• Prozac®

o Capsules: 10 mg, 20 mg, 40 mg

Prozac Weekly®

o Capsules (delayed-release): 90 mg

Sarafem®

o Tablets: 10 mg, 20 mg

Fluoxetine

Capsules: 10 mg, 20 mg, 40 mgCapsules (delayed release): 90 mg

o Liquid: 20 mg/5 mL

o Tablets: 10 mg, 20 mg, 60 mg

If you or someone you know is in crisis, please call 911 and/or the toll-free National Suicide Prevention Lifeline at 800-273-TALK (8255) to speak with a trained crisis counselor 24/7. A help line and other resources are also



available through the National Alliance on Mental Illness at nami.org.

#### What is fluoxetine and what does it treat?

Fluoxetine is an antidepressant medication that works in the brain. It is approved for the treatment of major depressive disorder (MDD), obsessive compulsive disorder (OCD), panic disorder, bulimia nervosa, and premenstrual dysphoric disorder (PMDD).

Symptoms of depression include:

- Depressed mood feeling sad, empty, or tearful
- Feeling worthless, guilty, hopeless, and helpless
- Loss of interest or pleasure in your usual activities
- Sleep and eat more or less than usual (for most people it is less)
- Low energy, trouble concentrating, or thoughts of death (suicidal thinking)
- Psychomotor agitation ('nervous energy')
- Psychomotor retardation (feeling like you are moving and thinking in slow motion)
- Suicidal thoughts or behaviors

Obsessive compulsive disorder (OCD) occurs when a person experiences the following symptoms at the same time:

- Obsessions (unwanted, recurrent, and disturbing thoughts)
- Compulsions (repetitive, ritualized behaviors that the person feels driven to perform in order to lessen the anxiety produced by the obsessions)

Panic disorder occurs when a person experiences unexpected and repeated episodes of intense fear. These episodes have physical symptoms including chest pain, shortness of breath, heart palpitations, sweating, dizziness, and nausea. Fear of future episodes is also part of panic disorder.

Bulimia is a condition where a person binges on food, then uses various methods to purge (e.g., use of laxatives, vomiting) in order to prevent weight gain.

Premenstrual dysphoric disorder (PMDD) is a condition where a woman experiences depression, tension, and irritability for a few days prior to menstruation that end when menstruation begins. These symptoms are more severe than those of premenstrual syndrome (PMS).

Fluoxetine may also be helpful when prescribed "off-label" for body dysmorphic disorder, binge eating disorder, generalized anxiety disorder (GAD), social phobia (also known as social anxiety disorder), dysthymia, or posttraumatic stress disorder (PTSD). "Off-label" means that it hasn't been approved by the Food and Drug Administration for this condition. Your mental health provider should justify his or her thinking in recommending an "off-label" treatment. They should be clear about the limits of the research around that medication and if there are any other options.

All FDA warnings are at the end of this fact sheet. Please consult them before taking this medication.



## What is the most important information I should know about fluoxetine?

Do not stop taking fluoxetine, even when you feel better. With input from you, your health care provider will assess how long you will need to take the medicine.

Missing doses of fluoxetine may increase your risk for relapse in your symptoms.

Stopping fluoxetine abruptly may result in one or more of the following withdrawal symptoms: irritability, nausea, dizziness, vomiting, nightmares, headache, and/or paresthesias (prickling, tingling sensation on the skin).

Depression is also a part of bipolar illness. People with bipolar disorder who take antidepressants may be at risk for "switching" from depression into mania. Symptoms of mania include "high" or irritable mood, very high self-esteem, decreased need for sleep, pressure to keep talking, racing thoughts, being easily distracted, frequently involved in activities with a large risk for bad consequences (for example, excessive buying sprees).

Medical attention should be sought if serotonin syndrome is suspected. Please refer to serious side effects for signs/symptoms.

