

Designing *MyPyramid for Kids* Materials to Help Children Eat Right, Exercise, Have Fun

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PROGRAM DESCRIPTION

As part of an overall effort to address obesity among elementary school-aged children, the US Department of Agriculture (USDA) developed *MyPyramid for Kids* (Figure 1), a child-friendly adaptation of the *MyPyramid* Food Guidance System. *MyPyramid for Kids* is designed to help children 6-11 years old understand and follow the dietary guidance of the *MyPyramid* Food Guidance System. Materials developed include the *MyPyramid for Kids* graphic with the child-tested tagline, "Eat Right. Exercise. Have Fun."; classroom materials; and an interactive computer game.

INTERACTIVE COMPUTER GAME

The *MyPyramid Blast Off* computer game is a fun, interactive way for elementary-grade students to increase their knowledge about the basic food groups, make healthy food choices,

and stay physically active. The game mission is for students to select food and activity choices that will

- Meet their daily calorie and food group requirements
- Include at least three meals or two meals and a snack
- Avoid too many foods high in solid fats and added sugars
- Total 60 minutes per day of physical activity.

Students enter their first name to personalize game play and their gender and age so a Food Intake Pattern at one of three calorie levels can be selected. Game play consists of dragging food and physical activity selections from options presented on a scrolling bar onto the *MyPyramid* rocket ship (Figure 2), where briefing cards tell players about their choices. After making selections, students can "Blast Off" and see if they have the right balance of fuel (food and physical activity) to reach Planet Power. Students may not take off, take off and not make it to Planet Power, or make it all the way to Planet Power. Students receive a mission report at

the end of the game and those students who successfully reach Planet Power can print a personalized certificate of achievement and the menu that got them to Planet Power.

CLASSROOM MATERIALS

The purpose of the classroom materials is to introduce children to the *MyPyramid for Kids* graphic and slogan, and to teach them healthy eating and physical activity messages based on the 2005 *Dietary Guidelines for Americans*.¹ Lesson plans are offered in three learning levels. Each level contains three lessons with age-appropriate activities; a color double-sided *MyPyramid for Kids* wall poster; a CD ROM of *MyPyramid Blast Off*; the parent handout *Tips for Families*; and a CD ROM of supplemental materials for educators. The lessons can be taught with minimal preparation; include a link with the National School Lunch Program; include a curriculum connection such as links to math, science, etc.; and identify skills students will develop, like graphing and analyzing information.

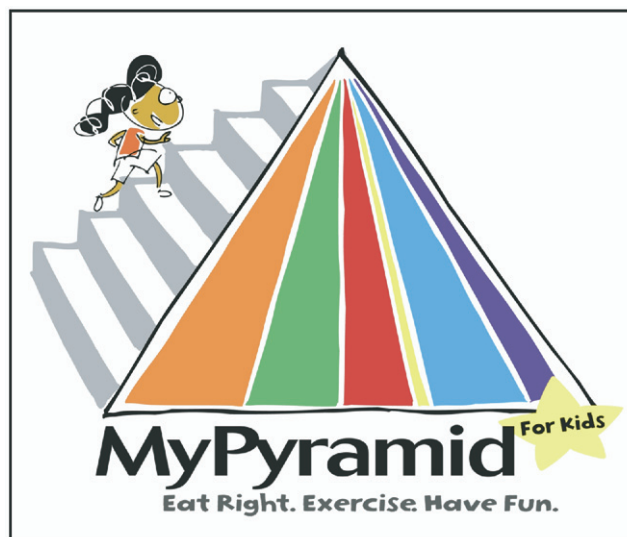


Figure 1. *MyPyramid for Kids* is a child-friendly adaptation of *MyPyramid*.

