

Experiential Activities Grades 3-5



Drying Herbs – Yes, you can do it and enjoy them in winter!!

Whether you've grown herbs at your site, or at home, drying and storing the herbs for use during the colder months is very easy to do!

Materials

- Rubber bands or string
- Brown paper lunch bags
- Place to hang herbs
- Wire or string
- Glass jars with lids or zippered plastic bags

Instructions

1. Cut healthy branches from your herb plants.
2. Remove any dry or diseased leaves. Yellowed leaves and leaves spotted by disease are not worth drying. Their flavor has already been diminished by the stress of the season.
1. Shake gently to remove any insects. There are always hitchhikers and since you won't be thoroughly washing the stems, you want to get rid of as many as you can now.
2. If you've picked your herbs while the plants are dry, you should be able to simply shake off any excess soil. But if necessary, rinse with cool water and pat dry with paper towels. Give them plenty of air circulation, so they can dry out quickly. Wet herbs will mold and rot.
1. Remove the lower leaves along the bottom inch or so of the stem.
2. Bundle 4 - 6 stems together and tie as a bunch. You can use string or a rubber band. The bundles will shrink as they dry and the rubber band will loosen, so check periodically that the bundle is not slipping. Make small bundles if you are trying to dry herbs with high water content.
3. Punch or cut several holes in a paper bag. Label the bag with the name of the herb you are drying.
4. Place the herb bundle upside down into the bag.
5. Gather the ends of the bag around the bundle and tie closed. Make sure the herbs are not crowded inside the bag.
6. Hang the bag upside down in a warm, airy room.
7. Check in about two weeks to see how things are progressing. Keep checking weekly until your herbs are dry and ready to store.



Storing Dried Herbs

1. Store your dried herbs in airtight containers. Zippered plastic bags will do, or small canning jars work nicely as well.
2. Be sure to label and date your containers.
3. Your herbs will retain more flavor if you store the leaves whole and crush them when you are ready to use them.
4. Discard any dried herbs that show the slightest sign of mold.
5. Place containers in a cool, dry place away from sunlight.
6. Dried herbs are best used within a year. As your herbs lose their color, they are also losing their flavor.
7. Use about 1 teaspoon crumbled dried leaves in place of a tablespoon of fresh herbs.



WHOLE GRAIN VS REFINED GRAIN

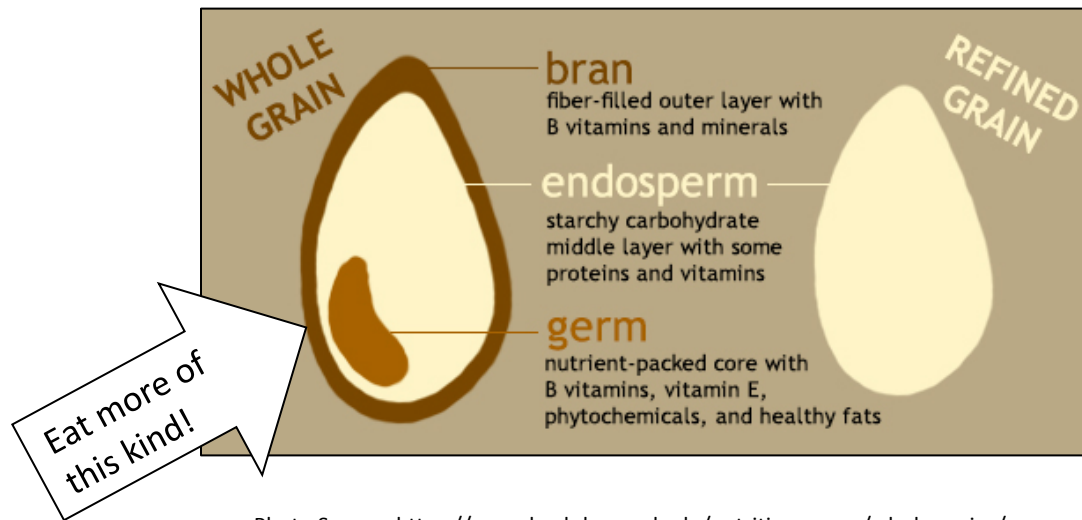


Photo Source: <https://www.hsph.harvard.edu/nutritionsource/whole-grains/>

A grain is considered to be a **whole grain** as long as all three original parts — the bran, germ, and endosperm — are still present in the same proportions as when the grain was growing in the fields. Foods made with whole grains are much healthier for you, but a lot of food is made with refined grain, which does not have as much of the naturally occurring nutrients.

THE BRAN: The bran is the multi-layered outer skin of the edible kernel. It contains important antioxidants, B vitamins, and fiber.

