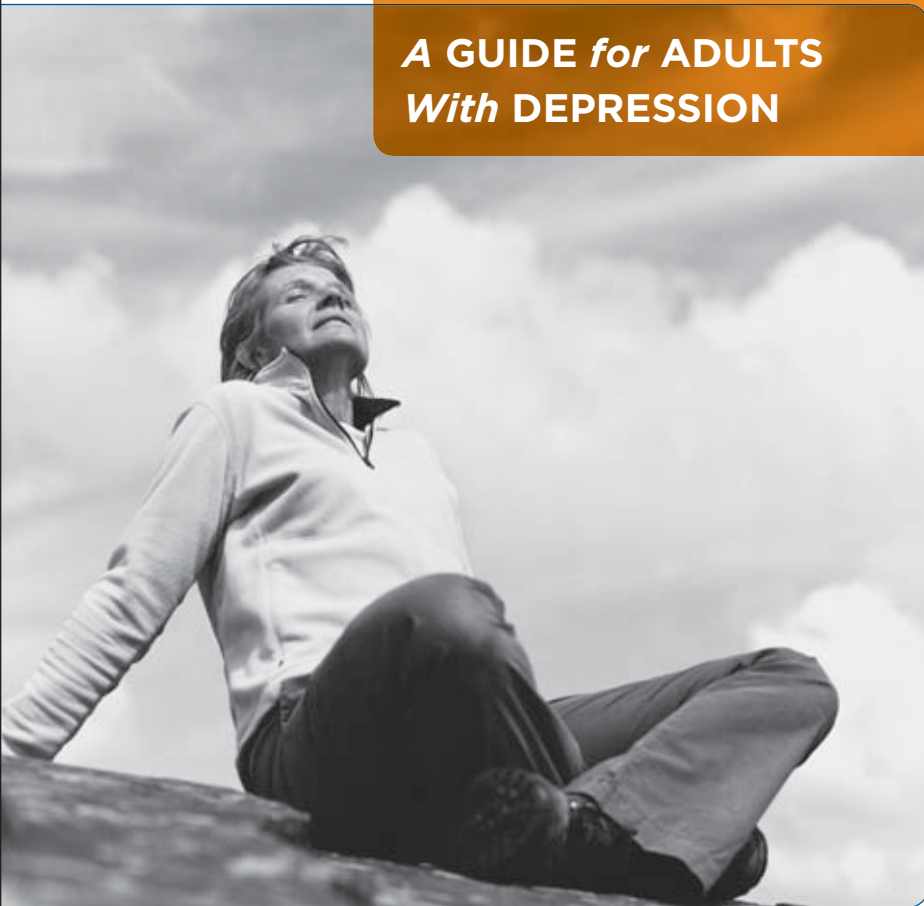


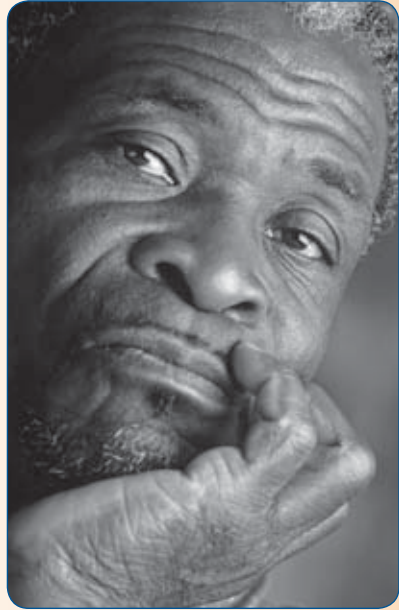
ANTIDEPRESSANT MEDICINES

A GUIDE for **ADULTS**
With **DEPRESSION**



FAST FACTS ON ANTIDEPRESSANTS

- The antidepressants in this guide work for treating depression. Most people can find one that makes them feel better.
- Six out of 10 people will feel better with the first antidepressant they try. The rest of the people will need to try other antidepressants before they find the one that is right for them.
- Most people taking antidepressants have at least one side effect.
- The most common side effects are constipation, daytime sleepiness, diarrhea, dizziness, dry mouth, headache, nausea, sexual problems, shakiness, trouble sleeping, and weight gain.



What does this guide cover?

