

Obesity Medications

– Where are We Now?

by Christopher D. Still, DO, FACP, FACN,
Nadia Boulghassoul-Pietrzykowska, MD,
and Jennifer E. Franceschelli, DO



Editor's Note: Please note that some of the medications mentioned in this article have been FDA approved, and may or may not be available at the time of the printing of this issue. None of the medications discussed in this article should be taken while pregnant or while attempting to become pregnant. One medication, Qsymia®, has specific FDA warning label information around the use of birth control due to birth defect risk. If you have questions regarding these medications, please contact a healthcare provider.

This year has proven to be an exciting one for obesity medications. For the first time in more than a decade, we saw two new obesity drugs approved by the Food and Drug Administration (FDA). In an area where individuals affected by obesity had little choice regarding treatment, there are now a few different approved medications, which have a lot of Americans asking the question, “Are these medications right for me?”

In this article, we’re going to take an in-depth look at all currently approved medications for the treatment of obesity, who should take them and more. Please keep in mind that new information on the treatment of obesity unveils itself each and every day. For the latest information on obesity treatments, please visit the OAC Web site.

Who Qualifies for Obesity Medications?

Depending on your body mass index (BMI), various options are available for the treatment of obesity. Although everyone is hopeful for a fast and easy way to lose weight, nothing has been shown to replace a prudent, low-fat diet along with behavior modification and an increase in physical activity as a cornerstone for all obesity treatments. Other options, such as the



use of weight-loss medications and metabolic and bariatric surgery can be considered if weight-loss levels out at a still unacceptable range or if medical problems are not adequately controlled.

The treatment of obesity should be a stepwise approach based on an individual's BMI. If you do not know your BMI, it's very easy to calculate with an online BMI calculator. The OAC provides a great online calculator located on their Web site in the "Measuring Weight" section located under the "Understanding Obesity" tab. Once you calculate your BMI, you will see that you fall into one of the below categories:

| Weight Category | BMI |
|-----------------|-------------|
| Underweight | < 18.5 |
| Normal | 18.5 - 24.9 |
| Overweight | 25 - 29.9 |
| Obese | 30 - 39.9 |
| Severely Obese | > 40 |

If someone is overweight (BMI between 25 and 29.9), diet, exercise and behavior modification is recommended. For a BMI of 30 alone or 27 with an obesity-related condition (type 2 diabetes, hypertension, sleep apnea), weight-loss medications can be considered in addition to diet, exercise and behavior modification. Diet and exercise is an essential part to any treatment plan. See the box on page 6 to learn more about incorporating these changes into your daily life.

Obesity Medications

Okay, now onto the section that everyone wants to read. The next tool that can be used to achieve weight-loss and health improvement are medications. Pharmacologic therapy may be offered to individuals affected by obesity who have failed to achieve weight-loss through diet and exercise alone.

Currently there are several drugs that are approved by the FDA for weight-loss:

- orlistat (Xenical® or alli®)
- phentermine products (Adipex® or Suprenza®)
- phentermine-topiramate (Qsymia®) (FDA approved, now available)
- lorcaserin HCl (Belviq®) (FDA approved, but not yet available)



Let's take a closer look at each of these medications and learn how they work:

Orlistat (Xenical® or alli®)

Orlistat is the only FDA approved weight-loss medication that is available over-the-counter and available at a higher dose with a prescription. It is a tablet that is usually taken three times per day before a meal that contains dietary fat. It works by decreasing the amount of fat your body absorbs. This means that only 2/3 of the calories that you take in from fat will be absorbed. The other 1/3 of the calories gets carried away in the digestion tract as stool.

It does not work well for people who are already on a low-fat diet since their calories from fat are already low. The average weight-loss is about 3-4 percent of your weight after one-year. In a person who weighs 200 pounds, this would mean eight pounds of weight-loss. Most weight-loss medications can only be used for several months due to side effects and tolerance. Orlistat has the advantage that it can be used for several years since tolerance is not an issue and side effects are mild.

