Buckwheat

Objectives
Participant will:
1. Explain a health benefit provided by eating buckwheat.
2. Describe how to purchase and store buckwheat.
3. Describe how to cook buckwheat.
4. Explain how to incorporate buckwheat into family meals.
5. Prepare and taste food that includes buckwheat.

Required Materials:
- Container or bag of buckwheat to show class.
- Container or bag of kasha to show class.
- Container or bag of buckwheat flour to show class.
- Container or bag of soba (buckwheat) noodles to show class.
- Ingredients and supplies needed to demonstrate and serve recipes (see pgs. 6-8).
- Lesson handouts – enough for all class participants (see pgs. 6-8).
- Required paperwork for program – enough for all class participants.

Optional Supplemental Materials:
- Hot buckwheat pancakes available to participants as they come into class.

Preparation Required:
- Study lesson and practice food demonstration.
- Gather supplies and materials to demonstrate recipes (see pgs. 6-8).
- Precook some buckwheat groats in butter or oil and with an egg for recipes used in objective 4 (see pg. 4, 6-8), pre-chop vegetables used in egg fried groats (see pg. 7 for recipe).
- **NOTE:** Participants will probably accept the milder taste of *unroasted* buckwheat over the strong taste of roasted kasha. You may want to have both available to try but it is recommended that you use unroasted groats for recipe demonstrations and tasting.
- Optional: Have hot buckwheat pancakes ready and available for tasting as participants enter class.
- Make copies of handouts and required paperwork – enough for all participants.
LESSON PLAN

Introduction:
Time: 5 minutes

• Welcome the class and thank them for making time to come.
• Briefly introduce yourself and the program.
• **Ask the class:** True or false? Buckwheat, a whole grain, is a close cousin to the wheat we eat and cook with everyday when we make bread, cookies, cakes, etc.
• False! Although buckwheat is used like a whole grain and has many of the same properties of grains, it is actually the seed of a plant related to rhubarb and is botanically considered a fruit! Who woulda thought!
• In this lesson, we will be talking about buckwheat and how to integrate this powerhouse of nutrients into our diets.

Objective 1: **Explain a health benefit provided by eating buckwheat.**
Time: 5 minutes

• **Ask the class:** Who has tasted buckwheat before? How was it prepared? Did you like it? Do you make it a consistent part of your menu planning? If yes, how?
• The name buckwheat comes from a Middle Dutch name that means beech wheat because it is shaped like a tiny beechnut. It originated in China and spread to Europe. It is a favorite in Eastern European countries like Russia.
• As was already mentioned, buckwheat is botanically not a grain, but it is processed, prepared, and consumed as one. Wild rice is kind of like that – it is a grass seed instead of rice but we still call it rice and use it like rice.
• Buckwheat is higher in protein than most grains.
• It contains lysine, an essential amino acid that is lacking in most other grains. An essential amino acid is a necessary protein building block that we have to get from food because our bodies don’t make it.
• Besides containing lots of B vitamins and minerals, buckwheat also contains phytochemicals that may have a positive effect on blood cholesterol, blood glucose, and blood pressure.
• Wow! We could call buckwheat a superfood!

Objective 2: **Describe how to purchase and store buckwheat.**
Time: 5 minutes

• Buckwheat has a distinctive earthy and nutty taste. Roasting it intensifies both taste and smell and some people find the flavor overpowering. If you have tried roasted buckwheat (known as kasha) before and didn’t like it, you may be very surprised by its mild flavor when unroasted.
• There are several ways to buy and use buckwheat.
  o Buckwheat flour may be the most common way we eat buckwheat in the U.S. (think buckwheat pancakes). It comes from grinding the buckwheat seed and ranges in color from light to dark. The darker the color, the more lysine it contains.
  o Unroasted buckwheat kernels or seeds are called groats. They have a black covering that must be removed or hulled before eaten. Once hulled they are a pale tan and light green color. They can be found whole or crushed (crushed is sometimes called grits) and have a mild flavor.
  o Kasha (roasted buckwheat groats) are a deep chestnut color and have a distinctively strong aroma and flavor. These can also be found whole or crushed.
  o Soba noodles are Japanese noodles made from buckwheat. The noodles usually contain a mixture of buckwheat and whole-wheat.
  o Buckwheat groats and soba noodles can be stored on the pantry shelf. They do best in a
Objective 3: Describe how to cook buckwheat.

