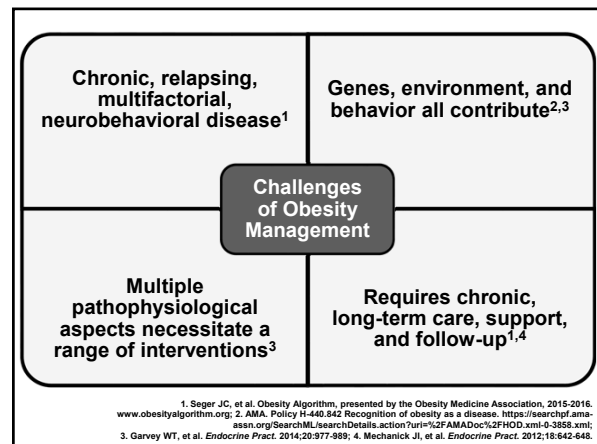


## Learning Objectives

At the conclusion of this activity, participants should be able to:

- Summarize current treatment recommendations for the management of adult obesity
- Identify clinical situations (eg, patient characteristics, weight loss history, weight loss goals) in which adults with obesity may benefit from pharmacological intervention for weight management
- Match patient characteristics, needs, and preferences with appropriate weight loss pharmacotherapies in developing individualized treatment plans for adults with obesity
- Provide patients with tools and approaches to promote adherence to individualized obesity management plans



## Identifying Candidates for Weight-Loss Therapy

Patients With Overweight or Obesity	Candidates for Weight Loss Therapy	Patients With Weight-Related Disease or Complication
BMI ≥ 25 kg/m <sup>2</sup> , or ≥ 23 kg/m <sup>2</sup> in certain ethnicities, and excess adiposity	Evaluate for weight-related complications	Prediabetes
	Evaluate for overweight or obesity	Male hypogonadism
		Metabolic syndrome
		Obstructive sleep apnea
		T2DM
		Asthma/reactive airway disease
		Dyslipidemia
		Osteoarthritis
		Hypertension
		Urinary stress incontinence
		CVD
		GERD
		NAFLD/NASH
		Depression
		PCOS
		Disability
		Female infertility

Garvey WT, et al. Endocrine Pract. 2015;22(suppl 3):1-203.

## General Goals of Obesity Management

Objectives <sup>1-4</sup>	Weight Loss Targets <sup>1-4</sup>
<ul style="list-style-type: none"> <li>• Medical rather than cosmetic benefit</li> <li>• Meaningful health improvements</li> </ul>	<ul style="list-style-type: none"> <li>• Initial goal is generally 5%-10% within 6 months</li> <li>• A more aggressive initial goal may be appropriate, based on complication profile</li> <li>• Once initial goal is met, reassess health goals and adjust therapy as needed</li> <li>• Greater losses = more benefit</li> </ul>

1. Garvey WT, et al. Endocrine Pract. 2016;22:842-884. 2. Apovian CM, et al. J Clin Endocrinol Metab. 2015; 100:342-362. 3. Jensen MD, et al. Obesity. 2014;22(suppl 2):S1-S410. 4. Seger JC, et al. Obesity Algorithm, presented by the Obesity Medicine Association, 2015-2016. www.obesityalgorithm.org.

## AACE/ACE Algorithm: Diagnosis, Treatment Goals, and Therapy Options

Diagnostic categories	Overweight: BMI ≥ 25 – 29.9 <sup>a</sup> kg/m <sup>2</sup> Obese: BMI ≥ 30 kg/m <sup>2</sup> No complications	BMI ≥ 25 kg/m <sup>2</sup> ≥ 1 mild to moderate complication or moderate weight loss will provide effective treatment	BMI ≥ 25 kg/m <sup>2</sup> ≥ 1 severe complication or more aggressive weight loss is needed for effective treatment
Treatment based on clinical judgement	<ul style="list-style-type: none"> <li>• Lifestyle/behavioral therapy</li> <li>• Consider pharmacotherapy if lifestyle alone is not effective</li> </ul>	<ul style="list-style-type: none"> <li>• Lifestyle/behavioral therapy</li> <li>• Consider pharmacotherapy (BMI ≥ 27)</li> </ul>	<ul style="list-style-type: none"> <li>• Lifestyle/behavioral therapy</li> <li>• Add pharmacotherapy (BMI ≥ 27)</li> <li>• Consider bariatric surgery (BMI ≥ 35)</li> </ul>
Treatment goals	Prevent progressive weight gain or achieve weight loss to prevent complications	Achieve weight loss sufficient to ameliorate complications and prevent further deterioration	

<sup>a</sup> BMI ≥ 23 kg/m<sup>2</sup> in certain ethnicities.

AACE/ACE algorithm for the medical care of patients with obesity. https://www.aace.com/files/guidelines/ObesityAlgorithm.pdf.

