

Customized Diet Guide for Short Bowel Syndrome

Following is a detailed food guide with specific calorie levels. This tool was developed because we are often asked by patients for specific recommendations on how many calories they need and what is the best way to get all those calories in. To get the most benefit of this tool, we recommend using under the guidance of a registered dietitian who can help develop a plan that is individualized for you. A dietitian with experience in short bowel syndrome can also help you if you are struggling to meet or maintain the weight that you feel healthiest at, having trouble staying hydrated without intravenous fluids, or wanting to review your overall nutrition plan.

The following tables list examples of food choices to help guide you in balancing more easily absorbed carbohydrate (complex carbs), protein, fat, and more easily digested vegetables. First off, remember the basics!

- ✓ Low fat, high carbohydrate diet for those with a colonic segment
- ✓ High fat, lower carbohydrate diet for those with jejunostomies and shorter ileostomies
- ✓ Chew foods well
- ✓ Avoid concentrated sweets and fluids
- ✓ Eat smaller meals, more often, up to 6-8 per day
- ✓ Limit fluids with meals; drink isotonic beverages
- ✓ Separate solids and liquids at meals as much as possible (eat solid foods first)

Remember: This guide is meant to help you *improve* your life – it is not meant to *rule* your life!

What is a “Short Gut Unit” (SGU)?

A short gut unit is simply a portion of a certain food.

One UNIT complex carbohydrate (CC) = 30g of complex carbohydrate food
Examples: 2 slices of bread, 1 C pasta

One UNIT protein = 15g protein food
Examples: 2 oz meat, 2oz cheese, 2 eggs, 1.5 C milk or yogurt

One UNIT fat = 15g fat
Examples: 1 T oil, 1.5 T butter

One UNIT veggie = ½ to 1 cup of more easily digestible vegetables

Measurement abbreviations	
tsp = teaspoon	oz = ounce
T = tablespoon	C = cup
“ = inches	
Common measurement conversions	
3 tsp = 1 T	4 oz = ½ C
4 T = ¼ C	8 oz = 1 C
5 1/3 T = 1/3 C	1 C = ½ pint

“Good” and “Not so Good” Food Choices for Short Gut Syndrome

Complex Carbohydrate (CC) Choices		
GOOD CHOICES	How much makes 1 SGU?	NOT SO GOOD (Avoid these!)
Bread and grains		
<ul style="list-style-type: none"> ➤ Sliced breads ➤ Pita bread ➤ Naan bread ➤ Rolls ➤ Bagels ➤ English muffins ➤ Plain waffles or pancakes ➤ Corn bread, plain muffins ➤ Banana, carrot or zucchini bread ➤ Tortillas – whole wheat or white flour, corn - toasted ➤ Pasta, macaroni, noodles ➤ Rice, brown rice, wild rice ➤ Biscuits ➤ Bread sticks ➤ Bread stuffing 	<p>2 slices (or 1 large slice) ½ of a 6” pocket One 4x4 inch piece 1 medium (or 2 small) 1 small 1 regular 2 (4” across) 1 med 1 slice (1” thick) 1 whole (10” across) 1 cup cooked 2/3 cup cooked 2 medium (2.5” across) 2 medium (5” long) 1 cup</p>	<p>Donuts, sweet rolls, Pop-Tarts[®], or other pastries</p>
<p>Cereals</p> <ul style="list-style-type: none"> ➤ <u>Unsweetened</u> cereals (wet or eaten dry as a snack) <ul style="list-style-type: none"> • Cheerios[®], cornflakes, Rice Krispies[®], Rice Chex[®], Spoonfuls, Special K[®], Kix[®], puffed rice or wheat • Hot cereals: cream of rice or wheat, grits, oatmeal 	<p>1 ½ cup</p> <p>1 cup cooked</p>	<p>Sugary cereals, high fiber cereals (> 3 grams fiber/serving), bran cereals</p> <p>Flavored hot cereals</p>
tsp = teaspoon, T = tablespoon, oz = ounce, C = cup, “ = inches		
Starchy vegetables		
<ul style="list-style-type: none"> ➤ Starchy vegetables: <ul style="list-style-type: none"> • Potatoes • Sweet potatoes • Yams • Plantain • Baked french fries 	<p>1 medium or 1 cup</p> <p>1 cup</p>	<ul style="list-style-type: none"> ➤ Creamed vegetables. ➤ Some people (particularly those without a colon) may do better limiting legumes (such as lima beans, kidney beans, black beans, pinto beans, refried beans, etc.).
Fruits		
<ul style="list-style-type: none"> ➤ Bananas ➤ <u>Unsweetened</u> canned fruits (applesauce, pears, peaches, mandarin oranges, apricots, cherries, plums, etc.) 	<p>1 large ½ cup</p>	<ul style="list-style-type: none"> ➤ Dried fruits, fruit canned in syrup ➤ Fruit juice, fruit drinks, watch out for high fructose corn syrup in drinks (Ex. Capri-Sun[®], canned fruits in syrup, etc.)

