

Obesity Medication

Medication name	Dose	Duration	Study	Wt loss over placebo
Orlistat	120 mg TID	1 yr	XENDOS	3.8%(1)
Orlistat	120 mg TID	4 yr	XENDOS	2.5%(1)
Phentermine	30 mg	9 -12 months		8.1%(2)
Qsymia	7.5/46 mg	2 yrs	SEQUEL	7.5%(3)
Qsymia	15/ 92 mg	2 yrs	SEQUEL	8.8%(3)
Lorcaserin	10 mg BID	1 yr	BLOOM	3.6%(4)
Bupropion SR+ Naltrexone	360/ 32mg	1 yr	COR-II	5.2%(5)
Metformin	850 BID	2.8 yrs	DPP	2.5%(6)
Liraglutide	3.0 mg SC daily	1 yr	SCALE	5.4%(8)
Liraglutide	3.0 mg SC daily	4 yr	SCALE	4.3%(9)
Intensive lifestyle + meal replacements		1yrs	LOOK AHEAD	7.9%(7)
Intensive lifestyle + meal replacements		4 yrs	LOOK AHEAD	3.6%(7)
Intensive lifestyle alone		1yr	DPP	6.9%(6)

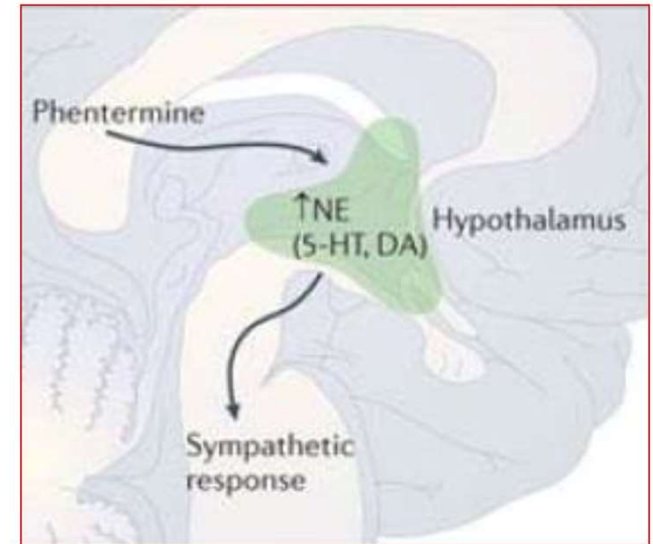
Dosing for Obesity Medications

Medication	Dose	Notes
Orlistat [®]	120 mg TID	Favorable safety and efficacy profile at 120 TID
Phentermine/topiramate	7.5 mg/46 mg QD	Start at 3.75/23 QD for 2 wks If tolerable, increase to 7.5/46
Lorcaserin	10 mg BID	
Naltrexone/bupropion	8 mg/90 mg, 2 tablets BID	<ul style="list-style-type: none"> • 1 tablet in the morning • After 1 wk, add 1 tablet before dinner • As tolerated: increase to 2 tablets in the morning the 3rd wk, 2 tablets before dinner the 4th wk to max 2 tablets BID • If side effects, no dose increases until tolerable • Discontinue if patient has not lost >5% body weight at 12 wks
Liraglutide	3.0 mg SC QD	<ul style="list-style-type: none"> • Start at 0.6 mg SC QD • Increase by 0.6 per wk to 3.0 max • No increases until tolerable if side effects occur

Phentermine

Phentermine :

- Reduces the reuptake of NE from the synapse.
- Also affects serotonin and dopamine reuptake
- Phendimetrazine, Diethylpropion, Benzphetamine also increase NE levels in the brain.
- Main differences lie in the adrenergic response and duration of action



Phentermine

Contra-indications

- Uncontrolled HTN
- Seizures
- Known CAD
- Cardiac arrhythmias
- Anxiety disorders
- Predisposition to acute narrow angle glaucoma

