Addressing Misconceptions in Obesity: Evidence-Based Treatment Approaches

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This activity is supported by an educational grant from Novo Nordisk Inc.

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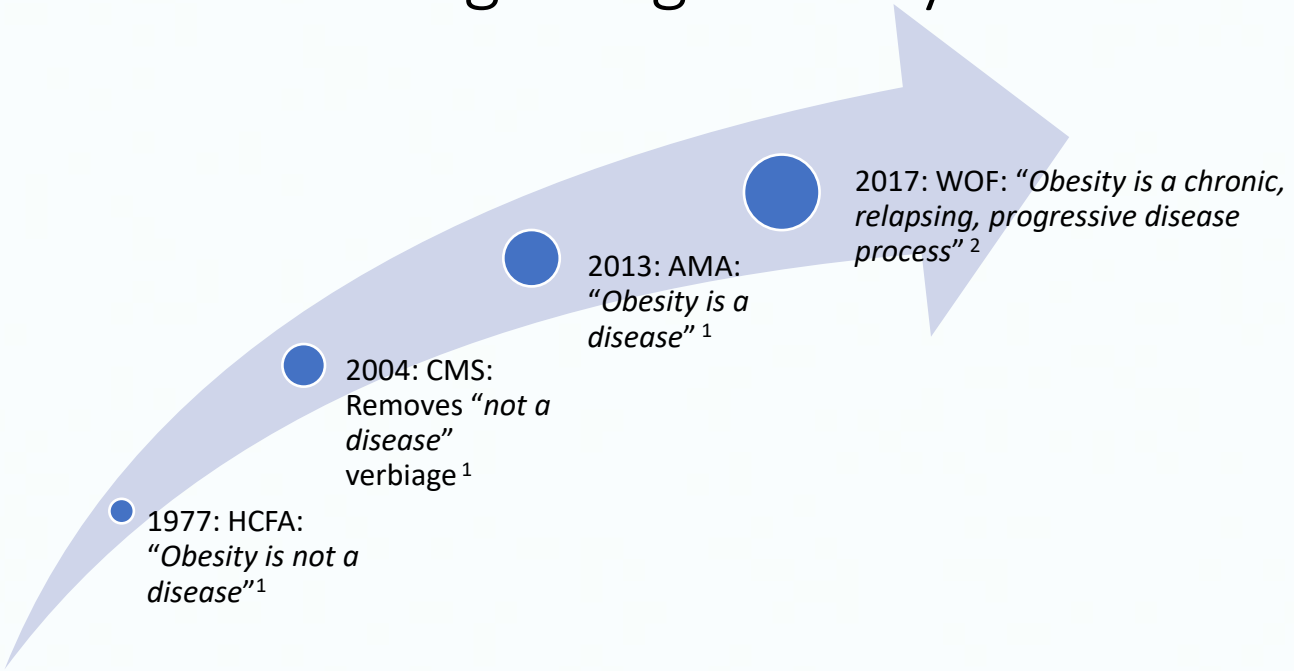
Obesity Definition: Obesity Medicine Association

"Obesity is defined as a chronic, progressive, relapsing, and treatable multi-factorial, neurobehavioral disease, wherein an increase in body fat promotes adipose tissue dysfunction and abnormal fat mass physical forces, resulting in adverse metabolic, biomechanical, and psychosocial health consequences."

Fitch AK, et al. *Obes Pillars*. 2022;1:100004.

Key Milestones in Recognizing Obesity as a Disease



AMA: American Medical Association; CMS, Centers for Medicare and Medicaid Services; HCFA, Healthcare Financing Administration; WOF, World Obesity Federation

1. Kyle TK, et al. *Endocrinol Metab Clin North Am*. 2016;45(3):511-520.
2. Bray GA, et al. *Obes Rev*. 2017;18(7):715-723.

Diagnostic Codes

Overweight and Obesity E66

- **Begin with coding complications, if applicable (i.e., obesity complicating pregnancy, etc.)**
- **Then, consider secondary code to identify BMI**

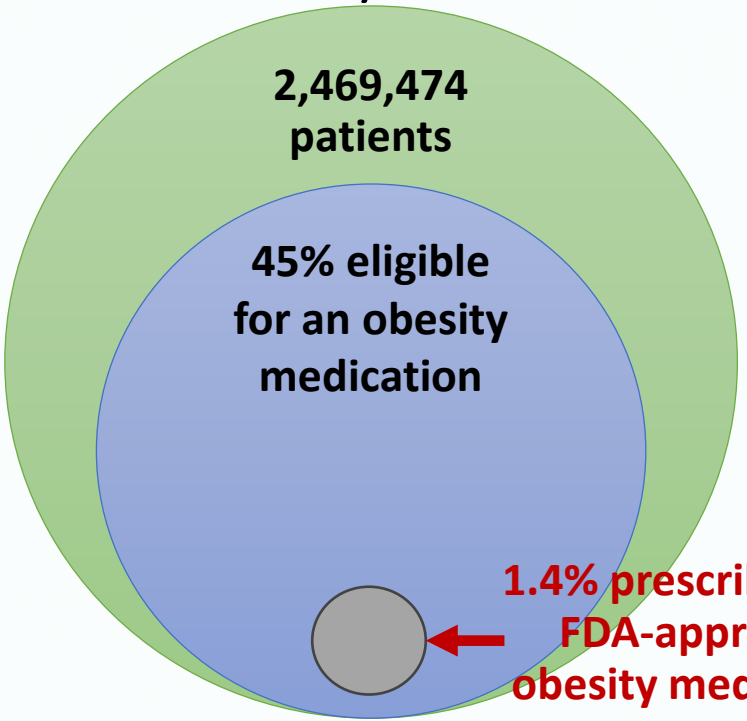
E66.0: Obesity due to excess calories (*unbillable, consider subcategory codes below*)

- **E66.01: Morbid (severe) obesity due to excess calories**
- **E66.09: Other obesity due to excess calories**
- **E66.1: Drug-induced obesity**
- **E66.2: Morbid (severe) obesity with alveolar hypoventilation**
- **E66.3: Overweight**
- **E66.8: Other obesity**
- **E66.9: Obesity, unspecified**

Fitch AK, et al. *Obes Pillars*. 2022;1:100004.