Snacks		
<ul style="list-style-type: none"> ➤ Crackers – saltines, club, soda, etc. ➤ Pretzels ➤ Matzoh ➤ Bagel snack crackers ➤ Corn or potato chips, reduced fat potato chips ➤ Rice cakes 	<p>12 1.5 oz 1.5 oz 1.5 oz 1.5 oz (30-40 chips) 4 (4” across)</p>	<ul style="list-style-type: none"> ➤ Granola bars, flavor-coated popcorns (Cracker Jacks®). ➤ Those without a colon may do better limiting high fiber snacks such as popcorn.
Desserts		
<ul style="list-style-type: none"> ➤ Animal crackers ➤ Graham crackers ➤ Gingersnaps ➤ Vanilla wafers ➤ Angel food cake, shortbread, plain pound cake ➤ Cake donuts – <u>no icing</u> ➤ Marshmallows 	<p>16 6 (2.5” square) 6 11 2 oz (1” thick slice) 1 medium (4” across) 6</p>	<ul style="list-style-type: none"> ➤ Iced cakes, cookies, snack cakes (Little Debbie’s®), pie, brownies, donuts ➤ Ice cream, sherbet, popsicles ➤ Pudding ➤ Candies, frosted marshmallows, sweetened gelatin (Jello®), fruit snacks, etc.
tsp = teaspoon, T = tablespoon, oz = ounce, C = cup, “ = inches		
Veggie choices (non-starchy)		
GOOD CHOICES	How much is 1 SGU	AVOID OR LIMIT (see FODMAPS below)
<ul style="list-style-type: none"> ➤ Leafy greens (romaine, spinach, red lettuce, collard greens, kale, etc) ➤ Cucumber ➤ Green, red or yellow pepper ➤ Cooked carrots, squash, zucchini, eggplant, turnip or beets ➤ Radishes ➤ Tomatoes 	<p>1 cup fresh or ½ cup cooked 8 slices ¼ cup ½ cup 3 whole ¼ large or 3 slices</p>	<p>Creamed vegetables, broccoli, Brussels sprouts, onions, leeks</p>
Protein Choices		
GOOD CHOICES	How much is 1 SGU?	AVOID
Meats/ fish/ poultry		
<ul style="list-style-type: none"> ➤ Poultry (chicken or turkey), beef (flank steak, tenderloin, ground beef, meatloaf, etc), pork (ham, Canadian bacon, pork chop, etc) ➤ Fish, fresh or canned ➤ Shellfish (clams, crab, lobster, scallops, shrimp, etc) ➤ Game (duck or pheasant, venison, buffalo/bison) 	<p>2 oz 2 oz 2 oz 2 oz</p>	<p>Heavily fried meats, heavily fried fish, or heavily fried poultry</p>

Dairy / Soy		
<ul style="list-style-type: none"> ➤ Regular cheeses (American, cheddar, Swiss, Monterey jack, mozzarella, feta, etc) ➤ Cottage cheese or ricotta ➤ Plain yogurt or yogurt sweetened with artificial sweeteners ➤ Milk, plain soy milk, buttermilk ➤ Tofu 	<p>2 oz</p> <p>4 oz</p> <p>10 oz</p> <p>1.5 cups</p> <p>2 oz</p>	Highly sweetened yogurts or kefir, chocolate or other flavored milks, cream, half and half, flavored soy milks
Eggs		
<ul style="list-style-type: none"> ➤ Poached, hard or soft cooked, omelet, scrambled 	2 eggs	Eggs prepared with ingredients not allowed
Nuts/ nut butters		
<ul style="list-style-type: none"> ➤ Peanuts, almonds, cashews, pecans, walnuts ➤ Edamame (soybeans) ➤ Peanut, almond, cashew, sunflower seed, or soy butter 	<p>¼ cup</p> <p>½ cup</p> <p>¼ cup (4T)</p>	Nutella [®] , flavored nut butters, nut butters with jam or jelly mixed in
tsp = teaspoon, T = tablespoon, oz = ounce, C = cup, “ = inches		
Fat Choices		
GOOD CHOICES	How much is 1 SGU?	AVOID
<ul style="list-style-type: none"> ➤ Oils, salad dressing (full fat), Miracle Whip[®] ➤ Butter or margarine ➤ Nuts ➤ Nut butters ➤ Cheese ➤ Cream cheese ➤ Avocado ➤ Olives ➤ Sesame paste (tahini) ➤ Bacon ➤ Coconut (shredded) 	<p>1 T</p> <p>1 T</p> <p>2 T</p> <p>2 T</p> <p>2 oz</p> <p>3 T</p> <p>3 oz (2/3 medium)</p> <p>24 large</p> <p>¼ C</p> <p>3 slices</p> <p>3 T</p>	Sweetened cream cheeses (strawberry, honey nut, etc), honey butter, flavored nut butters.
Miscellaneous / Seasonings		
GOOD CHOICES		AVOID
<ul style="list-style-type: none"> ➤ Salt, pepper, herbs, spices ➤ Garlic ➤ Dill pickles ➤ Soy sauce, worchestershire sauce, vinegar ➤ Tabasco or hot pepper sauce ➤ Splenda[®], Equal[®], Sweet 'N Low[®], etc. ➤ Unsweetened cocoa powder 		<p>More than ½ tsp sugar, maple or other syrups, jams, jellies, chocolate or other flavored syrups, honey, molasses, Nutella[®]</p> <p>Sugar alcohols (sorbitol, xylitol, mannitol) in "sugar-free" products such as gum and candy</p>

