

STRATEGY 4

SLICE MEDICATIONS

BUY ONE, GET ONE FREE! How many times have you seen that slogan advertised by grocery stores or mass merchandisers? It exemplifies the quintessential American good deal. Years ago, when Viagra® was first introduced, some of my patients who had been happy with the 50 mg dose started asking me for the 100 mg tablets. They explained that both the 50 mg and 100 mg tablet cost about \$10 each. They wanted the 100 mg dosage so that they could slice the tablet into two 50 mg parts—effectively doubling the number of doses for the same cost.

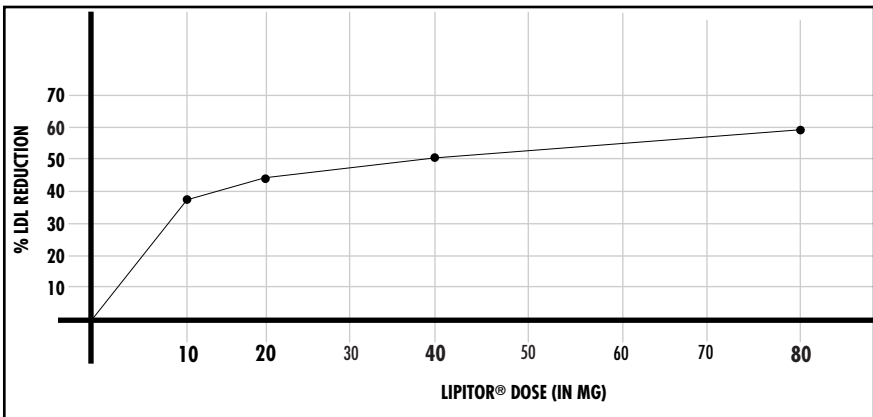
Most consumers do not realize that some medications are prepared to be sliced into two equal parts. Known as scored tablets, they have an indentation in the middle so that they may easily be cut into two equal pieces. Many other tablets that are not scored can also be sliced into two equal parts.

As we have seen, most of the cost of drugs goes into research, development, and promotional expenses. Because the manufacturing and ingredients are relatively inexpensive, different doses of a drug frequently cost the same. If you take a 40 mg daily dose of a medication and the cost of the 80 mg tablet is identical to the cost of the 40 mg tablet—as it frequently is—you can divide the 80 mg tablet into two parts and cut your cost by 50 percent. This is how you can buy one dose and get one dose free. Many drugs should not be sliced, however, and patients must consult with their physician and pharmacist before slicing medications. Some drug companies, pharmacies, and managed care plans may consider slicing medications to be inappropriate, but I do not know of any laws that prohibit pill slicing.

The Effects of Various Doses of Medications

Interestingly, doubling the dose of a drug usually does not double its effect. Lipitor®, the best-selling drug in the world, with annual sales approaching \$10 billion, illustrates this point. Lipitor® is a cholesterol-lowering drug that reduces the “bad” LDL cholesterol in the body. A 10 mg dose of Lipitor® reduces LDL cholesterol by 39 percent. Doubling the Lipitor® dose to 20 mg produces a reduction of LDL cholesterol of 43 percent—only 4 percent more than the 10 mg dose! Most other medications have similar “dose response” characteristics.

DOSES OF LIPITOR® AND PERCENT LDL REDUCTION



Note: Lipitor® is available only in 10, 20, 40, and 80 mg doses, shown in **bold** in the graph above.

Savings on Different Doses

Pharmaceutical companies will sometimes set flat pricing—i.e., identical pricing for different dosages—for some of their drugs in order to discourage patients from switching to a different medication due to cost concerns when a higher dosage is needed. The prices for different dosages of Lipitor® obtained in early 2005 from the Costco online pharmacy are given in the following table with a cost per 10 mg dose calculated. While the price paid for an individual 10 mg dosage varies widely, the price paid for a 20 mg, 40 mg, or 80 mg tablet is nearly identical.

