

Healthy Eating After Burn Injury—for Kids

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<https://msktc.org/burn/factsheets>

BURN Factsheet

This factsheet explains the importance of proper nutrition as your child recovers and heals from a burn injury. It describes the nutritional needs during recovery in the hospital and at home, offers tips for a healthy diet for healing, and includes a few kid-friendly recipes.

The Model Systems Knowledge Translation Center works with Burn Model System (BMS) centers to provide free research-based rehabilitation resources for people living with burn injury (See <https://msktc.org/burn> for more information). This factsheet has been approved by experts from the BMS centers.

This factsheet is intended to inform families of children with burn injury about nutrition during hospitalization and after they return home. Your child needs adequate nutrition to grow and develop. Having a burn injury dramatically increases the need for proper nutrition. The larger the burn size, the more nutrition your child needs to heal. A diet high in calories and protein:

- Supports the immune system to decrease risk of infection
- Helps wounds heal faster
- Maintains muscle mass
- Minimizes weight loss to support rehabilitation



How Are Nutrition Needs Determined?

For a child with a burn injury, a dietitian and the medical team decide how much nutrition (calories and protein) your child needs based on their weight, height, age, and burn size. Vitamins and minerals, such as vitamin C, vitamin A, and zinc, are also important for healing and preventing infection. Eating a healthy, well-balanced diet will help your child receive enough nutrients to support wound healing. Your medical team will let you know if your child needs to take any extra supplements.

How Are Nutrition Needs Met While Hospitalized?

Healing from a burn injury requires more calories and protein than any other type of injury. In the hospital, a dietitian makes sure that your child is getting enough nutrients to heal. The dietitian monitors your child's weight, nutrient intakes and outputs, and wound healing.



After a burn injury, it is important to eat a balanced diet that includes a lot of protein, in addition to other foods such as fruits, vegetables, and grains. Your child should eat high-protein foods at every meal and as snacks.

Examples of high-protein foods include:

- Lean meat
- Fish
- Eggs
- Dairy products (milk, yogurt, cheese)
- Beans
- Nuts



Drinking milkshakes or smoothies may help your child to meet their calorie and protein needs. If needed, the medical team may also recommend certain vitamin or mineral supplements.

Your child may need more nutrients than what they get from eating only by mouth. If this is the case, tube feeding can deliver more nutrients. A soft, flexible tube inserted through the nose reaches the stomach to deliver a liquid formula that contains all the nutrients needed for healing. Tube feeding will continue as long as necessary.

What Should Your Child Eat at Home?

After leaving the hospital, you can monitor your child's nutrition status by watching their weight, growth, and wound healing. Take your child to regular doctor appointments where they will chart your child's growth. Remember, your child requires fewer calories than when they were hospitalized. If your child's burn wounds are still open, their diet should include extra protein. As your child continues to heal, their nutrition needs will be like they were before the injury. At the hospital, they likely ate large meals, drank nutrition supplements, and ate a lot of snacks, so your child's appetite may be big when you get home. Now it is important to focus on a balanced diet. Avoid foods with little nutritional value, such as sugary beverages, desserts, candy, fatty meats, and white breads or crackers. Eat more lean meats, whole grains, vegetables, fruits, and dairy. A child with a burn injury needs the nutrients from these foods to continue healing and maintain a healthy weight.



Your child may also need extra vitamins. For example, the health care team may ask your child to take a vitamin D supplement because of extended hospitalization, immobility, and decreased exposure to the sun.

Ask your child's health care provider about exercise to help maintain a healthy weight. Playing and exercising is great for the mind and body. In general, your child can do many of the things that they did before the injury. Be sure to listen to your child's doctor about any limitations. Protect your child's skin from sunlight when they are outside. For more information, refer to the Exercise After Burn Injury Factsheet (https://msktc.org/lib/docs/Factsheets/Burn_Exercise_Fact_Sheet_508.pdf).



Tips for a Well-Balanced Diet at Home

- Offer your child small, frequent meals and snacks. Let him or her decide how much to eat at one time.
- Prepare balanced meals that include all five food groups: fruits, vegetables, grains, protein, and dairy.
- Give your child foods that are high in protein with every meal and snack.
- Have healthy snacks prepared and available in a place where your child can easily find them. For example, consider keeping cheese cubes and apple slices in a container on a low shelf in the refrigerator.
- Make smoothies or milkshakes for your child if they aren't interested in solid food.
- Offer your child water between meals. Sugary beverages such as soda and sports drinks add too many calories with little nutritional value.
- Get creative! Try combining new foods.
- Be a role model: Drink plenty of water, talk about your healthy food choices, and eat with your child.



Ideas for Increasing Protein

When your child eats:	Add or use:
Fruit and vegetable sticks	Peanut butter, almond butter, hummus, or cheese
Whole wheat bread or toast	Peanut butter or melted cheese
Oatmeal	Milk instead of water and add nuts
Crackers or chips	Choose whole grain and eat with peanut butter, cheese, or hummus
Milk	1 cup of regular dry milk powder to 1 quart of milk
Broth-based soups	Cream-based soups
Soups and casseroles	Diced or ground beef, chicken, or turkey
Ice cream or yogurt	Nuts and granola with seeds

It is best to add protein to the diet with whole foods; protein powder supplements are generally not needed.



Kid-Friendly Smoothie Recipes

Monkey Shake (485 calories, 14 g protein)

- 1 banana
- 2 tbsp. peanut butter
- 2 tbsp. chocolate syrup
- ½ cup whole milk

Creamsicle Smoothie (455 calories, 13 g protein)

- 1 cup orange sherbet
- ½ cup whole milk
- 6 oz. vanilla yogurt

Dinosaur Juice (310 calories, 9 g protein)

- ½ cup vanilla ice cream
- 1 or 2 handfuls fresh spinach leaves
- 2 cups frozen fruit: pineapple, mango, or berries
- 2 tbsp. wheat germ or flax seed

Summer Vacation Smoothie (370 calories, 9 g protein)

- ½ cup vanilla ice cream
- 1 package vanilla nutritional powder drink mix
- ½ cup orange juice
- ½ cup frozen fruit (e.g., pineapple, mango, etc.)



Additional Resources

Contact your local burn center and ask for an appointment with a dietitian who will create a nutrition action plan to meet your child's specific lifestyle and nutrition goals.

The MyPlate website (<http://www.choosemyplate.gov/kids>) contains nutrition information, healthy eating tips, and ideas for increasing physical activity.

References

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Authorship

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