Treatment with Obesity Medications

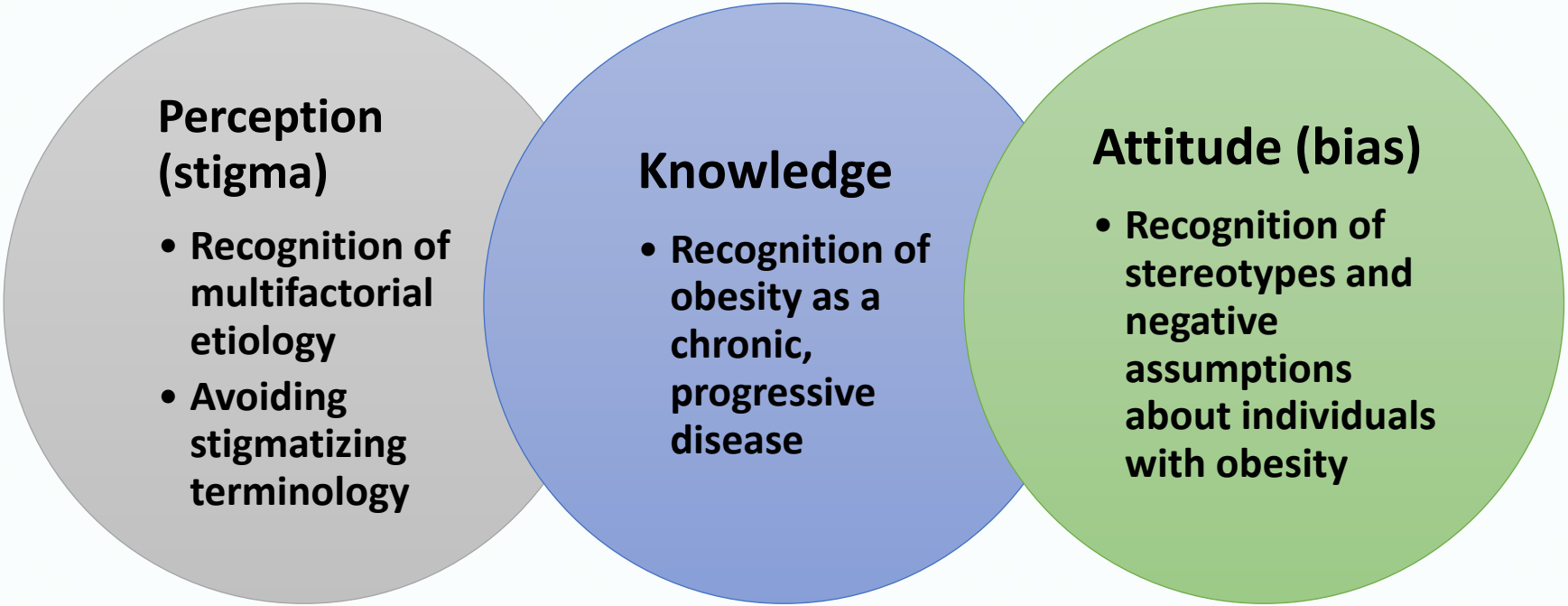
Cross-sectional, retrospective analysis of the Mass General Brigham (MGB) healthcare system (1/1/2018 to 1/1/2023)



Of those with prior MACE (9%), only 1% prescribed an FDA-approved obesity medication

Ostrominski JW, et al. *Obesity (Silver Spring)*. 2025;33(2):365-384.

Steps to Combat Clinician Inertia



Ginsburg BM, et al. *StatPearls*. Treasure Island (FL): StatPearls Publishing; 2024.

Purpose and Overview

- The Obesity Medicine Association (OMA) has released a series of Clinical Practice Statements in recent years
  - *Thirty Obesity Myths, Misunderstandings, and/or Oversimplifications: An OMA Clinical Practice Statement 2022*[1]
  - *Anti-Obesity Medications and Investigational Agents: An OMA Clinical Practice Statement 2022*[2]
  - Others
- Companion social media resource video blog (vlog) series geared towards patients addressing myths/misconceptions

1. Bays HE, et al. *Obes Pillars*. 2022;3:100034.
2. Bays HE, et al. *Obes Pillars*. 2022;2:100018.

Misconception:
“Obesity is a choice, not a disease”

Obesity as a Disease Checklist

Diagnosed by

- ✓ Signs/symptoms of illness, sickness or ailment
- ✓ Adverse anatomic changes to an organ/body system
- ✓ Dysfunction of an organ/body system

Caused by

- ✓ Genetic or development errors
- ✓ Inflammation or infection
- ✓ Medication adverse effects
- ✓ Nutritional abnormalities
- ✓ Unfavorable environmental or behavioral factors

Managed by

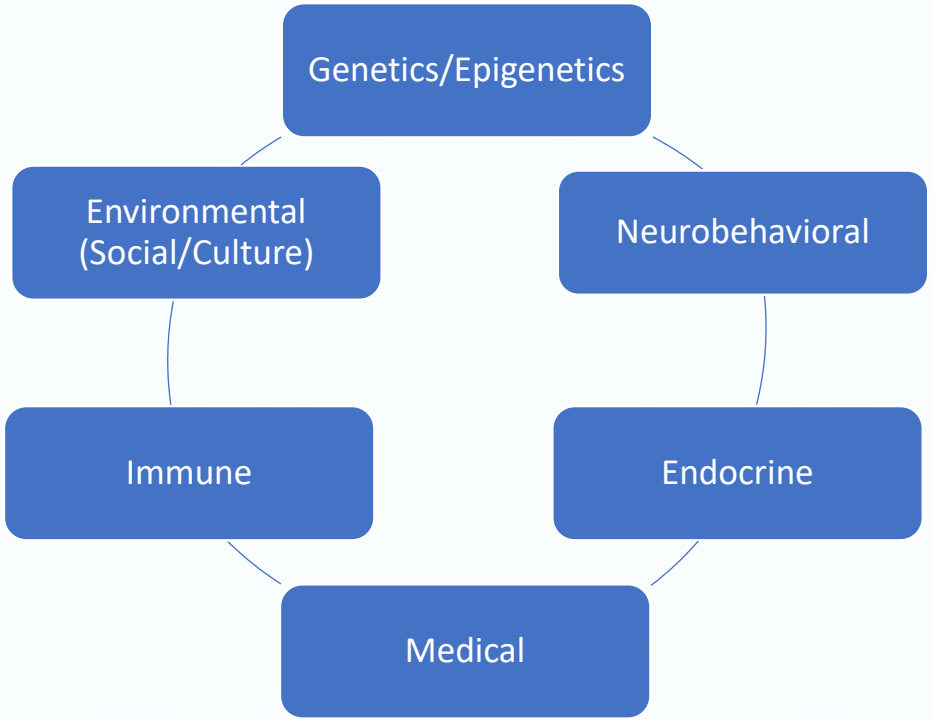
- ✓ Primary care clinicians
- ✓ Specialists
- ✓ Multidisciplinary team