Prices of Lipitor®

DOSE	PRICE PER 100 TABLETS	PRICE PER 10 MG
10 mg	\$232.07	\$2.32
20 mg	\$322.27	\$1.61
40 mg	\$323.47	\$0.81
80 mg	\$327.47	\$0.41

Let's assume that you need a 35 percent reduction in your LDL cholesterol and are taking Lipitor®. As shown in the graph, a 10 mg dose of Lipitor® will accomplish the goal, and a higher dose of Lipitor® may be extra medication that is not required. Theoretically, if you purchased 100 Lipitor® 80 mg tablets and neatly divided each tablet into eight equal pieces, the \$315.27 spent on the 80 mg tablets would provide enough medication to lower your LDL cholesterol for more than two years. From a practical point of view, you should not slice pills into eighths; however, an inexpensive pill cutter can readily slice tablets into halves.

Some thrifty patients split all of their medications. For example, 53-year-old George is a hard-driving businessman trying to keep his company afloat. George takes Toprol-XL® for hypertension, Lipitor® for his high cholesterol, and Viagra® (even though he doesn't really need it). George owns his own company, and his health insurance plan doesn't have good prescription drug benefits. Knowing that a dollar not spent on expenses, including prescription drugs, is an additional dollar in profit, George splits all of his medications.

Like other patients mentioned earlier in the chapter, he splits his 100 mg tablet of Viagra® into two pieces as well as his Lipitor® 80 mg tablet into two pieces. His Toprol-XL® 100 mg tablets are scored, so it very easy to divide them into two tablets. George effectively cuts his drug bill in half, paying for one dose and getting one dose free. He saves more than \$1,000 annually by doing this, money he puts into his business or his pocket.

If you choose to slice tablets, be very careful about the dose your doctor wants you to take. Use a pill cutter with a clear cover and a V-shaped tip to allow for careful positioning of the pill in the cutter.

Medications That Should Not Be Sliced

Slicing tablets is not a useful technique for all medications. For example, some drugs use different mechanisms to delay the release of the drug so that the drug needs to be taken once daily. Many of these kinds of drugs end in CD (controlled-delivery), CR (controlled-release), ER (extended-release), LA (long-acting), SR (sustained-release), or XL (extended-release). In most cases, slicing the tablet harms the time-release mechanism and should not be done. Examples of time-released medications not suitable for slicing include the following: Cardizem CD, Effector XR, and Glucotrol XL. Generic versions of each of these medications are available in non-time-released formulations. Calan SR and Toprol-XL are among the few time-released medications that are scored and suitable for slicing. No time-released medications should be crushed or chewed.

Although slicing capsules is not practical, some authors encourage their readers to save money by opening a capsule, dividing the granules into halves, then replacing half of the granules into a new capsule. I don't advise anyone to try this technique because it is too easy to lose granules or to mismeasure them. Stick to dividing tablets.

In addition, antibiotics generally should not be split, and I do not favor slicing medications used to treat memory loss or psychosis. Some common medications that are not suitable for slicing include: Nexium[®], Prilosec[®], Prevacid[®], Celebrex[®], Altace[®], Aciphex[®], and sublingual nitroglycerin.

Again, be sure to discuss slicing tablets with your physician beforehand. Your doctor will know whether your medications are suitable for slicing and will need to write your prescription at a higher dose than what you are supposed to take.

Medicines That May Be Sliced

BRAND NAME	GENERIC NAME	DOSES SUITABLE FOR SLICING	GENERAL COMMENTS
Accolate [®]	zafirlukast	10 and 20 mg	No tablets are scored.
Accupril [®]	quinapril	5, 10, 20, and 40 mg	Only the 5 mg tablets are scored.
Accuretic [®]	quinapril/HCTZ	10/12.5, 20/12.5, and 20/25 mg	All tablets are scored.

Medicines That May Be Sliced cont.