This guide can help you work with your doctor or nurse to choose medicines for depression. It covers:

- Common medicines for adults with depression.
- Side effects.
- Price.

This guide is based on a government-funded review of research about the medicines often used to treat adults with depression. The antidepressants are listed on page 8.

What is not covered in this guide?

This guide does not cover:

- Treatment of depression in children or teens.
- Postpartum depression (“baby blues”).
- Depression that is part of other mental health conditions like bipolar disorder (previously called manic-depressive disorder).
- Older antidepressant medicines like amitriptyline (Elavil®) and phenelzine (Nardil®).
- Other ways to treat depression such as counseling, light therapy, and herbal supplements like St. John’s Wort.



What are the common signs or symptoms of depression?

Depression is a deep sadness that won't go away. It can also be the loss of interest in doing things you usually enjoy. Common symptoms include:

- Sad, anxious, or “empty” mood that lasts more than 2 weeks.
- Trouble sleeping.
- Appetite changes—either less appetite and weight loss, or eating more and weight gain.
- Loss of interest in doing things you once enjoyed, including sex.
- Feeling restless and cranky.

- Nagging physical symptoms that don't get better with treatment (like chronic pain).
- Trouble paying attention, making decisions, or remembering.
- Feeling tired all the time or like you have no energy.
- Feeling guilty, hopeless, or worthless.
- Thoughts of suicide or death.

Depression is treatable. You can get better. The most common treatments for depression are antidepressant drugs, counseling, or a combination of the two.

What should I tell my doctor or nurse?

- Tell your doctor or nurse how you feel.
 - Describe any symptoms you have, like no appetite, feeling tired all the time, trouble getting to sleep or staying asleep, no interest in sex, or feeling worried a lot.
 - Tell them which symptoms bother you the most.
 - Let them know about any other health or mental health conditions you have.
- Bring a list of all your prescription and nonprescription drugs. Be sure to tell them if you are taking herbal products, like St. John's Wort, or any other supplements.
 - Tell your doctor or nurse whether you have taken an antidepressant before and how it worked for you.



Benefits of antidepressants

Will this medicine work for me?

- Most people can find an antidepressant that works for them.
- Six out of every 10 people feel better with the first antidepressant they try. The rest will need to try different antidepressants to find the one that is right for them.

How long before I feel better?

- Most people need to take an antidepressant regularly for at least 6 weeks to begin to get the full effect.
- If you still don't feel better, your doctor or nurse may give you a different antidepressant or add a second one.
- Most people need to keep on taking these medicines for 6 to 9 months. Some people will need to take them longer.

Understanding side effects

All of the antidepressants in this guide can cause side effects. If side effects become a problem, your doctor or nurse may be able to help you find another medicine.

- Most people taking these medicines will get at least one side effect. It is hard to predict which drug will cause which side effect for any one person.
- The most common side effects are constipation, daytime sleepiness, diarrhea, dizziness, dry mouth, headache, nausea, sexual problems, shakiness, trouble sleeping, and weight gain.
- Many side effects go away after a few weeks. But some only go away after you stop the medicine.

RESEARCH COMPARING SIDE EFFECTS

Some of the medicines in this guide have been compared with each other in research studies. Here's what we know from these studies:

Weight gain more likely

- More weight is gained by people taking **mirtazapine (Remeron®)** than by people taking:
 - citalopram (Celexa®)
 - fluoxetine (Prozac®)
 - paroxetine (Paxil®)
 - sertraline (Zoloft®)

The weight gain with **mirtazapine (Remeron®)** is around 2 to 7 pounds. Some people can gain much more.

- More weight is gained by people taking **paroxetine (Paxil®)** than by people taking:
 - fluoxetine (Prozac®)
 - sertraline (Zoloft®)

The average weight gain with **paroxetine (Paxil®)** for someone who weighs 150 pounds is about 5 pounds. Some people can gain much more.

Weight loss more likely

- People who take **bupropion (Wellbutrin®)** tend to lose a little weight, about 2 to 3 pounds.

