Treatment Options

A guide to obesity management

Rethink how a healthy lifestyle and medical management can provide support for your patients with obesity

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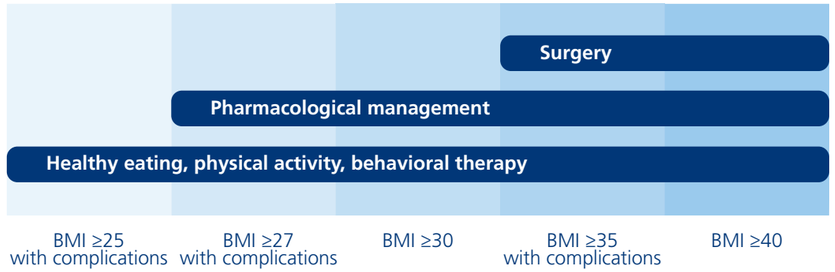
The facts about obesity

- Obesity is defined as excess adipose tissue that may impair health,[1] and presents many challenges to HCPs and patients managing their weight
- The dysfunction of excess adipose tissue contributes to obesity-related metabolic diseases[2]
- Obesity-related complications affect multiple organs and systems and are associated with certain cancers, type 2 diabetes, high cholesterol, and high systolic and diastolic blood pressure[3-5]

Weight loss of 5% or more has been shown to improve some obesity-related complications[4,6-9]

- Reduction in the risk of type 2 diabetes[6]
- Reduction in cardiovascular risk factors[7]
- Improvements in blood pressure[4,7,8]
- Improvements in blood lipids[4,7,9]

Managing obesity requires a stepwise approach, based on your patient's BMI (kg/m^2)[10]



Healthy eating, physical activity, and behavioral therapy should be continued through every step of managing obesity.

Tip: Pharmacotherapy and surgery should be an adjunct to healthy eating, physical activity, and behavioral therapy for appropriate patients.[10]

Visit **RethinkObesity.com** to learn more.

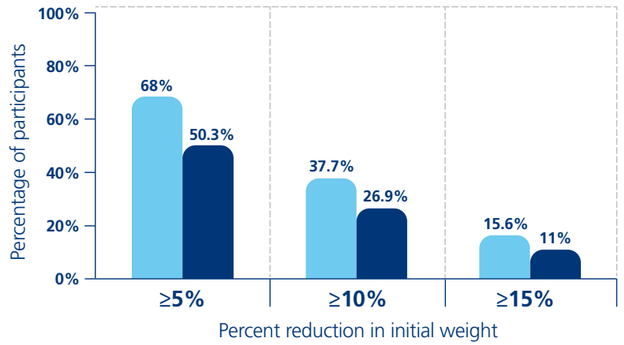
Lifestyle changes for long-term obesity management

Lifestyle intervention is the cornerstone of obesity treatment[11,12]

A critical component of obesity treatment is lifestyle intervention. This is a comprehensive approach that includes behavior modification, increased physical activity, and a healthy eating plan that creates an energy deficit.[11]

The Look AHEAD trial provides the largest and longest randomized evaluation to date of an intensive lifestyle intervention (ILI) for weight reduction. Even small weight loss may lead to additional health benefits and prevention of comorbidities, such as type 2 diabetes and reduction in blood pressure.[13]

Intensive lifestyle changes affecting weight loss at year 1 and 8[13]



Intensive lifestyle intervention

- Behavioral sessions
- Physical activity
- Meal replacements

Year 1 **Year 8**

Percentages are cumulative such that participants who lost 5% or more initial weight includes those who also lost ≥10% and ≥15%.[13]

Tell your patients: Your best weight is the weight you achieve while living the healthiest lifestyle.

