Nutrition Guidelines After Solid Organ Transplant

Nutrition plays a key role in the transplant process. Eating well and being at a healthy weight may help you recover faster after surgery. Good nutrition plays a key role in transplant success and your overall health.

Initial Guidelines After Transplant
After surgery, good nutrition promotes healing, fights and prevents infection, and helps you gain back weight you may have lost. You may not be as hungry. Your sense of taste may change due to medicines. Even if you don’t feel hungry, you will need to eat. Try these tips:

- Eat small, frequent meals or 3 meals with 2-3 snacks in between.
- Include high calorie, high protein foods. Examples include yogurt, pudding, cottage cheese, nuts, peanut butter, shakes, lean meats and eggs.
- Use supplement drinks such as Boost®, Ensure®, or Carnation Breakfast Essentials®.

Keeping a Healthy Weight
People tend to gain weight after transplant. Causes include a bigger appetite when taking steroids, unhealthy eating habits, lack of exercise, or a family history of obesity. Here are some ways to maintain a healthy weight.

- Eat regular meals: 3 meals per day or small, frequent meals.
- Control portion sizes at meals.
- When dining out, split a meal with someone or order the kids portion size.
- Choose healthy snacks.
- Limit intake of high calorie, high fat sweets (cakes, cookies, ice cream, and candy).
- Make physical activity part of your daily routine. Be active at least 4-5 days a week.

Heart Healthy Choices
Eat a heart healthy diet by:

- Choosing lean meats. Choose fish and skinless poultry more often than red meat. Eat 6-8 ounces per day. Trim the fat off the meat. Remove the skin from poultry before cooking.
- Avoid high fat, processed meats such as brats and sausage.
- Lower your use of butter and lard. Choose trans-fat free margarine.
- Use olive oil, canola oil, or other vegetable oil with cooking.
- Choose low fat dairy products (skim or 1% milk, low fat yogurt, and low-fat cottage cheese). Limit intake of high fat dairy products (whole milk, ice cream, and custards).
- Choose low fat salad dressings, mayo, sour cream, and cream cheese.

Sometimes your new kidney may not be working as it should right after kidney transplant. This is called delayed graft function (DGF) or “sleepy” kidney. You may need dialysis. If you have DGF, follow a renal diet. A renal diet is low in sodium, potassium, and phosphorus. When you no longer have DGF, you can stop the renal diet and follow the guidelines in this handout.

Long Term Guidelines After Transplant
After transplant, you will need to maintain a healthy lifestyle. This helps to prevent problems like diabetes, osteoporosis, and heart disease. Making healthy food choices can help prevent these problems too.
• Choose baked or low-fat crackers and chips.
• Eat more fiber foods. Examples include whole grain breads and cereals, whole grain pastas, brown rice, dry beans and peas, fruits and vegetables.

Low Sodium Foods
A diet low in sodium (salt) helps control blood pressure and prevent fluid retention. To lower your sodium intake:
• Avoid adding salt to your foods. Use herbs, spices, or blends such as Mrs. Dash® instead of salt. Avoid salt substitutes with potassium.
• Avoid foods with large amounts of sodium. Examples include ham, bacon, sausage, cheese, canned vegetables and soups, and boxed meals.
• Read food labels to find out if foods are high in salt.

Carbohydrates
If you have diabetes or high blood sugars, you may need to limit carbohydrates. Eating consistent amounts of carbohydrate at each meal may help. Foods with carbohydrate include breads, cereals, pasta, rice, starchy vegetables such as potatoes, corn, and peas, fruits, milk and yogurt, and sweets. Suggestions include:
• Choose a variety of foods like fruits, vegetables, proteins, and carbohydrates.
• Do not skip meals. Eat about the same amount of carbohydrate at each meal.
• Limit your intake of concentrated sweets such as regular soda, candy, or jams.

Dietary Supplements
Avoid herbal or dietary supplements unless approved by the transplant team. Avoid potassium supplements or salt substitutes that contain potassium.