Patients using orlistat on a regular basis should take a daily multivitamin as there is potential for deficiency in some vitamins. Common side effects are cramps, gas, stool leakage, oily spotting and gas with discharge that improve with a lower fat diet. Orlistat has also been shown to improve cholesterol levels and reduce risk of type 2 diabetes.

Phentermine (Adipex® or Suprenza®)

Phentermine is a medication available by prescription that works on chemicals in the brain to decrease your appetite. It also has a mild stimulant component that adds extra energy. Phentermine is a pill that is taken once a day in the morning time. Tolerance to this medication can develop, so it can only be used for several months at a time. Common side effects are dry mouth and sleeplessness.

Due to its stimulant effect, a person's blood pressure and heart rate can increase when on this medication;

Diet and Exercise

The Essential Components to any Treatment Plan

You probably read this sub-head and thought, "Yes, I've already dieted and exercised and didn't see any results." Well, you're not alone. Diet and exercise are often the front-line of defense when it comes to weight-loss and most individuals affected by obesity do struggle with this; however, diet and exercise should be the first place for you to start. Regardless of treatment choice, lifestyle modification through diet and exercise is essential to the success of any weight-loss program.

Diet

It seems simple right? We just need to control the calories we consume. Unfortunately, deprivation from foods we are used to eating is difficult to accept by our bodies and minds. In addition, when dieting, the body reacts very quickly by activating compensatory mechanisms that increase appetite and slow metabolism. This makes dieting even harder. As a result, the weight-loss achieved by diet alone is about 5 percent of body weight.

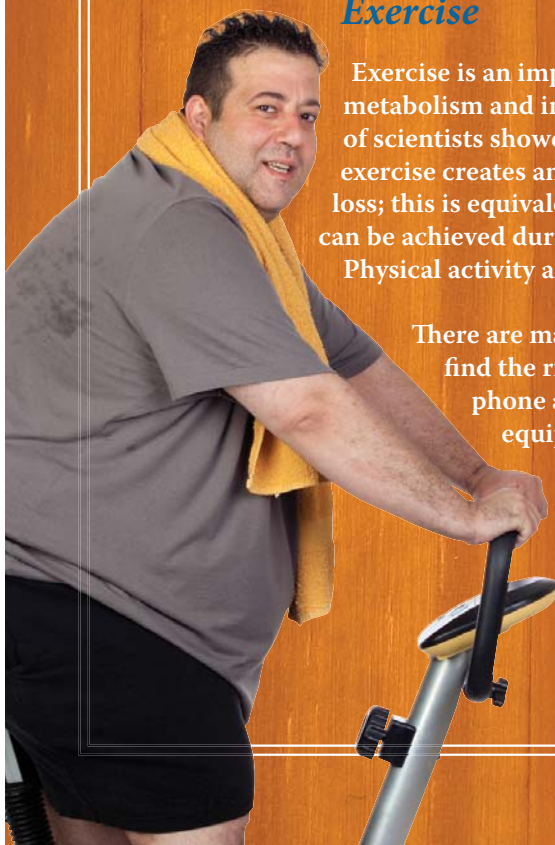
Dieting today is not what "dieting" was 10 or 15 years ago. With the integration of technology, you can easily log your daily caloric intake and keep track of what you eat. There's even an app that allows you to take a picture of your food and it will tell you how many calories are in it!



Exercise

Exercise is an important addition to diet as it boosts metabolism and increases weight-loss. A group of scientists showed that a moderate dose of daily exercise creates an optimal condition for weight-loss; this is equivalent to burning 300 calories which can be achieved during a 45 minute aerobic exercise. Physical activity also helps maintain weight-loss.

There are many tools available to help you find the right exercise for you. From smartphone apps to full-service fitness centers equipped with all the bells and whistles, you can easily make exercise a part of your daily routine. Start slow by simply going for a walk each day and build-up to more intense exercises such as jogging, swimming, biking, weight lifting and more.



therefore, you must be monitored closely by a physician who is experienced in prescribing this medication. It cannot be used in patients with some heart conditions (such as poorly controlled blood pressure), glaucoma (increased pressure in your eye), stroke, overactive thyroid or history of drug abuse because of its effects on a person's heart rate and blood pressure. There is some concern for abuse, but this is minimal if the medication is appropriately used as directed by a healthcare professional. The average weight-loss is 4-5 percent of your weight after one-year. In a 200 pound person, this means about 10 pounds of weight-loss.

