

# Yeast infections— vaginal

## Summary

A vaginal yeast infection is a fungal infection of the vagina or vulva that can cause discomfort, itching and a white discharge. Yeast infections are extremely common: most women will get at least one at some point in their lives. Women with HIV—especially women with low CD4 counts—are particularly prone to getting them. Fortunately, effective treatments are widely available.

Potent combination therapy for HIV (called ART) can strengthen the immune system and greatly reduce the risk for yeast infections occurring in the first place.

## What is a vaginal yeast infection?

A vaginal yeast infection is a fungal infection of the vagina and/or vulva. A yeast infection can also affect the anal area. It is caused by an overgrowth of yeast, or candida—a fungus normally found in the vagina, mouth and gastrointestinal tract, as well as on the skin. Candida is part of the normal “flora” of bacteria and fungi that live in the human body. When your immune system is strong and healthy, it maintains a balance of candida. This balance can be upset when your immune system is weakened or you are taking antibiotics, which in turn can lead to a yeast infection.

## Who is at risk for yeast infections?

Many women get yeast infections—in fact, most will get at least one at some point in their lives. HIV-positive women tend to get them more often and may have more difficulty getting rid of them. As a person’s immune system gets weaker and their CD4 count drops below 350 cells/mL, they become more prone to getting a yeast infection and the infection may be more severe.

A woman may also get a yeast infection as a result of:

- taking certain medications, such as antibiotics, hormones (including contraceptives such as “the pill”) or corticosteroids
- stress

# FACT SHEET

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- lack of sleep
- being pregnant
- having diabetes
- eating a lot of starchy or sugary foods. Sugar is added to many processed foods so read the label to find out if sugar has been added to foods that you are eating. Sugar can appear as glucose, fructose, glucose-fructose and so on. Some manufacturers add juices that tend to have high levels of naturally occurring sugar such as grape juice to some foods. All of these help to feed yeasts.

It is possible for a man who has sexual contact with an infected partner to develop symptoms, such as itching and a rash on the penis, but this is relatively uncommon.

## Symptoms

A yeast infection can cause the following symptoms:

- vaginal itching or burning
- redness and swelling of the vulva
- a thick, white vaginal discharge
- a burning sensation while urinating
- pain during intercourse

## Diagnosis

If you experience any of these symptoms, it's important that you see your doctor to confirm that you do indeed have a yeast infection, as these symptoms can have other causes that would require a different kind of treatment.

Your doctor will do a pelvic exam—he or she will take a swab of the vagina and have the sample examined under a microscope—to determine whether candida is the cause of the symptoms.

If you do have a yeast infection, try to abstain from sexual activity until the infection has cleared. Otherwise, you might make the vaginal irritation worse and you and your sex partner could re-infect each other.

## Treatment

Fortunately, the symptoms of a yeast infection usually disappear completely with the right treatment.

Treatment for yeast infections include:

- Local treatments, which treat a particular area affected by the infection
- Systemic treatments, which treat an infection that affects the whole body

### Local treatments

Many yeast infections can be treated with products you can purchase over-the-counter (without a prescription) at a drugstore. These include vaginal suppositories (a medicine you insert vaginally), creams or lozenges. The more commonly used drugs include clotrimazole (sold under the brand names Canesten and Clotrimaderm) and miconazole (sold under the brand names Micozole and Monistat). These treatments are relatively inexpensive and cause almost no side effects. However, they can be messy and often take longer to work than systemic treatments. Your doctor will let you know what kind of treatment is suitable for you.

### Systemic treatments

If your yeast infections are more persistent—they do not clear up with local treatment or they keep recurring—your doctor may prescribe a drug (pills taken orally) that circulates in the bloodstream throughout your body. Although systemic treatments for yeast infections are more convenient and take effect more quickly than local treatments, they are more expensive if you don't have drug coverage. They can also cause side effects and interact with other drugs. For many women, an effective systemic treatment for yeast infections is the anti-fungal drug fluconazole (Diflucan) taken once a day for one to three days.

## Prevention

There are several things you can do to keep the candida that normally lives in our bodies under

control. If you have HIV, the best way to prevent a yeast infection is to take ART to maintain a strong immune system.

To avoid getting a yeast infection or to minimize the symptoms of a yeast infection if you already have one, you can also try the following:

- Cut down on the amount of sugar and starchy foods you eat.
- Eat unsweetened yogurt with live bacterial culture (*Lactobacillus acidophilus*). Eating about a cup of plain yogurt that contains “live” or “active” cultures every day may help reduce the recurrence of yeast infections. The label of yogurt usually states whether the bacterial cultures are live or active. Supplements of *Lactobacillus acidophilus*, available at most health food stores, can also help maintain a healthy balance of bacteria in the body and reduce the risk of yeast infections.
- Avoid underwear that is tight or made of synthetic material.
- When you have your period, change your pads and tampons frequently.
- Change out of a wet swimsuit and exercise clothes as soon as you can.
- Avoid hot tubs and very hot baths.

## References:

Borges S, Silva J, Teixeira P. The role of lactobacilli and probiotics in maintaining vaginal health. *Archives of Gynecology and Obstetrics*. 2014 Mar;289(3):479-89.

Lasarte S, Samaniego R, Salinas-Muñoz L, et al. Sex hormones coordinate neutrophil immunity in the vagina by controlling chemokine gradients. *Journal of Infectious Diseases*. 2016 Feb 1;213(3):476-84.

Merenstein D, Hu H, Wang C, et al. Colonization by *Candida* species of the oral and vaginal mucosa in HIV-infected and noninfected women. *AIDS Research and Human Retroviruses*. 2013 Jan;29(1):30-4.

Ohmit SE, Sobel JD, Schuman P, et al. Longitudinal study of mucosal *Candida* species colonization and candidiasis among human immunodeficiency virus (HIV)-seropositive and at-risk HIV-seronegative women. *Journal of Infectious Diseases*. 2003 Jul 1;188(1):118-27.

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## Disclaimer

Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner knowledgeable about HIV- and hepatitis C-related illness and the treatments in question.

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