## Comprehensive Lifestyle Management Is the Foundation of Obesity Treatment

Meal Plan	Physical Activity	Behavior
<ul style="list-style-type: none"> <li>• Reduced-calorie healthy meal plan</li> <li>• ~ 500-750 kcal daily deficit</li> <li>• Individualized</li> <li>• Many meal plan options<sup>a</sup></li> <li>• Meal replacements</li> <li>• Very-low-calorie diet is an option for selected patients—requires supervision</li> </ul> <p><i>Team member/expertise: dietitian, health educator</i></p>	<ul style="list-style-type: none"> <li>• Aerobic activity               <ul style="list-style-type: none"> <li>– Goal: &gt; 150 min/wk</li> <li>– 3-5 days/wk</li> </ul> </li> <li>• Resistance exercise               <ul style="list-style-type: none"> <li>– Major muscle groups</li> <li>– 2-3 times/wk</li> </ul> </li> <li>• Reduce sedentary behavior</li> <li>• Individualized (eg, preferences, limitations)</li> </ul> <p><i>Team member/expertise: exercise trainer, physical activity coach, physical/occupational therapist</i></p>	<ul style="list-style-type: none"> <li>• Interventional package, including any number of behavioral modification techniques</li> </ul> <p><i>Team member/expertise: health educator, behaviorist, clinical psychologist, psychiatrist</i></p>

<sup>a</sup> AACE/ACE guideline lists: Mediterranean, DASH, low-carb, low-fat, volumetric, high protein, vegetarian.

AACE/ACE algorithm for the medical care of patients with obesity. https://www.aace.com/files/guidelines/ObesityAlgorithm.pdf.

- Progression from prediabetes to diabetes<sup>1</sup>
- Measures of glycemia<sup>1</sup>
- Triglycerides and HDL cholesterol<sup>1</sup>
- Systolic and diastolic blood pressure<sup>1</sup>
- Hepatic steatosis (measured by MRS)<sup>2</sup>
- Measures of feeling and function
  - Symptoms of urinary stress incontinence<sup>1</sup>
  - Measures of sexual function<sup>3</sup>
  - Quality of life measures (IWQOL)<sup>4</sup>
- NASH activity score (measured by biopsy)<sup>1</sup>
- Apnea-hypopnea index<sup>1</sup>
- Reduction in CV events, mortality, remission of T2DM<sup>5,6</sup>

1. Cefalu WT, et al. *Diabetes Care*. 2015;38:1567-1582.
2. Lazo M, et al. *Diabetes Care*. 2010;33:2156-2163.
3. Wing R, et al. *Diabetes Care*. 2013;36:2937-2944.
4. Kolotkin RL, et al. *Obes Res*. 2001;9:564-571.
5. Sjostrom L, et al. *JAMA*. 2012;307:56-65.
6. Sjostrom L, et al. *JAMA*. 2014;311:2297-2304.

History	Lifestyle/Support/ Psychosocial	Current Medications
<ul style="list-style-type: none"> <li>White man (aged 57 y/o)</li> <li>Last visit 9 mo ago</li> <li>Stent 18 mo ago; 3-mo education on heart-healthy habits</li> <li>T2DM (5 y); DSME at diagnosis</li> <li>Depression, HTN, and dyslipidemia</li> <li>Smoking—trying to quit for last 9 mo</li> <li>Reasons for visit—T2DM and weight gain (25 lb in last 2 y, especially since he's tried to quit smoking)</li> </ul>	<ul style="list-style-type: none"> <li>US Postal Service employee with good health benefits</li> <li>Divorced (2 y)</li> <li>2 adult children</li> <li>1 grandchild (2 mo old)</li> </ul>	<ul style="list-style-type: none"> <li>Metformin XR: 2000 mg/d</li> <li>Sitagliptin: 100 mg/d</li> <li>Losartan/HCTZ: 50 mg/25 mg once daily</li> <li>Atorvastatin: 40 mg once daily</li> <li>Aspirin: 81 mg once daily</li> <li>Duloxetine: 60 mg once daily</li> </ul>

DSME, diabetes self-management education

## Physical Examination

Height	70 in (178 cm)
Weight	270 lb (122 kg)
BMI	38.7 kg/m <sup>2</sup>
BP	144/82 mm Hg

## Laboratory Evaluation

Fasting blood glucose (FBG)	154 mg/dL
A1C	7.3%
Total-C	182 mg/dL
HDL-C	38 mg/dL
LDL-C	116 mg/dL
Triglycerides	140 mg/dL
eGFR	≥ 90 mL/min/1.73 m <sup>2</sup>