THE ENDOSPERM: The endosperm is the germ’s food supply, which provides essential energy to the young plant so it can send roots down for water and nutrients, and send sprouts up for sunlight’s photosynthesizing power. The endosperm is by far the largest portion of the kernel. It contains starchy carbohydrates, proteins, and small amounts of vitamins and minerals.

THE GERM: The germ is the embryo which has the potential to sprout into a new plant. It contains many B vitamins, some protein, minerals, and healthy fats.




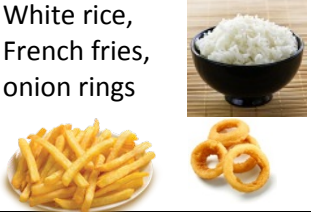








“**Refined grain**” is the term used to refer to grains that are not whole, because they are missing one or more of their three key parts (bran, germ, or endosperm). White flour and white rice are refined grains, for instance, because both have had their bran and germ removed, leaving only the endosperm. Refining a grain removes **about a quarter of the protein in a grain, and half to two thirds or more of a bunch of nutrients**, leaving the grain a mere shadow of its original self.

Check out the next page for “**WG Eat this, not that**” – ideas on how to get more whole grain foods into your diet!

WG (Whole Grains) EAT THIS, NOT THAT!

You can make simple **whole grain** substitutions for things you regularly eat. Look at the chart below for some ideas on how to easily eat more whole grains. *Circle the foods you eat*, then share this with your family and try to get everyone eating more whole grains! Check out the following pages for information on what food items include healthy “whole grains!”

****Staff – bring in whole and refined grains products (or food label) to use as examples during this lesson!****

EAT THIS	INSTEAD OF THIS	WHY?
<p>Whole grain cereal: The word “Whole” should be in the first ingredient in the list, ex. = Cheerios, Kashi cereals, Grape-Nuts, shredded wheat, etc.</p> 	<p>Refined grain cereal: Corn flakes, frosted corn flakes, corn pops</p> 	<p>Nutritious whole grains will keep you feeling “full” longer, and, they provide more needed nutrients. Typically, whole grain cereals contain less added sugars, so that is an added benefit of buying whole grain cereals!</p>
<p>Brown rice, quinoa, barley, wild rice</p> 	<p>White rice, French fries, onion rings</p> 	<p>These whole grains are higher in protein, fiber, and many vitamins and minerals! They boost your immune system and many have a wonderful, nutty flavor!</p>
<p>Whole wheat pasta</p> 	<p>Enriched white flour pasta</p> 	<p>White flour pasta uses refined flour and thus has been stripped of nutrients – go for “whole!”</p>
<p>Popcorn</p> 	<p>Pretzels, chips, Doritos, Cheetos</p> 	<p>Air-popped popcorn is low in calories and high in fiber (just don’t drench it in butter or some other high-calorie flavoring)!</p>
<p>Whole wheat or whole grain multi-grain bread</p> 	<p>White bread</p> 	<p>Whole grain breads are higher in fiber, protein, selenium and manganese.</p>
<p>Pancakes (white flour)</p> 	<p>Buckwheat pancakes</p> 	<p>Buckwheat is good for your blood and your heart and is high in fiber and magnesium.</p>

How do I know if I am eating whole grains? --

Read the Ingredient List!

- Choose foods that list one of the following whole-grain ingredients first on the food's ingredient list:

<ul style="list-style-type: none"> • brown rice • buckwheat • bulgur • millet • oatmeal • popcorn • quinoa • rolled oats 	<ul style="list-style-type: none"> • whole-grain barley • whole-grain corn • whole-grain sorghum • whole-grain triticale • whole oats • whole rye • whole wheat • wild rice
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- Some foods labeled with the words "multi-grain," "cracked wheat," "seven-grain," or "bran" are not whole-grain products – read the ingredient list to really know!
- Color is not an indication of a whole grain. Bread can be brown because of molasses or other added ingredients. Read the ingredient list to see if it is a whole grain.
- Use the Nutrition Facts label and choose whole grain products with a higher % Daily Value (% DV) for fiber. Most, but not all, whole grain products are good or excellent sources of fiber.

WHOLE GRAINS



Sources:

<https://www.choosemyplate.gov/grains-tips>
<http://slideplayer.com/slide/10656013/36/images/29/Cereals+REFINED+GRAIN+WHOLE+GRAIN++Corn+flakes++Cheerios.jpg>
<http://www.shape.com/healthy-eating/meal-ideas/healthiest-cereal-choices-help-you-live-longer>
<http://www.livestrong.com/article/289338-whole-grain-bread-vs-white-bread/>
<http://www.whfoods.com/genpage.php?tname=foodspice&dbid=11>

Flower Panels

Before winter comes, bring some summer inside! Choose some of your favorite flowers and frame them to enjoy indoors.

