



Pulse Bingo

Target audience: adults or older youth

Developed by:

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Before the lesson

- Photocopy and cut out numbers 1 to 24 and place them in a bowl, hat, etc. (Keep the original sheet with the lesson.) If you have limited time, you may want to preselect questions that you wish to emphasize.
- Have small prizes available for the winners. (If you play to the end, everyone will have a “blackout” because the answers are on every card.)
- Distribute one bingo card to each player. You may wish to laminate the cards so they last longer. (You can use erasable markers to mark the cards if laminated.)
- Distribute pennies, dry lentils, buttons, pieces of paper, etc., to players to mark their bingo cards.
- See www.ag.ndsu.edu/pubs/yf/foods/fn1508.pdf for recipes from “Pulses: The Perfect Food,” such as these:
 - Chickpea Chocolate Cake
 - Hummus with veggies or whole-grain crackers

Rules

- The instructor or designated leader should draw the numbers and ask the questions.
- If you have limited time to play, you can choose the questions/answers you want to highlight ahead of time and include the numbers of those questions in the “hat.” Or you can preselect the questions and read them in order.
- Read the question and allow time for participants to find the answer.
- The answers will be on the bingo cards. Give the players 10 seconds to figure out the answer before you tell them the answer. After you give them the answer, allow them time to mark it on their card with a dry bean, penny, button, etc. Reinforce the correct answer by providing some additional information.
- A “bingo” occurs when a person gets five across, diagonally or down and calls out “Pulse!” The leader should check the card to make sure it’s a “bingo.” Continue to play until “blackout” if desired. Or try these variations: four corners, stamp or kite. (You may wish to create a poster showing the variations.)
- To “bingo” in a blackout game, the winner must have every space on his or her card filled.
- If you choose to play a variation game other than blackout, the only way to win is to fill the spaces that correspond to the game you choose. For example, if you are playing for a kite, the only way to win is to get a kite in any of the corners. If someone gets five across, diagonally or four corners, it’s not a bingo because the participants are playing for a kite.

Introduction

Pulses, which include chickpeas/garbanzo beans, dry peas and lentils, increasingly are being recognized for their role in promoting good health. This game reviews some of the properties of pulses and their use on our menus.

Pulse Bingo

Questions and Answers

Mark the free space in the center of the bingo card.

1. What B vitamin is in pulse foods naturally?

Folate

Comment: Folate is found in pulse foods naturally. "Folic acid" is the man-made form of folate found in fortified cereals, flour and other grain-based foods.

Folic acid helps prevent birth defects.

2. What is another name for chickpeas?

Garbanzo beans

Comment: "Garbanzo" is a term used mostly in Latin America and Spain.

3. What pulse food usually is yellow or green?

Dry peas

Comment: Split peas are used to make a delicious soup. Make your own soup at home to control the sodium content. Freeze leftovers in 1-cup portions for a quick and filling lunch.

4. What pulse food can be brown, green, yellow, red, black or French green?

Lentils

Comment: Brown or green are the most common colors associated with lentils. French green and black are smaller and used as an interesting culinary alternative. Yellow and red are used mostly in Indian cooking and are called "dal." The yellow and red lentils have been dehulled and the color is from the cotyledon, or the inside of the seed.

5. When you add fiber-rich foods such as chickpeas and lentils to your diet, what should you do?

Drink more liquids

Comment: Drinking plenty of water and other liquids with fiber-rich foods helps with digestion and prevents constipation.

6. In what two food groups can pulses be found?

Vegetable and Protein

Comment: If you are using pulses for your Vegetable Group recommendation, 1 cup of cooked pulses equals 1 cup of vegetables. If you are using pulses as part of your Protein Foods Group recommendations, ¼ cup of cooked pulses equals 1 ounce equivalent of protein. For example, 1 cup of split pea or lentil soup counts as a 2-ounce protein equivalent (allowing for water and other vegetables in the soup).

7. In what forms can you buy many pulse foods?

Canned and dry

Comment: Look for various pulse foods the next time you are in the grocery store. You might find ready-to-eat hummus in the deli area. Remember that many canned legumes have added sodium. For example, to reduce sodium in canned chickpeas, drain and rinse them.

8. What food component in pulses is linked to reducing blood cholesterol levels and promoting a healthy weight?

Fiber

Comment: Soluble fiber has been shown in some studies to help reduce blood cholesterol

levels as part of a healthy diet, and fiber contributes to weight management because it helps people feel full, or satiated.

9. Which ingredient can toughen pulses if added too soon in the cooking process?

Salt

Comment: Add salt during the last 10 minutes of cooking time.

10. Which essential amino acid or protein building block is found in abundance in pulses?

Lysine

Comment: An essential amino acid means your body cannot produce it on its own, so you must get it from your diet. Lysine helps calcium absorption, helps build muscle and has anti-inflammatory properties, along with other health benefits.

11. To which of the following dishes can you add lentils to extend meat and for variety: taco meat, meatloaf or spaghetti sauce?

All three

Comment: Adding pulse foods to recipes such as taco meat stretches your meat budget and adds fiber.

12. What is the most popular recipe for using chickpeas?

Hummus

Optional comment: Have you tried hummus? Many different recipes are available. Today, we will try hummus as a snack.

13. What two important nutrients are in split pea soup?

Potassium and vitamin K

Comment: Potassium is important for the functioning of the heart, kidneys and other organs. Vitamin K is needed for our blood to clot properly.

14. Vegetarians usually use pulses to get enough of this nutrient in their diet. Name the nutrient.

Protein

Comment: Although people commonly combine legumes with grains to get a “complete” protein, you can consume these separately as long as you do it within a 24-hour period.

15. Chickpeas and whole dry peas need this step before cooking, while lentils and split peas do not. What step is it?

Soaking

Comment: Overnight soaking is the easiest, but you also can use the quick-soak method.

16. According to Italian folklore, what ailment could be “cured” by chickpeas?

Warts

Comment: This piece of folklore hasn’t stood the test of time, but it is interesting. Be sure to see your qualified health-care practitioner for advice about skin conditions.

17. In the 18th century, Germans substituted roasted chickpeas to make a popular beverage. What beverage was it?

Coffee

Comment: Many coffee substitutes today use a variety of roasted grains and vegetables, including barley, chicory, dandelion root and carob.

18. Chickpeas, lentils and dry peas all can be ground to make what ingredient?

Flour

Comment: Pulse-based flours have become very important in gluten-free cooking and baking.

19. What is the overall name given to lentils, chickpeas and split peas?

Pulse crops

Comment: The word “pulse” comes from the Anglo-French word “puuiz,” which means gruel or thick soup. That’s because pulse foods often are used to make these recipes.

20. Which type of diet can incorporate pulses to help with blood glucose management?

Diabetic diet

Comment: Some studies show that consuming pulses may result in more stable blood glucose levels after meals.

21. On average, what amount of protein is in 1 cup of cooked pulses?

15 grams

Comment: That’s about one-third of our daily protein needs, based on a 2,000-calorie diet.

22. Which element is produced by pulses as they grow, making them an important agricultural crop?

Nitrogen

Comment: All legumes are “nitrogen fixing” plants because of the underground nodules growing from them. After harvest, the fixed nitrogen is released into the soil from the dead plant nodules, making it available for other crops, so it is a natural form of fertilizer.

23. What is another definition for the word pulse, which remind us they are good for cardiovascular health?

Heartbeat

Comment: From TheFreeDictionary.com, a heartbeat is “the rhythmical throbbing of arteries produced by the regular contractions of the heart.”

24. What two states consistently are the top pulse growers in the U.S.?

North Dakota and Montana

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