History	Lifestyle/Support/ Psychosocial	Current Medications
<ul style="list-style-type: none"> <li>Hispanic woman, 35 years old</li> <li>Hypertension—treated</li> <li>Overweight since high school</li> <li>Unable to lose weight and keep it off since pregnancies despite trying several programs</li> </ul>	<ul style="list-style-type: none"> <li>Dental hygienist—full time in large practice</li> <li>Married (9 y)</li> <li>1 daughter (8 y old) and twin sons (5 y old)</li> <li>Feels like she's ready to try again to lose weight</li> <li>Motivated to look and feel good for her 10th wedding anniversary</li> </ul>	<ul style="list-style-type: none"> <li>Ramipril: 10 mg/d</li> <li>Drospirenone/ethinyl estradiol: 3 mg/0.02 mg</li> </ul>

## Physical Examination

Height	63 in (160 cm)
Weight	165 lb (75 kg)
BMI	29.2 kg/m <sup>2</sup>
BP	128/78 mm Hg

## Laboratory Evaluation

Fasting blood glucose (FBG)	75 mg/dL
A1C	5.5%
Total-C	180 mg/dL
HDL-C	47 mg/dL
LDL-C	103 mg/dL
Triglycerides	149 mg/dL
eGFR	≥ 90 mL/min/1.73 m <sup>2</sup>

Obesity is a chronic disease<sup>1</sup> with pathophysiological changes that increase<sup>2</sup>:

- Energy storage (eg, ↓ thyroid hormones, ↑ cortisol)
- Food intake (eg, ↑ ghrelin, ↓ leptin and PYY)

Short-term use of weight loss medications is not generally recommended—no evidence of longer-term health benefits<sup>3</sup>

Long-term weight loss medications...

- Help more patients adhere to lifestyle changes and lose more weight<sup>3,4</sup>
- Support long-term weight maintenance<sup>4</sup>
- Are associated with improved health and quality of life<sup>3</sup>

1. AMA. Policy H-440.842 Recognition of obesity as a disease. <https://searchpf.ama-assn.org/SearchML/searchDetails.action?uri=%2FAMADoc%2FHOD.xml-0-3858.xml>;
2. Sumithran P, Proietto J. *Cl. Clin Sci (Lond)*. 2013;124:231-241; 3. Garvey WT, et al. *Endocr Pract*. 2016;22:342-384; 4. Apovian CM, et al. *J Clin Endocrinol Metab*. 2015;100:342-362.

## FDA Approved Medications for Long-Term Weight Management

Agent	Dosage form; frequency <sup>1</sup>	Mechanism of Action
Orlistat <sup>1,2</sup>	Oral; 3 × daily <sup>a</sup>	Gastrointestinal lipase inhibitor <i>Promotes fat excretion (GI)</i>
Lorcaserin <sup>1,2</sup> Schedule IV	Oral; 1 or 2 × daily	Serotonin 2C RA <i>Suppresses appetite (CNS)</i>
Phentermine/ topiramate ER <sup>1,2</sup> Schedule IV	Oral; 1 × daily <sup>b,c</sup>	Sympathomimetic/antiepileptic <i>Suppresses appetite (CNS)</i>
Naltrexone ER/ bupropion ER <sup>2</sup>	Oral; 2 × daily <sup>b</sup>	Opioid antagonist/antidepressant <i>Regulates appetite, reward (CNS)</i>
Liraglutide 3.0 mg <sup>2</sup>	SC; 1 × daily <sup>b</sup>	Glucagon-like peptide 1 RA <i>Suppresses appetite (CNS)</i>

Diethylpropion, phendimetrazine, and phentermine are sympathomimetic appetite suppressants approved for short-term use (a few weeks).<sup>1,3</sup>

<sup>1</sup> Yanovski SZ, Yanovski JA. *JAMA*. 2014;311:74-86.

<sup>2</sup> Drugs@FDA. <http://www.accessdata.fda.gov/scripts/cder/DrugsatFDA>.

<sup>3</sup> Garber AJ, et al. *Endocr Pract*. 2016;22:84-113.

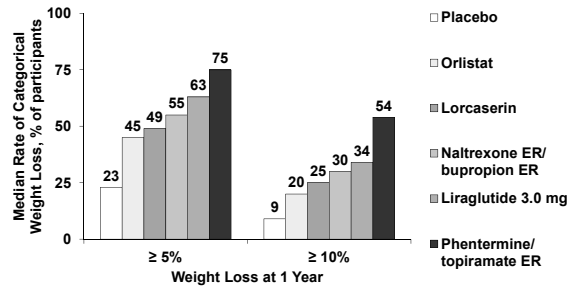
<sup>a</sup> Dose-ranging study identified 120 mg 3 × daily as optimal regimen.<sup>4</sup>

<sup>b</sup> Titration required.

<sup>c</sup> 15-mg/92-mg dose for use only if 7.5-mg/46-mg dose is not effective.

<sup>4</sup> Van Gaal LF, et al. *Eur J Clin Pharmacol*. 1998;54:125-132.

