



Blender Bike Manual



Welcome / Overview

We are so excited that you will be using our Blender Bike! Please find the following information to support you at your health event. We suggest you watch the short introductory videos first to get a quick understanding of how the bike works. Then, review the included materials that guide you in everything from: determining your basic supplies, selecting smoothie ingredients, making your first Blender Bike smoothie, and educating your participants on healthy habits. Details on how to transport the bike are included in a separate full-color guide that includes photos.

Best of luck and please reach out to us with questions. Please don't forget to take pictures and share your event with us at <https://www.facebook.com/how2fitkids!>

Introductory Videos:

- **The Blender Bike Experience:** <https://www.youtube.com/watch?v=5wPiu2A8zWQ>
An example of what your Blender Bike event can be like.
- **What to Do if the Blender Gets Stuck When Making a Smoothie:**
<https://www.youtube.com/watch?v=zuraWhHcgIc> Sometimes the blender gets stuck, this quick video shows you how to be prepared and fix it fast!

What You Will Need for a Blender Bike Event:

- A vehicle to safely transport the Blender Bike. See “Transporting the Blender Bike” for more details at <http://www.how2fitkids.org/blender-bike/>
- **If using indoors**, you must be in a space that fits the bike’s size of approximately 35” wide x 38 ½” high x 59” long (front to back).
- **If making smoothies**, you will need to follow all Torrington Area Health District Food Handling Guidelines and rules for public consumption. You must have access to clean water for handwashing and cleaning up; trash receptacles; a table, cart, or other work surface; and the supplies that follow. Ideally, two adults will be present so that one can handle smoothie preparation, while the other supervises bike safety.

Supplies / Ingredients

Smoothie Supplies

- A cooler with ice (to keep perishable ingredients cold)
- Food thermometer to assure ingredients are not left above 40 degrees Fahrenheit
- Clean ice (for use in the smoothies)
- A bowl or container and scoop for the ice
- Bowls for ingredients and for serving
- Measuring cups (for liquid and dry ingredients)
- Small paring knives or kitchen shears
- Cutting board
- Mixing spoon / spatula
- Scissors (to cut open plastic bags of fruit)
- Paper towels or sponge for cleaning up
- Wet wipes / sanitizer (to clean and disinfect the bike handlebars)
- Small paper or plastic cups (for smoothies, one per attendee)
- Plastic gloves for safe food handling

Smoothie Ingredient Tips

- For best results, allow frozen fruit to thaw a little before blending.
- Cut large pieces into smaller chunks. (Kitchen shears can be helpful for this.)
- If using fresh instead of frozen fruit, more ice may be needed.
- Read the labels and use ingredients with little or no added sugar, salt, and fat (like plain nonfat yogurt, low-fat milk, or unsweetened plant milks).
- Fruit is naturally sweet. If using a recipe that calls for added sugar or honey, try it first before adding sweetener. [This is also a great teaching moment to show participants that they don't need to use sugar!]
- Greek yogurt has more protein per serving than regular yogurt and makes a slightly thicker smoothie.
- Determine the number of participants you plan to serve and adjust your recipe accordingly. The 48 oz. blender container can make ~12-15 servings per 3-4 oz serving.

Blender Bike Tips

Blender Bike Safety

- Make sure participants are warned not to touch the wheel or blender to prevent injury, and to not pedal the bike too vigorously or when the blender is not attached.
- Ideally, the bike rider's knee should be slightly bent when their foot is on the pedal at its lowest point. (See details below on how to adjust the seat.) Always supervise pedaling to ensure participant safety and prevent misuse of the bike.
- Pedaling the Blender Bike when it is filled with fresh ingredients can be quite challenging. This is normal, and if children are participating, an adult might need to get the blending started and then the children can take turns completing it.
- Prepping smoothie ingredients typically requires the use of a knife. Please be mindful of keeping knives away from participants. Kitchen shears might be easier to use, but could still prove to be sharp and lead to potential injuries.

How to Blend a Smoothie with the Bike

1. Wash hands before handling food.
2. Ensure perishable ingredients are kept cold or on ice.
3. Prepare ingredients by cutting in small chunks and then layer them in blender container. The ideal order to prevent the blender from getting stuck is:
 - a. Softer ingredients on the bottom, such as banana, yogurt, or smaller ingredients (i.e. blueberries)

- b. Larger ingredients, such as frozen strawberries or mango chunks
 - c. Then, ice, and
 - d. Finally finish with the liquid on top.
4. Adjust the height of bike seat to fit the size of the rider. Ideally, the rider's knee should be slightly bent when foot is on pedal at its lowest point [See additional details below on how to adjust the seat.]
5. Set the blender container on the base at the front of the bike.
6. Loop the strap over the top of the blender and secure.
7. Begin pedaling forward to turn the blades of the blender.
8. If the blender becomes stuck, then stop pedaling and stir contents with a spoon or follow the suggestions under, "If the Blender Gets Stuck."
9. Re-secure the top of the blender containers and then pedal.
10. When blending is complete, remove strap.
11. When done, wipe down bike, clean the workspace and utensils, and dispose of trash.

If the Blender Gets Stuck

If you or a participant attempt to peddle and you hear a whistling noise, or the blender just appears to be stuck, this is called "torque slip." You can fix this by addressing the following:

- ***Have you layered the smoothie correctly?*** Are there hard ingredients blocking the blade? You want to be sure that the hard ingredients are not at the bottom. It is better to have banana, yogurt, or frozen berries closest to the blade, rather than ice or larger chunks of frozen fruit. You can use a spoon or spatula to dislodge any large pieces.
- ***Is the bike set up correctly?*** Is the tire firm when you squeeze it and fully inflated to 60 psi? Is the roller properly aligned? You may need to rotate the blender to adjust the roller (see video link below for details).