Time: 10 minutes

- **Ask the class**: Assuming that you have never cooked buckwheat before, but from what you know about cooking other grains, how would you expect to cook buckwheat?

- Cooking buckwheat is much like cooking rice or oats or wheat berries – basically you add the dry kernels to water or other liquid and boil it until it is tender. Buckwheat is unique in that it cooks relatively quickly (10-15 minutes) compared to other whole grains that may take an hour or so to cook.

- There are a few tricks to cooking buckwheat that make it a little tastier than throwing it in a pot of water.

- To keep buckwheat groats from falling apart in the cooking process, it is helpful to coat them in a little fat. You can use butter or oil, or an egg. We will discuss both methods.

- **Demonstrate how to cook groats in butter or oil and with an egg as you discuss the following (see pg. 6). You should also have some cooked and chilled groats available to demonstrate buckwheat patties and egg-fried groats later in Objectives 4 and 5.**

- To cook the groats in butter or oil, heat a tablespoon of the fat in a heavy pan over medium heat then add one cup of groats to the fat. Stir for two or three minutes to coat each grain with fat and to lightly toast the groats. Turn off the heat and add two cups of liquid (water, chicken broth, or vegetable broth). If using water, add a pinch of salt. Bring the pot to a boil over high heat, then lower the heat, cover the pot, and let it simmer for 12-15 minutes until the liquid has been absorbed. Turn off the heat and let it sit for 5 minutes.
  - This method produces a sticky, cereal like product and makes a great wholegrain breakfast when you cook the groats in water and then combine them with some milk and a little sugar or honey.
  - They can be used like grits if you cook them in broth and then add some butter, salt, and pepper.

- You can also cook the groats with an egg.

- **Ask the class**: Can you guess why anyone would want to do cook their buckwheat with an egg?
  - This process keeps the groats from sticking together and you get an end product very similar to rice. To use this method, lightly beat an egg in a small bowl and add one cup of groats to the egg. Stir this mixture well to coat each grain with egg. Heat a nonstick skillet over medium heat and then add the buckwheat/egg mixture. Stir until the egg mixture is dry. Heat two cups of liquid in a heavy pot until it boils (add a pinch of salt if using water) and then stir in the buckwheat coated in egg. Cover the pot and let it simmer for 12-15 minutes or until the liquid is absorbed. Turn off the heat and let the pot sit for 5 minutes. The groats will be separate, light, and tender. You can use them just as you would rice.

- Cooked buckwheat groats will keep in the fridge for up to five days. Reheat them in the microwave or in a saucepan over low heat.

- Buckwheat flour contains no gluten. Gluten is the protein in wheat flour that “glues” things together and keeps them from crumbling and falling apart. It is also the factor that allows breads and other baked goods to rise. That is why most recipes that call for buckwheat also call for some wheat flour. The advantage of using buckwheat flour is for the taste and the added nutrients it adds to baked goods.

- Soba noodles are a fun way to get some whole grain into your meals. People who don’t love the taste of whole-wheat pasta really like soba noodles. Use them in any recipe that calls for noodles or pasta. They are especially good in Asian dishes. They cook just like regular
spaghetti noodles. Just add them to boiling water and cook them until they are tender. For best results, follow the recommendations on the package for time needed to cook.

Objective 4 and 5: Explain how to incorporate buckwheat into family meals. Prepare and taste food that includes buckwheat.