- Cut frames from old cardboard boxes; use a cutter (with an adult!) or scissors.
- Cover with plastic wrap that side of the frame that will be the back of the frame as shown on the image; fasten with scotch tape.
- Arrange the flowers.
- Cover once again with plastic wrap; use scotch tape to fasten the flowers.
- You can either color the frames or leave them in the original brown color!
- Observe how the flowers change over time as they dry.

Source: <http://krokotak.com/2015/04/flower-panels/>



Make a Row Cover Model

Make a smaller version of what many people use to protect their precious plants from the cold!

Materials

- Floral foam
- Pipe Cleaners (long)
- Saran wrap

Instructions

- Align two pieces of floral foam side by side (see photo).
- Stick one end of a pipe cleaner in one piece of foam.
- Creating an upside down U, put the other end of the pipe cleaner in the other piece of foam.
- Depending on the size of your foam, continue adding pipe cleaners this way (at least three total).
- Use Saran wrap to create row cover by wrapping it over the pipe cleaners.
- If you want, on a piece of paper, draw a row of plants. Then put the “plants” under the cold-weather-protective row cover!

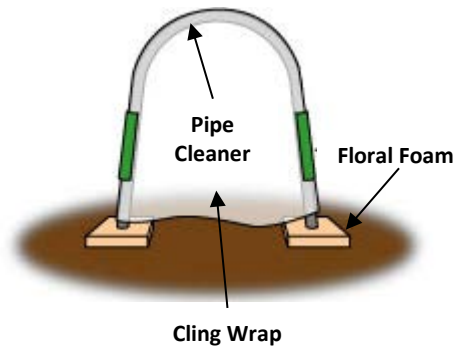


Photo Sources:

<http://www.ourveggiegarden.com/CraftsRowCoverSupports.html>

<https://www.gardeningknowhow.com/edible/vegetables/vgen/row-covers-for-garden-plants.htm>

<http://www.save-on-crafts.com/raquettes.html>



Homemade Cloches (Plant Covers)

Whether you have a garden at home or at camp, try any of these ideas to protect your plants during colder temperatures! Use markers to label and decorate the jug.

Recycled Jugs

Small plants may only require a cover to protect them from the freezing air. By cutting the bottom out of a 1-gallon jug, you have an instant cloche, or cover. Then simply place it over the plant, mound mulch around and over it for extra protection. When a warm day comes along, take the cap off to let the extra heat escape out the top, if not you may kill your plant due to it becoming too hot in the cloche! On the cooler days leave the top on. You can also water the plant through the opening on top – so easy! Remove the jug permanently (in spring) when the temperature rises above freezing; in the fall you may have to use it during nights, and then remove during the day.



Clear Plastic Bottles

Plastic drink bottles, such as water or soda bottles, make for ideal plant-sized cloches that protect plants against wind and light frosts. Simply cut off the base, and pop it



over your plant. Clear bottles work best because they allow maximum light transmission (plus you can see your plants!); don't forget to peel off the label either. Keep them from blowing away by securing them through the neck of the bottle with a cane (stick).

You can also use overturned buckets and cardboard boxes. Be sure to sink the edges of the cloche into the soil to secure it from blowing in the wind.



Sources: <http://homeguides.sfgate.com/homemade-plant-frost-protection-37998.html>
<http://living.thebump.com/homemade-plant-frost-protection-6910.html>
<http://www.frugalfamilyhome.com/home/gardening/diy-cloche-covers>
<https://www.growveg.com/guides/effective-cold-weather-protection-for-vegetable-gardens/>
http://img.thrfun.com/img/093/682/cloches_11.jpg
<https://s-media-cache-ak0.pinimg.com/originals/bc/07/38/bc0738170b76dcabea5978f94a0560ea.jpg>
https://spygarden.files.wordpress.com/2013/05/dsc_8063-500x309.jpg



WHOLE GRAIN STAMP

When you go to the grocery store, there is a great tool that can help you easily identify authentic whole grain foods – the Whole Grain Stamp! The next time you go to the store, look for it! The Stamp is on more than 11,000 products in 55 countries!

There are three different varieties of the Whole Grain Stamp: the 100% Stamp, the 50% Stamp, and the Basic Stamp. Each Stamp shows how many grams of whole grain ingredients are in a serving of the product. Even though the images below show just three different numbers (23g, 32g, 20g), when you look on your grocery shelves you'll see a wide range of numbers, reflecting the whole grain content of a serving of that specific product. If a product contains large amounts of whole grain (23g, 37g, 41g, etc.) but also contains extra bran, germ, or refined flour, it will use the 50%+ Stamp or the Basic Stamp (and not the 100% Stamp).