BRAND NAME	GENERIC NAME	DOSES SUITABLE FOR SLICING	GENERAL COMMENTS
Aceon®	perindopril	2, 4 and 8 mg	All tablets are scored.
Actos®	pioglitazone	15, 30, and 45 mg	No tablets are scored.
Aldactone®	spironolactone	25, 50, and 100 mg	All tablets are scored.
Allegra®	fexofenadine	30 and 60 mg	No tablets are scored. The 180 mg tablet is time-released and is not suitable for slicing.
Amaryl®	glimepiride	1, 2, and 4 mg	All tablets are scored.
Ambien®	zolpidem	5 and 10 mg	No tablets are scored.
Atacand®	candesartan	4, 8, 16, and 32 mg	No tablets are scored.
Atacand HCT®	candesartan/ HCTZ	16/12.5, and 32/12.5 mg	No tablets are scored.
Avalide®	irbesartan/HCTZ	150/12.5, and 300/12.5 mg	No tablets are scored.
Avandia®	rosiglitazone	2, 4, and 8 mg	No tablets are scored.
Avandamet™	rosiglitazone/ metformin	1/500, 2/500, 4/500g, 2/1000, and 4/1000 mg	No tablets are scored.
Avapro®	irbesartan	75, 150, and 300 mg	No tablets are scored.
Benicar™	olmesartan	5, 20, and 40 mg	No tablets are scored.
Benicar HCT™	olmesartan/HCTZ	20/12.5, 40/12.5, and 30/25 mg	No tablets are scored.
Bextra®	valdecoxib	10 and 20 mg	No tablets are scored.
Blocadren®	timolol	5, 10, and 20 mg	The 10 mg and 20 mg tablets are scored.

Medicines That May Be Sliced cont.

BRAND NAME	GENERIC NAME	DOSES SUITABLE FOR SLICING	GENERAL COMMENTS
Caduet®	amlodipine/ atorvastatin	5/10, 5/20, 5/40, 5/80, 10/10, 10/20, 10/40, and 10/80 mg	No tablets are scored.
Calan®	verapamil	40, 80 and 120 mg	The 80 mg and 120 mg tablets are scored. Calan SR® is available as 120 mg, 180 mg, and 240 mg sustained-release caplets; the 180 mg and 240 mg caplets are scored.
Capoten®	captopril	12.5, 25, 50, and 100 mg	All tablets are scored.
Cardura®	doxazosin	1, 2, 4, and 8 mg	All tablets are scored.
Catapres®	clonidine	0.1, 0.2, and 0.3 mg	All tablets are scored.
Celexa®	citalopram	10, 20, and 40 mg	The 20 mg and 40 mg tablets are scored.
Cialis®	tadalafil	5, 10, and 20 mg	No tablets are scored.
Clinoril®	sulindac	150 and 200 mg	The 200 mg tablet is scored.
Coreg®	carvedilol	3.125, 6.25, 12.5, and 25 mg	No tablets are scored.
Corgard®	nadolol	20, 40, 80, 120, and 160 mg	All tablets are scored.
Corzide®	nadolol/bendro- flumethiazide	40/5 and 80/5 mg	All tablets are scored.

Medicines That May Be Sliced cont.

BRAND NAME	GENERIC NAME	DOSES SUITABLE FOR SLICING	GENERAL COMMENTS
Coumadin®	warfarin	1, 2, 2.5, 3, 4, 5, 6, 7.5, and 10 mg	All tablets are scored. Slicing medications used to thin the blood without careful monitoring is strongly discouraged and may lead to serious problems with the blood being too thin or too thick.
Cozaar®	losartan	25, 50, and 100 mg	No tablets are scored.
Crestor®	rosuvastatin	5, 10, 20, and 40 mg	No tablets are scored.
Diabeta®	glyburide	1.25, 2.5, and 5 mg	All tablets are scored.
Disalcid®	salsalate	500 and 750 mg	All tablets are scored.
Demadex®	toremide	5, 10, 20, and 100 mg	All tablets are scored.
Detrol®	tolterodine	1, and 2 mg	Detrol® LA is available as 2 mg and 5 mg capsules not suitable for slicing.
Diovan®	valsartan	40, 80, 160, and 320 mg	No tablets are scored.
Diovan HCT®	valsartan/HCTZ	80/12.5, 160/12.5, and 160/25 mg	No tablets are scored.
Diuril®	chlorothiazide	250 and 500 mg	All tablets are scored.
Effexor®	venlafaxine	25, 37.5, 50, 75, and 100 mg	All tablets are scored. Effexor XR® is available as 37.5 mg, 75 mg, and 150 mg extended-release capsules not suitable for slicing.