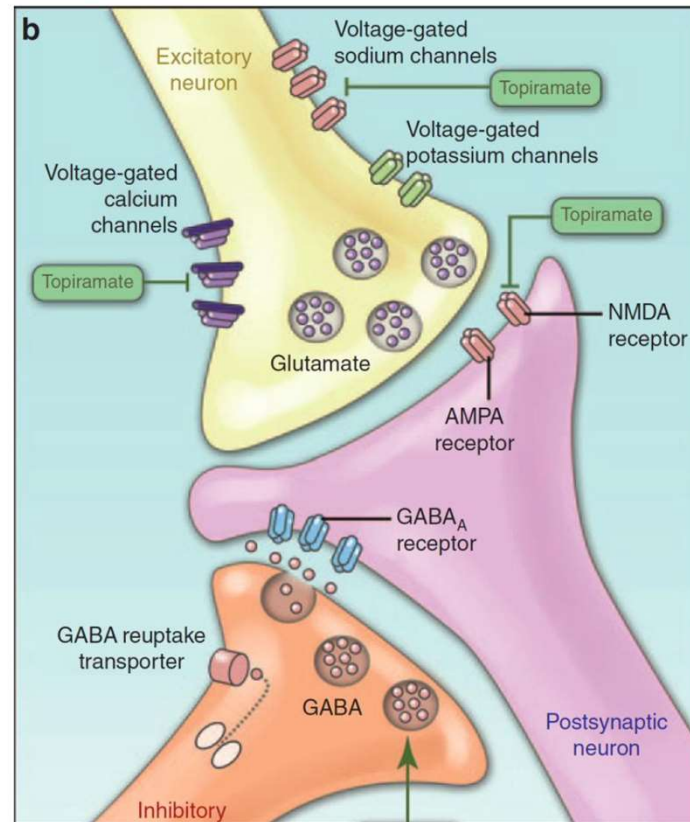
Common SE

- Tachycardia, HTN
- Anxiety, insomnia
- Tachyphylaxis and tolerance
- Acute narrow angle glaucoma

Important Interactions

- Increased risk of serotonin syndrome with SSRIs

Topiramate



Topiramate

- Overall inhibitory effect on post synaptic neurons
- Reduces glutamate release by blocking voltage gated sodium channels
- Enhances GABA release
- Blocks AMPA and NMDA receptors
- **Carbonic anhydrase inhibition**

Zonisamide

- Enhances serotonin and dopamine neurotransmission
- Is a sulfonamide

Obesity Medicine



Topiramate

Contraindications

- Kidney stones
- Glaucoma
- Sulfa allergy(Zonisamide)