Treated by

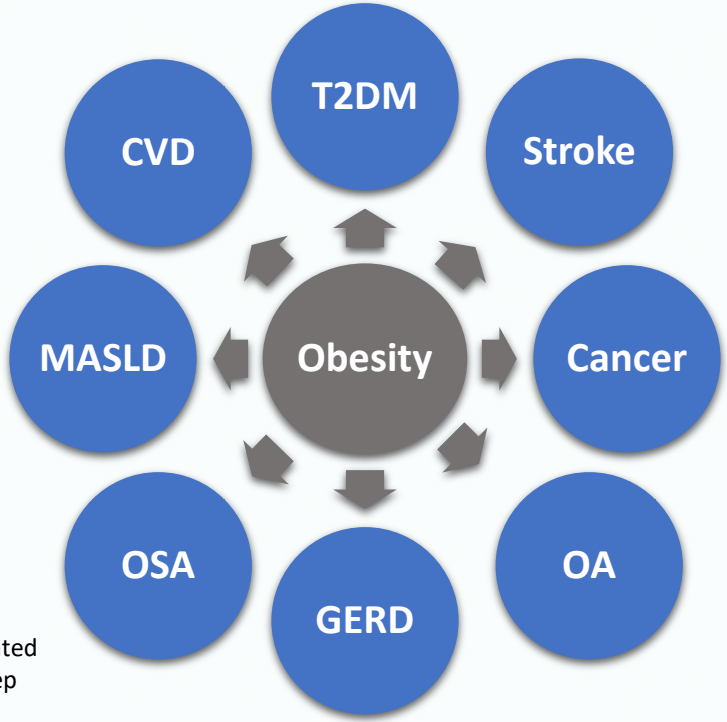
- ✓ Medical nutrition therapy
- ✓ Routine physical activity
- ✓ Behavior modification
- ✓ Medication
- ✓ Surgery
- ✓ Patient education and training

✓ **Contributes to increased morbidity and mortality**

Obesity as a Multifactorial Disease



Health Consequences of Chronic Obesity

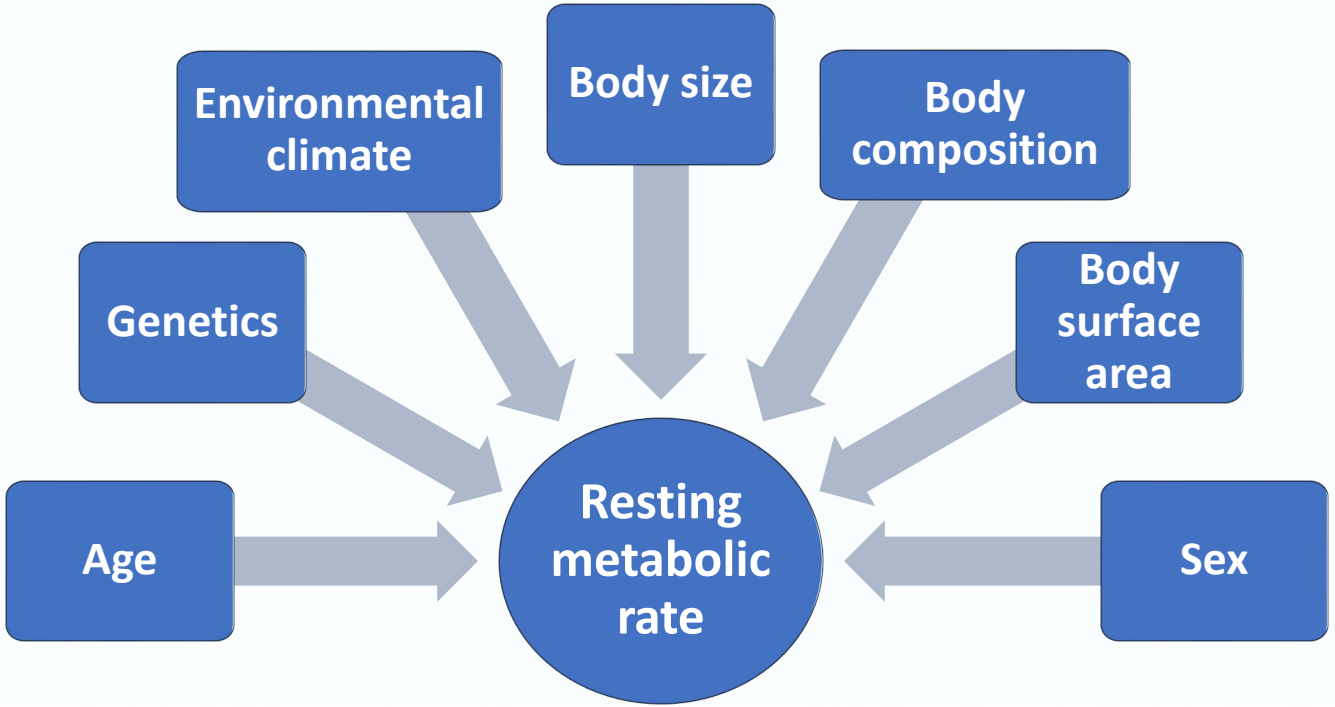


CVD, cardiovascular disease; GERD, gastroesophageal reflux disease; MASLD, metabolic dysfunction-associated liver disease; OA, osteoarthritis; OSA, obstructive sleep apnea; T2DM, type II diabetes mellitus

Fruh SM. *J Am Assoc Nurse Pract*. 2017;29(S1):S3-S14.