FLUIDS AND HYDRATION:		
GOOD CHOICES		AVOID
<ul style="list-style-type: none"> ➤ Oral Rehydration solution (WHO formula, Ceralyte[®], Pedialyte[®], etc)* ➤ Soups, broth – limit to 4 oz per day ➤ If allowed: 6oz Lactaid[®] milk ➤ If allowed: 4oz coffee, tea, ice tea <p>*See below for homemade ORS recipes</p>		<ul style="list-style-type: none"> ➤ Avoid more than 4 oz coffee, tea, ice tea ➤ Avoid more than 6 oz Lactaid[®] milk ➤ Flavored coffees or teas, hot cocoa, Ovaltine[®], Nesquik[®] ➤ Fruit juices or fruit drinks (watch out for high fructose corn syrup in drinks), Kool-Aid[®], Tang[®] ➤ Sodas (all kinds) ➤ Alcohol ➤ Water ➤ Sugar free beverages ➤ Supplements such as Boost[®] or Ensure[®].
tsp = teaspoon, T = tablespoon, oz = ounce, C = cup, “ = inches		
FODMAP's: Limit yourself to only 2-3 UNITS total of these foods per week initially. If not well-tolerated (or if these foods come out looking the same as when they went in) you may do better avoiding these foods.		
<ul style="list-style-type: none"> ➤ Apples, pears, oranges, pineapples, melons ➤ Onions, leeks, asparagus, artichokes, cabbage, Brussels sprouts ➤ Broccoli, cauliflower ➤ Corn ➤ Beans ➤ Nuts 		<ul style="list-style-type: none"> 1/2 cup 1/2 cup 1/2 cup 1/4 cup 1/3 cup 1/4 cup

This diet is from the new patient guidebook, "A Patient's Guide to Managing a Short Bowel." To obtain a copy, go to: <http://www.shortbowelsupport.com>.

Homemade Oral Rehydration Solution Recipes (Goal of 20-25g carbohydrate, 75-80mEq Sodium per liter)

Sugar and salt water	<ul style="list-style-type: none"> ➤ 1 quart water ➤ ¾ teaspoon salt ➤ 6 teaspoons sugar ➤ (optional: Crystal Light® to taste) 	
Regular Gatorade®	<ul style="list-style-type: none"> ➤ 1 ½ cups Gatorade® ➤ 2 ½ cups water ➤ ¾ teaspoon salt 	
Chicken Broth	<ul style="list-style-type: none"> ➤ 4 cups water ➤ 1 dry chicken broth cube ➤ ¼ teaspoon salt ➤ 2 tablespoon sugar 	OR <ul style="list-style-type: none"> ➤ 2 cups liquid broth ➤ 2 cups water ➤ 2 tablespoon sugar
Tomato Juice	<ul style="list-style-type: none"> ➤ 2 ½ cups tomato juice ➤ 1 ½ cups water 	