Nausea & vomiting more likely

- More people (10 percent more) have nausea and vomiting with **venlafaxine (Effexor®)** than with:
 - citalopram (Celexa®)
 - escitalopram (Lexapro®)
 - fluoxetine (Prozac®)
 - fluvoxamine
 - paroxetine (Paxil®)
 - sertraline (Zoloft®)

Sexual problems less likely

- Fewer people taking **bupropion (Wellbutrin®)** have sexual problems (loss of sexual desire or loss of ability to reach orgasm) than people taking:
 - fluoxetine (Prozac®)
 - paroxetine (Paxil®)
 - sertraline (Zoloft®)

Sexual problems more likely

- More people taking **paroxetine (Paxil®)** have sexual problems than people taking:
 - fluoxetine (Prozac®)
 - fluvoxamine
 - nefazadone
 - sertraline (Zoloft®)

Diarrhea more likely

- More people (8 percent more) have diarrhea with **sertraline (Zoloft®)** than with:
 - bupropion (Wellbutrin®)
 - citalopram (Celexa®)
 - fluoxetine (Prozac®)
 - fluvoxamine
 - paroxetine (Paxil®)
 - mirtazapine (Remeron®)
 - nefazadone
 - venlafaxine (Effexor®)



DON'T STOP YOUR MEDICINE SUDDENLY

Never stop taking an antidepressant medicine suddenly. If you quit your medicine all at once, it can make you feel sick, as if you have the flu. You may get headaches, dizziness, and nausea. Work with your doctor or nurse to decrease your dose a little at a time before you stop.

- Paroxetine (Paxil®) and venlafaxine (Effexor®) are more likely than the other antidepressants in this guide to cause these flu-like symptoms when you stop suddenly.
- Fluoxetine (Prozac®) is less likely than the others to cause these symptoms.



Serious risks

Serotonin syndrome

Serotonin syndrome is a rare, but serious, drug reaction. Serotonin is a chemical produced by nerve cells. The antidepressants in this guide raise the amount of serotonin in the brain. Up to a point, this can be good. But too much serotonin can cause serotonin syndrome. Common symptoms include confusion, hallucinations, loss of coordination, fever, rapid heart rate, and vomiting.

What causes it?

Serotonin syndrome happens most often when two drugs that raise serotonin in the brain are taken at the same time. Some other drugs that raise serotonin include:

- Migraine headache medicines called triptans (Amerge[®], Imitrex[®]).
- The supplement L-tryptophan.
- Herbal products like St. John's Wort.
- Over-the-counter cough medicines that contain dextromethorphan.
- Prescription pain killers like meperidine (Demerol[®]).

How can I avoid it?

Check with your doctor or pharmacist before taking other prescription or over-the-counter medicines, supplements, or herbal products.

Suicide

Antidepressants can increase the risk of suicide for people younger than 25. No matter what your age, if your depression gets worse or you are thinking about hurting yourself, please talk with your doctor.

What is still not known?

- We do not know very much about using these drugs for a long time because research studies generally only last 3 months to 1 year.
- We don't know if any of these antidepressants are better than the others for symptoms that sometimes come along with depression, like trouble sleeping and pain.
- We don't know if any antidepressant works better for men versus women or in people of different races.
- We don't know if any one of these antidepressants is more likely than another to raise the risk of suicide.

How can I use the information in this guide?

When talking with your doctor or nurse about antidepressants, think about:

What side effects are most important to you?

- Are you most worried about sexual issues like loss of sexual desire or loss of ability to reach orgasm?

You might ask your doctor or nurse about bupropion (Wellbutrin®).

- Are you concerned about weight gain?

You might ask your doctor or nurse about taking bupropion (Wellbutrin®). You might want to avoid paroxetine (Paxil®) and mirtazapine (Remeron®).

- Are you most worried about nausea and vomiting?

Nausea and vomiting are the most common side effects that cause people to stop taking their antidepressant medicine during the first 30 days.

If your medicine causes nausea or vomiting, or any other side effect, let your doctor or nurse know. There may be a solution.

How often will you need to take the medicine?

Some antidepressants are taken once a day. Others need to be taken more often. Page 8 has a list of antidepressants and how often they need to be taken.

Is cost important?

Use the chart on page 8 to compare the prices of different drugs. If prescriptions are part of your health insurance plan, check with your plan about the cost to you.



