

I can tell you my child's fluid and diet plan after the transplant.

The Registered Dietitian on your Transplant Team will teach you about your child's fluid and diet plan and answer all your questions.

Your child will be on a **low microbial diet**.

- Drink bottled water.
- Do not eat raw fish or rare meat.
- All fruits and vegetables must be washed, dried, and peeled.
- Do not eat grapefruit or drink grapefruit juice. It interacts with tacrolimus.

Will my child have any diet restrictions after transplant?

Most children will be able to eat more foods than they could before transplant.

What can my child eat after the liver transplant?

Transplant medicines may increase your child's appetite. Food may taste better than it used to. Give your child a lot of different foods to try.

Your child can now enjoy many fruits, vegetables, whole grains, and low fat dairy products. Eating a lot of different foods will help your child get all the vitamins, minerals, and protein needed for wound healing, recovery from surgery, and to help fight infections. Children may like foods they did not like before the transplant.

What foods should my child stay away from?

If your child has high blood pressure, he or she should stay away from food high in salt or sodium.

I can tell you our child's fluid goal

How much water does my child need to drink?

It is important that your child has enough fluids. The best fluids have no caffeine or sugar, such as water and skim milk, or flavored waters without sugar, such as Crystal Light.

Nutrition after a liver transplant

In the first months after a liver transplant, you or your child will be recovering from the stress of surgery. It is important to take in enough protein, calories, vitamins and minerals to help wounds heal and prevent muscle loss.

If your child feels full after eating part of a meal, offer smaller meals 6 times a day instead of 3 full meals.

Talk to the Transplant Team if your child does not want to eat, feels sick to the stomach, or has bowel problems.

Calories

You or your child should eat enough calories to slowly gain back weight and build muscle. Choose foods that are dense with nutrients, like milk, cheese, whole grains, fruits, and vegetables. Keep away from foods that have few nutrients, like soda and candy. If your child has a poor appetite, tell the Transplant Team.

Protein

Protein is important for healing and muscle gain. High doses of prednisone given after transplant breaks down muscle, so extra protein is important.

Every day you should eat some foods that are high in protein.

Animal-based proteins

Fish

Poultry, like chicken or turkey

Egg whites or egg substitute

Eggs — Your child should not eat more than 4 yolks each week

Dairy products, like milk, cheese, or yogurt

Red meat, like beef, pork, or veal

Plant-based proteins

Unsalted nuts

Peanut butter or other nut butters

Beans, lentils, and split peas, including kidney, black, pinto, navy beans

Soy products like tofu, soy milk, tempeh

Seitan, which is wheat gluten

Choose protein lower in fat more often and cook them in ways that use less fat, such as grilling or baking.

Sugar

Prednisone can make your body take less sugar into the body's cells, so there is more sugar left in the blood. This may cause you or your child's blood sugar (glucose) level to rise. This condition is called high blood sugar, hyperglycemia, or steroid-induced diabetes. We can treat this side effect of prednisone by limiting simple carbohydrates and sugars.

Your child should get only small amounts of these simple sugars:

- Sugar
- Molasses
- Doughnuts, pastries, sweet rolls
- Pies, cakes, cookies
- Candy, chocolate candy
- Ice cream, frozen yogurt, sherbet
- Honey
- Syrups, such as corn syrup or maple syrup
- Jam, jelly, marmalade
- Soft drinks
- Other sweetened beverages, like fruit juice or sweet tea
- Jell-O

Your child may use diet soda, and unsweetened or artificially sweetened jams, jellies, and marmalade. The best fluids have no caffeine or sugar, such as water, skim milk, flavored water or Crystal Light.

If your child has high blood sugars:

- Feed your child at least three meals each day at regular, evenly spaced times. Avoid skipping meals. Every meal and snack should include a high quality protein. For example, a meal can be a turkey sandwich on whole grain bread with a salad. A snack could be ½ cup of 1% cottage cheese with fresh fruit or berries.

- Foods with carbohydrates should be high in fiber. Choose to eat whole grain products, lentils, peas, beans, and vegetables. Avoid white breads. Choose cereals with at least 5 grams of fiber per serving.
- Limit fruit to one serving per meal. One serving is the same as ½ cup or one medium sized piece of fruit.
- Read food labels. Avoid foods with added sugars list in the ingredients. Different names for sugars include fructose, maltose, dextrose, corn syrup, high fructose corn syrup, honey, raw sugar, and brown sugar.

Sodium or salt

Sodium is salt. Surgery and medicine such as prednisone can cause the body to hold on to (retain) sodium and water. Too much fluid in the body can increase blood pressure.