## Are there specific concerns about fluoxetine and pregnancy?

If you are planning on becoming pregnant, notify your health care provider to best manage your medications. People living with MDD who wish to become pregnant face important decisions. Untreated MDD has risks to the fetus, as well as the mother. It is important to discuss the risks and benefits of treatment with your doctor and caregivers. For women who take antidepressant medications during weeks 13 through the end of their pregnancy (second and third trimesters), there is a risk that the baby can be born before it is fully developed (before 37 weeks).

For mothers who have taken SSRIs during their pregnancy, there appears to be less than a 1% chance of infants developing persistent pulmonary hypertension. This is a potentially fatal condition that is associated with use of the antidepressant in the second half of pregnancy. However, women who discontinued antidepressant therapy were five times more likely to have a depression relapse than those who continued their antidepressant. If you are pregnant, please discuss the risks and benefits of antidepressant use with your health care provider.

Caution is advised with breastfeeding since fluoxetine does pass into breast milk.

## What should I discuss with my health care provider before taking fluoxetine?

- Symptoms of your condition that bother you the most
- If you have thoughts of suicide or harming yourself
- Medications you have taken in the past for your condition, whether they were effective or caused any adverse effects
- If you experience side effects from your medications, discuss them with your provider. Some side effects may pass with time, but others may require changes in the medication.
- Any other psychiatric or medical problems you have, including a history of bipolar disorder
- All other medications you are currently taking (including over the counter products, herbal and nutritional supplements) and any medication allergies you have
- Other non-medication treatment you are receiving, such as talk therapy or substance abuse treatment. Your provider can explain how these different treatments work with the medication.
- If you are pregnant, plan to become pregnant, or are breastfeeding
- If you drink alcohol or use drugs



#### How should I take fluoxetine?

Fluoxetine is usually taken one time per day with or without food.

Typically patients begin at a low dose of medicine and the dose is increased slowly over several weeks.

The dose usually ranges from 20 mg to 80 mg when taken once daily or 90 mg taken once weekly. Only your health care provider can determine the correct dose for you.

If you are taking fluoxetine for PMDD, it can be taken once daily (everyday) or intermittently (usually starting 14 days prior to menstruation through the first full day of menses of each cycle). Discuss this with your prescriber.

The liquid should be measured with a dosing spoon or oral syringe which you can get from your pharmacy.

The delayed release form should be swallowed whole. It should not be chewed, crushed, or broken.

Consider using a calendar, pillbox, alarm clock, or cell phone alert to help you remember to take your medication. You may also ask a family member or friend to remind you or check in with you to be sure you are taking your medication.

## What happens if I miss a dose of fluoxetine?

If you miss a dose of fluoxetine that you take daily, take it as soon as you remember, unless it is closer to the time of your next dose. If you take fluoxetine once weekly, take it as soon as possible, then go back to your regular schedule the next week. Discuss this with your health care provider. Do not double your next dose or take more than what is prescribed.

## What should I avoid while taking fluoxetine?

Avoid drinking alcohol or using illegal drugs while you are taking antidepressant medications. They may decrease the benefits (e.g., worsen your condition) and increase adverse effects (e.g., sedation) of the medication.

## What happens if I overdose with fluoxetine?

If an overdose occurs, call your doctor or 911. You may need urgent medical care. You may also contact the poison control center at 1-800-222-1222.

A specific treatment to reverse the effects of fluoxetine does not exist.

## What are the possible side effects of fluoxetine?

#### **Common side effects**

Headache, nausea, diarrhea, dry mouth, increased sweating, feeling nervous, restless, fatigue, or having trouble sleeping (insomnia). These will often improve over the first week or two as you continue to take the medication.

Sexual side effects, such as problems with orgasm or ejaculatory delay often do not diminish over time.

#### Rare/serious side effects

Low sodium blood levels (symptoms of low sodium levels may include headache, weakness, difficulty concentrating and remembering), teeth grinding, angle closure glaucoma (symptoms of angle closure glaucoma may include eye pain, changes in vision, swelling or redness in or around eye), serotonin syndrome (symptoms may include shivering, diarrhea, confusion, severe muscle tightness, fever, seizures, and death), seizure, QT prolongation and ventricular arrhythmia including Torsades de Pointes (changes in the electrical activity of your heart; symptoms may include fast, slow or irregular heartbeat, shortness of breath, and dizziness or fainting)

SSRI antidepressants including fluoxetine may increase the risk of bleeding events. Combined use of aspirin, nonsteroidal anti-inflammatory drugs (e.g., ibuprofen, naproxen), warfarin, and other anti-coagulants may increase this risk. This may include symptoms such as gums that bleed more easily, nose bleed, or gastrointestinal bleeding. Some cases have been life threatening.