Food Safety
Transplant patients are at higher risk of foodborne illnesses. To prevent these illnesses, practice food safety. The booklet “Food Safety for Transplant Recipients” provides ways you can lower your risk of foodborne illness. You can find it online at: http://www.fda.gov/food/foodborneillnesscontaminants/peopleatrisk/ucm312570.htm. You can also find it by searching the booklet title.

Food Safety When Dining Out
• Avoid entrée items that have uncooked or undercooked ingredients like eggs, poultry, meat, or fish. Don’t hesitate to ask your server about the menu items.
• Avoid buffets. It is hard to control portion sizes at buffets. Foods may also be undercooked or have been at an unsafe temperature for too long.
• It is safe to dine at the hospital cafeteria. The food is prepared fresh and does not sit out for long periods of time.

Specific Foods to Avoid
• Hotdogs, deli meat, luncheon meat, smoked fish or meats, and precooked seafood should be reheated to steaming hot or ≥165°F
• Unpasteurized pates or meat spreads
• Unpasteurized/raw milk
• Cheeses made from unpasteurized milk. (Check the food label to be sure.) Common cheeses made with raw milk: feta, brie, camembert, blue, and queso-fresco.
• Unwashed fruits and vegetables
• Raw sprouts (alfalfa, bean, or other sprouts)
- Unpasteurized juices, ciders, or kombucha
- Raw or undercooked meat, poultry, seafood, or fish (raw sushi)

**Internal Cooking Temperatures**
It is important to heat up some foods to certain temperatures. The list below gives recommended internal cooking temperatures.

- Beef, pork, veal, and lamb ($\geq 145^\circ$F); ground meat ($\geq 160^\circ$F)
- Poultry (ground, parts, whole and stuffing; $\geq 165^\circ$F)
- Eggs (cook until yolk and white are firm); egg dishes ($\geq 160^\circ$F)
- Fin fish ($\geq 145^\circ$F or flesh is opaque)
- Shrimp, lobster, and crabs (flesh is pearly and opaque)
- Clams, oysters, and mussels (shells open)
- Scallops (flesh is milky white, opaque, and firm)
- Leftovers (cook or reheat to $\geq 165^\circ$F)

**Other Food Safety Tips**

**Clean:** Wash hands and surfaces often.
- Wash your hands with warm water and soap before eating, handling food, after using the bathroom, changing diapers, and handling pets.
- Wash cutting boards and dishes, used to prepare raw meats, in hot soapy water.
- Rinse and scrub fresh fruits and vegetables under running tap water. Do this even for foods with skins and rinds that are not eaten.

**Separate:** Separate raw meats from other foods.
- Use one cutting board for fresh produce. Use a separate board for raw meats.
- Never place cooked food on a plate that had raw meats on it unless the plate has been washed with hot, soapy water.
- Separate raw meats from other foods in your grocery bags.
- Store raw meats separately in fridge (for example, on a bottom shelf).

**Cook:** Cook to the right temperature.
- Cooking to recommended internal temperatures kills harmful bacteria.
- Use a food thermometer to ensure proper cooking temperature.
- Bring sauces, soups, marinades, and gravy to a boil when reheating.

**Chill:** Refrigerate foods promptly.
- Use an appliance thermometer to be sure the temperature stays below 40°F for refrigerator and below 0°F for freezer.
- Divide large amounts of leftovers into shallow containers for quicker cooling. Refrigerate within 2 hours (1 hour if air temperature is $>90^\circ$F).
- Never thaw food at room temperature. Defrost in the fridge, in cold water, or in the microwave.
- Check the dates on foods and throw away if expired.
- Discard or freeze leftovers after 3 days.
If you are a UW Health patient and have more questions, contact UW Health using the phone numbers listed below. You can also visit our website at www.uwhealth.org/nutrition.

Nutrition clinics for UW Hospital and Clinics (UWHC) and American Family Children’s Hospital (AFCH) can be reached at: (608) 890-5500.

Nutrition clinics for UW Medical Foundation (UWMF) can be reached at: (608) 287-2770.