If the blender is stuck, and stirring doesn't work, you can free the blockage by stopping pedaling and moving the front wheel with your hand back-and-forth until the blender breaks loose. Then, you should be able to pedal again.

This 4-minute video walks you through the above information:

<https://www.youtube.com/watch?v=zuraWhHcqlc>

Adjusting the Bike Seat

For ease of pedaling, the rider's knee should be slightly bent when their foot is on the pedal at its lowest point. To adjust, move the metal bar that secures the seat away from the frame to release the post. Slide the metal post (under the seat) up or down to adjust height of bike seat. Push the metal bar back towards post to secure it.



Education Tips

Suggested Nutrition & Physical Activity Messages

One of the primary goals of the Blender Bike is teaching participants about healthy habits. Any of the following messages are helpful to convey to participants. You do NOT need to include all of these! They are just guidelines to support your educational goals.

The Benefits of Fruits and Vegetables

- *Fruits and vegetables are healthy additions to your daily diet.*
- *They are naturally low in calories and a great source of fiber that keeps you full.*
- *Fruits and vegetables have a variety of nutrients like vitamins, minerals, and fiber that help to keep you healthy.*
- *Ideally, we get at least 5 servings of fruits and vegetable every day. But many people don't meet this goal.*
- *A serving of fruit or vegetables is approximately ½ cup (or 1/2 the size of a baseball).*

The Benefits of Dairy and Fortified Plant Milks

- *Dairy products contain potassium, which is good for your heart, and calcium and vitamins D and K, which are good for bones.*
- *Lower fat dairy products, with no added sugar, like nonfat or 1% milk and low-fat, plain yogurt are the best choices.*
- *Some people have trouble eating dairy products as they might be harder to digest (lactose, dairy intolerance, or allergies).*
- *Plant milks that have been fortified with calcium and vitamin D are healthy choices too. This includes almond, coconut, oat, or soy milk.*
- *Read labels to be sure there is no added sugar in the dairy or plant milks that you use.*
- *It is better to add your own sweetener or use fruit to naturally sweeten your yogurt or smoothies, so that you know exactly how much sugar you are getting.*
- *Pre-sweetened yogurts and flavored milks often have far too much sugar. [Could bring a label of a typical fruit yogurt container to display this.]*

The Importance of Avoiding Added Sugars

- *It is best to avoid or limit drinks that have added sugars.*
- *Added sugars can lead to cavities in our teeth and an unhealthy weight if we get too much.*
- *Fruits are naturally sweet and often don't require any additional sugars to taste delicious.*

The 5-2-1-0 Health Guidelines

- *An easy way to remember daily health goals is – “5-2-1- 0”*
 - *5 fruits and veggies*
 - *2 healthy screen habits*
 - *1 hour of physical activity*
 - *0 sugary drinks*

The Importance of Physical Activity

- *Children and teens need at least 1 hour (60 minutes) of physical activity every day.*
- *Activity can be anything that includes steady movement, such as playing on the playground, running, walking, swimming, or biking.*
- *Activity can also be planned such as in gym class or exercise programs like yoga or lifting weights.*
- *Try to pick activities that you enjoy so that you will look forward to doing it.*

[Adapted from US DHHS 2008; 2015]

Basic Blender Bike Smoothie Recipe

Smoothies are very versatile! You can find many smoothie recipes online, use one of our recipe handouts, or simply modify the following formula based on your ingredient availability.

Basic Ingredients (fills one large blender – 48 oz)

1 cup plain or vanilla Greek yogurt [Choose the yogurt with lowest amount of fat, added sugar, and artificial sweeteners.]

2 ripe bananas, peeled and cut into chunks

3 cups frozen fruit (such as berries, mango, peaches, or pineapple)

2 1/2 cups milk (low-fat dairy or plant-based milk with no sugar added)

½ -1 cup fresh spinach (optional)

1-2 cups of ice

Add all ingredients (softer ingredients on the bottom), in the order listed. Cover securely and blend until smooth. Stir if blender stops or slows. This recipe makes approximately 48 oz., which provides six 8-ounce servings or sixteen 3-ounce samples. Two batches will serve a group of 20-25 people.

Additional Resources

- **Fit Together NWCT Blender Bike page** - <http://www.how2fitkids.org/blender-bike/> - download copies of this manual, the “Transporting the Blender Bike” PDF, and additional smoothie recipe hand-outs.
- **Rock the Bike** – the website of the Blender Bike maker. It includes troubleshooting videos and images of the bike in action <https://rockthebike.com/fender-blender-pro/>
 - **Troubleshooting Tips** <https://rockthebike.com/troubleshooting-tips/>
- **Blender Bike Healthy Living Curriculum, from Ohio 4H:** This comprehensive curriculum includes recipes, activities, and a program evaluation form if needed. <https://ohio4h.org/books-and-resources/design-team-curriculum/healthy-living-curriculum>
- **Blender Bike Overview, Ohio 4-H Youth Development; Ohio State University Extension:** <https://ohio4h.org/4Hblenderbike>

If you need more help, please contact us at: fittogether@how2fitkids.org



www.FitTogetherNWCT.org

[This manual was compiled using information from Rock the Bike - <https://rockthebike.com/transporting-your-pro-frame/> and the Ohio 4-H Youth Development; Ohio State University Extension <https://ohio4h.org/4Hblenderbike>] - REVISED 8/5/25