

Lipid-Lowering Drugs 2005

Drug Type	Generic Name	Brand Name	Average Daily Dosage*	Average Retail Price†	How They Work	Advantages	Disadvantages
Statins (HMG-CoA reductase inhibitors)	atorvastatin	Lipitor	10 to 80 mg	10 mg: \$68	HMG-CoA reductase is required for the liver to produce cholesterol. Statins block the action of this enzyme. As a result, the liver makes less cholesterol and more LDL receptors, which remove LDL from the blood.	The most effective drugs to lower total and LDL cholesterol. Can lower LDL cholesterol by 25% to 55% and triglycerides by 10% to 25%. Can increase HDL cholesterol by 5% to 15%. Side effects are uncommon. Better tolerated than bile acid sequestrants or nicotinic acid. Reduce the risk of heart attacks, strokes, and death.	Gastrointestinal symptoms or reversible liver injury occurs in 1% to 2% of people. Muscle soreness also can occur, more often when statins are used in combination with nicotinic acid, fibrates, erythromycin, antifungal agents, or cyclosporine. When severe, muscle inflammation can cause kidney damage.
	fluvastatin	Lescol	20 to 80 mg	40 mg: \$58			
	fluvastatin, extended-release	Lescol XL	80 mg	80 mg: \$74			
	lovastatin‡	Mevacor	20 to 80 mg	20 mg: \$70 (\$30)			
	pravastatin	Pravachol	10 to 40 mg	40 mg: \$126			
	rosuvastatin	Crestor	5 to 40 mg	10 mg: \$71			
simvastatin§	Zocor	10 to 80 mg	20 mg: \$122				
Bile acid sequestrants	cholestyramine	Questran	8 to 24 g	4 g : \$80 (\$40)	Bile acids, made from cholesterol by the liver, are released from the gallbladder into the intestine after meals. Normally, bile acids are reabsorbed from the intestine and returned to the liver for reprocessing. Bile acid sequestrants bind bile acids in the intestine and remove them via the stool. As a result, the liver converts more cholesterol to bile acids and removes more LDL from the blood.	Long-term safety and effectiveness have been established. Can be combined with any other lipid-lowering drug. Used for people with elevated LDL cholesterol levels but normal triglyceride levels. On average, bile acid sequestrants reduce LDL cholesterol by 15% to 25%. Used alone, these drugs reduce the risk of heart attacks. Bile acid sequestrants also slow the progression of plaques and may even cause plaque regression when combined with other cholesterol-lowering drugs.	Constipation is common, especially at higher doses. This side effect may be temporary and can be relieved with a high-fiber diet or stool-softening pills. May cause heartburn or a feeling of fullness. Triglyceride levels may rise. Rarely, bile acid sequestrants can interfere with the absorption of folic acid. Proper timing of drug dosage is important to avoid interference with the absorption of other drugs.
		Questran Light	8 to 24 g	4 g : \$66 (\$45)			
	colestipol	Colestid	10 to 30 g	5 g : \$60			
		Colestid Flavored	10 to 30 g	5 g : \$66			
		Colestid pills	10 to 30 g	1 g: \$20			
	colesevelam	WelChol	3.75 to 4.375 g	0.625 g: \$27			
Nicotinic acid	niacin	Niacor	3 to 6 g	500 mg: \$7 (\$5)	Nicotinic acid decreases the production of VLDL by the liver. VLDL is the major carrier of triglycerides in the blood.	Safe and effective, niacin is used to treat high LDL cholesterol levels, high triglyceride levels, and/or low HDL cholesterol levels. The most effective drug to raise HDL levels (about 20% on average), it also reduces LDL cholesterol on average by 10% to 20% and triglycerides by 20% to 30%. Used alone, it decreases heart attacks and heart attack deaths. When combined with bile acid sequestrants, it slows progression and contributes to regression of plaques in the coronary arteries.	Skin flushing and itching may occur about half an hour after taking the drug. These side effects often decrease with time and can be greatly reduced by starting on a low dose and gradually increasing the dose, taking an extended-release formulation, taking the drug with meals, or taking an aspirin half an hour before taking the drug. Should not be used by people with peptic ulcers or a history of ulcers or by people with liver disease or gout. Should be used with caution in people with diabetes or pre-diabetes. In rare cases, sustained-release formulations can cause liver injury.
	niacin, extended-release‡	Niaspan	375 to 2,000 mg	500 mg: \$43			
Fibrates	fenofibrate	Lofibra	67 to 200 mg	67 mg: \$26	These drugs stimulate the activity of lipoprotein lipase. This enzyme breaks down triglycerides and thus lowers VLDL and triglyceride levels.	Fibrates are safe for long-term use. They are the most effective drugs to lower triglycerides, producing reductions of 30% to 50%. They also raise HDL cholesterol by about 10%. Fenofibrate may be more effective than gemfibrozil in lowering total and LDL cholesterol. Gemfibrozil reduces the risk of heart attacks.	Total and LDL cholesterol may increase. Feelings of fullness, diarrhea, gas, muscle aches, and reversible liver injury may occur. Long-term use can lead to gallstones. When taken with a statin, fibrates (especially gemfibrozil) increase the risk of severe muscle inflammation and kidney damage.
		Tricor	54 to 160 mg	54 mg: \$35			
	gemfibrozil	Lopid	1,200 mg	600 mg: \$47 (\$9)			
Cholesterol absorption inhibitor	ezetimibe§	Zetia	10 mg	10 mg: \$75	Ezetimibe inhibits the intestinal absorption of cholesterol from the diet and from bile acids.	Safe and effective, ezetimibe lowers total cholesterol by 13%, LDL cholesterol by 15%, and triglycerides by 8%. When used in combination with a statin, total cholesterol is reduced by 17%, LDL cholesterol by 25%, and triglycerides by 14%. May be useful in people who experience intolerable side effects with statins or cannot reach desirable lipid levels with a statin alone.	People with liver disease or elevated liver enzymes should not take ezetimibe in combination with a statin. Side effects are uncommon; they include back pain, joint pain, diarrhea, and sinus inflammation.

* These dosages represent an average range for the treatment of elevated lipid levels. The precise effective dosage varies from patient to patient and depends on many factors. Do not make any changes in your medication without consulting your doctor.
 † Average price for 30 tablets or capsules (unless otherwise indicated) of the dosage strength listed. Actual price may vary. If a generic version is available, the cost is listed in parentheses. Sources: drugstore.com, eckerd.com, and walgreens.com.
 ‡ A combination of lovastatin and extended-release niacin (brand name Advicor) is available.
 § A combination of simvastatin and ezetimibe (brand name Vytorin) is available.
 || Amount of the active ingredient.