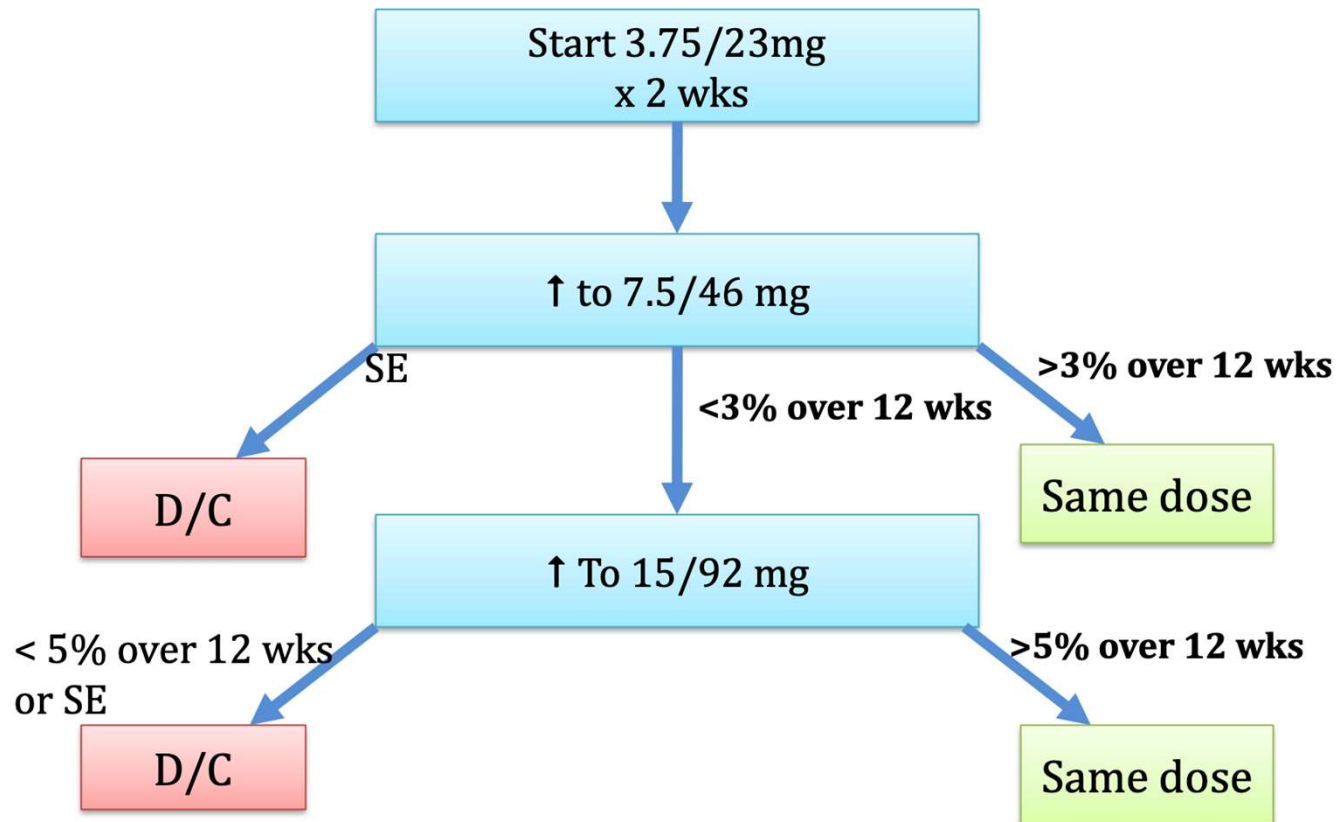
Caution:

- Topiramate levels increased when combined with metformin
- Start or stop medications slowly