The Look AHEAD (Action for Health in Diabetes) trial is a multicenter, randomized clinical trial comparing the effects of an intensive lifestyle intervention with diabetes support and education on the incidence of major cardiovascular disease effects in 5,145 patients with obesity or who are overweight with type 2 diabetes mellitus.[14]

Behavior modification

Building a skill set of behavioral knowledge and strategies can help patients achieve and sustain improvements in obesity. There are several strategies to help your patients, including[15]:

Goal setting[15]
Sit down with your patients to set specific, realistic, and measurable goals. Encourage your patients to set incremental goals that are attainable and increase their motivation and adherence.

Self-monitoring[15]
Many patients may benefit from self-monitoring. Suggest that they use their phone or My Weight Journal to record their eating habits and physical activity, as well as their goal progress or successes with the other suggestions listed below.

Stress management[15]
Help them identify areas of stress and then discuss healthy coping and stress-reduction strategies such as relaxation techniques, enlisting social support, and regular physical activity.

Alternative behaviors[15]
Help them learn to identify eating triggers, and how to counter those triggers with healthy activities and eating habits.

Social support[15]
Assist their efforts to identify and include family and/or close friends who can provide support through their struggles and victories.

Self-monitoring tools can help you and your patients see behavior trends that impact their weight[16]

A number of tools are available to help patients keep track of their weight and weight-management efforts. Your patients might find tools with the following features helpful.

Features of commonly available tools[16]

- **Personalized goal setting**
- **Bar-code scanners**
- **Assessment calculators** (eg, weight, BMI, % body fat, calories burned)
- **Recipe builders and calorie trackers**
- **Sleep trackers**
- **Food and activity journals**
- **Activity trackers**

- These are just some of the available options. Please discuss with your patients what might work best for them[16]

STEFANO
Stefano's BMI is 37

Increased physical activity may help your patients manage their weight[17]

Key physical activity guidelines for adults with obesity[18]

- Avoid inactivity. Any physical activity is better than none and provides benefit
- For additional health benefits, at least **2 hours and 30 minutes a week** of moderately intense, or **1 hour and 15 minutes a week** of vigorously intense aerobic activity (preferably spread throughout the week)
- For even greater health benefits, increase physical activity to **5 hours a week** of moderately intense, or to **2 hours and 30 minutes a week** of vigorously intense aerobic activity
- Engage in muscle-strengthening activities that are moderate or high in intensity and involve all major muscle groups on **2 or more days a week**

Help your patients plan a physical activity routine that aligns with their personal goals.

For long-term obesity management, increase aerobic physical activity to **≥150 min per week**.[11,12]

The following is an example of a physical activity schedule that conforms to the above recommendation. Remember that the best plan is the one that your patients will adhere to.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	≥30 Minutes	≥30 Minutes	≥30 Minutes	≥30 Minutes	≥30 Minutes	

Prescribing physical activity

When prescribing physical activity for your patients with obesity, you may need to modify the activity you recommend to fit each individual. The FITT (Frequency, Intensity, Time, and Type) Principle provides a framework of evidence-based recommendations to monitor and support your patients in achieving their weight goals.[20]

The FITT Principle[20]

Component	Recommendation
Frequency	Establish a regular physical activity habit (3-5 days per week) before recommending potentially unsustainable levels in the long term
Intensity	Start at a low to moderate intensity[a] and gradually progress over several weeks or months
Time	30-60 minutes, using a gradual progression
Type	Low-impact activities that are convenient, accessible, and enjoyable to the patient

[a]An example of moderate intensity can be estimated using 55%-70% of the age-predicted maximal heart rate (ie, 220 – [age x 0.55-0.70]) or a rating of perceived exertion of 3 to 5 on a scale of 0 (easiest) to 10 (hardest) effort.[20]

Healthy eating for long-term obesity management

Adherence is the best predictor of success[12]

Creating an energy deficit is the primary goal of developing healthy meal plans for patients with obesity. No single meal plan is superior to others in terms of weight loss, so patient preferences should guide which meal plan is chosen to increase the likelihood of long-term adherence.[11,12]

Guidelines for caloric targets[11]

	or			
~500 kcal/day below energy requirements		1,200-1,500 kcal/day total for women	1,500-1,800 kcal/day total for men	**Patients weighing >330 lb** Add 300 kcal/day to the recommendations on the left

The best eating plan is the one that your patient will adhere to.