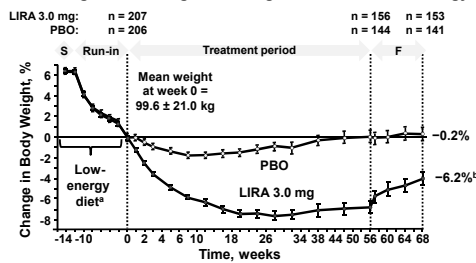
## Individuals With Obesity Lose More Weight With Agents Approved for Long-Term Use vs Placebo



Khara R, et al. *JAMA*. 2016;315:2424-2434.

## Weight Loss Medication With Lifestyle Management Can Help Maintain Weight and Support Additional Weight Loss

### Effect of Liraglutide 3.0 mg After Weight Loss on a Low-Energy Diet<sup>1</sup>



Mean weight regain was also significantly less with orlistat (120 mg/d) vs PBO after low-energy diet<sup>2,3</sup>

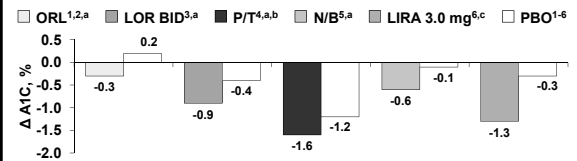
<sup>1</sup> Wadden T, et al. *Int J Obes (Lond)*. 2013;37:1443-1451.

<sup>2</sup> Hill JO, et al. *Am J Clin Nutr*. 1999;69:1108-1116.

<sup>3</sup> Richelsen B, et al. *Diabetes Care*. 2007;30:27-32.

S, screening; F, follow-up; LIRA, liraglutide; PBO, placebo.

## Example of Health Improvements With Long-Term Weight Loss Medications: Effects in T2DM



- All agents significantly reduced A1C vs PBO ( $P < .05$ )<sup>1-6</sup>
- Other improvements vs PBO included:
  - Significant FPG reduction (except N/B)<sup>1-6</sup>
  - Lower requirement for oral antihyperglycemic agents

<sup>1</sup> Cefalu WT, et al. *Diabetes Care*. 2015;38:1567-1582.

<sup>2</sup> Hollander PA, et al. *Diabetes Care*. 1996;21:1288-1294.

<sup>3</sup> O'Neil PM, et al. *Obesity*. 2012;20:1426-1435.

<sup>4</sup> Garvey WT, et al. *Diabetes Care*. 2014;37:3309-3316.

<sup>5</sup> Hollander P, et al. *Diabetes Care*. 2013;36:4022-4029.

<sup>6</sup> Davies M, et al. *JAMA*. 2015;314:887-896.

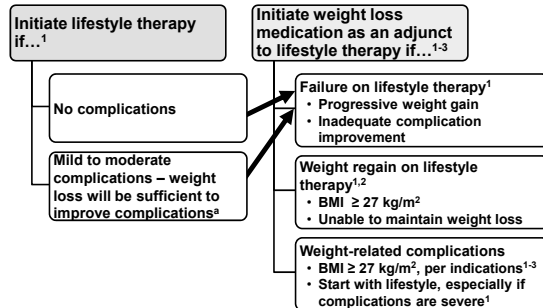
BL A1C, 7.5% to 8.9%.

<sup>a</sup> Not indicated for treatment of hyperglycemia in T2DM.

<sup>b</sup> 15-mg/92-mg dose; for use only if 7.5-mg/46-mg dose is not effective.

<sup>c</sup> 3.0-mg dose not indicated for treatment of hyperglycemia in T2DM.

## When to Initiate Weight Loss Medications in Patients With Overweight/Obesity<sup>1,2</sup>



<sup>1</sup> AACE/ACE algorithm for the medical care of patients with obesity.

<sup>2</sup> <https://www.aace.com/files/guidelines/ObesityAlgorithm.pdf>.

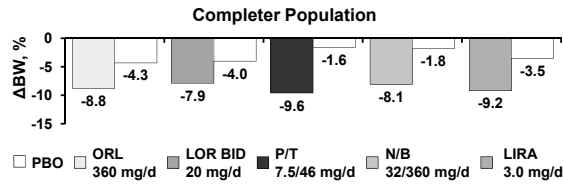
<sup>3</sup> Apovian CM, et al. *J Clin Endocrinol Metab*. 2015;100:342-362.

<sup>a</sup> Weight loss medications may also be indicated based on clinical judgment.

<sup>4</sup> US FDA. Drugs@FDA. <http://www.accessdata.fda.gov/scripts/cder/DrugsatFDA>.