Myth:
“Individuals with obesity have low metabolism”

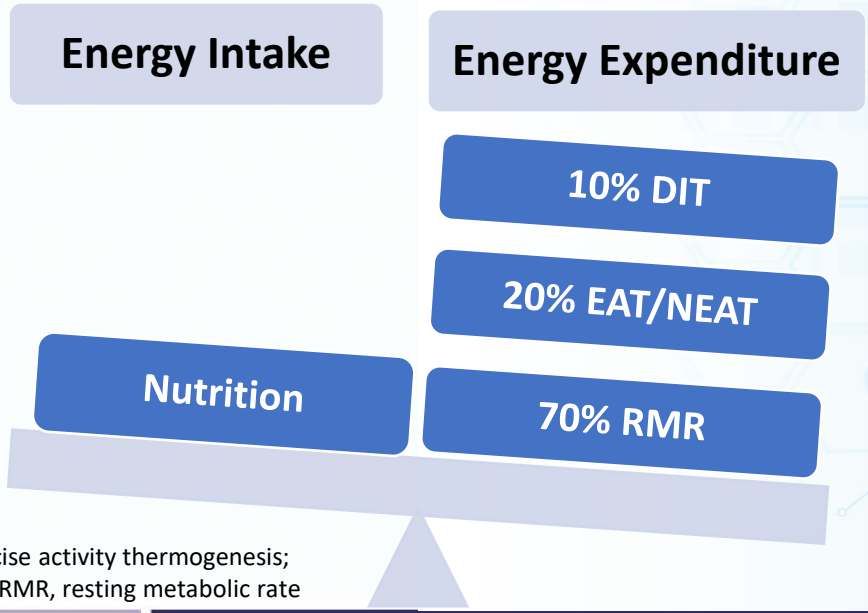
Determinants of Metabolic Rate



Bays HE, et al. *Obes Pillars*. 2022;3:100034.

Body Weight Homeostasis

Individual variation in behavior and genetics play a key role



DIT, diet-induced thermogenesis; EAT, exercise activity thermogenesis; NEAT, non-exercise activity thermogenesis; RMR, resting metabolic rate

Expert Perspective/Key Takeaways

- Obesity is a common, chronic disease with a complex pathophysiology and multifactorial etiology
- Obesity is an independent risk factor for many diseases, including
  - Cancers, various
  - CVD and stroke
  - MASLD
  - Osteoarthritis
  - Obstructive sleep apnea
  - Type 2 diabetes mellitus

Misconception:
“Obesity is classified solely on BMI”

Body Mass Index (BMI)

	BMI*
Normal Weight	18.5-24.9 kg/m^2
Overweight	25.0-29.9 kg/m^2
Class I Obesity	30.0-34.9 kg/m^2
Class II Obesity	35.0-39.9 kg/m^2
Class III Obesity	≥40 kg/m^2

**BMI for a Caucasian population; different cut-off points may be more appropriate for different races*

Fitch AK, et al. *Obes Pillars*. 2022;1:100004.

Waist Circumference

- Waist circumference classification for abdominal obesity
- Abdominal obesity is included in diagnostic criteria for metabolic syndrome

	Females*	Males*
Abdominal Obesity	≥35 inches (88 cm)	≥ 40 inches (102 cm)

**Waist circumference for a Caucasian population; different cut-off points may be more appropriate for different races (e.g., 80 cm for Asian females and 90 cm for Asian males)*

Fitch AK, et al. *Obes Pillars*. 2022;1:100004.

Percent Body Fat

OMA classifications of percent body fat as assessed by dual energy X-ray absorptiometry (DEXA or DXA)

	Females*	Males*
Essential Fat	<15%	<10%
Athlete	15-19%	10-14%
Fitness	20-24%	15-19%
Acceptable	25-29%	20-24%
Pre-Obesity	30-34%	25-29%
Obesity	>35%	>30%

**Percent body fat for a Caucasian population; different cut-off points may be more appropriate for different races*

Fitch AK, et al. *Obes Pillars*. 2022;1:100004.

Obesity Classification

- BMI limitations
  - May not reflect adiposity in patients with increased/decreased muscle mass
  - Males versus females (including postmenopausal women)
  - Racial disparities
- Percent body fat is a more accurate measurement of adiposity than BMI/body weight
- Waist circumference and visceral fat better correlate with risk of cardiometabolic disease than BMI alone

Fitch AK, et al. *Obes Pillars*. 2022;1:100004.

Myth:
“There is no staging system available for determining obesity-related morbidity and mortality”

Edmonton Obesity Staging System (EOSS)

- Clinical staging system that ranks patients with obesity on a 5-point ordinal scale
- Developed to help guide treatment decisions based on obesity-related comorbidity and functional limitations
- Found to independently predict increased mortality and improved clinical utility in assessing obesity-related risk and treatment prioritization

Padwal RS, et al. *CMAJ*. 2011;183(14):E1059-E1066.
Sharma AM, et al. *Int J Obes* (Lond). 2009;33(3):289-295.

Edmonton Obesity Staging System (Cont.)

Score	Criteria
0	No apparent risk factors (e.g., blood pressure, serum lipid and fasting glucose levels WNL), physical symptoms, psychopathology, functional limitations and/or impairment of well-being related to obesity
1	Presence of obesity-related subclinical risk factors (e.g., borderline HTN, impaired fasting glucose levels, elevated levels of liver enzymes), mild physical symptoms (e.g. dyspnea on moderate exertion, occasional aches and pains, fatigue), mild psychopathology, mild functional limitations and/or mild impairment of well-being
2	Presence of established obesity-related chronic disease (e.g., HTN, T2DM, sleep apnea, osteoarthritis), moderate limitations in activities of daily living and/or well-being
3	Established end-organ damage such as MI, HF, stroke, significant psychopathology, significant functional limitations and/or impairment of well-being
4	Severe (potentially end-stage) disabilities from obesity-related chronic diseases, severe disabling psychopathology, severe functional limitations and/or severe impairment of well-being

Padwal RS, et al. *CMAJ*. 2011;183(14):E1059-E1066.
Sharma AM, et al. *Int J Obes* (Lond). 2009;33(3):289-295.

Expert Perspective/Key Takeaways

- BMI should not be used alone to screen for obesity
- Percent body fat is a more accurate measurement of adiposity than BMI
- Waist circumference or visceral fat better correlate with risk of cardiometabolic disease than BMI alone
- Edmonton Obesity Staging System is useful to help guide treatment decisions based on obesity-related comorbidity and functional limitations

Benefits of Treating Obesity as a Disease

- Healthy nutrition and physical activity improve numerous processes:
  - Anatomic
  - Physiologic
  - Inflammatory
  - Metabolic
- Medically managed and supervised weight loss:
  - Improves glucose and lipid metabolism
  - Reduces blood pressure
  - Reduces thrombotic risk
  - Results in a more significant and clinically meaningful weight loss maintenance
- Weight loss in patients with obesity improves:
  - Quality of life
  - Obstructive sleep apnea
  - Osteoarthritis
  - Cardiac hemodynamics
  - Body image
- Weight loss in patients with obesity may reduce:
  - Premature all-cause mortality
  - Cancer complications
  - Depression

Tondt J, et al. Obesity algorithm slides, presented by the Obesity Medicine Association. Published 2023; Accessed November 13, 2024. https://obesitymedicine.org/obesity-algorithm-powerpoint
Fitch AK, et al. *Obes Pillars*. Mar 2022;1:100004.