DOSE AND PRICE OF ANTIDEPRESSANTS

Generic Name ¹	Brand Name	Dose ²	Price for 1-Month Supply ³	
			Generic	Brand
Bupropion	Wellbutrin®	75 mg three times a day	\$ 65	\$ 160
		150 mg three times a day	\$ 175	\$ 210
	Wellbutrin SR®	150 mg once a day	\$ 60	\$ 85
		150 mg twice a day	\$ 115	\$ 175
		200 mg twice a day	\$ 230	\$ 320
	Wellbutrin XL®	150 mg once a day	Not available as generic	\$ 125
300 mg once a day			\$ 165	
450 mg once a day			\$ 290	
Citalopram	Celexa®	10 mg once a day	\$ 75	\$ 90
		20 mg once a day	\$ 75	\$ 95
		40 mg once a day	\$ 80	\$ 100
		60 mg once a day	\$ 155	\$ 195
Duloxetine	Cymbalta®	20 mg twice a day	Not available as generic	\$ 215
		30 mg twice a day		\$ 240
		60 mg twice a day		\$ 240
Escitalopram	Lexapro®	10 mg once a day	Not available as generic	\$ 80
		20 mg once a day		\$ 85
Fluoxetine	Prozac®	10 mg once a day	\$ 80	\$ 145
		20 mg once a day	\$ 80	\$ 150
		40 mg once a day	\$ 160	\$ 295
		40 mg twice a day	\$ 320	\$ 595
	Prozac Weekly®	90 mg once a week	Not available as generic	\$ 110
Fluvoxamine	Only available as generic	50 mg once a day	\$ 75	Only available as generic
		100 mg once a day	\$ 80	
		150 mg once a day	\$ 160	
Mirtazapine	Remeron®	15 mg once a day	\$ 80	\$ 105
		30 mg once a day	\$ 85	\$ 110
		45 mg once a day	\$ 85	\$ 110
Nefazodone	Only available as generic	50 mg twice a day	\$ 90	Only available as generic
		100 mg twice a day	\$ 90	
		300 mg twice a day	\$ 200	
Paroxetine	Paxil®	10 mg once a day	\$ 80	\$ 95
		20 mg once a day	\$ 80	\$ 100
		40 mg once a day	\$ 85	\$ 110
		60 mg once a day	\$ 165	\$ 210
Sertraline	Zoloft®	50 mg once a day	\$ 85	\$ 90
		100 mg once a day	\$ 85	\$ 90
		200 mg once a day	\$ 170	\$ 180
Trazodone	Desyre!®	50 mg once a day	\$ 15	\$ 70
		100 mg three times a day	\$ 65	\$ 355
		150 mg three times a day	\$ 130	\$ 305
Venlafaxine	Effexor®	37.5 mg twice a day	Not available as generic	\$ 135
		50 mg twice a day		\$ 140
		75 mg three times a day		\$ 220
	Effexor XR®	75 mg once a day	Not available as generic	\$ 110
		150 mg once a day		\$ 120
		225 mg once a day		\$ 230

¹ These drugs were included in the research studies. ² Doses are similar to those used in the research studies.

³ Average Wholesale Price from *Drug Topics Redbook*, 2007. SR = sustained release, XL/XR = extended release.

For more information

For an electronic copy of this guide and materials about choosing treatments and medicines for other medical conditions, visit this Web site: www.effectivehealthcare.ahrq.gov

For a free print copy, call the AHRQ Publications Clearinghouse (800) 358-9295

Ask for AHRQ Publication Number 07-EHC007-2A

For more information about depression, visit the Medline Plus Web site: www.nlm.nih.gov/medlineplus/depression.html

For information about mental health services and resources in your state, try the Mental Health Services Locator at this Web site: mentalhealth.samhsa.gov/databases



What is the source of this guide?

The information in this guide comes from a detailed review of 293 research reports. The detailed review is called *Comparative Effectiveness of Second-Generation Antidepressants in the Pharmacologic Treatment of Adult Depression* (2007) and was written by RTI International-University of North Carolina Evidence-based Practice Center.

The Agency for Healthcare Research and Quality (AHRQ) created the Eisenberg Center at Oregon Health & Science University to make research useful for consumers. This guide was prepared by Sandra Robinson, M.S.P.H., Valerie King, M.D., Martha Schechtel, R.N., Theresa Bianco, Pharm.D., and David Hickam, M.D., of the Eisenberg Center. People with depression helped them write this guide.

AHRQ Publication Number 07-EHC007-2A
August 2007

The photos in this guide are of models and are used for illustrative purposes only.