## Characteristics of Weight Loss Agents

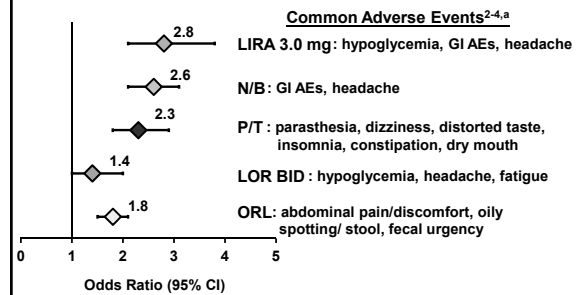
## Medications Approved for Long-Term Weight Management: 1-Year Efficacy in Clinical Trials<sup>a</sup>



<sup>a</sup> Data from key clinical trials ≥ 1 year in duration that included data for recommended doses; participants had baseline BW of ≈ 100 kg and average BMIs in the range of 35-39.9 kg/m<sup>2</sup>.

Garvey WT, et al. *Endocr Pract.* 2016;22:842-884.

## Direct Meta-Analysis: Likelihood of Discontinuation Due to Adverse Events<sup>1</sup>



<sup>a</sup> Selected common (defined as incidence > 5%) AEs are noted; refer to medication package inserts and cited references for complete information.

1. Khara R, et al. *JAMA.* 2016;315:2424-2434.  
2. Drugs@FDA: FDA approved drug products. <http://www.accessdata.fda.gov/scripts/cder/drug/saf/FDA>. 3. Garvey WT, et al. *Endocr Pract.* 2016;22:842-884; 4. ADA. *Diabetes Care.* 2016;39(suppl 1):S47-S51.

## Medications for Chronic Weight Management: Contraindications and Related Precautions<sup>a</sup>

- **Orlistat**
  - Chronic malabsorption syndrome (eg, fat soluble vitamins/medications)
  - Cholestasis
- **Lorcaserin**
  - None other than pregnancy
  - Serotonin syndrome
- **Phentermine/topiramate ER**
  - Topiramate: fetal oral clefts (regular pregnancy testing)
  - Glaucoma
  - Hyperthyroidism
  - During/within 14 days of MAOI use
- **Naltrexone ER/bupropion ER**
  - Chronic opioid use (opioid withdrawal)
  - Uncontrolled hypertension
  - Seizure disorders; anorexia nervosa or bulimia; abrupt discontinuation of some drugs<sup>b</sup>
  - Use of other bupropion-containing products
  - During/within 14 days of MAOI use
- **Liraglutide 3.0 mg**
  - MEN2, personal/family history of MTC (potential risk of thyroid C-cell tumors—rodent data<sup>c</sup>)

All are contraindicated in pregnancy and generally not recommended for women who are breastfeeding; caution on use of reliable contraception.

<sup>a</sup> For all agents, known hypersensitivity to agent or any component.

<sup>b</sup> Alcohol, benzodiazepines, barbiturates, antiepileptic drugs.

<sup>c</sup> Relevance in humans has not been determined.

US FDA. Drugs@FDA. <http://www.accessdata.fda.gov/scripts/cder/Drugs@FDA>.

## Individualized Use of Medications for Chronic Weight Management: General Considerations

### All agents may be used in cases of

- T2DM
- Mild CKD (CrCl 50-79 mL/min)<sup>a</sup>
- Moderate CKD (CrCl 30-49 mL/min) *Dose limitations for P/T, N/B*
- Anxiety *Dose limitations for P/T*

### Use all agents with caution in cases of

- Mild hepatic impairment<sup>a,b</sup>




### Avoid use of all agents in cases of

- Severe hepatic impairment<sup>b</sup>

<sup>a</sup> Mild-moderate, Child-Pugh 5-9; severe, Child-Pugh > 9.  
<sup>b</sup> Watch for cholelithiasis (ORL, LIRA 3.0 mg), hepatic metabolism (LOR), dose limitations (N/B, P/T).

Garvey WT, et al. *Endocr Pract.* 2016;22:842-884.

## Individualized Use of Medications for Chronic Weight Management: Agent-Specific Considerations<sup>a</sup>

	 Preferred	 Use with caution	 Avoid		
Consideration	ORL	LOR	P/T	N/B	LIRA 3 mg
Prevent T2DM		Insufficient data		Insufficient data	
Severe R <sup>b</sup>	Oxalate nephropathy	Urinary clearance of drug or metabolite			Volume depletion
Nephrolithiasis	Kidney stones		Kidney stones		
Depression		Insufficient data	Avoid max dose	Insufficient data	
		Serotonin drugs		Adolescents/YA	
Psychoses	Insufficient data	Insufficient data			Insufficient data
Glaucoma			Angle closure (CI)	Angle closure	
Seizure			15/92 mg—taper slowly to stop	Lowers threshold	
Pancreatitis	Monitor				Monitor
					Cases with history
Opioid use				Antagonist	
Age ≥ 65 years	Limited data	Insufficient data	Limited data	Insufficient data	Limited data
Addiction		Abuse potential (high dose)?	Insufficient data (TOP benefit?)	Seizure risk	

CI, contraindicated; YA, young adults.

<sup>a</sup> Considerations in addition to contraindications; <sup>b</sup> CrCl < 30 mL/min.

