

Orlistat



PLAY PICMONIC

Mechanism

Inhibits Gastric and Pancreatic Lipase

[Inhibiting-chains on the Stomach and Pancreas with Lip-lasers](#)

Orlistat is used to treat obesity by inhibiting gastric and pancreatic lipase, decreasing the absorption of fat. This inhibition will cause the inability of the enzyme to hydrolyze dietary fat into absorbable free fatty acids and mono glycerol, causing the elimination of fat via the fecal route. Pancreatic enzymes such as trypsin, amylase, and phospholipase A2 are not affected by this drug.

Decrease Absorption of Fat

[Down-arrow Absorbing-sponge Bacon](#)

Decreased Absorption of Fat by Orlistat will cause a caloric deficit in the patient, causing weight loss.

Clinical Use

Weight Loss

[Skinny-with-baggy-pants](#)

The FDA approves Orlistat as a weight loss agent to treat obesity.

Side Effects

Increased Bowel Movements

[Up-arrow Bowels-bowl Movements](#)

Increased bowel movements can also be present in patients taking Orlistat.

Steatorrhea

[Steak-diarrhea](#)

Steatorrhea is defined as oily stools, which represent increased fat content in the stools. This side effect can be minimized by reducing dietary fat content to less than 30% of the calories from fat.

Abdominal Pain

Abdomen Pain-bolt

Abdominal pain is one of the most common side effects seen in patients taking Orlistat. It can be present in 25% of patients. However, patients experiencing new-onset severe abdominal pain after taking Orlistat should be considered to have pancreatitis.

Flatulence

Farting

Flatulence is the most common side effect seen in patients taking Orlistat. It can be present with discharge and found in 40.1% of patients. Controlling dietary fat to 15 grams per meal can reduce the side effect.

Calcium Oxalate Kidney Stones

Calcium-cow Oxalate-ox Kidney Throwing Stones

The decreased absorption of fat from Orlistat will increase the binding of free fatty acids to calcium in the gut lumen. The decrease of calcium in the gut lumen due to its binding to free fatty acid prevents calcium from binding with oxalate, and this will increase oxalate in the gut, which will then be absorbed.

Decreased Absorption of Fat-Soluble Vitamins

Down-arrow Bacon Viking-ship

Decreased absorption of fat-soluble vitamins can occur in patients taking orlistat due to long-term orlistat-induced steatorrhea.