GLORIA
Gloria's BMI is 39

STEVE
Steve's BMI is 39

Discuss healthy eating plans with your patients

Food plan	Defining characteristics	Source of health benefits
Low-carbohydrate diet[21]	• Restriction of total carbohydrate intake from all sources to ≤45% of daily calories	• Emphasis on restriction of refined starches and added sugars in particular
Low-fat diet[21]	• Restriction of total fat intake from all sources to ≤20% of daily calories	• Emphasis on plant foods direct from nature • Avoidance of harmful fats
Low-glycemic diet[21]	• Limiting glycemic load of overall eating plan by restricting intake of foods with a high glycemic index and/or glycemic load (extends to exclusion of certain vegetables and many fruits)	• Restriction of starches, added sugars • High fiber intake
Mediterranean diet[21]	• Mimicking the common themes of traditional dietary pattern that is predominant in Mediterranean countries	• Foods direct from nature (mostly plants) • Emphasis on healthful oils, notably monounsaturates
Ketogenic diet[22,23]	• Restriction of carbohydrate intake to 6% (alternatively, <30 g/day) with high fat (65%) and protein (30%)	• Emphasis on healthy fats has been proposed to promote satiety and reduce energy intake • Some studies show that this diet helps promote greater weight loss than low-fat, high-carbohydrate diets
Dietary Approaches to Stop Hypertension (DASH)[24]	• Increased intake of foods that are low in saturated fat, cholesterol, and total fat, and high in potassium, magnesium, calcium, protein, and fiber	• Focuses on increasing intake of foods rich in nutrients that are expected to lower blood pressure
Volumetric[25]	• Allows for liberal portions of food with low energy density, and reduces the energy density of meals by adding water-rich ingredients (such as fruits and vegetables)	• May create an energy deficit while simultaneously preserving the amount of food consumed

Principles of pharmacotherapy in obesity management

For appropriate patients, pharmacotherapy is part of a comprehensive approach to long-term weight management[11]

Three guiding principles should be followed when considering pharmacotherapy for patients with obesity.

1. Reinforce patient efforts

Pharmacotherapy is meant to reinforce patient lifestyle intervention efforts, not replace them

2. Understand side effects

Health care professionals and patients should both be familiar with the medication and its potential side effects and contraindications

3. Every patient is different

If clinically meaningful weight loss (≥5%) is not achieved after 3-4 months, a new treatment plan should be implemented

Most patients are not able to achieve and maintain a healthy weight with healthy eating and increased activity alone. Some pharmacotherapies may benefit patients who[26]:

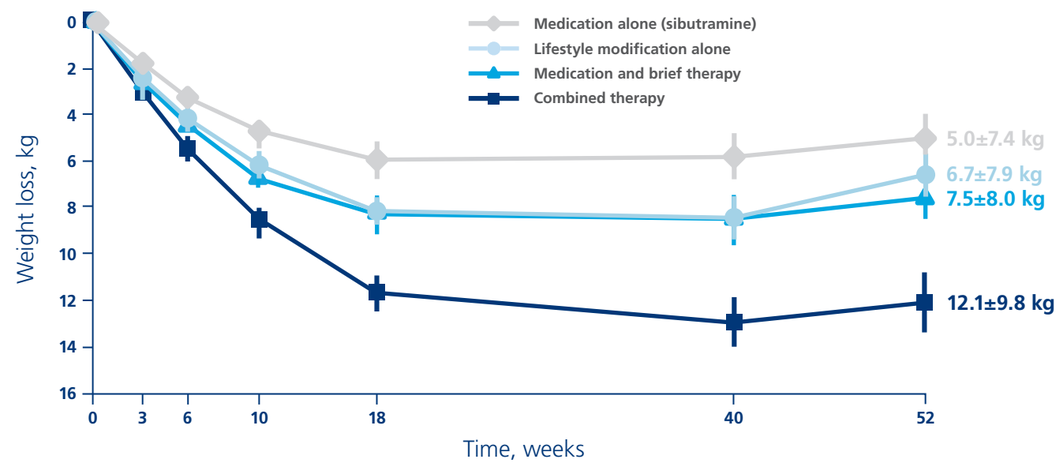
- Have tried lifestyle changes but can't reach a healthier weight, **and**
- Are regaining weight after losing it, **and**
- Have a BMI of ≥27 kg/m^2 and a weight-related comorbidity, **or**
- Have a BMI that is >30 kg/m^2