Benefits of Treating Obesity as a Disease (Cont.)

- Weight loss in females with obesity may improve metabolism and obesity-related obstetric and gynecologic disorders (PCOS)
- Weight loss in males with obesity may increase testosterone levels when hypogonadism is due to adiposopathic consequences of obesity
- Weight loss in males and childbearing females with pre-obesity/obesity may reduce epigenetically transmitted risk of obesity and metabolic disease in children

Tondt J, et al. Obesity algorithm slides, presented by the Obesity Medicine Association. Published 2023; Accessed November 13, 2024. https://obesitymedicine.org/obesity-algorithm-powerpoint
Fitch AK, et al. *Obes Pillars*. 2022;1:100004.

Myth:
“Weight loss of at least 10% over six months is needed for any health benefit”

Improvements in Health Conditions by Degree of Weight Loss

≥ 2.5% weight reduction	≥ 5% weight reduction	≥ 10% weight reduction	≥ 15-16% weight reduction
• Glucose metabolism • Triglyceride levels • Polycystic ovary syndrome and infertility	• Improved quality of life scores • Depression • Mobility • Knee functionality, walking speed, distance, and pain in patients with knee osteoarthritis • Hepatic steatosis • Urinary incontinence • Sexual function • HDL level • Healthcare costs	• Sleep apnea • Metabolic dysfunction-associated steatohepatitis	• Cardiovascular risk • Overall mortality

1. Ryan DH, et al. *Curr Obes Rep*. 2017;6(2):187-194.
2. Bays HE, et al. *Obes Pillars*. 2022;2:100018.

Myth:
“Slow and gradual weight reduction is ultimately more effective than large and rapid weight loss”

Setting Weight-Loss Treatment Goals

- Older evidence suggests overly aggressive weight loss goals leads to higher attrition and cautioned against rapid weight loss due to health-related concerns and increased risk of weight regain[1]
- More recent studies support that[1,2]:

1. Casazza K, et al. *N Engl J Med*. 2013;368(23):2236-2237.
2. Gordon ML, et al. *Proc Int World Wide Web Conf*. 2019;2019:571-582.

Expert Perspective/Key Takeaways

- Healthy nutrition, physical activity, and weight loss in patients with obesity is essential to improving numerous body processes and health outcomes
  - As little as a 2.5% weight loss can result in improvement in glucose metabolism and triglyceride levels
  - A 5% weight loss significantly also improves mobility, hepatic/urinary/sexual function, and overall quality of life
- Recent evidence suggests that more ambitious weight loss goals and greater and more rapid weight loss increase long-term weight loss success

Myth:
“Low fat diets are the best way to reduce body fat”

Pitfalls of the “Low-Fat” Diet Culture

- Does not take into consideration the nutritional benefits of healthier unsaturated fats
- May be associated with increased refined carbohydrate intake
  - “SnackWell” effect

“The low-fat ideology came to dominate America in the last decades of the 20th century and subsequently contributed to an excess intake of refined carbohydrates which, in the context of an increasingly sedentary lifestyle, may have fueled the obesity epidemic.”

– Fischer et al.

Fischer NM, et al. *Vasc Med*. 2020;25(2):184-193.

Current Nutrition Recommendations

- General principles
  - High consumption: non-starchy vegetables, fruits, wholegrains, and legumes
  - Moderate consumption: nuts, seafood, lean meats, low-fat dairy products, vegetable oil
  - Limited to no intake: trans-fats, saturated fats, red meats, sodium, refined carbohydrates, sugar-sweetened beverages
- Three diets with strongest evidence of decreasing cardiovascular disease and mortality
  - Dietary Approaches to Stop Hypertension (DASH) diet
  - Mediterranean diet
  - Healthy vegetarian diet

Fischer NM, et al. *Vasc Med*. 2020;25(2):184-193.

Myth:
“Increased physical exercise is the most effective way to reduce body weight”

Physical Activity and Weight Loss

- Physical activity modestly contributes to weight reduction
- A nutritional caloric deficit is required for clinically meaningful weight reduction
- Benefits of physical activity extend beyond weight loss
  - Body composition
  - Cardiovascular benefits
  - Metabolic benefits
  - Cancer benefits
  - Psychological well-being

Bays HE, et al. *Obes Pillars*. 2022;3:100034.

Behavior Modification

Behavior Modification Principles

- Behavioral therapy techniques should be:

Feasible	Efficacious	Measurable/ Accountable	Self-owned

- Personalized tracking enhances planning, knowledge, record keeping, accountability, and reflection
  - Fitness trackers
  - Smartwatches
  - Use of social media
- Social support at home and in the community: family, weight-loss groups, others
- Regular clinician encounters

Fitch AK, et al. *Obes Pillars*. 2023;7:100070.
Freshwater M, et al. *Obes Pillars*. 2022;2:100014.

Complementary and Alternative Treatments

Supplements Considered Potentially Unsafe

Supplement	Mechanism	Adverse Side Effects
Ephedra (Ma Huang)[1]	Appetite suppression	↑BP, MI, palpitations, stroke, seizure, sudden death
Bitter orange (Synephrine)[1]	Appetite suppression	↑HR, ↑BP, Chest pain, anxiety, HA, musculoskeletal
2,4 Dinitrophenol (2,4 DNP) [1]	↑ Fat metabolism	Hyperthermia, ↑HR, diaphoresis, tachypnea, cardiac arrest, death
High-dose Green Tea Extract (EGCG)[2]	↑ Fat metabolism	Gastrointestinal upset, colitis, hepatitis, cholecystitis, nephrotoxicity
Yohimbine[3]	↑ Fat metabolism	Anxiety and other psychiatric effects, hypertension, tachycardia
Laxative/diuretic-based supplements[4]	Promoting digestion/ fluid loss	Gastrointestinal upset, dehydration, electrolyte imbalances, arrhythmias, seizures, cardiac arrest

BP, blood pressure; HA, headache; HR, heart rate; MI, myocardial infarction

1. Tondt J, et al. *Obes Pillars*. 2022;2:100017.
2. Ramachandran B, et al. *Toxicol Rep*. 2016;3:336-345.
3. Bersani FS, et al. *Biomed Res Int*. 2015:120679.
4. Roerig JL, et al. *Drugs*. 2010;70(12):1487-503.