One way to avoid holding on to sodium and water is to eat less salt. The easiest way to do this is to not add salt and not eat foods which are made with added salt. This is called the **No Added Salt diet**, which keeps the sodium down to less than 3000 mg each day.

No Added Salt Diet

- Do not add salt to food.
- Do not cook with salt. Use herbs and spices for flavor.
- Read the label on all the foods you use. Even foods that don't taste salty may have lots of salt. Look at foods that say, "no salt added."
- **Avoid or limit these foods:**
 - High salt soup. Most canned, dehydrated, and bullion soups are high in salt. Consider soup that says it is low in sodium.
 - Processed meats like ham, bacon, sausage, frankfurters, cold cuts (like bologna, salami, pastrami), corned beef, smoked or dried meat or fish, canned meat, salt pork.
 - Processed or canned foods. Cheese, packaged meals, most canned foods, frozen vegetables with sauce, pickles, sauerkraut, vegetable juice.
 - Food in restaurants. One meal often has more than 3000 mg of sodium.
 - Salted snacks. Crackers, pretzels, potato chips, corn chips, tortilla chips, popcorn, nuts, seeds.
 - Condiments and seasonings. Ketchup, mustards, horseradish, sauces (like barbecue, chili, steak, Worcestershire), MSG (monosodium glutamate), soy sauce, meat tenderizers, pickle relish, olives, garlic salt, onion salt, salad dressing.

Potassium

Some medicine, like Cyclosporine and Tacrolimus, can make blood potassium levels go up. Other medicines, like furosemide, can make blood potassium levels go down. Potassium blood levels that are not right can cause problems with muscle and the heart. Your child's health care team may manage your child's blood potassium levels with medicine or diet.

Here are some foods **high in potassium**. Eating more of these foods would raise blood potassium levels. Eating fewer of the foods would lower blood potassium levels. If your child's diet needs to control potassium carefully, your child's dietitian will give you a longer list.

Fruits

- Apricots
- Avocados
- Bananas
- Dried fruit
- Melons
- Nectarines
- Oranges
- Peaches

Vegetables

- Leafy greens
- Pumpkins
- Potatoes
- Split peas
- Dried beans
- Lentils
- Tomatoes

Juices

- Orange juice
- Prune juice
- Tomato juice
- V-8 juice

Other food

- Milk and dairy
- Peanut Butter
- Nuts
- Chocolate

Magnesium

Some medicine, like Tacrolimus and diuretics, can make blood magnesium levels go down. Magnesium blood levels that are too low can cause changes in heart rhythm, muscle cramps and weakness, tremors, confusion, depression, and high blood pressure. Your child's health care team may manage your child's blood magnesium levels with medicine or diet.

Here are some foods **high in magnesium**. Eating more of these foods would raise blood magnesium levels. Eating fewer of the foods would lower blood magnesium levels. If your child's diet needs to control magnesium carefully, your child's dietitian will give you a longer list.

Whole grains

- Quinoa
- Millet
- Buckwheat
- Brown Rice
- Bran (rice, wheat, and oat)
- Rye
- Whole wheat bread

Vegetables

- Darky leafy greens, like spinach or chard)

Beans

- Black beans
- Soy beans
- Navy beans
- Pinto beans
- Kidney beans
- Lima beans
- Lentils

Nuts and seeds

- Pumpkin seeds
- Sesame seeds
- Sunflower seeds
- Flax seeds
- Brazil nuts
- Almonds
- Cashews
- Peanuts

Fish

Salmon
Halibut

Fruit

Dates
Bananas
Raisins
Avocados

Dairy

Yogurt
Milk

Other foods

Dark chocolate
Molasses

Calcium

After transplant, children and teens should take in enough calcium every day. How much calcium depends on his or her age.

| Age | Calcium requirement (mg) |
|--------------|---------------------------------|
| 1 – 3 years | 700 mg/day |
| 4 – 8 years | 1000 mg/day |
| 9 – 18 years | 1300 mg/day |

Dairy products are a good source of calcium. Each 8 ounce glass of milk has about 300 mg of calcium. If your child does not get enough calcium from food, talk to the dietitian about calcium supplements.

If your child needs to be tube fed at home, we will teach you how to do this. You will be able to practice this in the hospital and have time to ask questions.

Disclaimer

The information provided at this site is intended to be general information, and is provided for educational purposes only. It is not intended to take the place of examination, treatment, or consultation with a physician. Phoenix Children's Hospital urges you to contact your physician with any questions you may have about a medical condition.