Garvey WT, et al. *Endocr Pract.* 2016;22:842-884.

## Cardiovascular Safety of Medications Approved for Chronic Weight Management

☐ Preferred
☐ Use with caution
☒ Avoid

Individualization of Therapy in the Context of Cardiovascular Disease <sup>1</sup>					
Consideration	ORL	LOR	P/T	N/B	LIRA 3 mg
CAD			✓ HR	✓ HR, BP	✓ HR
Arrhythmia		✓ for bradycardia	✓ HR, rhythm (BP for N/B)		
CHF	Insufficient data				
HTN			✓ HR	✓ HR, BP	✓ HR
				CI if uncontrolled	

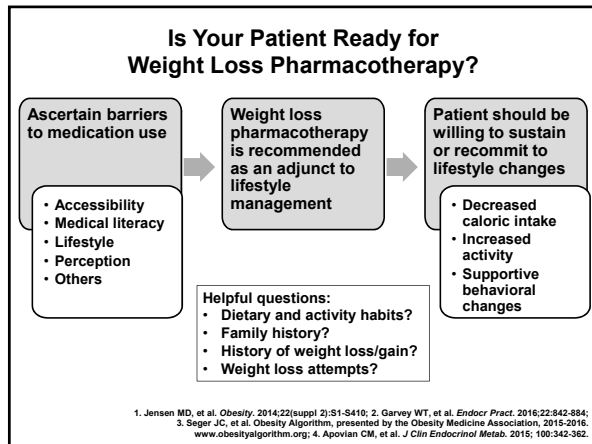
**Cardiovascular outcome trials—risk of CV events<sup>a</sup>**

- N/B: HR, 0.88 (99.7% CI, 0.57-1.34) vs PBO at 50% of expected events<sup>2,b</sup>
- LIRA 1.2 and 1.8 mg: HR, 0.87 (95% CI, 0.78-0.97) vs PBO (*P* = .01)<sup>3</sup>
- Results anticipated for LOR (2018) and N/B (2022)<sup>4</sup>

<sup>a</sup> CV death, nonfatal MI, or nonfatal stroke.

<sup>b</sup> Ended early—new study required.

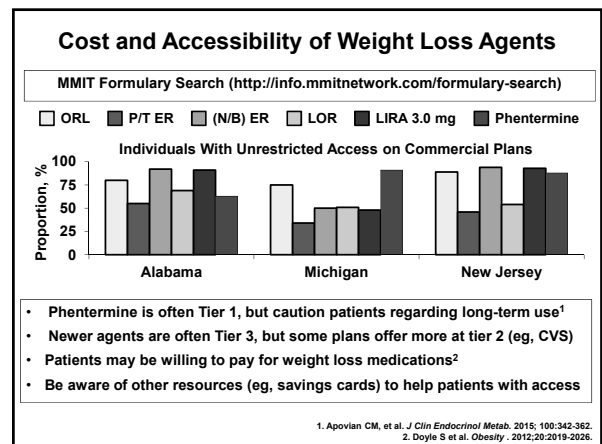
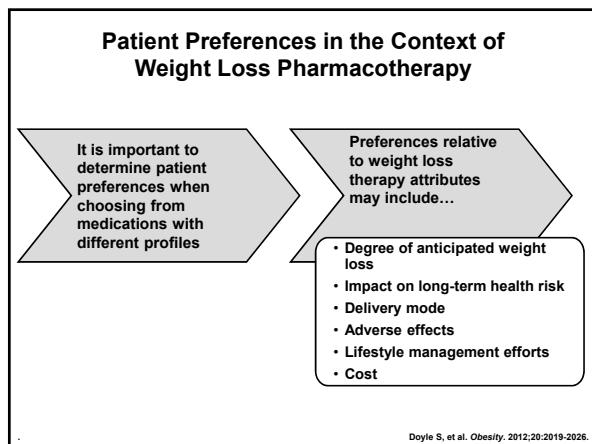
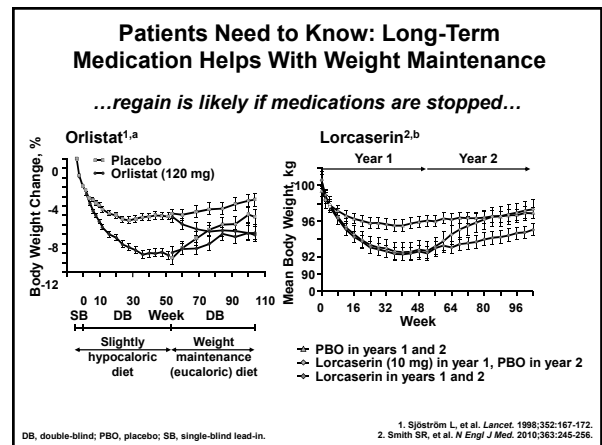
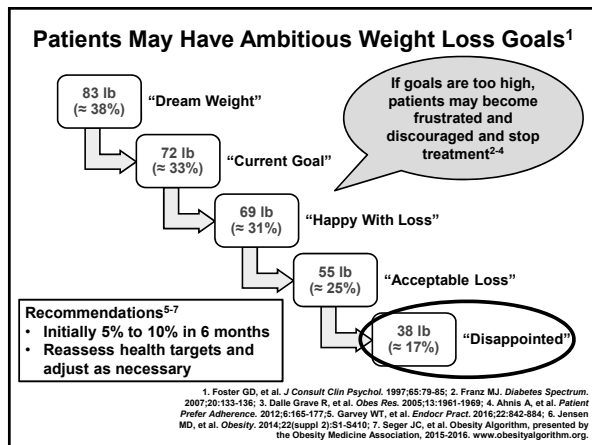
1. Garvey WT, et al. *Endocr Pract.* 2016;22:842-884.  
2. Nissen SL, et al. *JAMA.* 2016;315:990-1004.  
3. Marso SP, et al. *N Engl J Med.* 2016;375:311-322.  
4. ClinicalTrials.gov. <https://clinicaltrials.gov/ct2/search/index>.