Some common combination foods

Food / Entrée	Serving size	SGU's per serving		
		Complex carb (CC)	Protein (Prot)	Fat
Macaroni and cheese, tuna noodle casserole, spaghetti with meatballs.	1 cup	1 CC	1 Protein	1 Fat
Tuna or chicken salad	1 cup	½ CC	1 Protein	1 Fat
Chow mein (with noodles or rice)	2 cups	1 CC	1 Protein	½ Fat
Cheese or veggie pizza, thin crust	¼ of a 12" pie	1 CC	1 Protein	1 Fat
Pizza with meat topping, thin crust	¼ of a 12" pie	1 CC	1 ½ Protein	1 ½ Fat
Chicken pot pie	1 cup	1 ½ CC	½ Protein	1 ½ Fat
Fast food hamburger	1	1 CC	1 ½ Protein	1 ½ Fat
Submarine sandwich, hoagie, grinder, etc with lean meat (turkey, ham, chicken etc), and cheese	1 sandwich (6" roll)	1 ½ CC	1 ½ Protein	½ Fat
Tacos (hard or soft shell)	3 regular	1 CC	½ Protein	1 Fat

OPTIMIZE YOUR DIET by using the guide for your calorie level				
WITH COLON				
Calorie level	Complex carb (CC) SGU's <i>per day</i>	Protein SGU's <i>per day</i>	Fat SGU's <i>per day</i>	Veggie SGU's <i>per day</i>
1800	7 - 8	4 - 7	2 - 3	1 - 2
2000	7 - 8	5 - 8	2 - 3	1 - 2
2200	8 - 10	5 - 8	2 - 4	1 - 2
2400	9 - 11	6 - 9	3 - 4	1 - 2
2600	10 - 12	6 - 9	3 - 5	1 - 2
2800	11 - 13	7 - 10	3 - 5	1 - 2
3000	12 - 14	8 - 11	4 - 6	1 - 2

WITHOUT COLON				
Calorie level	Complex carb (CC) SGU's <i>per day</i>	Protein SGU's <i>per day</i>	Fat SGU's <i>per day</i>	Veggie SGU's <i>per day</i>
1800	4 - 6	4 - 7	4 - 5	1 - 2
2000	5 - 7	5 - 8	4 - 5	1 - 2
2200	6 - 8	5 - 8	5 - 6	1 - 2
2400	6 - 8	6 - 9	5 - 6	1 - 2
2600	7 - 9	6 - 9	6 - 7	1 - 2
2800	7 - 9	7 - 10	6 - 7	1 - 2
3000	7 - 9	8 - 11	7 - 8	1 - 2

SAMPLE 2000 Calorie Meal Plan

Patients without colon (may have jejunostomies or ileostomies)		Patients with intact colon	
<i>Short gut units (SGU) per day of each group:</i> 5 -7 Complex carb (CC), 5-8 Protein (prot), 5-6 Fat	SGU's	<i>Short gut units (SGU) per day of each group:</i> 7-8 Complex carb (CC), 5-8 Protein (prot), 2-3 Fat	SGU's
Breakfast 2 scrambled eggs 1 English muffin or 2 slices toast 6 oz lactose-free nonfat milk* (if allowed) 1 tablespoon margarine 1-2 teaspoons diet jelly 4 oz coffee* (if allowed)	1 prot, ½ fat 1 CC ½ prot 1 fat	Breakfast 1 cup oatmeal 2 scrambled eggs 1 English muffin or 2 slices toast 6 oz lactose-free nonfat milk* (if allowed) 1-2 teaspoons diet jelly 4 oz coffee* (if allowed)	1 CC 1 prot, ½ fat 1 CC ½ prot
Morning Snack 1 slice bread 2 tablespoons peanut butter ½ banana	½ CC ½ prot, 1 fat ½ CC	Morning Snack 1 slice bread 2 tablespoon peanut butter 1 banana	½ CC ½ prot, 1 fat 1 CC
Lunch 4 oz turkey breast 1 hoagie roll 2 oz cheese 3 slices tomato	1 prot 1 CC 1 prot, 1 fat 1 veggie	Lunch 4 oz turkey breast 1 hoagie roll 1 oz cheese 3 slices tomato	1 prot 1 CC ½ prot, ½ fat 1 veggie
Afternoon Snack 6 crackers 2 oz cheddar cheese	½ CC 1 prot, 1 fat	Afternoon Snack 12 crackers 2 oz cheddar cheese 2 oz deli ham	1 CC 1 prot, 1 fat ½ protein
Dinner 4 oz grilled salmon 1 large baked sweet potato 1/2 tablespoon butter	1 prot 1 CC ½ fat	Dinner 6 oz grilled salmon 1 large baked sweet potato 1 small dinner roll 1 tablespoon butter	1 ½ prot 1 CC ½ CC 1 fat
Evening snack 8 animal crackers	½ CC	Evening snack 16 animal crackers	1 CC

***Appropriate beverage choices and volume with vary between patients. You should discuss your individual hydration plan with your physician and dietitian.**