# Are there any risks for taking fluoxetine for long periods of time?

To date, there are no known problems associated with long term use of fluoxetine. It is a safe and effective medication when used as directed.



## What other medications may interact with fluoxetine?

Fluoxetine should not be taken with or within 6 weeks of taking monoamine oxidase inhibitors (MAOIs). These include phenelzine (Nardil®), tranylcypromine (Parnate®), isocarboxazid (Marplan®), rasagiline (Azilect®), and selegiline (Emsam®).

Although rare, there is an increased risk of serotonin syndrome when fluoxetine is used with other medications that increase serotonin, such as other antidepressants, migraine medications called "triptans" (e.g., Imitrex®), some pain medications (e.g., tramadol (Ultram®), amphetamines, and the antibiotic linezolid (Zyvox®).

Fluoxetine may increase the levels and effects of:

- Certain anticonvulsants, such as phenytoin (Dilantin®), carbamazepine (Tegretol®, Equetro®)
- Certain antipsychotics, such as haloperidol (Haldol®), aripiprazole (Abilify®)
- Benzodiazepines, such as alprazolam (Xanax®), diazepam (Valium®)
- Atomoxetine (Straterra®)
- Warfarin (Coumadin®)
- Metoclopramide (Reglan®)
- Tricyclic antidepressants, such as imipramine (Tofranil®), desipramine (Norpramin®)
- Beta blockers, such as metoprolol (Toprol XL®, Lopressor®) and propranolol (Inderal®)

Fluoxetine may **decrease** the effects of tamoxifen (Nolvadex®) and codeine.

Fluoxetine may **increase** the effects of other medications that can cause bleeding (e.g., ibuprofen (Advil®, Motrin®), warfarin (Coumadin®), and aspirin).

## How long does it take for fluoxetine to work?

Sleep, energy, or appetite may show some improvement within the first 1-2 weeks. Improvement in these physical symptoms can be an important early signal that the medication is working. Depressed mood and lack of interest in activities may need up to 6-8 weeks to fully improve.

## Summary of Black Box Warnings

#### **Suicidal Thoughts or Actions in Children and Adults**

Depression and certain other psychiatric disorders are themselves associated with increases in the risk of suicide. Patients with major depressive disorder (MDD), both adult and pediatric, may experience worsening of their depression and/or the emergence of suicidal ideation and behavior (suicidality) or unusual changes in behavior, whether or not they are taking antidepressant medications. This risk may persist until significant remission occurs.

In short-term studies, antidepressants increased the risk of suicidality in children, adolescents, and young adults when compared to placebo. Short-term studies did not show an increase in the risk of suicidality with antidepressants compared to placebo in adults beyond age 24. Adults age 65 and older taking antidepressants have a decreased risk of suicidality. Patients, their families, and caregivers should be alert to the emergence of anxiety, restlessness, irritability, aggressiveness and insomnia. If these symptoms emerge, they should be reported to the patient's prescriber or health care professional. All patients being treated with antidepressants for any indication should watch for and notify their health care provider for worsening symptoms, suicidality and unusual changes in behavior, especially during the first few months of treatment.

Important Disclosure: This information is being provided as a community outreach effort of the College of Psychiatric and Neurologic Pharmacists. This information is for educational and informational purposes only and is not medical advice. This information contains a summary of important points and is not an exhaustive review of information about the medication. Always seek the advice of a physician or other qualified medical professional with any questions you may have regarding medications or medical conditions. Never delay seeking professional medical advice or disregard medical professional advice as a result of any information provided herein. The College of Psychiatric and Neurologic Pharmacists disclaims any and all liability alleged as a result of the information provided herein.