

Blending Nutrition and Physical Activity: A Blender Bike Curriculum Guide to Facilitate Experiential Learning

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BACKGROUND

What is a blender bike? A blender bike is a bike with an attached blender powered entirely by its rider. Variations include:

- stationary versions with the blender on the front
- retrofitted bicycles with an attachment that sits over the back wheel



Why use a blender bike? Blender bikes can be used for more than drawing attention and motivating participants to sample new foods. The *Blending Nutrition and Physical Activity* curriculum guide provides an organized approach for engaging participants in experiential learning activities in settings ranging from educational sessions in classrooms to large public events.

Although the amount of pedaling needed to create foods on a blender bike is not enough to meet the 60-minute daily recommendation for physical activity, it opens discussions about the:

- intensity of various activities,
- benefits of physical activity,
- creative ways to include physical activity each day, and,
- the relationship between calories consumed and energy expended.

CURRICULUM

The main activities in the *Blending Nutrition and Physical Activity* curriculum guide are described below. By following these lessons plans, leaders can use the blender bike as a vehicle for conveying nutrition and physical activity concepts. Activities included in the *Blending Nutrition and Physical Activity* guide feature fun and tasty ways to prepare fruits and vegetables along with low-fat dairy and with little or no added sugars. Supplemental materials and healthy living concepts are listed.

1. Making Smoothies with a Group

Participants learn about smoothie ingredients and get hands-on experience pedaling a blender bike. The instructions help the facilitator make the most of the time available.

2. Create Your Own Smoothie Recipe

Participants learn the rationale for including certain ingredients, then use that knowledge to create their own smoothie recipe and taste the results.

3. Making Several Recipes at One Event

Participants get hands-on blending experience within a 45-minute session. The instructions guide to facilitator set up stations for three different recipes to maximize taste testing within the available time.

4. Calories In, Calories Out

How long would it take to burn the calories in assorted foods and beverages? Participants try to correctly sort them into three time categories.



5. The Beat Goes On

Participants learn how to take a pulse and experience how different intensities of physical activity affect heart rate.

6. Supporting Materials

Materials include fact sheets, recipes, game materials, and reporting forms.



Healthy Living Concepts

The following healthy living concepts based on the *Dietary Guidelines for Americans 2015-2020* can be conveyed and reinforced through blender bike activities.

1. Eat a variety of healthy foods each day.
2. Consume a balanced diet that matches your food intake to the number of calories you need.
3. Make healthy food choices by selecting foods that have little or no added sugar and fat.
4. Eat more fruits and vegetables.
5. Eat more whole grains.
6. Drink more water.
7. Eat less junk food, including sugar-sweetened beverages.

DISCUSSION

The Ohio 4-H Blender Bike has traveled to many counties and has been well received at camps, classrooms, fairs, teen leader trainings, and other events. Several county Extension offices in Ohio have acquired or gained access to a blender bike in recent years.

Events featuring the blender bike reached 3,000 individuals in 2017.

Hands-on experience with food is an effective strategy to teach about healthy eating behaviors.

- Adolescents find hands-on learning, including tasting and trying new foods, to be a fun and enjoyable part of nutrition education.
- Hands-on activities and positive taste testing experience can translate into interest in making foods at home and a willingness to eat the foods again.
- People are more likely to meet dietary recommendations when they prepare their own food.

RECOMMENDATIONS

Blender bikes can add depth to ongoing nutrition education and can add a fun and active healthy living component to other Extension programming and exhibits.

Suggested blender bike activities include customizing a standard smoothie recipe and taste testing different low-cost foods (e.g., hummus and salsa) that can be easily replicated at home with a regular blender.

REFERENCES

U.S. Department of Health and Human Services & U.S. Department of Agriculture. (2015). *2015 – 2020 Dietary Guidelines for Americans*. (8th ed.). Retrieved from <http://health.gov/dietaryguidelines/2015/guidelines/>