OMA Position on Vitamins & Herbal Supplements

- The OMA does not endorse the clinical use of supplements
  - Lack of FDA-approval process
  - Adverse effects, including risk of herbal and dietary supplement (HDS)-induced liver injury and sudden death
  - Not permitted to be marketed for purpose of treating, diagnosing, preventing, or curing diseases
- Consuming concentrated vitamin preparations does not promote weight loss
- There is little evidence supporting herbal, mineral, or amino acid supplements as a safe way to achieve clinically meaningful weight loss or long-term benefits

Bays HE, et al. *Obes Pillars*. 2022;3:100034.
Tondt J, et al. *Obes Pillars*. 2022;2:100017.

Myth:
“Vitamins and herbal supplements are effective in achieving weight reduction”

Metabolic & Bariatric Surgery

Myth:
“Bariatric surgery is considered the ‘easy way out’ and reserved for patients who are failures and ‘cheaters’ and is too dangerous for everyone else”

Benefits of Metabolic & Bariatric Surgery

- Cost-effective compared to non-surgical treatments[1]
- Reduced mortality, risk of cancer, and cardiovascular disease risk factors (diabetes mellitus, hypertension, dyslipidemia) and events[1,2]
- Improvements in osteoarthritis and skin disorders and possible improvement in depression[1,2]
- Improvements in MASLD and metabolic dysfunction-associated steatohepatitis (MASH)[3]

1. Fitch AK, et al. *Obes Pillars*. 2023;7:100070.
2. Shetye B, et al. *Obes Pillars*. 2022;2:100015.
3. Benson-Davies S, et al. *Obes Pillars*. 2025;13:100154.

Indications for Metabolic & Bariatric Surgery

- Strongly recommended to be considered in all patients with BMI ≥35 kg/m^2 (regardless of presence, absence, or severity of comorbidities)[1]
- Class I obesity (30-34.9 kg/m^2)[1]
  - Should be considered for individuals with metabolic disease (i.e., diabetes mellitus) who do not achieve substantial or durable weight loss or comorbidity improvement with nonsurgical methods
- BMI ≥25 kg/m^2 suggests clinical obesity in Asian patients
  - Individuals with BMI ≥27.5 kg/m^2 should be offered MBS[1]
- May be considered as bridge to joint arthroplasty, transplantation, left ventricular assist device (LVAD), abdominal wall hernia, MASLD/MASH/cirrhosis[1,2]

1. Eisenberg D, et al. *Surg Obes Relat Dis*. 2022;18(12):1345-1356.
2. Benson-Davies S, et al. *Obes Pillars*. 2025;13:100154.

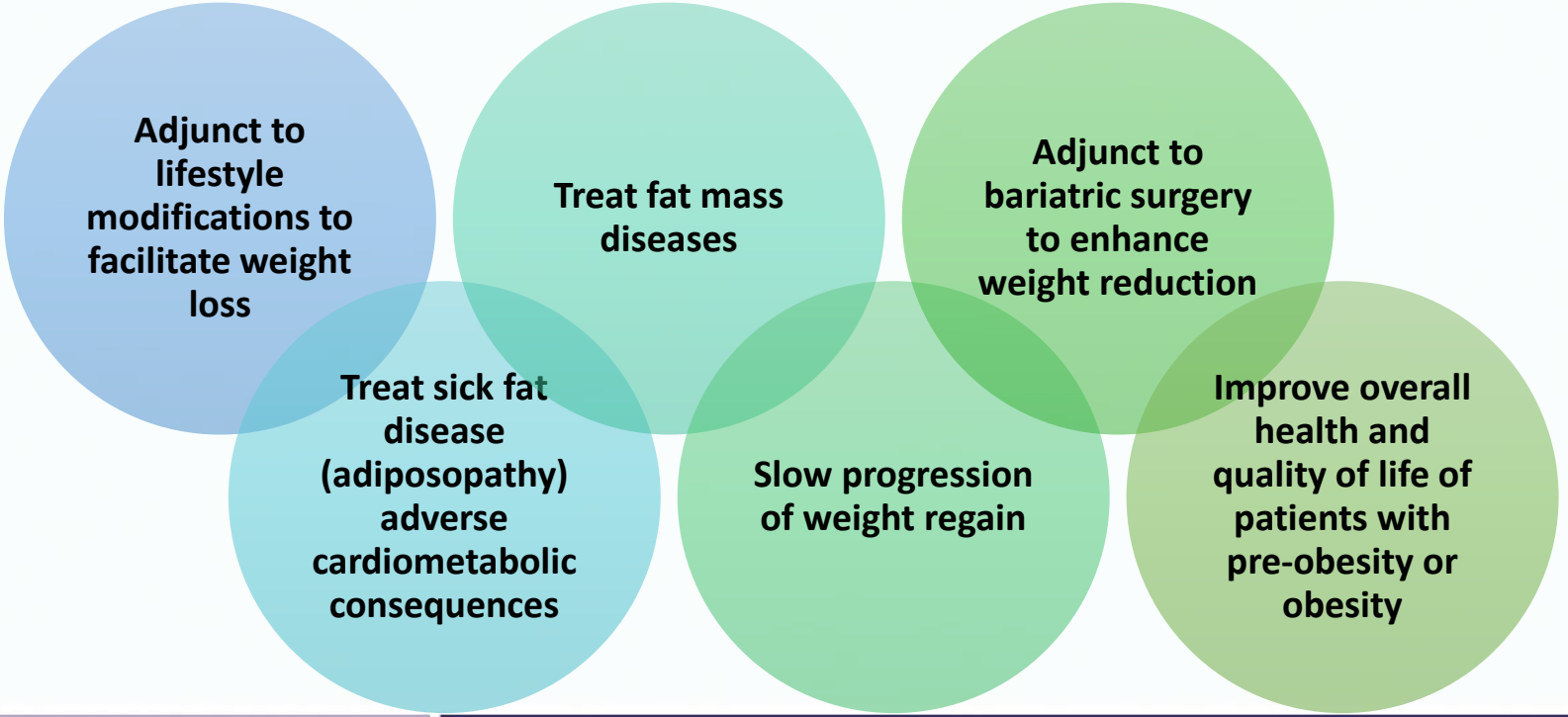
Barriers to Metabolic & Bariatric Surgery

- 1% of eligible patients receive surgery
- Limited patient and clinician knowledge
- Attitudes regarding effectiveness and safety
- Bias from failure to recognize and treat obesity as a disease
- Cost and lack of health insurance benefits
  - Coupled with clinician lack of knowledge regarding insurance coverage and patients' affordability and cost-sharing

Gasoyan H. *Surg Obes Relat Dis*. 2019;15(1):146-151.