Different pharmacotherapies may help the patient to lower appetite, increase energy expenditure, decrease the amount of fat the body absorbs, or reduce cravings.[26,27]

Arrange regular follow-up visits with your patients to regularly assess weight and associated risks and revisit weight-management options.

Treatment plans that include pharmacotherapy as an adjunct to healthy eating and increased physical activity may be more effective than any of these alone[28]

From a 1-year study of 224 patients with BMI of 30 to 45 kg/m^2



From a 1-year study of 224 patients with BMI of 30 to 45 kg/m^2, randomly assigned to receive medication (sibutramine) alone, lifestyle-modification counseling, medication with brief therapy, or medication with lifestyle-modification counseling (combined therapy).[28]

Patients who received combined therapy (medication with lifestyle counseling) lost significantly more weight at weeks 18, 40, and 52 than all other treatment groups (P<0.001).[28]

Understanding pharmacotherapy options

There are 2 main types of pharmacotherapy treatments

Short-term treatments[26]

- These medications are usually only taken for a few weeks

Long-term treatments[29,30]

- These medications are FDA approved for chronic management of obesity to help patients maintain a healthier weight
- Pharmacotherapy management may help with a patient's ability to maintain lifestyle changes that lead to healthier weight

JOHN
John's BMI is 37

Actor Portrayal.

Body weight is tightly regulated by the cross-talk between the brain and peripheral organs

In normal physiology, weight is maintained by various appetite-regulating hormones, metabolic signals, and neurotransmitters that the brain interprets to control appetite, satiety, energy absorption, and energy expenditure.[31]

Patients with obesity often face challenges in losing weight and maintaining weight loss. This may be due to increased levels of appetite-promoting signals and decreased levels of satiety-promoting signals. Additionally, once patients lose weight, they experience a reduction in metabolism that encourages weight regain. These changes in appetite-regulating hormones and metabolic adaptation can be difficult to overcome for many patients with obesity.[31-34]

Considering pharmacotherapy options for your patients with obesity

Pharmacotherapy, when used in conjunction with lifestyle modification such as diet and exercise, is a useful treatment option for patients with obesity who are trying to lose weight.[32,35]

Pharmacotherapies work via at least one of three broad physiological methods[32,35]

Decreased macronutrient absorption	Some pharmacotherapies decrease the ability of the gastrointestinal system to absorb energy from digested food
Reduced appetite	Most pharmacotherapies decrease food consumption behaviors, effectively decreasing energy intake
Increased satiety	Some pharmacotherapies increase the satiety experienced after consuming food, which can reduce food intake