100% OF THE GRAIN IS WHOLE GRAIN



50% OR MORE OF THE GRAIN IS WHOLE GRAIN



EAT 48g OR MORE OF WHOLE GRAIN DAILY

THE 100% STAMP	THE 50%+ STAMP	THE BASIC STAMP
For products whereby ALL of the grain is whole grain.	For products whereby at least 50% of the grain is whole grain.	For products containing significant amounts of whole grain, but less than 50% of all grain is whole grain.
Minimum requirement: 16g (16 grams) whole grain per serving. (a full serving of whole grain)	Minimum requirement: 8g (8 grams) whole grain per serving. (one half serving of whole grain)	Minimum requirement: 8g (8 grams) whole grain per serving. (one half serving of whole grain)

See the next page for an activity involving the Whole Grain Stamp!



Name that Stamp!

Let's say you have four breakfast cereals sitting on a shelf (leader: perhaps bring in some boxes to use as examples for this activity!). They each have a serving size of 30 grams, but they're made up of different ingredients. Imagine you could look behind the scenes and know just how much of each ingredient each cereal contained. Try to figure out which stamp each of the cereals below would have. Do this alone or in a group! (Answers found on next page)

- Cereal A: whole oats (22 grams), walnuts (5 grams), raisins (3 grams)
- Cereal B: whole oats (27 grams), oat bran (3 grams)
- Cereal C: whole oats (15 grams), walnuts (7 grams), raisins (5 grams), coconut (3 grams)
- Cereal D: corn flour (12 grams), whole oats (9 grams), raisins (5 grams), sugar (4 grams)

The Whole Grain Stamp helps you know, in addition to reading the list of ingredients, if the food you are choosing helps you meet the recommended "three servings or more of whole grains each day." For example:

- Eat three whole grain food products labeled "100% Whole Grain" OR
- Eat six products bearing ANY Whole Grain Stamp



Community and Home Gardening Coloring & Activity Sheets

Answers:

Cereal A: This cereal would qualify for the 100% Stamp, 22g or more. All of its grains are whole grain, and it contains more than 16g of whole grain.

Cereal B: This cereal would qualify for the 50%+ Stamp, 27g or more. Although bran is a very healthy part of all intact grains, it's not a WHOLE grain, so we can't use the 100% Stamp on this product. Still, 90% of its grain ingredients are whole grain, so it earns the 50%+ Stamp.

Cereal C: This cereal would also qualify for the 50%+ Stamp, 15g or more. All its grain is whole grain, *but it doesn't meet the minimum of 16g* of whole grain required for the 100% Stamp.

Cereal D: This cereal would qualify for the Basic Stamp, 9g or more. The first ingredient is corn flour, a refined grain, and it contains more refined grain than whole grain. Cereal D isn't nearly as healthy as the first three examples, but with 43% of its grain as whole grain, and 4g (about 1 teaspoon) of sugar, it might be a good first step toward change for someone who has always eaten cereals with no whole grains and lots of sugar (12 grams of sugar equals teaspoons, which is the amount in many cereals!). It's all about starting where you are, and working your way to better food choices.

Adapted from: <https://wholegrainscouncil.org/whole-grain-stamp>



Community and Home Gardening Kid Friendly Fun

September is “Whole Grains Month” –
Try out some of these fun activities!

Whole Grains Month is a great time for everyone to get on the whole grains bandwagon. Eating better is not an all-or-nothing choice; every little improvement you make in your food helps – in every month.



Whole Grains Month
September 2017 #WholeGrainsMonth



Take this home, hang it on your refrigerator and everyone try as many as possible this month!

- Buy three different loaves of whole-grain bread and taste all of them to see which one you like best.
- Serve bulgur or brown rice instead of potatoes with dinner one night this month.
- Look for the Whole Grain Stamp every time you shop.
- Try a new breakfast cereal with at least 16 grams of whole grain per serving.
- Buy some whole-wheat pasta and try it.
- Visit the health food store or a major grocery and look at all the different grains in bins.
- Make a favorite whole grain recipe and share with a friend or neighbor.
- On the weekend, try cooking a pot of steel-cut oatmeal.
- Make pizza using a whole wheat pita as the crust.
- Make favorite cookies with whole wheat flour instead of white (look up online how to convert the measurements first, and perhaps try white whole wheat which may bake a bit easier).
- Serve hamburgers with whole wheat buns.

Adapted from: <https://wholegrainscouncil.org/get-involved/celebrate-wg-month/dozen-ways-celebrate-whole-grains-month>



www.nrpa.org/CommitToHealth
#CommitToHealth