Time: 20 minutes

- **Ask the class:** So now that we have cooked buckwheat groats, what do we do with them?
- **Pass out recipe handout so participants can follow along as you demonstrate recipes.**
- Buckwheat cereal is a great way to start the day, but there is so much more you can do with this super grain.
- **Demonstrate Basic Buckwheat Burgers (see pg. 7 for recipe).**
- **Ask the class:** What are some ways you think these meatless patties could be served?
  - Veggie burger, veggie patty with gravy and/or cheese, topped with eggs or cottage cheese.
- Cooking buckwheat with an egg keeps the grains separated, fluffy, and light. The egg gives the groats a delicious flavor that makes a perfect egg fried rice except we will be using groats instead of rice!
- **While burgers are browning, cook soba noodles for Chicken Vegetable Stir-fry and demonstrate Egg Fried Groats (see pgs. 6-8 for recipes). Don’t forget to watch noodles so they don’t over cook and to turn burgers as necessary. As you can see, this complete demonstration requires practice!**
- Stir-fry is a perfect dish to accompany fried rice or groats. And when you make it with soba noodles, even better!
- **Demonstrate Chicken Vegetable Stir-fry.**
- **Ask the class:** What are some other ways you can think of to use groats that we have not discussed?
  - Buckwheat goes very well with bacon, sausage, or chicken dishes. It pairs well with onions, mushrooms, nuts, sour cream, and cottage cheese.
  - Don’t forget buckwheat flour and adding it to pancakes, waffles, muffins, breads, etc. and remember soba noodles as an option for all your dishes calling for noodles!

Conclusion: Summary

Time: 5 minutes

- Buckwheat truly is a super grain. It is easy on the food budget, easy to prepare, and good for the body. What more could you ask for?! Remember that even though the taste of roasted buckwheat, or kasha, can be a little overpowering for some, the unroasted buckwheat groats are quite mild and take on the flavors of lots of foods they are served with.
- Are there any questions about today’s lesson?
- **Let participants taste prepared recipes.**
- **Thank class for coming.**
References:


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Cooking Buckwheat

Buckwheat Groats: Method 1
1 tablespoon butter or oil
1 cup raw buckwheat
2 cups liquid* (water, chicken broth, vegetable broth)
Pinch of salt if using water as liquid

Heat butter or oil in heavy pan until butter melts. Add buckwheat and stir 2-3 minutes to coat grains with fat and to lightly toast them. Slowly add liquid (and salt if liquid is water) and bring to boil over high heat. Lower heat, cover pan, and simmer 12-15 minutes or until liquid has been absorbed. Take pan off heat and let stand 5 minutes.

Yield: 3 ½ cups buckwheat groats.

*The liquid you use will depend on what you plan to do with the end product. If you want a breakfast cereal, use water. If you will be using the groats in a side dish for your evening meal, the chicken or vegetable broth would be preferred.

Buckwheat Groats: Method 2
1 egg
1 cup raw buckwheat
2 cups liquid* (water, chicken broth, vegetable broth)
Pinch of salt if using water as liquid

Lightly beat an egg in a small bowl and then add groats to the egg. Stir well to coat each grain with egg. Heat a nonstick skillet over medium heat. Add buckwheat/egg mixture to skillet and stir until mixture is dry; set aside. Heat liquid in heavy pot until it boils (add a pinch of salt if using water). Stir in buckwheat/egg mixture. Reduce heat to low, cover pot, and let it simmer for 12-15 minutes or until the liquid is absorbed. Turn off heat and let the pot stand for 5 minutes. The groats will be separated, light, and tender. Use them as you would rice.

Cooked buckwheat groats will stay good in the fridge for about 5 days. They do not freeze well. They pair especially well with chicken, bacon, sausage, mushrooms, onions, cottage cheese, and sour cream. Use creamy buckwheat as cereal or grits. Use egg coated buckwheat as rice.

Buckwheat Flour
Use in combination with wheat flour to produce nutty, robust flavored pancakes, waffles, muffins, quick breads, rolls, etc. Experiment by replacing ¼ to ½ of flour in your favorite pancake, muffin, or roll recipes with buckwheat. Buckwheat works really well with whole-wheat to produce a superior, nutrient-dense baked product.

Soba Noodles
This Japanese noodle has a wonderful flavor. It works especially well in recipes with an Asian flare but can be used in any recipe calling for noodles. If you tried whole-wheat pasta before and didn’t like it, give soba noodles a try! Cook them like other noodles – just add them to boiling water. Follow recommendations on the package for time needed to cook.

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**Begging for Buckwheat**

These fun recipes are a great way to get some buckwheat on your menu!