### Discuss Weight Effects of Medications as Part of the Shared Decision-Making Process

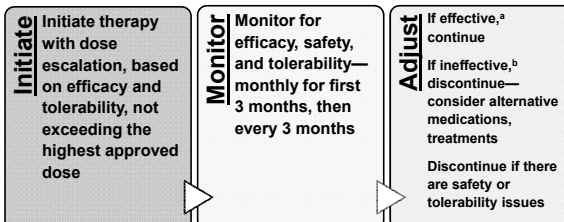
Category	Drugs That May Cause Weight Gain	Possible Alternatives
<b>Neuroleptics</b>	Thioridazine, haloperidol, olanzapine, quetiapine, risperidone, clozapine	Ziprasidone, aripiprazole
<b>Antidiabetic agents</b>	Insulin, sulfonylureas, thiazolidinediones	AGIs, DPP-4i's, SGLT2i's, GLP-1 RAs, metformin
<b>Steroid hormones</b>	Contraceptives, glucocorticoids, progestational steroids	Barrier methods, NSAIDs
<b>Tricyclics (ADs)</b>	Amitriptyline, nortriptyline, imipramine, doxepin	Protriptyline, bupropion, nefazodone
<b>MAOIs (ADs)</b>	Phenelzine	
<b>SSRIs (ADs)</b>	Paroxetine	Fluoxetine, sertraline
<b>Other (ADs)</b>	Mirtazapine, duloxetine	Bupropion
<b>Anticonvulsants</b>	Valproate, carbamazepine, gabapentin, pregabalin, vigabatrin	Topiramate, lamotrigine, zonisamide, felbamate
<b>Antihistamines</b>	Cyproheptadine	Inhalers, decongestants
<b>β- and α-adrenergic blockers</b>	Propranolol, doxazosin	ACEIs, CCBs

Kushner RF, Ryan DH. *JAMA*. 2014;312:943-952; Apovian CM, et al. *J Clin Endocrinol Metab*. 2015;100:342-362.



## Monitor and Adjust as Needed

## Monitor Pharmacotherapy to Assess Need for Adjustment or Discontinuation<sup>1,2</sup>

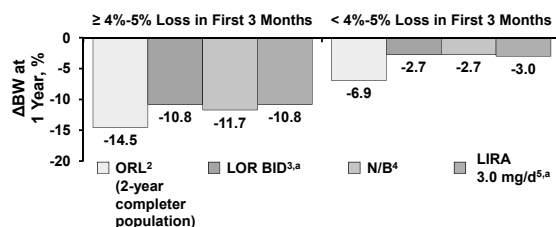


\* Weight loss  $\geq 5\%$  at 3 months except  $\geq 4\%$  at 16 weeks for liraglutide 3.0 mg.  
 † Weight loss  $< 5\%$  at 3 months except  $< 4\%$  at 16 weeks for liraglutide 3.0 mg.

1. US FDA. Drugs@FDA: FDA approved drug products. <http://www.accessdata.fda.gov/scripts/cder/DrugsatFDA>.  
 2. Apovian CM, et al. *J Clin Endocrinol Metab*. 2015;100:342-362.

## Monitor and Adjust: Why the 3-Month Rule?

- Pretreatment predictors of response to medications are uncommon<sup>1</sup>
- However, 12-week weight loss with pharmacotherapy is indicative of response (weight loss) at 1 year<sup>1</sup>

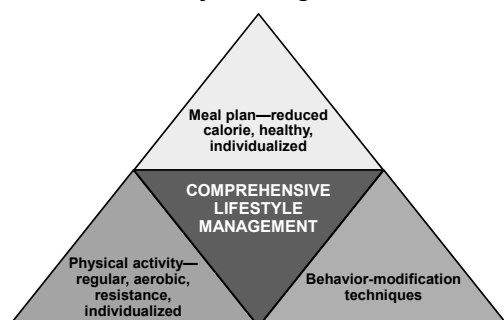


\* Patients without TZDM.

