

## Modified Fiber Diet (Post-intestinal Resection Diet)

After removal of any part of the intestine there is a period of adaptation. This adaptation takes two forms: compensation of the remaining intestine for the portion of intestine lost and restoration of the normal intestinal flora. The length of time to achieve adaptation is highly dependent on the type and amount of intestine lost. Losing the sigmoid colon alone does not have any long term consequences and adaptation takes about 10 days. Adaptation to the loss of the terminal ileum with the ileocecal valve can take several weeks. Adaptation to an extensive small bowel resection (several feet) takes up to nine months.

During the adaptation process there are some foods that can help the body to restore the intestinal flora and adapt faster than others. Protein in the form of meat, fish, fowl, eggs, and cheese is essential for wound healing in general. The specific component of the diet that has an impact on intestinal adaptation is the source of dietary fiber.

Water soluble fibers are those used by plants to store energy, usually in pith cavities or fruits. Pectin is an example of a water soluble fiber, which is present in various fruits including apples. Water soluble fibers delay emptying of the stomach and delay movement of food and digestive juices through the intestine. When these fibers reach the colon, or ileal pouch, they are easily fermented by bacteria. The bacterial fermentation of fiber leads to the production of short chain fatty acids: butyrate, propionate and acetate. These fatty acids promote absorption of water and salts by the intestine, thereby decrease increase the consistency of stool, i.e. less watery. This explains the rationale for the BRAT diet used in babies with diarrhea: Banana, Apple (sauce), Rice, and Toast.

Water insoluble fibers are typically found in the cortex of plants, in grains, and legumes. One example of water insoluble fiber is cellulose (paper). Foods high in cellulosic fibers, such as bran, have some of the opposite effects on the intestine: they speed up transit and are poorly fermented by bacteria. Thus, these fibers produce bulk in stool which is of help for constipation. Fiber differs according to its plant source. The role of in-soluble fiber is to produce rapid transit through the intestine and increase bulk.

The next page is a list of sources of dietary fiber to help guide your selections. If any of these do not agree with you keep a record and try them at a later date. It may just not be time to foods such as dairy products into your diet. Remember to drink plenty of fluids. You should consume 6 to 8 glasses (ten ounces x 6-8= 1,800-2,400 cc) of water daily.

## Foods

Listed below are sources of dietary fiber recommended by the medical team at Surgical Consult Services, which will help guide you with your food selections. Some considerations as you re-introduce certain food back into your diet include:

- If any of these do not agree with you, keep a record and try them at a later date. It simply just may not be time to introduce certain foods, such as dairy products, into your diet. Try again a couple of days later.
- Drink plenty of fluids – consume six to eight glasses of water daily

Some foods **best tolerated** immediately after surgery:

- Asparagus tips/cooked
- Acorn squash
- Agar
- Apples (peeled, cooked or baked)
- Avocado
- Banana
- Beets (cut and canned)
- Canned apricots
- Canned pears
- Canned, whole asparagus spears
- Catsup/ketchup
- Converted rice
- Cooked carrots
- Cream of mushroom soup
- Creamy peanut butter
- Flaxseeds
- Ginger snaps
- Grapefruit – pink or white (peeled)
- Green beans
- Guar
- **Kanana** banana flakes
- Locust-bean gum
- Mucilages
- Oatmeal (well-cooked/hot)
- Orange/citrus fiber
- Oranges (peeled)
- Pasta
- Pectin
- Psyllium
- Pumpkin
- Seaweed

- Sugar cookies
- Sweet potatoes/ yams
- Watermelon
- White potatoes (baked/boiled)

Foods **not** recommended immediately after surgery include:\*

- Brown rice
- Cabbage
- Celery
- Chestnuts, bean sprouts, etc.
- Chinese vegetables bamboo shoots in water
- Coconut
- Coleslaw
- Corn
- Cucumbers
- Dried fruit
- Foods with whole seeds or kernels (including sunflower, quinoa, etc.)
- Fruits with seeds
- Grapes (all varieties)
- Green peppers (all colors)
- Lettuce
- Mushrooms
- Nuts
- Olives
- Onions
- Pickles
- Pineapple
- Popped corn
- Seeds (such as sunflower, poppy, etc.)
- Radishes
- Raw fruits and vegetables
- Salad
- Salad greens
- Tomatoes
- Whole grain breads

\*Foods not recommended for people with strictures and /or recurrent obstructions include dried fruits (apricots, prunes etc.), and most of the food that is in the “not recommended” list, above.