

# Modafinil

Modafinil is wakefulness promoting agent that is FDA-approved to treat conditions related to fatigue, such as narcolepsy, sleep apnea and shift-work. Modafinil also improves depression, bipolar depression, concentration, attention deficit hyperactivity disorder, binge eating, cocaine abuse and impulsivity (it is not FDA-approved for these but has proven effective in controlled studies of them).

Modafinil can help people set their sleep-wake cycle by rising out of bed at the same time and staying awake and alert throughout the day. These behavioral changes often lead to better sleep at night and faster recovery from depression.

## About the two brands

Provigil and Nuvigil are two brand names which contain the same ingredient: modafinil. Medications come as right- and left- hand versions, and Nuvigil contains only the right-handed version while Provigil contains both. There is little clinical difference between the two formulations. Nuvigil may last 1-2 hours longer, and allows higher dosing. Provigil is available in a generic form but is currently still expensive.

## How it works

Modafinil improves increases activity in parts of the brain that are involved in alertness. It also raises dopamine levels.

## How should I take it?

Unlike most psychiatric medications, modafinil's effects do not build up over time. The medication only lasts for the day (10-12 hours) that you take it, and can be taken as needed or every day depending on the reason you are taking it.

Modafinil should be taken soon after waking, with or without food. If you miss your dose, be aware that taking it too late in the day can cause insomnia.

You may find that you need less caffeine after starting modafinil. If so, you should lower your caffeine intake gradually in order to prevent withdrawal headaches.

## Key Points

1. Take modafinil when you wake up. The effects only last for the day that you take it; it can be taken as needed.
2. Coupons are available at [www.nuvigil.com](http://www.nuvigil.com). Please give us 7 days notice if your insurer requires authorization.

## How long do I need to take it?

Modafinil does not have long-term preventative effects so can be stopped after the symptoms you were using it for resolve. Sometimes people experience tiredness in the first few days after stopping it but there are usually no significant withdrawal symptoms.

## Is it addictive?

There is always concern that medications which have quick effects, such as modafinil, can be addictive. In 20 years of its use, modafinil has not been found to cause psychological or physical addiction (even when studied in people with drug-addiction). It has been found to protect brain cells from damage.

## Costs and insurance approval

Your pharmacist will tell you if insurance authorization is required for this medication. Please give us 7 days notice if that is the case (ask your pharmacist to fax the authorization information to us at 336-201-0538). If you are taking Nuvigil, you may be eligible for a month free depending on your insurance plan. We

will provide you with a coupon for this or, if we are out, you can find one at [www.nuvigil.com](http://www.nuvigil.com) (note: this coupon will also help you get a discount on future copays).

We will do everything we can to persuade your insurer to cover the medication. If coverage is denied, you will need to call your insurer to initiate an appeal.

You can purchase a small amount of the medication while awaiting approval (ask your insurance if they can reimburse you for that later). Once the medication is approved, you will need to keep up with the expiration date of the approval and notify us with 7 days notice to have it renewed.

If you are paying out-of-pocket, the lowest price is at Costco for Provigil (\$200-300/month, 336-970-2300); you do not need to be a member to use the Costco pharmacy. The price will likely go down by April 2015.

### Side effects

Modafinil is relatively free of side effects. When people do not tolerate the medication it is usually because of anxiety (although it can also improve anxiety), headaches, or insomnia. These usually improve with time or by lowering the dose.

Rash: Modafinil is associated with a very rare, life-threatening rash called Stevens-Johnson Syndrome (SJS). Many medications are associated with this rash; in the case of modafinil it is so rare that we don't know if the medication causes it. If you develop a rash while starting modafinil, stop the medication and call us at (336) 722-7266.

Contraception: Modafinil contains a warning that it may reduce the effectiveness of hormonal contraceptives, lasting for a month after stopping it. However, the research on this is

small and actually shows that modafinil's effect on hormonal contraception is either none or too small to measure. Oral contraceptive pills are not 100% effective; even when taken perfectly the rate of pregnancy on them is 0.3% per year, so extra protection is always advisable.

### How to store and dispose of medication

- Keep out of the reach of children.
- Store away from heat, direct light and damp places.
- To safely dispose of unwanted pills: Do not pour in the toilet or sink (it will enter the water supply). To prevent children or pets from eating it, mix unwanted pills in a bag with a little water and inedible trash (such as coffee grounds or kitty litter) and throw in the trash.

### Quick facts

Brand name	Provigil (modafinil), Nuvigil (armodafinil)
Dose range	Nuvigil: 50-250 mg/day Provigil: 100-200mg/day
Sizes	> Provigil tabs: 100, 200mg > Nuvigil tabs: 50, 150, 250mg
Release date	12/24/1998 (Provigil) 6/15/2007 (Nuvigil) (used in France since 1994)
FDA-approval	Narcolepsy, obstructive sleep apnea, shift-work disorder

—Chris Aiken, MD, updated 2/15/2014