Medicines That May Be Sliced cont.

BRAND NAME	GENERIC NAME	DOSES SUITABLE FOR SLICING	GENERAL COMMENTS
Glucotrol®	glipizide	5 and 10 mg	All tablets are scored. Glucotrol XL® is available as 2.5 mg, 5 mg, and 10 mg extended-release tablets not suitable for slicing.
Glucophage®	metformin	500, 850, and 1000 mg	No tablets are scored. Glucophage XR® is available as 500 mg and 750 mg extended-release tablets not suitable for slicing.
Glucovance®	glyburide/ metformin	1.25/250, 2.5/ 500, and 5/500 mg	No tablets are scored.
Glyset®	miglitol	25, 50, and 100 mg	No tablets are scored.
Halcion®	triazolam	0.125 and 0.25 mg	The 0.25 mg tablets are scored.
Hydrodiuril®	HCTZ	25 and 50 mg	All tablets are scored.
Hyzaar®	losartan/HCTZ	50/12.5 and 100/25 mg	No tablets are scored.
Imitrex®	sumatriptan	25, 50, and 100 mg	No tablets are scored.
Inderal®	propranolol	10, 20, 40, 60, and 80 mg	All tablets are scored. Inderal® LA is available as 60 mg, 80 mg, 120 mg, and 160 mg sus-tained-release capsules not suitable for slicing.

Medicines That May Be Sliced cont.

BRAND NAME	GENERIC NAME	DOSES SUITABLE FOR SLICING	GENERAL COMMENTS
Kerlone®	betaxolol	10 and 20 mg	All tablets are scored.
Lasix®	furosemide	20, 40, and 80 mg	The 40 mg tablets are scored.
Lescol®	fluvastatin	20 and 40 mg	The 80 mg tablet is extended-release and not suitable for slicing.
Levitra®	ildenafil	2.5, 5, 10, and 20 mg	No tablets are scored.
Levoxy®	levothyroxine	25, 50, 75, 88, 100, 112, 125, 137, 150, 175, 200, and 300 mcg	All tablets are scored. Slicing medications used to treat hypothyroidism without careful monitoring is discouraged.
Lexapro®	escitalopram	10 and 20 mg	Both tablets are scored.
Lipitor®	atorvastatin	10, 20, 40, and 80 mg	No tablets are scored.
Lopressor®	metoprolol tartrate	50 and 100 mg	All tablets are scored.
Lotensin®	benazepril	5, 10, 20, and 40 mg	No tablets are scored.
Lotensin HCT®	benazepril/HCTZ	5/6.25, 10/12.5, 20/12.5, and 20/25 mg	All tablets are scored.
Mavik®	trandolapril	1, 2, and 4 mg	The 1 mg tablets are scored.
Maxzide®	triamterene/HCTZ	37.5/25 and 75/50 mg	All tablets are scored.
Metaglip®	glipizide/metformin	2.5/250, 2.5/500, and 5/500 mg	No tablets are scored.
Micardis®	telmisartan	20, 40, and 80 mg	No tablets are scored.
Micardis HCT®	telmisartan/HCTZ	40/12.5, and 80/12.5 mg	No tablets are scored.
Mobic®	meloxicam	7.5 and 15 mg	No tablets are scored.

Medicines That May Be Sliced cont.