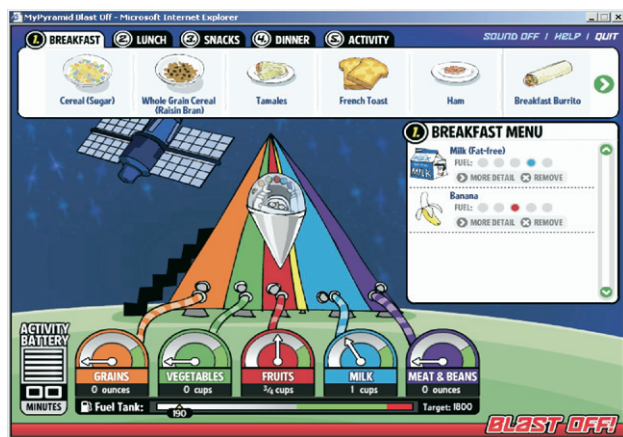


Figure 2. Gameplay for the *MyPyramid Blast Off* game consists of dragging food and physical activity selections onto the *MyPyramid* rocketship.

FORMATIVE RESEARCH

Formative research was conducted with children 6-11 years old and teachers of children in this age group in several phases through the development process. First, 2 focus groups were conducted with 16 teachers in Stamford, Connecticut, to gain insight into the best methods to prepare teachers to present the MyPyramid Food Guidance System. The teachers indicated that they needed an introduction to the food guidance system themselves, in order to best present it to students. They also advised that materials developed should be kept simple.

Then, focus groups with teachers and students were conducted in Bethesda, Maryland, to elicit ideas and opinions on the development of an interactive computer game. These focus groups, including 1 group of 8 teachers and 2 groups with 16 children total, provided insights into how computers are used in the classroom and what elements define successful classroom computer games. Children indicated that the best classroom computer games are ones that allow the student to be part of the game. Teachers stated that decision-making would be an important part of a game where students learned the consequences of their choices. Two varia-

tions of an interactive game concept were tested with the Bethesda groups. Both teachers and students had very favorable impressions of the rocketship concept for the game and provided insight into ways to enhance the concept such as including feedback messages for the user and simplifying the design of some game components.

Additional focus groups, including 4 groups with a total of 32 teachers and 4 groups with a total of 24 children, were conducted in Los Angeles, California, and Birmingham, Alabama. In each city, first, second, and third grade teachers in one group and fourth and fifth grade teachers in a separate group contributed insights into preparation methods for teaching the MyPyramid Food Guidance System to students. Findings among teachers included: they preferred receiving teaching material in a format they could use directly with their students; they did not want to receive additional background material for their use only; and, they emphasized the importance of including parents in the education process. One group of 6-8-year-olds and one group of 9-11-year-olds in each city provided their reaction to and understanding of a children's poster. The children

as well as the teachers reacted favorably to the poster. Some of the younger children had difficulty connecting foods to their appropriate food groups. Generally, children did not seem to understand the yellow band for oils on the graphic. They understood the concept of variety as depicted on *MyPyramid for Kids*, but had some difficulty with the concepts of proportionality and moderation. These findings led to the development of a simplified version of the children's poster for use with younger children in the age range. A statement about oils is included on both posters.

Lastly, 16 children participated in dyads to test the usability of the *MyPyramid Blast Off* game in Fairfax, Virginia. The children indicated the game was fun, challenging, and that they were generally able to understand how the game was played with help from the test administrator. They contributed feedback that led to game enhancements such as clarifying the instructions and improving color-coding.

DISSEMINATION AND MATERIALS AVAILABILITY

Educators in elementary schools may order the *MyPyramid for Kids* materials from the MyPyramid.gov and teammnutrition.usda.gov websites. The classroom materials also may be downloaded from the Team Nutrition website; *MyPyramid Blast Off* may be played online. Team Nutrition currently is developing the MyPyramid Food Guidance System materials for use with middle school and high school students, with availability planned for the 2007-08 school year.

REFERENCE

1. U.S. Department of Health and Human Services and U.S. Department of Agriculture. *Dietary Guidelines for Americans*, 2005. 6th Edition, Washington, DC: U.S. Government Printing Office, January 2005.