

Medical Nutrition Therapy Diet

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Chronic Pancreatitis

1. Purpose

a. Nutrition Indicators

Chronic weight loss, diarrhea, nausea, vomiting, fatty or oily stools, pale or clay-colored stools

b. Criteria to Assign the Diet

Steatorrhea, malnutrition, weight loss.

c. Rationale for Diet

The object of the therapy is to prevent further damage to the pancreas, forestall further attacks of acute inflammation, alleviate pain, treat steatorrhea, and correct malnutrition, preventing weight loss and promoting weight gain as appropriate.

2. Population

a. Overview

Chronic pancreatitis is the inflammation of the pancreas that does not heal or improve, gets worse over time, and leads to permanent damage.

b. Disease Process

When inflammation and scarring of the pancreas occur, the organ is no longer able to make the right amount of enzymes. As a result, your body may be unable to digest fat and other important nutrients. This condition is most often caused by alcohol abuse over many years. Other conditions that can be linked to chronic pancreatitis include autoimmune problems, blockage of the pancreatic duct, complications of cystic fibrosis, hypertriglyceridemia, hyperparathyroidism, and use of certain medications. It occurs more frequently in men than in women and usually develops in people ages 30-40.

c. Biochemical and Nutrient Needs

Pancreatic enzymes such as Viokase, Pancrease, or Cotazym are prescribed to improve digestion and absorption. The patient should drink plenty of fluids, eat a moderate to low-fat diet, eat small, frequent meals, get enough vitamins and calcium in the diet, and avoid alcohol and caffeine. To promote weight gain, the level of fat in the diet should be the maximum a patient can tolerate without increased steatorrhea or pain, medium-chain triglycerides may be added to the diet since they don't require lipase for digestion. Water soluble vitamins or parenteral administration of vitamin B12 may be necessary.

3. General Guidelines

a. Nutrition Rx

low to moderate fat intake, high vitamin and calcium content, water soluble vitamins or parenteral feeding if needed, adequate fluid intake. No caffeine or alcohol.

- b. Adequacy of Nutrition Rx
low on fat, but medium-chain triglycerides can be added to the diet if other fats not tolerated.
- c. Goals
Prevent further damage to the pancreas, forestall further attacks of acute inflammation, alleviate pain, treat steatorrhea, and correct malnutrition, preventing weight loss and promoting weight gain as appropriate
- d. Does it Meet DRI
Yes, the only nutrient sometimes restricted is fat.

4. Education Material

- a. Nutrition Therapy
Education on the essential nutrients for avoiding further liver damage, malnutrition, and weight loss, and what foods to avoid.
- b. Ideas for Compliance
Goal setting, food journals, education on the negative health effects of non-compliance.

5. Sample Menu

- a. Foods Recommended
whole grains, dark leafy greens, fruits, vegetables, lean meats, cold-water fish, tofu, olive oil and vegetable oil
- b. Foods to Avoid
Alcohol, caffeine, refined foods (white breads, pastas, sugar), fewer red meats, trans-fatty acids, high-fat foods.
- c. Example of a meal plan
Breakfast: egg white omelette with fat-free cheese and spinach, strawberries on the side
Lunch: Turkey sandwich with lettuce, avocado, tomato, and honey mustard dressing, side salad with mixed dark leafy greens and low fat dressing, apple
Dinner: Veggie-Stir fry with tofu and rice, dessert of low-fat yogurt with fruit and granola.

6. Websites

- a. Organizations with Websites
<http://www.mayoclinic.com/health/pancreatitis/DS00371>

<http://www.umm.edu/altmed/articles/pancreatitis-000122.htm>

http://my.clevelandclinic.org/disorders/pancreatitis/dd_overview.aspx

b. Government Websites

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

<http://www.nlm.nih.gov/medlineplus/ency/article/000221.htm>

7. References

a. Journal articles references

Steer, M. et al. Chronic Pancreatitis. *The New England Journal of Medicine*, Volume 332, 1995.

Layer, P. et al. The different courses of early- and late-onset idiopathic and alcoholic chronic pancreatitis. *Gastroenterology*, Volume 5, 1994.

Babak, E. and Whitcomb, D. Chronic pancreatitis: diagnosis, classification, and new genetic developments. *Gastroenterology*, Volume 120, 2001.