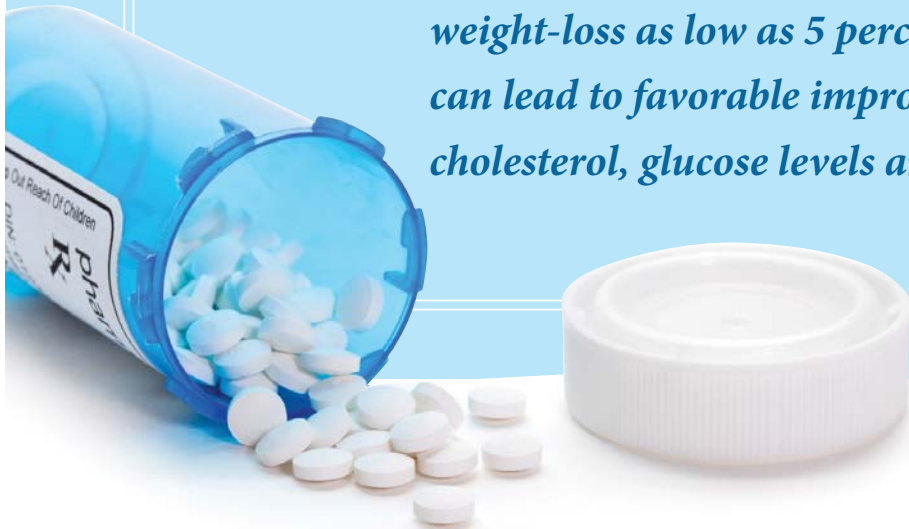
Phentermine-Topiramate (Qsymia®)

This combination medication was approved by the FDA in July 2012. Topiramate is a medication used to treat seizures. It was found that a common side effect of this medication was weight-loss. Phentermine, as described in this article, helps to increase your energy and decrease your appetite.

The highest dose of Qsymia® (15 mg of phentermine and 92 mg of topiramate extended-release) has led to a 13.2 percent weight-loss after one-year. In a 200 pound person, a 13.2 percent weight-loss would mean a loss of 26.6 pounds. Cholesterol levels have also been shown to improve. The most common side effects were dry mouth, constipation and pins and needle feeling in extremities. Qsymia® should **NOT** be taken during pregnancy since it has been associated with birth defects.



Although weight-loss achieved by diet, exercise and medications seems modest, research has shown that weight-loss as low as 5 percent of initial body weight can lead to favorable improvements in blood pressure, cholesterol, glucose levels and insulin sensitivity.



Lorcaserin (Belviq®)

Lorcaserin was approved in June 2012 by the FDA. Although it is not yet commercially available, it has been shown to have an average of 5.8 percent weight-loss after one-year. In a 200 pound person, this would mean an 11.6 pound weight-loss.

It is like many of the other medications and works on the chemicals in your brain to help decrease your appetite. Lorcaserin also requires a prescription. The most common side effects are headache, dizziness, fatigue, dry mouth, upper respiratory tract infection and nausea.

Conclusion

The best weight-loss results are achieved with a comprehensive program involving physicians, dietitians and behavioral specialists providing individual guidance and treatment. Diet, exercise, medications and sometimes bariatric surgery may all be needed to achieve a healthy weight.

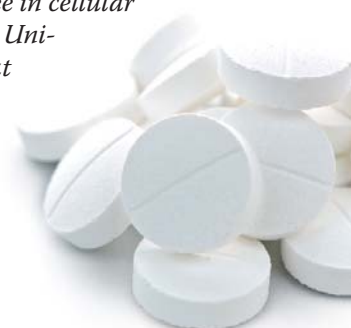
Most importantly, the major weight-loss benefit is the improvement of diseases caused by obesity. Although weight-loss achieved by diet, exercise and medications seems modest, research has shown that weight-loss as low as 5 percent of initial body weight can lead to favorable improvements in blood pressure, cholesterol, glucose levels and insulin sensitivity. The risk of developing heart disease is reduced the most in patients who have impaired glucose tolerance, type 2 diabetes or high blood pressure. Moreover, this beneficial effect can be carried on for many years after losing weight.