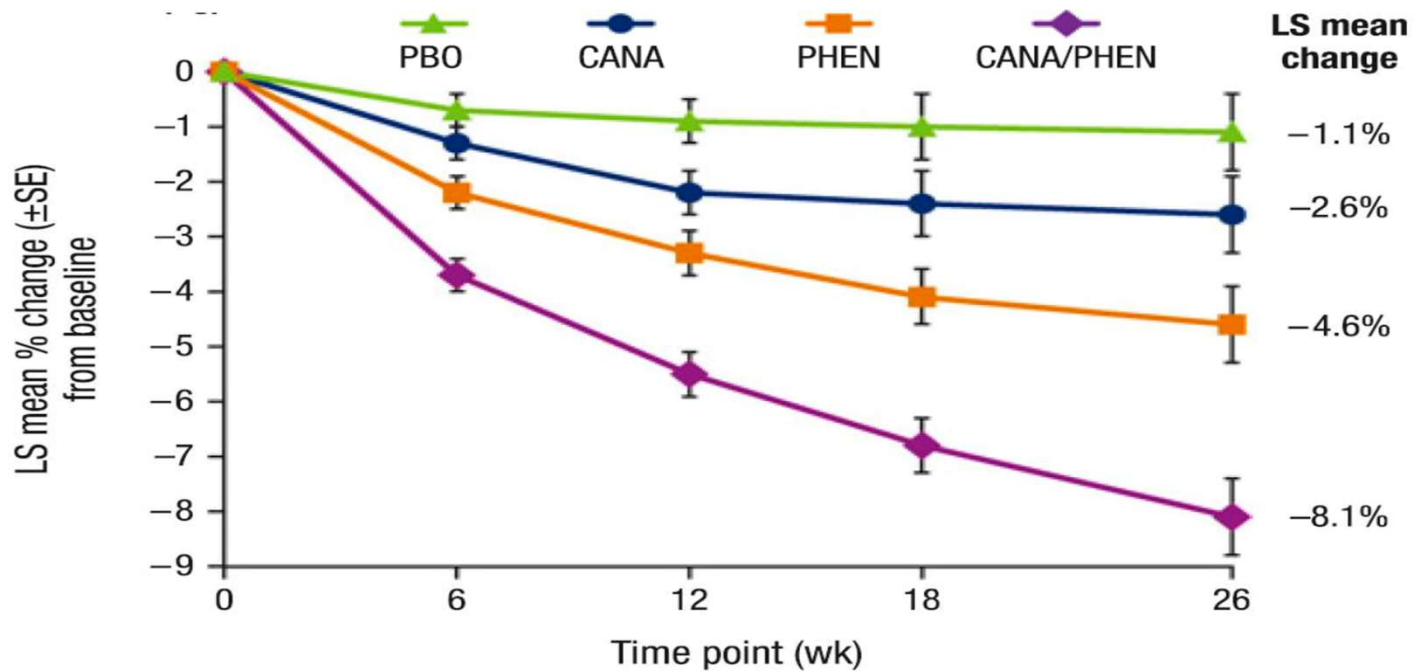
Side Effects

- Somnolence and lethargy
- Memory impairment
- Kidney stones
- Metabolic acidosis
- Acute angle closure glaucoma
- QT prolongation (Topiramate)
- Renal failure (Zonisamide)
- Steven Johnson syndrome (Zonisamide)

Algorithm for Phentermine/ Topiramate ER (Qsymia)



- Combination of phentermine and canagliflozin is promising.



Hollander P., et al, Diabetes Care 2017. PMID: 28289041

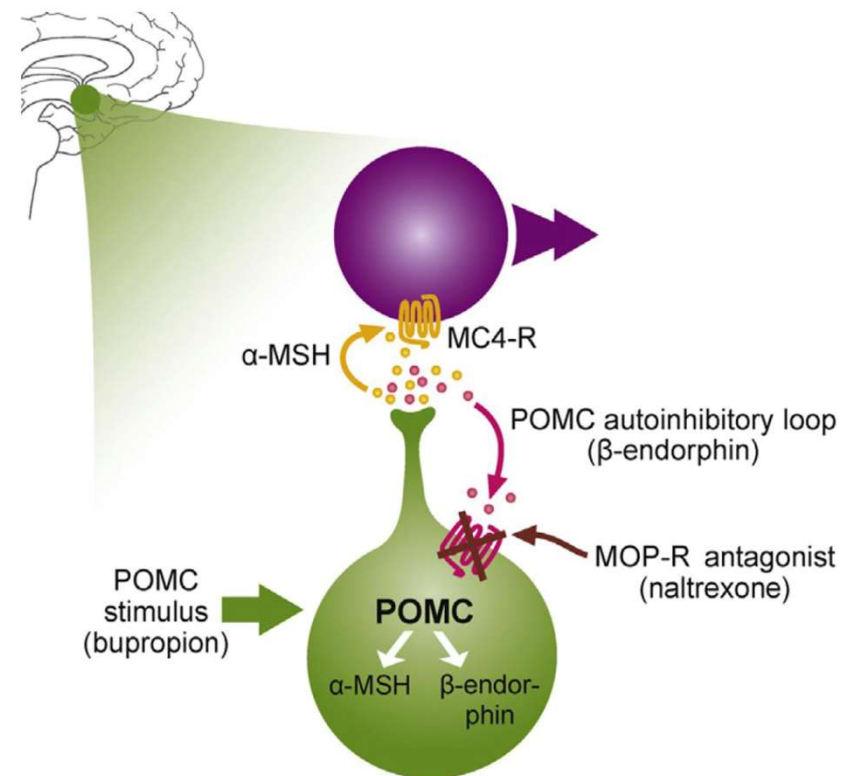
Bupropion SR + Naltrexone (Contrave)

Bupropion:

- Reduces uptake of dopamine and activates POMC neurons
- Modulates reward pathways
- Weakly inhibits NE uptake

Naltrexone:

- Blocks the feedback inhibition of by β -endorphin.



