

Sucrose Intolerance

Congenital
Sucrase-Isomaltase
Deficiency (CSID)

www.sucroseintolerance.com

Fruits

Fruits Tolerated by Most People with Sucrose Intolerance	Fruits Tolerated by Some People with Sucrose Intolerance	Fruits Tolerated by Few People with Sucrose Intolerance
avocados	persimmons	apples
blackberries	plums	apricots
blueberries	raisins	bananas
boysenberries	watermelon	cantaloupe (rockmelon)
cherries		dates
cranberries, fresh		grapefruits
currants		guava
figs, raw		honeydew melons
gooseberries		mangos
grapes		nectarines
kiwi fruits		oranges
lemons		passion fruits

Fruits Tolerated by Most People with Sucrose Intolerance	Fruits Tolerated by Some People with Sucrose Intolerance	Fruits Tolerated by Few People with Sucrose Intolerance
limes		peaches
loganberries		pineapples
olives		tangelos
papayas		tangerines (mandarin oranges, clementines)
pears		
pomegranates		
prunes		
raspberries		
rhubarbs		
strawberries		

Vegetables

Vegetables and Legumes Tolerated by Most People with Sucrose Intolerance	Vegetables and Legumes Tolerated by Some Sucrose Intolerance	Vegetables and Legumes Tolerated by Few People with Sucrose Intolerance
alfalfa sprouts	edamame soybeans	beets
artichokes, globe*	jicamas	black beans

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arugulas	leeks	black-eyed peas (cowpeas)
asparagus*	okra	butternut/buttercup squashes
bamboo shoots	pumpkins	carrots
bok choy	snow peas	cassavas (yuca)
broccoli*	tempeh	chickpeas (garbanzo beans)
brussels sprouts*	tofu	corn
cabbages*	yellow wax beans	garlic
cauliflower*		green peas
celery		lentils
chard		kidney beans
chicories		lima beans
chives		navy beans
collard greens		onions
cress		parsnips
cucumbers		pinto beans

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eggplants		potatoes
endive		soybeans
green beans		split peas
kale		sweet potatoes
lettuces		yams
mung bean sprouts		
mushrooms		
mustard greens		
peppers (red, yellow, and green)		
radishes		
spaghetti squash		
spinach		
tomatoes		
turnips		
yellow squash (summer)		

Vegetables and Legumes Tolerated by Most People with Sucrose Intolerance	Vegetables and Legumes Tolerated by Some Sucrose Intolerance	Vegetables and Legumes Tolerated by Few People with Sucrose Intolerance
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zucchini (courgettes)

*Artichokes, asparagus, broccoli, brussels sprouts, cabbages, and cauliflower can cause gas in all individuals, not just people with Sucrose Intolerance, so consumption of these foods should be monitored closely.

Starches

Carbohydrates that are higher in fiber, which slows down the rate of digestion, may be better tolerated than more processed carbohydrates. For this reason, it is recommended that someone affected by Sucrose Intolerance choose whole-grain bread instead of white bread, whole-grain breakfast cereals (made with whole oats, barley, or bran) instead of more processed cereals. It is also recommended that those affected by Sucrose Intolerance choose whole-wheat pasta, quinoa, lentils, brown rice, or wild rice instead of processed grains like white rice. It is important to read food labels carefully because some whole-grain products may have added sugars, including sucrose.

Since the digestion of starch begins in the mouth with salivary amylase (a digestive enzyme), it is important to thoroughly chew starchy foods. The more a food containing starch is chewed, the greater the exposure the starch has to the salivary amylase enzyme, which allows for more starch to be broken down and digested.

Adding fat and protein along with starches may enhance starch tolerance by slowing the digestive process and allowing more time for ingested food to pass through the small intestine and be exposed to digestive intestinal enzymes. For example, when eating a potato, add sour cream, cheese, or butter.

As people with CSID grow older and their digestive tract lengthens, they can most likely increase the amount of starch in their diet.