Pharmacological Management

Purpose of Obesity Medications



Bays HE, et al. *Obes Pillars*. 2022;2:100018.

Key Principles of Obesity Medications

- Eligibility criteria (alongside lifestyle interventions)[1,2]
  - Patients with obesity: BMI ≥30 kg/m^2
  - Patients with overweight/pre-obesity: BMI ≥27 kg/m^2 with weight-related comorbidities (i.e., T2DM, HTN, dyslipidemia) who have inadequate response to lifestyle interventions
  - Must note limitations of BMI including muscular individuals or those with sarcopenia – may consider adiposity measurements as “off label”
- Contraindications
  - All obesity medications are contraindicated in patients with drug hypersensitivities (anaphylaxis/angioedema) or in pregnancy

1. Bays HE, et al. *Obes Pillars*. 2022;2:100018.
2. Grunvald E, et al. *Gastroenterol*. 2022;163(5):1198-1225.

Short- versus Long-term Obesity Medications

- Expected weight loss is based on the obesity medication selected, dose, and inter-individual variability
- Longer-term obesity medication selection is patient- and drug-specific
- If there is not ≥3% to 5% weight loss of baseline body weight (“clinical improvement”) after 12-16 weeks for most obesity medications, then recommended to increase dose (if applicable) or discontinue the medication
  - Some obesity medications do not have explicit stopping criteria (i.e., semaglutide 2.4 mg and tirzepatide 10 mg and 15 mg weekly injection)
  - Medication should be continued as maintenance therapy (weight plateaus are expected)

Bays HE, et al. *Obes Pillars*. 2022;2:100018.

Expert Perspective/Key Takeaways

Healthful Nutrition

Physical Activity

Behavior Modification

Medical Management

Fitch AK, et al. *Obes Pillars*. 2023;7:100070.

Expert Perspective/Key Takeaways

- DASH, Mediterranean, and healthy vegetarian-style diets are recommended
- Important benefits of physical activity
- Behavior therapy modification
- Patients should be counseled that ephedra, bitter orange, 2,4 DNP, EGCG, yohimbine, and laxative/diuretic-based supplements are considered potentially unsafe
- Metabolic and bariatric surgery is strongly recommended for patients with:
  - BMI ≥35 kg/m^2
  - BMI 30-34.9 kg/m^2 who have metabolic diseases where nonsurgical interventions are unsuccessful
- Eligible candidates for obesity medications include patients with:
  - BMI ≥30 kg/m^2
  - BMI ≥27 kg/m^2 with weight-related comorbidities

Safety and Efficacy of FDA-approved Obesity Medications and the Role of Lifestyle Modifications

Recommendations for FDA-approved Obesity Medications

- Obesity medications are indicated in combination with a reduced-calorie diet and increased physical activity[1]
- Orlistat may be considered for patients who would benefit from modest weight loss, have contraindications to other obesity medications, or prefer a medication that has minimal absorption
- Phentermine (or diethylpropion) may be recommended for short-term use (12 weeks) [1] or off-label for long-term use
- Others: phentermine-topiramate ER, naltrexone-bupropion ER, semaglutide, liraglutide, and tirzepatide
- Forthcoming: oral semaglutide (OASIS-1 trial), others

Grunvald E, et al. *Gastroenterol*. 2022;163(5):1198-1225.

Adverse Reactions and Contraindications

	Safety/Tolerability	Warnings	Contraindications
Phentermine HCl	High BP, headache, increased/irregular HR, overstimulation, tremor, insomnia, dry mouth	Avoid in overactive thyroid, uncontrolled HTN, seizure disorders	History of cardiovascular disease (i.e., uncontrolled hypertension, stroke), glaucoma, hyperthyroidism, agitation, drug abuse, or within 14 days of MAOIs
Orlistat	Oily discharge with flatus, gallstones, kidney stones, malabsorption of fat-soluble vitamins	Severe liver injury and pancreatitis (rare)	Chronic malabsorption syndrome and cholestasis

Bays HE, et al. *Obes Pillars*. 2022;2:100018.

Adverse Reactions and Contraindications (Cont.)

	Safety/Tolerability	Warnings	Contraindications
Phentermine HCl + topiramate (ER)	Paresthesia, dizziness, dysgeusia, insomnia, constipation, dry mouth, acute closure glaucoma	Monitor for increased HR, suicidal behavior/ideation, mood/sleep disorders, cognitive impairment Embryo-fetal toxicity	Glaucoma, hyperthyroidism, within 14 days of MAOIs
Naltrexone HCl + bupropion HCl (ER)	Nausea, vomiting, diarrhea/constipation, insomnia, headache, dizziness	Black box warning: Suicidal behavior/ideation	Uncontrolled hypertension, seizure disorders, bulimia/anorexia nervosa, within 14 days of MAOIs

Bays HE, et al. *Obes Pillars*. 2022;2:100018.

Adverse Reactions and Contraindications (Cont.)[1,2]

	Safety/Tolerability	Warnings	Contraindications
GLP-1 receptor agonists liraglutide and semaglutide GIP/GLP-1 dual receptor agonist tirzepatide	Nausea, vomiting, diarrhea/constipation abdominal pain/discomfort, dyspepsia, headache, fatigue	Risk of thyroid C-cell tumors, acute gallbladder injury, acute kidney injury, pancreatitis May cause hypoglycemia, particularly alongside sulfonylureas/insulin	Personal/family history of medullary thyroid cancer or Type 2 Multiple Endocrine Neoplasia syndrome

1. Bays HE, et al. *Obes Pillars*. 2022;2:100018.
2. Tirzepatide (Mounjaro). Prescribing Information. Eli Lilly and Company; 2024.

