

رواغ اروسیه دارشکه دعام بزشکی و خدمات بهداشتی در مانے ارومیہ

مركز تحقيقات سلامت مواد غذايي و آشاميدني

مدیریت تغذیه در انواع جراحی های چاقی دکتر هادی عبداله زاد دکتر هادی عبداله زاد دکتری تخصصی (Ph.D) علوم تغذیه استاد گروه علوم تغذیه

FOOD-DRUG-HERB INTERACTIONS Common Drugs and Nutrition Implications

FOOD-DRUG-HERB INTERACTIONS

- Before surgery, the patient must stop the use of aspirin, ibuprofen (Advil, Motrin), vitamin E, warfarin (Coumadin), and any other drugs that affect blood clotting.
- Drugs may be used for managing the side effects of surgery.

FOOD-DRUG-HERB INTERACTIONS

 Morbidly obese patients are likely to be deficient in vitamin D prior to surgery because of poor sunlight exposure, less bioavailability of the vitamin when sequestered in fat cells, and inhibited hepatic activation of the vitamin. Vitamin D and calcium are required after bypass.

FOOD-DRUG-HERB INTERACTIONS

 Over-the-counter multivitamin and mineral supplements do not provide adequate amounts of vitamin B12, iron, or fatsoluble vitamins; supplementation must be lifelong to maintain optimal micronutrient status. Absorption of both iron (heme and nonheme) and zinc will be markedly reduced. Deficiencies of vitamin B12, thiamin, and copper are the most frequent deficiencies that can cause neurological changes

Supplements, Herbs, and Botanicals

- Answer questions about the use of herbs and botanicals; ensure that the patient stops using them before surgery.
- After surgery, any herbs and botanical products should be discussed with the medical doctor before use.

NUTRITION EDUCATION, COUNSELING, CARE MANAGEMENT

Preoperative Evaluation

Evaluate:

- all weight-loss attempts and their outcomes
- usual eating patterns and nutritional intake
- frequency of eating away from home
- cooking and shopping patterns
- reasons and motives for bariatric surgery
- knowledge about protein, vitamins, and minerals
- awareness of signs of dehydration; and
- food allergies and intolerances.

- Protein is the priority. It must be eaten first and at each meal, with at least 60 g being consumed per day. Protein supplements may be needed.
- Patients should stop eating at the first sign of fullness.
- Meal intake should be 'A to '/2 cup (4 to 8 tbsp).

- It is essential that the patient eat and sip slowly, take small bites, chew food until liquefied, and limit snacking.
- Discuss methods for blenderizing foods and adjusting reci pes. Thinned baby food, low-fat and sugar-free milk shakes, thinned hot cereals, blenderized soups, vegetable juices, and sugar-free instant breakfast drinks are useful.



- Discuss appropriate quantities and qualities of foods that will be consumed; overeating may stretch the stoma or cause dumping syndrome.
- Increase awareness of mindful eating and satiety.
- Close monitoring is essential to prevent rapid weight loss and subclinical and clinical nutritional deficiencies.

- Emphasize the importance of nutritional supplementation, including calcium, vitamin D, iron, and vitamin B12 in addition to a daily multivitamin and mineral tablet.
- The patient should avoid fasting, as it may cause hypoglycemia.

- Promote adequate sleep, exercise, and lifestyle measures that support a sense of well-being. Encourage exercise to help with weight loss and self-esteem.
- Discuss how to manage dumping syndrome by avoiding simple sugars.

- Most patients lose a significant amount of weight andmaintain their weight losses long term, thereby having an improved quality of life. Unfortunately, between 5% and 30% of patients lose little weight or are unable to maintain their weight losses postoperatively.
- Monitor the patient for substance abuse.

- Preconception and prenatal supplementation are critical for patients who have undergone bariatric surgery and want to have children. Deficiencies of iron, vitamin A, vitamin B12, vitamin K, and folate are associated with severe anemia, con genital abnormalities, low birth weight, and failure to thrive.
- Encourage participation in a support group

Patient Education, Food Safety

 Surgical patients may be vulnerable to foodborne illness; safe food handling and hand washing are essential.

NUTRITION CARE PROCESS MINI CASE STUDY Inadequate Vitamin Intake

Assessment Data

 35-year-old female with history of gastric bypass 6 months ago. She has been having difficulty with intake of protein foods; states she has difficulty chewing and swallowing them. She has not been taking prescribed vitamin-mineral supplement. BMI>50 before surgery; 6month post-operation, BMI 48. Low serum B12 level. Recent complaints of tingling and numbness in extremities

Nutrition Diagnoses (PES)

 inadequate vitamin B12 intake related to inadequate intake and not taking vitaminmineral supplement as evidenced by food and nutrition-related history, low serum B12 level, and symptoms of neurological changes (tingling in hands and feet] Interventions

Interventions

- Food and nutrient delivery: Encourage use of dairy foods, as tolerated, along with protein supplements for dietary vitamin B12.
- Education: Discuss the importance of vitamin B12 from supplemental intake when dietary intake is poor

Interventions

- Counseling: Promote use of acceptable sources of B12 while on the highly restricted bypass protocol. Discuss methods of cooking and preparing protein foods that will make them tolerable.
- Coordination of care: Collaborate with medical team and family members to emphasize improving the diet and lab work every 3

Monitoring and Evaluation

- Monitoring: Use of vitamin-mineral supplements (pill count).
- Evaluation: After 1 month: Has been using the prescribed vitamin supplements. Noted improvement in neurological symptoms; normalized vitamin B12 lab values.