**Basic Buckwheat Burgers**

2 teaspoons butter  
1/2 cup raw buckwheat  
1 cup chicken broth  
2 eggs  
1/2 cup whole-wheat bread crumbs*  
2 green onions, sliced thin  
1-2 cloves garlic, minced  
Salt and pepper to taste

Heat butter or oil in heavy pan until butter melts. Add buckwheat and stir 2-3 minutes to coat grains with fat and to lightly toast them. Slowly add chicken broth and bring to boil over high heat. Lower heat, cover pan, and simmer 12-15 minutes or until broth has been absorbed. Take pan off heat and let stand 5 minutes.

Place cooked buckwheat in medium bowl. Add eggs, breadcrumbs, onions, and garlic. Mix well. Add salt and pepper to taste. Form 4-6 patties and fry in nonstick pan coated with cooking spray until brown on both sides.

Yield: 4 servings

*These burgers are great served on a bun with mayonnaise, ketchup, tomato, melted cheese, etc. or as a side dish with chicken or pork.*

**Egg Fried Groats**

1/2 cup raw buckwheat  
1 egg  
1 cup chicken stock  
1 tablespoon canola oil  
1/2 teaspoon sesame oil (optional)  
2 cups shredded cabbage  
1 small red or green bell pepper, diced  
3 green onions, sliced  
1/2 ribs celery, diced  
1 carrot, grated  
1 cup spinach, chopped  
1 tablespoon soy sauce

Lightly beat an egg in a small bowl and then add groats to the egg. Stir well to coat each grain with egg. Heat a nonstick skillet over medium heat. Add buckwheat/egg mixture to skillet and stir until mixture is dry. Heat chicken stock in heavy pot until it boils. Stir in buckwheat/egg mixture. Reduce heat to low, cover pot, and let it simmer for 12-15 minutes or until the liquid is absorbed. Turn off heat and let the pot stand for 5 minutes. Heat oils in skillet over medium-high heat. Add vegetables and stir-fry until vegetables are tender-crisp. Add buckwheat/egg mixture to skillet. Season with soy sauce. Serve hot.

Yield: 4 servings

**Buckwheat is higher in protein than most grains. It contains lysine, an essential amino acid that is lacking in most other grains. It also contains B vitamins, minerals, and phytochemicals that may have a positive effect on blood cholesterol, blood glucose, and blood pressure.**

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More Begging for Buckwheat

**Colorful Chicken Vegetable Stir-fry with Soba Noodles**

- 2 tablespoons cornstarch
- 2 teaspoons sugar
- 6 tablespoons soy sauce
- ½ cup apple juice or water
- 1 pound chicken tenders
- 3 cups broccoli florets
- 2 medium carrots, thinly sliced
- 1 red pepper, large diced
- ½ small onion, thin sliced
- 6-8 button mushrooms, thin sliced
- 2 tablespoons vegetable oil, *divided*
- Hot cooked soba noodles

In a bowl, combine cornstarch, sugar, soy sauce, and apple juice or water until smooth. Add chicken and toss to coat; set aside. In a large skillet, stir-fry broccoli, carrots, pepper, onion, and mushrooms in 1 tablespoon oil for 4-5 minutes; remove and keep warm. In the same skillet, stir-fry chicken and sauce in remaining oil until chicken is cooked through and sauce thickens. Return vegetables to pan and toss to mix. Serve over soba noodles.

Yield: 4 servings

**Buckwheat Pancakes**

- ½ cup whole-wheat flour
- ½ cup buckwheat flour
- ¼ cup quick cooking oats
- 3 teaspoons baking powder
- 1 cup skim milk
- 3 tablespoons vegetable oil
- 2 tablespoons honey
- 1 egg, lightly beaten

Combine wheat flour, buckwheat flour, oats, and baking powder into large bowl. Stir in milk, oil, honey, and egg. Heat a lightly oiled griddle or frying pan over medium heat. Pour ¼ cup batter onto griddle for each pancake. Cook over low to medium heat on both sides until lightly browned and serve hot.

Buckwheat can be stored on the pantry shelf. It does best in a cool, dark place in an airtight container. Buckwheat flour can be stored in the pantry but does best if kept refrigerated or frozen. For best quality, plan to use the buckwheat products you buy within six months to a year.

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