BRAND NAME	GENERIC NAME	DOSES SUITABLE FOR SLICING	GENERAL COMMENTS
Monopril®	fosinopril	10, 20, 40, and 80 mg	The 10 mg tablets are scored.
Monopril® HCT	fosinopril/HCTZ	10/12.5 and 20/12.5 mg	No tablets are scored.
Neurontin®	gabapentin	600 and 800 mg	The 600 mg and 800 mg tablets are scored. The 100 mg, 300 mg, and 400 mg capsules are not suitable for slicing.
Norvasc®	amlodipine	2.5, 5, and 10 mg	No tablets are scored.
Paxil®	paroxetine	10, 20, 30 and 40 mg	The 10 mg and 20 mg tablets are scored. The 12.5, 25, and 37.5 mg controlled-release tablets are not suitable for slicing.
Prandin®	repaglinide	0.5g, 1, and 2 mg	No tablets are scored.
Pravachol®	pravastatin	10, 20, 40, and 80 mg	No tablets are scored.
Precose®	acarbose	25, 50, and 100 mg	No tablets are scored.
Prinivil®	lisinopril	2.5, 5, 10, 30, and 40 mg	The 5 mg tablets are scored.
Prinzide®	lisinopril/HCTZ	10/12.5, 20/12.5, and 20/25 mg	No tablets are scored.
Remeron®	mirtazapine	15, 30, and 45 mg	The 15 mg and 30 mg tablets are scored. Remeron® SolTab, a tablet that disintegrates quickly, is available as 15, 30, and 45 mg doses and is not suitable for slicing.

Medicines That May Be Sliced cont.

BRAND NAME	GENERIC NAME	DOSES SUITABLE FOR SLICING	GENERAL COMMENTS
Starlix®	nateglinide	60 and 120 mg	No tablets are scored.
Synthroid®	levothyroxine	25, 50, 75, 88, 100, 112, 125, 150, 175, 200, and 300 mcg	All tablets are scored. Slicing medications used to treat hypothyroidism without careful monitoring is discouraged.
Tenormin®	atenolol	25, 50, and 100 mg	No tablets are scored.
Teveten®	eprosartan	400 and 600 mg	No tablets are scored.
Teveten HCT®	eprosartan/HCTZ	600/12.5 and 600/25 mg	No tablets are scored.
Toprol-XL®	metoprolol succinate	25, 50, 100, and 200 mg	All tablets are scored and may be sliced into two equal pieces. They should not be crushed or chewed.
Trandate®	labetalol	100, 200, and 300 mg	All tablets are scored.
Uniretic®	moexipril/HCTZ	7.5/12.5, 15/12.5, and 15/25 mg	All tablets are scored.
Univasc®	moexipril	7.5 and 15 mg	Both tablets are scored.
Viagra®	sildenafil	25, 50, and 100 mg	No tablets are scored.
Vaseretic®	enalapril/HCTZ	5/12.5 and 10/12.5 mg	No tablets are scored.
Vasotec®	enalapril	2.5, 5, 10, and 20 mg	The 2.5 mg and 5 mg tablets are scored.
Vytorin™	ezetimibe/simvastatin	10/10, 10/20, 10/40, and 10/80 mg	No tablets are scored. Slicing Vytorin™ produces a dosage different than the commonly prescribed dosages.

Medicines That May Be Sliced cont.

BRAND NAME	GENERIC NAME	DOSES SUITABLE FOR SLICING	GENERAL COMMENTS
Xanax®	alprazolam	0.25, 0.50, 1 and 2 mg	All tablets are scored. The 0.5 mg, 1 mg, 2 mg, and 3 mg tablets of Xanax XR® are extended-release and not suitable for slicing.
Zaroxolyn®	metolazone	2.5, 5g, and 10 mg	No tablets are scored.
Ziac®	bisoprolol/HCTZ	2.5/6.25g, 5/6.25, and 10/6.25 mg	No tablets are scored.
Zebeta®	bisoprolol	5 and 10 mg	The 5 mg tablets are scored.
Zestoretic®	lisinopril/HCTZ	10/12.5, 20/12.5, and 20/25 mg	No tablets are scored.
Zestril®	lisinopril	2.5, 5, 10, 30, and 40 mg	No tablets are scored.
Zocor®	simvastatin	10, 20, 40, and 80 mg	No tablets are scored.
Zoloft®	sertraline	25, 50, and 100 mg	All tablets are scored.
Zomig®	zolmitriptan	2.5 and 5 mg	The 2.5 mg tablets are scored.
Zyrtec®	cetirizine	5 and 10 mg	No tablets are scored.