

NUTRITION AFTER YOUR CHILD'S SURGERY:

Recovering and Powering Up

GOOD NUTRITION IS BENEFICIAL AFTER SURGERY



INITIATE FEEDING AFTER SURGERY

Discuss with your healthcare provider, even small amounts of foods and fluids can be beneficial early in recovery. Providing nutrition may lower your child's risk of an infection and **result in a faster recovery**.¹⁻⁵ Continue to provide nutritious foods rich in protein and plenty of fluids until your child is fully recovered.

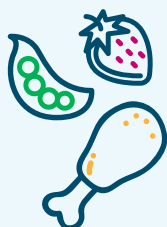
If your child was underweight or overweight before the surgery, follow up with your healthcare provider to address specific ongoing nutrition concerns.



MANAGE NAUSEA

Your child may have some nausea after the surgery, which can be managed by:

- Encouraging sips of clear fluids first, such as water, juice and oral rehydration solutions
- Eating smaller, more frequent meals and snacks to avoid overconsumption
- Taking small bites and chewing food well
- Limiting fried, greasy, spicy and high sugar foods or drinks



CONSUME A HEALTHY DIET TO SUPPORT HEALING AND RECOVERY

Following surgery, your child will need the right amount of calories and nutrients to help his or her body heal. Nutrients that help your child recover from surgery include protein, iron, vitamin C and zinc.

Below you'll find general information on the amount of each nutrient to provide depending on your child's age and gender, and can be adjusted by the medical team to meet your child's specific needs.

PROTEIN

Protein is an important nutrient to build and repair tissues, such as skin and muscle. In addition to zinc and vitamin C, protein is important for wound healing.

RECOMMENDED DAILY SERVINGS* OF PROTEIN ⁶				
(AGE IN YEARS)				
1-3	4-8	9-13	GIRLS 14-18	BOYS 14-18
2	3	5	6 ½	7 ½

WHAT IS A SERVING OF PROTEIN? ⁷	
MEAT, POULTRY, FISH	1 OZ
EGG	1 LARGE
MILK, YOGURT, SOY MILK	1 CUP
CHEESE	1 ½ OZ
PEANUT BUTTER, NUT BUTTERS	2 TABLESPOONS
TOFU	2 OZ
BEANS, PEAS, LENTILS (CANNED OR COOKED)	½ CUP

*One serving contains approximately 7-8 grams of protein. OZ = Ounces, MG = Milligrams

VITAMIN C

Vitamin C helps to build collagen to provide structure in your child's skin, muscles and bones. Since vitamin C is found in fruits and vegetables, aim to have your child eat one at each meal and snack. Vitamin C also helps your child absorb iron, so pair foods rich in iron and vitamin C together.

RECOMMENDED DAILY AMOUNT OF VITAMIN C ⁸				
(AGE IN YEARS)				
1-3	4-8	9-13	GIRLS 14-18	BOYS 14-18
15 MG	25 MG	45 MG	65 MG	75 MG

FOODS RICH IN VITAMIN C ⁸		
BELL PEPPERS	½ CUP	95 MG
KIWI	1 MEDIUM	60 MG
ORANGE	1 SMALL	50 MG
STRAWBERRIES	½ CUP	45 MG
BROCCOLI	½ CUP	40 MG
CANTALOUPE	½ CUP	30 MG
SWEET POTATO	½ CUP	15 MG
TOMATOES	½ CUP	10 MG

NUTRITION FOR RECOVERY AFTER YOUR CHILD'S SURGERY

ZINC

Zinc supports the creation of new immune cells, which contribute to the body's ability to heal from wounds.

RECOMMENDED DAILY AMOUNT OF ZINC ⁷				
(AGE IN YEARS)				
1-3	4-8	9-13	GIRLS 14-18	BOYS 14-18
3 MG	5 MG	8 MG	9 MG	11 MG

MANY OF THE FOODS THAT ARE GOOD SOURCES OF PROTEIN ARE ALSO RICH IN ZINC ⁷		
BEEF CHUCK ROAST	3 OZ	4 MG
PORK CHOP	3 OZ	3 MG
BAKED BEANS	½ CUP	3 MG
SHRIMP	½ CUP	2 MG
YOGURT	1 CUP	1.5 MG
MILK	1 CUP	1 MG
CHICKEN BREAST	3 OZ	1 MG
PEANUT OR ALMOND BUTTER	2 TABLESPOONS	1 MG
CHEDDAR CHEESE	1 OZ	1 MG
BLACK BEANS	½ CUP	1 MG

OZ = Ounces, MG = Milligrams

IRON

Iron helps the body make new red blood cells and helps support muscles. Children who are iron deficient or have anemia may be at an increased risk for an infection following a surgery.

RECOMMENDED DIETARY INTAKE OF IRON ⁹				
(AGE IN YEARS)				
1-3	4-8	9-13	GIRLS 14-18	BOYS 14-18
7 MG	10 MG	8 MG	15 MG	11 MG

WHAT FOODS ARE GOOD SOURCES OF IRON? ¹⁰		
To improve the absorption of iron, also eat foods that contain vitamin C, such as fruits and vegetables.		
TOFU, COOKED	½ CUP	3.6 MG
LENTILS, CANNED OR COOKED	½ CUP	3.3 MG
GROUND BEEF	3 OZ	2.3 MG
BLACK BEANS, CANNED OR COOKED	½ CUP	2 MG
QUINOA, COOKED	½ CUP	1.4 MG
TUNA, CANNED	3 OZ	1.3 MG
GREEN PEAS	½ CUP	1.2 MG
WHOLE WHEAT BREAD	1 SLICE	1 MG
CHICKEN BREAST, PORK CHOP	3 OZ	0.9 MG
OATMEAL	½ CUP	0.9 MG
RAISINS	1 ½ OZ BOX	0.8 MG
ENRICHED PASTA, COOKED	½ CUP	0.7 MG



Good nutrition helps the body heal after surgery. It's important to consume enough calories and the right nutrients to promote healing and healthy growth.*

If your child is unable to consume adequate food to meet their nutrition needs, talk to a dietitian or your child's medical team for recommendations. An oral nutrition supplement may be recommended.

*Your child's healthcare provider can help determine an appropriate nutrition plan based on your child's age and development, food allergies or intolerances, and other factors unique to your child.

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1. Behera BK, et al. *J Pediatr Surg.* 2022;57(8):1473-1479. 2. Du N, et al. *Medicine (Baltimore).* 2021;100(1):e24149. 3. Loganathan AK, et al. *Pediatr Surg Int.* 2022;38(1):157-168. 4. Deitch EA. *Surgery.* 2002;131(3):241-244. 5. McClure RJ, et al. *Arch Dis Child Fetal Neonatal Ed.* 2000;82(1):F29-F33. 6. Institute of Medicine. *Dietary Reference Intakes: The Essential Guide to Nutrient Requirements.* Washington, DC: The National Academies Press; 2006:536 7. U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025.* 9th ed. December 2020:146 8. U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025.* 9th ed. December 2020:147 9. Institute of Medicine. *Dietary Reference Intakes: The Essential Guide to Nutrient Requirements.* Washington, DC: The National Academies Press; 2006:530 10. Food Sources of Iron. *Dietary Guidelines for Americans.* Accessed 8/11/2022. <https://www.dietaryguidelines.gov/resources/2020-2025-dietary-guidelines-online-materials/food-sources-select-nutrients/food-1>