

# Blender Bikes: Blending Nutrition & Physical Activity

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## What Is a Blender Bike?

A blender bike is a bike with an attached blender powered entirely by its rider. It quickly becomes the center of attention when someone is pedaling it. There are several variations; most common is a stationary bike with the blender on the front or a bike retrofitted with an attachment that sits over the back wheel. When a blender bike is added to program activities, it becomes a creative tool for highlighting and expanding Extension's healthy living programs.

Featuring the bike at events can attract participants to an educational exhibit that features healthy eating. The ultimate goal of 4-H Healthy Living programs is to engage youth and families through access and opportunities to achieve optimal physical, social, and emotional well-being. The blender bike alone will not change food choices; instead it should be viewed as a tool to aid in achieving this overarching goal.

## Why Is a Blender Bike a Good Teaching Tool?

Hands-on experience with food is an effective strategy to teach about healthy eating behaviors (Nelson, Corbin, & Nichols-Richardson, 2013; Walters & Stacey, 2009). The blender bike is a creative tool to expose, engage, and educate about healthy eating, the importance of fruit and vegetable consumption, limiting sugar-sweetened beverages, and making healthy choices.

Concrete experiences with food aid in learning abstract concepts (Nelson et al., 2013). Hands-on activities and positive taste testing experience can translate into interest in making foods at home. Recipes made on the blender bike can be replicated at home with a regular blender. People are more likely to meet dietary recommendations when they prepare their own food (Larson, Perry, Story, & Neumark-Sztainer, 2006).

The experience of pedaling the blender bike is not enough; it's the first step in an experiential learning process. Ideally, the blender bike is used in conjunction with other activities that engage participants in learning about making healthy choices.



Teens try out the 4-H Blender Bike during training to be 4-H Healthy Living Advocates.

## Why Focus on Nutrition & Physical Activity?

The *Dietary Guidelines for Americans 2015-2020* issued by the U.S. Department of Health and Human Services and U.S. Department of Agriculture recommend eating more fruits and vegetables. However, fruit and vegetable consumption is below recommended levels; many Americans consume half or less of the daily recommended of these foods, with Ohio ranking below the national average (CDC, 2010, 2013, 2015). Middle school and high school-age children are especially lacking in fruit and vegetable consumption (Guenther, Dodd, Reedy, & Krebs-Smith, 2006) and they consume more than the recommended limit for added sugars. A diet rich in fruits and vegetables is linked to decreased risk of cardiovascular disease, other chronic diseases, and some cancers (Van Duyn & Pivonka, 2000). Furthermore, physical activity is associated with many health benefits (Janssen & LeBlanc, 2010), but many children and adolescents do not get the recommended 60 minutes of daily physical activity (CDC, 2014; U.S. Department of Health & Human Services, 2008).

## What Are the Healthy Living Messages to Communicate?

The blender bike can be a tool to communicate nutrition and physical activity messages, such as:

- Diets should include a variety of vegetables and fruits, including whole fruit.
- Eat non-fat or low-fat dairy products.
- Limit beverages with added sugars.



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Although the amount of pedaling needed to create foods on a blender bike isn't enough to meet the requirement for daily physical activity, it opens the discussion about the importance of physical activity and the many ways to include it.

- Children and adolescents need 60 minutes of physical activity daily.
- Physical activity is fun, is good for you, and will keep you fit.

## Important Points

- Vegetables and fruits are low in calories.
- Eat more fruits and vegetables. Many people do not get the recommended amount of fruits and vegetables.
- Limit added fat, salt, and sugar.
- Make healthy beverage choices; choose beverages without added sugar.
- Calories are not the only factor to consider when selecting foods. Two foods can have the same amount of calories, but have different nutritional contributions. Foods with lots of nutrients are considered *nutrient dense*.
- Children and adolescents should do 60 minutes (1 hour) or more of physical activity daily.
- Physical activities can be unstructured and part of play, such as playing on playground equipment, jumping rope, riding bikes, and playing active. Or these activities can be structured, such as yoga, lifting weights, or working with resistance bands.
- It is important for young people to participate in physical activities that are appropriate for their age, that are enjoyable, and that offer variety.

(Adapted from US DHHS 2008; 2015)

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