

Nutritional considerations with antiobesity medications

Almandoz JP, Wadden TA, Tewksbury C et al. Nutritional considerations with antiobesity medications.

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Background:

Current anti-obesity medications (AOMs) are highly effective at achieving an average weight reduction of 15% or greater with a generally favorable safety profile. However, evidence to guide nutritional recommendations for the patient population using this treatment regimen is limited to studies of individuals using very-low calorie diets (VLCDs) or undergoing bariatric surgery for weight loss. This narrative review aims to provide clinicians who are treating patients taking AOMs with guidance around nutritional assessment, management, counseling and monitoring for nutritional deficiency, to support patients' efforts to achieve a healthier lifestyle and optimize outcomes during the weight loss process. A summary of the seven core dietary areas is below.

Dietary Component	Nutritional Recommendations	Special Considerations	Risks of insufficient intake
Energy	Energy goals for weight loss vary based on factors such as age, sex, body weight and physical activity and therefore minimum energy goals should be personalized. Intakes recommended as safe during weight reduction: Women: 1200 to 1500 kcal/day Men: 1500 to 1800 kcal/day	A healthy dietary pattern should emphasize vegetables, fruits, whole grains, lean protein foods, low-fat dairy and healthy fats. If VLCDs are used, they should be done under medical supervision. Diets <800 kcal/day typically include meal replacement products (i.e., formulated foods supplemented with protein, vitamins, and minerals).	Poor diet quality may lead to micronutrient deficiency. VLCDs pose a risk of dehydration, electrolyte imbalance and cholelithiasis Overall energy deficiency can lead to decreased strength and functional capacity.
Protein	Based on the acceptable macronutrient distribution range (AMDR), energy intake from protein corresponds to 10-35% of total calories. USDA guidelines minimum: Women: 46 g/d, Men: 56 g/day RDA – Healthy adults of normal weight (0.8 g/kg/day) Adults with obesity during weight reduction (>60-75 g/day and up to 1.5 g/kg/day) Some bariatric procedures: >1.5 g/kg/day	Prioritize intake of protein-rich foods first. Sources include beans, peas, lentils, nuts, seeds, soy products, seafood, lean meat, poultry, low-fat dairy foods, and eggs. Meal replacement products typically containing 15-25 g protein per serving (in the form of shakes, bars or other formulated foods) can be used when intake from whole food is insufficient	Loss of lean body mass, weakness, edema, hair loss, skin changes.
Carbohydrates	Based on the acceptable macronutrient distribution range (AMDR) for healthy adults, energy intake from carbohydrates corresponds to 45-65% of total calories. – Women at 1200-1500 kcal/day, should consume 135-245 g/day of carbohydrates. – Men at 1500-1800 kcal/day, should consume 170-290 g/day of carbohydrates.	Attention to consumption of micronutrient-rich, high-fiber vegetables and fruits. For patients who prefer a low carbohydrate (ketogenic) diet, adequate hydration is necessary.	Low carbohydrate diets (ketogenic) increase ketone body production which may promote increased urination, with dehydration and electrolyte imbalance.
Dietary Fat	The AMDR for fat in healthy adults corresponds to 20-35% of total calories: Women: 25 to 60 g/day; 1200–1500 kcal/day Men: 35 to 70 g/day; 1500–1800 kcal/day	Prioritize intake of foods rich in n-3 polyunsaturated fatty acids (e.g., flaxseed, soybean or canola oil, or fatty fish), n-6 polyunsaturated fatty acids (e.g., nuts, seeds, and vegetable oils), or monounsaturated fatty acids (e.g., olive oil).	Limit the intake of sources of saturated fat (e.g., animal fats and tropical oils), fried and high fat foods. Essential fatty acid deficiency can lead to dry hair, hair loss and impaired wound healing
Dietary Fiber	Women: 21–25 g/day; Men: 30–38 g/day amounts vary based on age	Good sources include fruits, vegetables, and whole grains; soluble, nonfermentable, gel-forming fibers such as psyllium and insoluble fibers (coarse wheat bran) can increase stool water content and bulk, which may aid stool passage. Consider use of a fiber supplement. Increase fluid intake.	Constipation
Fluids	Consumption of >2 to 3 L/day	Consume water, low-calorie beverages (such as unsweetened coffee or tea), or nutrient-dense beverages (such as low-fat, dairy or soy alternatives). Limit alcohol intake. Caffeine intake can have a diuretic effect.	Inadequate fluid intake can lead to hypotension, tachycardia and dizziness.
Micronutrients	Increase intake of food sources with micronutrients of concern such as vegetables, fruits, low-fat dairy, and fortified soy alternatives. Supplementation with a complete multivitamin, calcium, and vitamin D to help reduce risk of deficiency.	Micronutrients of concern for US adults: potassium, calcium, vitamin D, iron in child-bearing women, and vitamin B12 in older adults.	Malnutrition, fatigue, reduced physical function, impaired mood and cognition, immune dysfunction, and multiple other complications.

Conclusion:

The use of AOMs to treat obesity leads to decreased appetite and food consumption which may impact the dietary intake of energy, carbohydrates, protein, fat, fiber, fluids and micronutrients. A thorough ongoing nutritional and medical assessment can recognize issues of concern and help health care providers guide management and counseling to facilitate a healthy weight loss journey, including support when medication side-effects occur. Psychopathology should not be overlooked as weight bias stigma, depression and suicide ideation may require support services. Additional research specific to nutrition and patients taking GLP-1 medication would be beneficial.

Summary prepared by Nestlé Health Science

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