

Medical Nutrition Therapy Diet: High Fiber Diet

Purpose

- a. Nutrition Indicators: Constipation, increased colonic pressure, fever, abdominal pain, gastrointestinal bleeding, elevated white blood cell count
- b. Criteria to Assign the Diet: Diagnosis of diverticulosis or diverticulitis, high risk of diverticulosis or diverticulitis, constipation
- c. Rationale for the Diet: A high fiber diet prevents constipation. When a person is constipated, colonic pressure is increased because bowel movements are more difficult and may require excessive straining. This pressure can cause the fecal matter to exert pressure against the walls of the colon which could in turn create pouches in the wall, called diverticula. These may become infected and inflamed, as in diverticulitis.

Population

- a. Overview: Anyone can develop diverticulosis and diverticulitis but it is most common in Western and industrialized countries. Incidence increases with age and is also associated with obesity, decreased physical activity, steroids, alcohol and caffeine intake, and cigarette smoking.
- b. Disease Process: Diverticula develop in the colon due to pressure exerted on the walls of the colon. When motility is hindered, waste products can be trapped and can exert pressure on the walls of the colon. This is increased by constipation because excessive straining to attempt a bowel movement occurs. The pressure on the walls of the colon can cause small pouches, or diverticula, to develop. Food stuffs and bacteria may get stuck in these pouches and become infected, which is diverticulitis.
- c. Biochemical and Nutrient Needs: A patient with diverticulosis does not have any special nutrient needs other than a high fiber diet. They are not at any more risk for malnutrition. They may need to consume a fiber supplement in order to consume adequate fiber.

General Guidelines

- a. Nutrition Rx: A diet of 6 to 10 grams above the recommended 20-35 grams fiber a day is prescribed.
- b. Adequacy of Nutrition Rx: This diet does not include changes in other nutrients and could be followed not only to treat diverticulosis/diverticulitis but also to prevent it.
- c. Goals: This diet aims to reduce symptoms of diverticulosis/diverticulitis while preventing any new diverticula from forming.
- d. Meet the DRI: This diet does not alter the consumption of any other nutrients, so they DRIs should still be met. In this diet, fiber consumption

ranges from 26 to 41 grams per day. All of these values meet or exceed the DRI for fiber.

Educational Material

- a. Nutrition Therapy: Patient must understand that increasing their fiber drastically in a short period of time can cause GI distress. The patient should begin making small adjustments and adding fiber a little at a time.
- b. Ideas for Compliance: Providing educational materials explaining the many other benefits of eating a high fiber diet. Adding fiber to well-liked treats, such as milkshakes.

Sample Menu

- a. Foods Recommended: Fruits, vegetables, whole or unrefined grains, legumes
- b. Foods to Avoid: Caraway seeds, nuts, popcorn hulls, sunflower, pumpkin, and sesame seeds, possibly foods with small seeds such as tomatoes, cucumbers, strawberries
- c. Example of a Meal Plan

Breakfast: $\frac{3}{4}$ cup bran flakes cereal, $\frac{1}{2}$ cup skim milk, 1 medium apple

Snack: 1 medium pear, 1 oz. whole wheat crackers, 1 oz. cheese

Lunch: 3 oz. baked salmon with 1 cup cooked lentils, 1 side salad, 1 whole-wheat roll

Snack: Celery with creamy peanut butter and raisins

Dinner: Whole-wheat spaghetti with sautéed peppers, onions, and spinach, side salad, whole wheat garlic bread, $\frac{1}{2}$ cup strawberries with yogurt and granola

Websites

<http://www.mayoclinic.com/health/high-fiber-foods/nu00582>

<http://www.mypyramid.gov/>

<http://www.eatright.org/Public/content.aspx?id=6843>

<http://digestive.niddk.nih.gov/ddiseases/pubs/diverticulosis/>

<http://www.mayoclinic.com/health/diverticulitis/ds00070>

References

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