grain Crackers  | <b>No</b>         | <b>First ingredient is enriched flour. (not 8 grams of whole grain per ounce)</b>        |
| Whole Grain Pasta     | <b>Yes</b>        | <b>First ingredient is whole wheat durum flour. Label has the whole grain stamp.</b>     |

# Getting Whole Grains on Board Menu Activity

## Answer Key

Instructions:

- Circle all the whole grain items on the menu.
- Below the refined grain items, write in whole grain options.

### Breakfast

|  |  |   |  |   |
|--|--|---|--|---|
| Orange Juice<br><b>Cheerios</b><br>Milk                    | Banana<br>Corn Flakes<br><b>**Wheaties</b><br>Milk | Orange Slices<br>English Muffin<br><b>**WW English Muffin</b><br>Milk | Tomato Juice<br><b>Whole Wheat Toast</b><br>Milk                         | Orange Juice<br><b>Oatmeal</b><br>Milk  |
| V-8 Juice<br>Rice Cake<br><b>**Brown Rice Cake</b><br>Milk | Pineapple<br><b>Whole Grain Pancake</b><br>Milk    | Apple Juice<br>Biscuit<br><b>**Whole Grain Biscuit</b><br>Milk        | Peaches<br>Cream of Wheat<br><b>**Whole Grain Cream of Wheat</b><br>Milk | Orange Juice<br>Blueberry Muffin<br><b>**Whole Grain and Oat Muffin</b><br>Milk |

### Lunch/Supper

|   |   |  |  |  |
|---|---|--|--|--|
| PBJ & Cottage Cheese<br><b>Whole Wheat Bread</b><br>Carrots<br>Orange<br>Milk | Chili Crackers<br><b>**Whole Grain Crackers</b><br>Chili Beans<br>Applesauce<br>Milk        | Meatballs<br>Rice<br><b>**Brown Rice</b><br>Spinach<br>Pears<br>Milk | Scr. Egg/Cheese Biscuit<br><b>**Whole Grain Biscuit</b><br>Hash Browns<br>Broccoli<br>Milk | Spaghetti Casserole<br>Spaghetti<br><b>**WW Spaghetti</b><br>Green Beans<br>Apple Wedges<br>Milk |
| Corndog<br>Tator Tots<br>Grapes<br>Milk                                       | Meat Loaf<br>Dinner Roll<br><b>**WW Dinner Roll</b><br>Mashed Potato<br>Green Beans<br>Milk | Chicken Nuggets<br>Baby Carrots<br>Kiwi<br>Milk                      | <b>Burrito WG Tortilla</b><br>Lettuce/Tomato<br>Refried Beans<br>Milk                      | Hamburger Bun<br><b>**WW Bun</b><br>French Fries<br>Fruit Cocktail<br>Milk                       |

### Snacks

|                         |  |  |                |   |
|-------------------------|--|--|----------------|---|
| <b>Wheaties</b><br>Milk | Muffins<br><b>**Whole Grain Muffin</b><br>Milk | Waffle<br><b>**Whole Grain Waffle</b><br>Grape Juice | Scones<br>Milk | English Muffin<br><b>**WW English Muffin</b><br>Hot Chocolate |
|-------------------------|--|--|----------------|---|

**\*\*Corn dogs with whole grain batter and chicken nuggets with whole grain breading are available from wholesale providers to school nutrition programs. However, these items are not typically available retail and would not be required to be whole grain if at least one other item served during the day is whole grain. Commercial scones are rarely whole grain. Whole grain scones can be made from scratch using 51% whole wheat flour or whole wheat pastry flour.**