Myth:
“Drugs should not be used to treat obesity, because weight will only be regained once weight-loss medications are discontinued”

Patient Barriers to Obesity Medications

- Obesity thought to be due to “unhealthful lifestyle”
- Failure to recognize and treat obesity as a chronic disease
- Lack of awareness of evidence supporting use
- Poor tolerability and side effects associated with earlier obesity medications
- Lack of knowledge of newer obesity medications
  - Evidence-based with demonstrated efficacy, less safety concerns
  - Better tolerated than older obesity medications
  - Improved cardiovascular outcomes and possibly mortality

1. Bays HE, et al. *Obes Pillars*. 2022;3:100034.
2. Bays HE, et al. *Obes Pillars*. 2022;2:100018.

Myth:
“All long-term weight-loss medications provide similar weight loss”

Average Weight Loss with Long-Term Obesity Medications*

Medication	Placebo-subtracted Weight Loss
Orlistat[1]	3.2%
Naltrexone HCl + bupropion HCl (ER)[2]	4.8%
Phentermine HCl + topiramate (ER)[3]	8.6%
Liraglutide (injection)[4]	5.4%
Semaglutide (injection)[5]	12.4%
Tirzepatide (injection)[6]	11.9-17.8%

*Not head-to-head comparisons

1. Zavoral ZH. *J Hypertens*. 1998;16(12 Pt 2):2013-2017.
2. Greenway FL, et al. *Lancet*. 2010;376(9741):595-605.
3. Gadde KM, et al. *Lancet*. 2011;377(9774):1341-1352.
4. Pi-Sunyer X, et al. *N Engl J Med*. 2015;373(1):11-22.
5. Wilding JPH, et al. *N Engl J Med*. 2021;384(11):989-1002.
6. Jastreboff AM, et al. *N Engl J Med*. 2022;387(3):205-216.

Myth:
“Lifestyle modifications are not as important once a weight-loss medication is started”

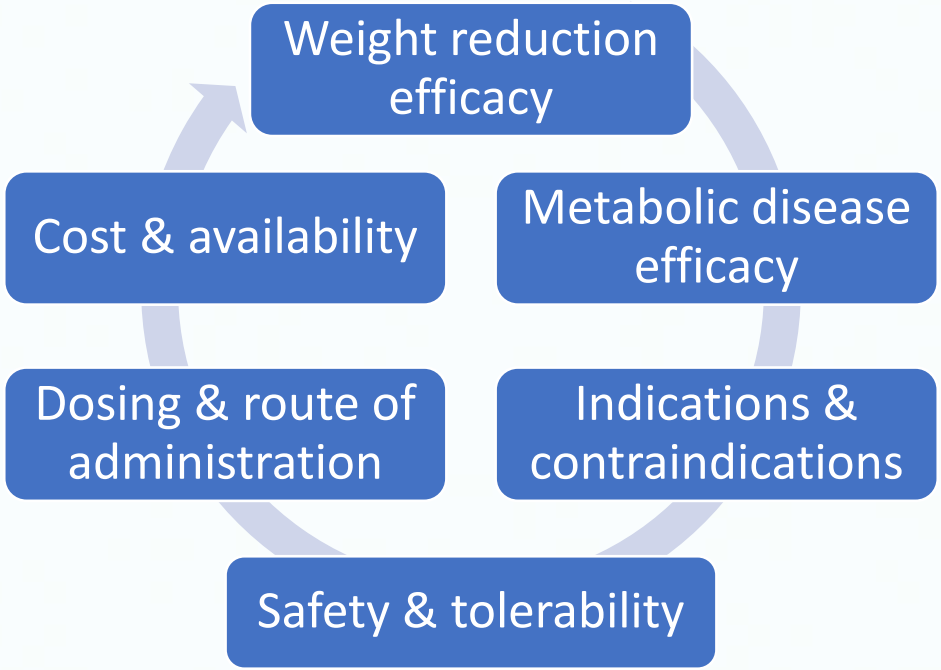
Why Use Obesity Medications?

"The rationale for use of medications is to help patients adhere to a lower calorie diet more consistently in order to achieve more sufficient weight loss and health improvements when combined with increased physical activity."

Jensen MD, et al. *Circulation*. 2014;129(25 Suppl 2):S102-S138.

Myth:
“Selection of a weight-loss medication is based solely on its weight loss efficacy”

Shared Decision-Making



Bays HE, et al. *Obes Pillars*. 2022;2:100018.

Misconception:
“Obesity medications obtained online are safe and effective”

Compounded Peptides

- The Food and Drug Administration (FDA) does not approve compounded drugs
- Without FDA approval, compounded drugs cannot be guaranteed to have the same efficacy, safety, and purity of FDA-approved drugs
- Compounded drugs are not intended to be mass produced, stored, marketed, or sold as replications of patented medications

Fitch AK, et al. *Obes Pillars*. 2023;6:100061.

Compounded Peptides (Cont.)

- Compounding may be permitted in times of shortages, following FDA guidance
- Before prescribing compounded drugs, clinicians must secure evidence that the source of the medication and pharmacist compounding the medication adhere to FDA standards
- Patients receiving compounding drugs should undergo a thorough informed consent process including the potential risks, benefits, and limitations of compounded peptides

Fitch AK, et al. *Obes Pillars*. 2023;6:100061.

Interprofessional, Multidisciplinary Support

- Patients should have access to a registered dietitian nutritionist or nutrition counseling from clinicians trained in nutrition (i.e., obesity medicine clinicians)
- Clinician oversight of safe and effective physical therapy plan based on patient's health and mobility
- Many patients benefit from behavior modification guided by a physician, nurse practitioner, physician assistant, nurse, dietitian, psychologist/psychiatrist, health coach, behavior therapist, clinical social worker, or other counselor
- Multidisciplinary clinician involvement in determination of medical management based on patient needs, comorbidities, and goals

Fitch AK, et al. *Obes Pillars.* 2023;7:100070.

Expert Perspective/Key Takeaways

- Lifestyle modifications alongside obesity medications are essential to enhance and maintain weight loss success
- Newer obesity medications (e.g., GLP-1 and GIP/GLP-1 receptor agonists) are more effective and have a favorable safety profile compared to many previous medications (appropriate dose escalation may mitigate GI side effects)
- Percentage of expected average weight loss with obesity medications varies based on the medication and ranges between 5% to 20% on average

Additional Tools & Resources

- Social media resource
  - Companion patient-focused vlog series addressing myths and misconceptions about obesity and its treatment options
- Other clinical resources in the activity toolbox
  - Obesity Action Coalition (OAC): https://www.obesityaction.org/
  - Obesity Medicine Association (OMA): https://obesitymedicine.org/
  - OMA Academy: https://academy.obesitymedicine.org/
  - Others