Bupropion SR + Naltrexone (Contrave)

Contraindications:

Uncontrolled HTN (bupropion)
Severe anxiety (bupropion)
Tachyarrhythmias (bupropion)
Seizure disorder (bupropion)
Narrow angle glaucoma (bupropion)

Opioid use (naltrexone)
Liver failure (naltrexone)

Side effects:

Nausea, vomiting, hypertension, tachycardia, anxiety
Monitor for worsening depression/suicidal behavior

Bupropion SR + Naltrexone (Contrave)

Bupropion + Naltrexone (Contrave)

- Sustained release bupropion and naltrexone 90 mg and 8 mg per tablet.
- Start one tablet a day. Increase by one tablet a week until final dose of 2 tablets BID (360mg + 32 mg)
- High fat meal can greatly increase bioavailability(avoid)
- Continue only if weight loss $\geq 5\%$ at 12 weeks.

GLP-1 Agonists

Liraglutide (Saxenda)

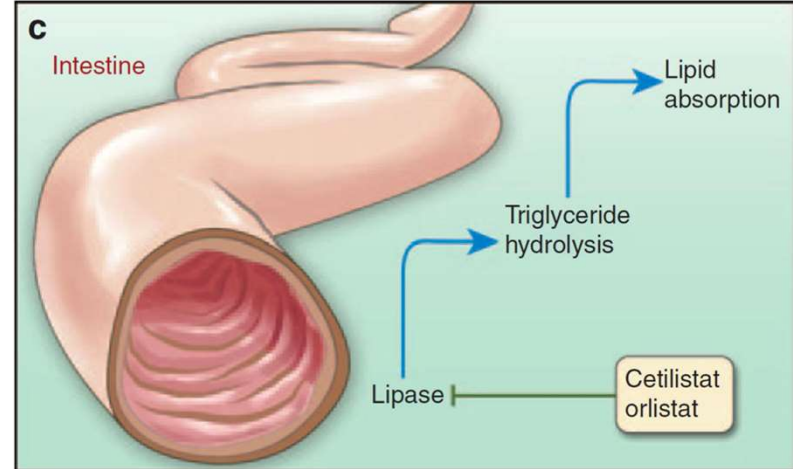
- Injected subcutaneously with a multi dose pen.
- Start with 0.6 mg once a day by injectable pen
- Increase by 0.6 mg weekly until dose of 3 mg once daily
- Continue only if weight loss $\geq 4\%$ at 16 weeks.

Orlistat

- Inhibits gastric and pancreatic lipase.
- Causes malabsorption of 30% of ingested fat.

Side effects: GI intolerance, steatorrhea, stool leakage, fat soluble vitamin deficiencies.

Psyllium reduces side effects of steatorrhea and stool leakage.



Obesity Medicine

Orlistat

Orlistat

- Over the counter Alli 60 mg tab TID.
- Prescription Xenical 120 mg TID.
- Supplement patients with fat soluble vitamins.
- Use with psyllium fiber for improving gastrointestinal SE.

Wegovy (Semaglutide) 2.4 mg

GLP-1 Agonist weekly injection

15% weight loss seen in ~50% study participants

*Available starting 6/18/21



Start

- Start Wegovy™ at a dose of **0.25 mg** per week for your **first month**

Increase

- For your **second month**, you'll increase your weekly dose to **0.5 mg**
- For your **third month**, you'll increase your weekly dose to **1 mg**
- For your **fourth month**, you'll increase your weekly dose to **1.7 mg**

Full Dose

- For the **fifth month** onwards, you'll increase your weekly dose to the full dose of **2.4 mg**

The most common side effects of Wegovy™ may include: nausea, diarrhea, vomiting, constipation, stomach (abdomen) pain, headache, tiredness (fatigue), upset stomach, dizziness, feeling bloated, belching, gas, stomach flu and heartburn.

Source: www.wegovy.com

Plenity (<https://www.myplenity.com>)

FDA cleared weight management approach made from—cellulose and citric acid.

Average weight loss was 10% (**about 22 pounds**).

The most common side effects were diarrhea, distended abdomen, infrequent bowel movements, and flatulence.

Prescribed through Plenity website through Plenity telehealth visit. Soon will be available to all providers to prescribe

Administration:

Take 3 Plenity capsules

Take three capsules with water 20 minutes before lunch and dinner.

Drink 16 oz of water