

## Nutrition Jeopardy

Melanie Tracy Burns, PhD, RD,\*  
Michelle Benoit, MS, Denise Bulvan,  
MS, School of Family and Consumer  
Sciences, Eastern Illinois University, 600  
Lincoln Avenue, Charleston, Illinois  
61920; Tel: (217) 581-6680; Fax:  
(217) 581-6090; E-mail:  
mdburns@eiu.edu

\*Author for correspondence

A need is present to teach adolescents about healthy eating early in life as their habits carry over into adulthood. One area of concern among adolescents is unsafe weight loss methods. One survey of 8th to 10th graders found that 32% of those surveyed skipped meals, 22% fasted, and 7% used diet pills.<sup>1</sup> A second area of concern is food intake. On average, adolescents consume fat, saturated fat, and sodium in amounts greater than recommended, whereas fruit, vegetable, and calcium intake is less than recommended.<sup>2</sup> According to the American Dietetic Association, nutrition programs and interventions have been successful in improving adolescent's diets.<sup>3</sup>

A practical way to teach nutrition messages to adolescents is through a competitive or "gaming" approach.

There seems to be continued interest in games, with students particularly receptive to learning nutrition through this approach.<sup>4</sup> The purpose of our Nutrition Jeopardy activity is to increase nutrition knowledge related to calcium, weight management, healthy snacking, and fruits and vegetables to high school students through the gaming approach.

Twenty-five students (40% male), ranging in age from 14 to 18 years old, participated in this 50-minute learning activity. The major instrument used for the activity was a 2' x 3' board constructed to include 4 main nutrition categories (Figure). The categories and respective statements were printed on a computer, laminated, and attached to the board (Table 1) with double-sided Velcro™ tape for easy removal during

the learning activity. A designated team member requests a category and point value. Point values increase with the educator's perceived level of difficulty. The corresponding card is removed from the board, the statement is read, and the participant must answer in the form of a question. We propose that the nutrition educator be directly involved in the design of the categories, responses, handout development, and discussions. The complete rules of the game are included in Table 2.

A unique aspect of the learning activity is that it can be adapted to a variety of audiences by changing the board categories and questions. Once the board is designed, the implementation cost is minimal. Items to be purchased include contents to create the board and prizes, such as apples, for the

Table 1. Statements Used in Nutrition Jeopardy

Jeopardy Category	Point Value	Statement
Calcium	100	This is the name of the disease (common in older Americans) in which inadequate calcium intake causes bone mass loss, resulting in brittle bones.
	200	These types of vegetables are high in calcium.
	300	This is the amount of calcium adolescents need every day.
	400	These 2 vitamins and/or minerals help your body absorb the maximum amount of calcium. Is it (a) vitamin C and iron, (b) vitamin D and magnesium, (c) iron and magnesium, (d) niacin and iron?
Snacks	100	Name a snack high in vitamin C.
	200	Name the snack that is higher in fat: Nutrigrain bar or a blueberry muffin.
	300	Peanut butter can be spread on crackers as a healthy snack. Name the food group in which peanut butter belongs.
	400	WOW!™ potato chips contain this fat substitute.
Fruits/vegetables	100	This is the recommended number of fruit servings every day, according to the Food Guide Pyramid.
	200	Name a fruit that is a good source of potassium.
	300	T/F: Canned vegetables have a higher nutritional value than frozen vegetables.
	400	Name the vegetable that is highest in beta-carotene.
Weight management	100	T/F: Very-low-calorie diets lead to weight loss.
	200	T/F: You need to exercise vigorously to burn off fat.
	300	This is better to eat when trying to control your weight: a bagel or a croissant.
	400	This is the amount of safe weight loss per week.



Figure. Nutrition Jeopardy game board.

Table 2. Rules of Nutrition Jeopardy

1. The game is played like the Jeopardy or Rock-n-Roll Jeopardy game on television.
2. There are 4 categories, and the questions in each category reflect something about the category title.
3. Three to 30 players are recommend. If 3 participate, each will work individually. With an increase in the amount of people, divide them into teams. Four to 5 teams are recommended.
4. The person who rings in (or raises his/her hand) first will get the first try at answering the question. Allow 15 seconds for the team that rang in to answer. Discussions should range from 1 to 3 minutes for reinforcement of information.
5. Please do not yell (or call out) answers until you are called upon.
6. Please phrase your answer in the form of a question. Each team will get one freebie if they forget to phrase it in the form of a question. "What is \_\_\_\_."
7. If the first team is incorrect, the next team to ring in (or raise their hand) gets a chance to answer.
8. Only 2 wrong answers will be accepted before we move on.
9. Designate someone to determine who rings in first.
10. SCORING:
  - Each question is worth the amount of points listed on the card.
  - If you answer correctly, you get those points.
  - If you answer incorrectly, those points will be deducted from your overall score.
  - Designate someone to keep score.
  - The team who has the most points at the end of the game wins.
11. This program is designed for education and fun!
12. Each team will choose a team name that is food/nutrition related.
13. Select someone out of the crowd, flip a coin, or pick numbers to determine who picks the first question.
14. Once all of the questions are answered, the game is over.
15. Start playing!

winning team. To further minimize cost and time, category headings and questions could be taped to a chalkboard or wall or incorporated into a PowerPoint presentation.

Informal evaluation indicated that the activity is useful in stimulating high school students' awareness of the presented nutrition information. The pretest data, which included a 10-item questionnaire, indicated that the par-

ticipating adolescents were not very knowledgeable (average of 50% correct) about the nutrition categories targeted. Following the activity, participants were requested to summarize 3 to 4 facts highlighted, which they (100%) did successfully. The participants provided positive comments regarding the learning activity. Some comments included that they enjoyed playing the game, wanted to play the

game longer, and learned new information.

A few refinements in the implementation of the program are noted. Improvements of the activity would include more discussion during the activity and the inclusion of a few key handouts of the identified nutrition topics.

In conclusion, Nutrition Jeopardy proved to be a positive experience in teaching nutrition information to high school students. This classroom workshop can be used with 3 to 30 people divided into small groups. The participants appeared interested and motivated to learn more about nutrition. We found the program to be useful in conveying the targeted nutrition messages. In addition, the board's versatility will enable the nutrition educator to have greater flexibility when using the gaming approach for nutrition education. Since the board was constructed with double-sided Velcro tape, it can be redesigned for any target audience or nutrition category.

## REFERENCES

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