1. Yanovski SZ, Yanovski JA. *JAMA*. 2014;311:74-86.  
 2. Rissanen A, et al. *Int J Obes Relat Metab Disord*. 2003;27:163-169.  
 3. Smith SR, et al. *Obesity*. 2014;22:2137-2146.  
 4. Fujoka K, et al. *Int J Obes (Lond)*. 2016 Jun 22. [Epub ahead of print].  
 5. Fujoka K, et al. *Endocrine Rev*. 2015;36(2 suppl) (abstract SAT-576).

## Supporting Your Patient's Use of Weight Loss Pharmacotherapy

## Components of Comprehensive Lifestyle Management



AACE/ACE algorithm for the medical care of patients with obesity. <https://www.aace.com/files/guidelines/ObesityAlgorithm.pdf>

## Choose a Nutrition Plan Your Patient Can Live With<sup>1,2,a</sup>

Diet/Program	Description
Weight Watchers	Point system based encourages healthy choices; group support
HMR	Meal replacements, fruits/vegetables; lifestyle training; coaching
Biggest Loser	Regular meals (fruits, vegetables, lean protein, whole grains), food journal, exercise
Jenny Craig	Personalized prepackaged meal/exercise plan with support <sup>b</sup>
Raw food	Raw foods (fresh fruits, berries, vegetables, nuts, seeds, herbs)
Volumetrics	Focus on low-density, high-volume foods
Atkins	Low carb; frozen food line is available
Flexitarian	Mostly vegetarian; outlined 5-week meal plan
Slim-Fast	Meal replacement program
Vegan diet	Excludes all animal products

HMR, Health Management Resources.  
 \* Top 10 weight loss diets for 2016 from *U.S. News and World Report*.  
 † Consultants with access to expertise of registered dietitians.

1. Jensen MD, et al. *Obesity*. 2014;22(suppl 2):S1-S410.  
 2. *U.S. News and World Report*. Best weight-loss diets 2016. <http://health.usnews.com/best-diet/best-weight-loss-diets>.

### Interventions That Promote Behavior Change<sup>1</sup>

- Self-monitoring of food intake, exercise, and weight
- Goal setting
- Education (face-to-face meetings, group sessions, remote technologies)
- Problem-solving strategies
- Stimulus control
- Behavioral contracting
- Stress Reduction
- Psychological evaluation, counseling, and treatment when needed
- Cognitive restructuring
- Motivational interviewing
- Mobilization of social support structures

- *Intervention for behavior change may include any number of these approaches<sup>1</sup>*
- *Consider commercial programs that have features consistent with these interventions (eg, Weight Watchers, Jenny Craig, TOPS)*
- *Be aware of tools that may help (eg, activity monitors, phone applications)<sup>2-4</sup>*

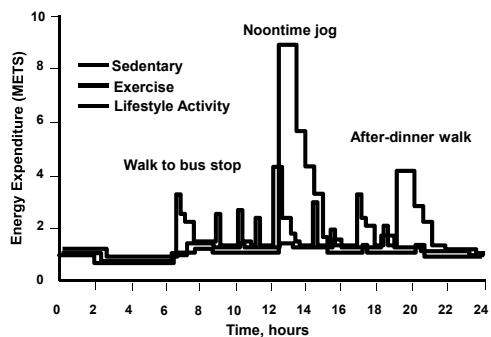
1. Garvey WT, et al. *Endocr Pract.* 2016;22:842-854; 2. Lee JM, et al. *Med Sci Sports Exerc.* 2014;46(9):1840-1848; 3. *Diabetes Forecast.* <http://www.diabetesforecast.org/2014/jan/app-happy.html>; 4. Neithercott C. *Diabetes apps.* <http://forecast.diabetes.org/apps-jan2013>.

### Water Intake

#### Avoidance of

- Regular sodas
- Fruit juices
- Caloric beverages

### The Lifestyle Approach



Andersen RE, et al. *Ann Intern Med.* 1997;127:394-400.

### Clinical Pearls

- Overweight and obesity are chronic metabolic diseases that require persistent, ongoing treatment
- Comprehensive lifestyle management is key and should include nutrition plans that the patient can follow, physical activity, self-monitoring, and accountability
- Weight loss medication can
  - Support patient adherence to comprehensive lifestyle management
  - Help more patients lose more weight
  - Promote improved health and quality of life
- Selection of weight loss medication should
  - Include shared decision-making between the patient and clinician
  - Be individualized based on the patient's history, clinical status, and preferences
- Weight loss medication is intended for long-term use—follow-up and reassessment are important