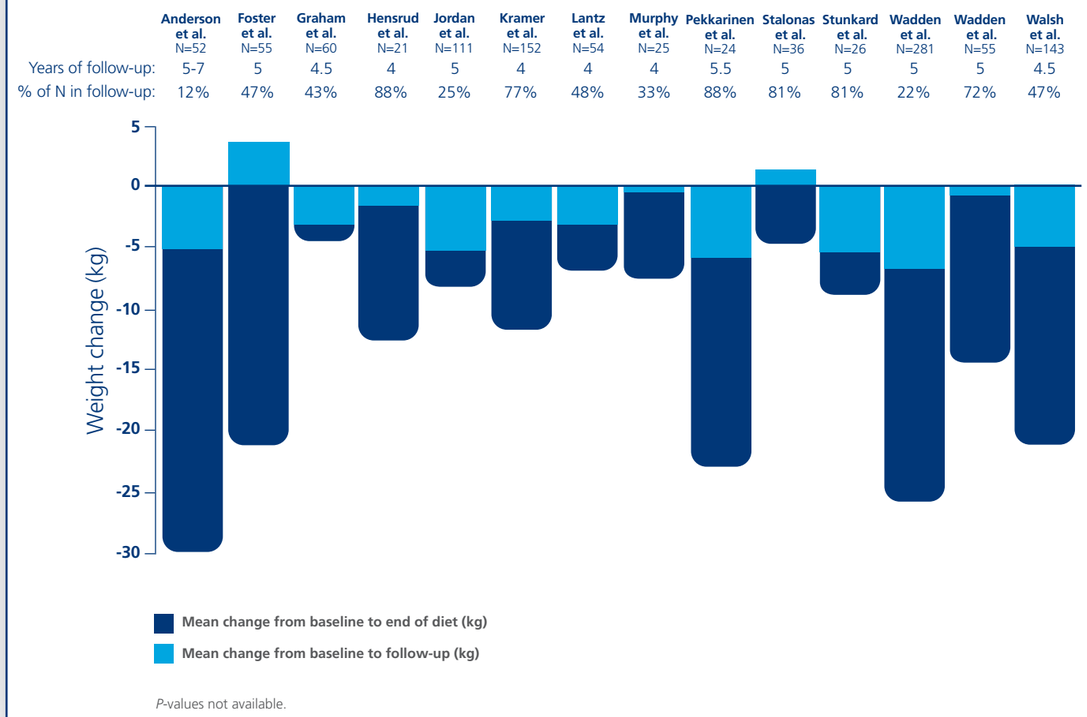
Why should you consider pharmacotherapy treatments?

- Using pharmacotherapy in conjunction with lifestyle modification, patients have achieved a 5%-10% weight loss nearly twice as often as without the use of medication[35]
- Combined with lifestyle intervention, these FDA-approved pharmacotherapies produced weight loss greater in both magnitude and duration than lifestyle intervention alone[32]

Visit **RethinkObesity.com** to learn more.

What happens when treatment is removed?

Patients regained most of the weight they lost during the diet period[29,30,36]



P-values not available.

Obesity is a chronic disease requiring long-term management.

Bariatric surgeries

Bariatric surgery may be an option for your patients if[10,26]:

- Their BMI is 35-39.9 and they have an obesity-related comorbidity, **or**
- Their BMI is ≥40

Studies show that bariatric surgery is associated with a 30%-50% lower risk of death in patients at 7-15 years compared with those not having surgery.[37]

The following are common types of surgery to treat obesity:

Gastric bypass surgery[38]

- Limits food intake
- May help increase energy expenditure
- Benefits gut hormones that reduce appetite and increase satiety

Gastric sleeve surgery[38]

- Limits food intake
- Requires no foreign objects left within the body, or rerouting of the food stream
- Benefits gut hormones that reduce appetite and increase satiety

Adverse effects[10,11]

Complications from bariatric surgery can lead to re-operation, and some adverse effects—such as dumping syndrome, gastroesophageal reflux, and hypoglycemia—can be challenging to treat. Refer to the AHA/ACC/TOS Guideline for the Management of Overweight and Obesity in Adults for more information on the various surgical options and their respective adverse effects.

ACC, American College of Cardiology; AHA, American Heart Association; TOS, The Obesity Society.

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The following resources may be helpful for your patients who are attempting to reach and maintain a healthier weight:

- **TruthAboutWeight.com**
- Obesity Action Coalition: **obesityaction.org**

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