Meats and Other Sources of Protein

Most individuals with CSID can eat plainly prepared sources of protein, such as beef, pork, lamb, fish, turkey, chicken, and eggs. A plain preparation refers to cooking without breading, sauces, or seasonings. Protein sources can be cooked with butter, oils, salt and pepper. However, many processed meats, such as bacon, sausage, luncheon meat, deli meat, liverwurst, and pâté, are cured with sucrose or have starch fillers and should be avoided. Once your sucrose and starch tolerance levels have been established, these food items may be reintroduced (one new food every three to five days).

Nuts and nut butters can be a great source of calories for an individual with Sucrose Intolerance. Some nuts are higher in sucrose and starch, however, and should be avoided initially. Nuts and nut butters that are generally tolerated include almonds, Brazil nuts, hazelnuts, macadamia nuts, peanuts, pecans, pumpkin seeds, flax seeds, almond butter, and peanut butter. Legumes and beans are high in starch and should be avoided until your level of starch tolerance has been established. Most individuals with Sucrose Intolerance can tolerate tofu.

Dairy

Dairy products like cow's milk, ricotta cheese, plain cottage cheese, sour cream, butter, cream, whipping cream, and hard cheeses (cheddar, Colby, mozzarella, parmesan, provolone, and Swiss) are foods most

individuals with CSID can eat. One should inspect food labels and ingredients in processed cheeses or cheese products since these foods may contain sucrose or starch fillers and should be avoided.

Plain, unsweetened yogurt, yogurt sweetened with dextrose, and yogurt sweetened with fructose are dairy products that most CSID patients can tolerate. Many affected individuals choose to eat full-fat dairy products to ensure they are getting enough calories.

A minority of individuals with CSID also have lactose intolerance. Those who are lactose intolerant should consult their physician or registered dietitian to see if milk products can be tolerated.

Fats

In general, most fats and oils, such as butter, margarine, olive oil, and vegetable oil, can be tolerated without restriction. With regard to margarines, it is always a good idea to read labels carefully for potential starch or sucrose content. Olives and avocados are high in fat and may be beneficial to those who need to preserve a high calorie intake.

Beverages

Typically, individuals with CSID can tolerate milk, diet soda, water, and homemade limeade or lemonade made with fresh juice and fructose or dextrose. Many can tolerate regular sodas (non-diet) that are sweetened with high fructose corn syrup. Sweetened sodas should only be consumed under the advice of a registered dietitian or physician.

Seasonings

In general, most people with CSID can tolerate salt and pepper, as well as fresh herbs. However, many spices may contain sugar or starch fillers, so one should read the labels of spices carefully. It may be best to avoid seasonings initially during the two-week elimination diet. Once your sucrose and starch tolerance levels have been established, herbs and spices may be added back to your diet. Remember to only add one new food (herb or spice) every three to five days to best determine your ability to tolerate it.

Other Tips

Parents or caregivers have noticed a few trends that have contributed to raising tolerance levels when adding starch to the diet.

First, thoroughly chew food. For example, chew a bite of starchy food 30 times before swallowing. Salivary amylase is the first enzyme to break down starch, so starchy foods break down more easily if exposed to salivary amylase in the mouth for an extended period. The more a food is chewed, the greater the exposure of the starchy food to this digestive enzyme.

Second, the combination of a high-starch food with a fatty food at the same time of ingestion assists in digestion; for example, combining cheese with a starchy vegetable. The amount of time an ingested food spends in the small intestine affects starch digestion. Foods with a high-fat content are processed more slowly and allow the starch to have more exposure to the pancreatic enzyme amylase, isomaltase, and maltase-glucoamylase in the small intestine.

Working with a registered dietitian who has experience with Sucrose Intolerance is crucial for dietary success. Registered dietitians can demonstrate how to effectively write and manage a food log or diary and how to add foods to the diet. They can also use their networks of fellow registered dietitians who may have experience with low-sucrose diets. At first, the list of food choices for someone with Sucrose Intolerance may seem very limited, but rest assured that, over time and close monitoring of specific foods and related symptoms, the list of acceptable foods you can tolerate will grow substantially.