About the Authors:

Christopher D. Still, DO, FACP, FACN, has been studying developments in obesity and nutrition support for nearly two decades. Dr. Still directs the Geisinger Center for Nutrition and Weight Management as well as their Obesity Research Institute. Dr. Still's interest in weight-loss comes from his personal experiences with obesity. Dr. Still once weighed 385 pounds, and losing the weight was a life and career changing experience. Dr. Still is certified by the American Board of Internal Medicine, the American Board of Nutrition and the American College of Nutrition, among others. He is also an emeritus member of the OAC Board of Directors.

Nadia Boulghassoul-Pietrzykowska, MD, is Board Certified in Internal Medicine and presently a nutrition and bariatric medicine fellow at the GI/Nutrition Department at Geisinger Medical Center. Dr. Boulghassoul-Pietrzykowska is interested in obesity, nutrition and addiction.

Jennifer E. Franceschelli, DO, is a physician training in bariatric medicine and nutrition at Geisinger Medical Center. She earned her bachelor's degree in cellular and molecular biology at West Chester University and completed medical school at Philadelphia College of Osteopathic Medicine. She has an interest in pediatric obesity and a strong proponent of the multi-disciplinary approach in the prevention and treatment of obesity.



Membership Application

OAC Membership Categories

(select one)

- Individual Membership: \$20/year
- Institutional Membership: \$500/year
- Chairman's Council Membership: \$1,000+/year

OAC Membership Add-ons

(optional, but only accessible by OAC members)

Add-on 1: Educational Resources

To order bulk copies of OAC resources, members can purchase educational packages. If you'd like to order resources, select one of the below packages.

- Standard Package**
10-50 pieces/quarter \$50
- Deluxe Package**
51-100 pieces/quarter \$100
- Premium Package**
101-250 pieces/quarter \$150

Add-on 2: Make a General Donation

Make a tax-deductible donation to the OAC when joining as a member. Your donation helps the OAC's educational and advocacy efforts.

- \$5
- \$10
- \$25
- \$50
- \$100
- Other _____

Membership/Add-on Totals:

Membership Category: \$ _____
Add-on 1 (if applicable): + \$ _____
Add-on 2 (if applicable): + \$ _____
TOTAL MEMBERSHIP PAYMENT: \$ _____

Contact Information

Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Email: _____

Payment Information

- Check (payable to the OAC) for \$ _____.
- Credit card for my TOTAL membership payment of \$ _____.

- Discover®
- MasterCard®
- Visa®
- Amex®

Credit Card Number: _____

Expiration Date: _____ Billing Zip Code: _____

RETURN TO:

Mail: OAC
4511 North Himes Ave., Ste. 250
Tampa, FL 33614

Fax: (813) 873-7838

OAC

MEMBERSHIP



Building a Coalition of those Affected

The OAC is the **ONLY** non-profit organization whose sole focus is helping those affected by obesity. The OAC is a great place to turn if you are looking for a way to get involved and give back to the cause of obesity.

There are a variety of ways that you can make a difference, but the first-step is to become an OAC Member. The great thing about OAC membership is that you can be as involved as you would like. Simply being a member contributes to the cause of obesity.

Why YOU Should Become an OAC Member

Quite simply, because the voice of those affected needs to be built! The OAC not only provides valuable public education on obesity, but we also conduct a variety of advocacy efforts. With advocacy, our voice must be strong. And, membership is what gives the OAC its strong voice.

Membership Benefits

Benefits to Individual Membership

- Official welcome letter and membership card
- Annual subscription to the OAC's publication, *Your Weight Matters Magazine*
- Subscriptions to the *OAC Members Make a Difference* and *Obesity Action Alert* monthly e-newsletters
- "Bias Buster" Alerts, alerting specifically to issues of weight bias
- Immediate Advocacy Alerts on urgent advocacy issues and access to the OAC's expert advocacy team
- Ability to lend your voice to the cause

