The American College of Obstetricians and Gynecologists

WOMEN'S HEALTH CARE PHYSICIANS

# Fertility Awareness-Based Methods of Family Planning

**Fertility awareness** is knowing and recognizing when the fertile time (when a woman can get pregnant) occurs in the **menstrual cycle**. Several methods can be used, either singly or together, to identify this time. Fertility awareness can be used as a method to prevent pregnancy or plan for a pregnancy. When used to prevent pregnancy, it sometimes is called "natural family planning." This pamphlet explains

- when the fertile period occurs during the menstrual cycle
- effectiveness of fertility awareness-based methods in preventing or promoting pregnancy
- types of fertility awareness-based methods
- advantages and disadvantages of using fertility awareness-based methods to prevent pregnancy

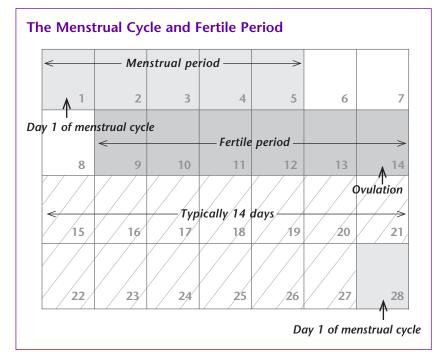
## The Menstrual Cycle

A menstrual cycle is defined from the first day of menstrual bleeding (called day 1) of one menstrual period to the first day of menstrual bleeding of the next. An average menstrual cycle lasts 28 days. Cycles ranging from as few as 21 days to as many as 34 days are considered normal.

In a normal menstrual cycle, an *ovary* releases an *egg*, a process called *ovulation*. In an average menstrual cycle of 28 days, ovulation occurs about 14 days before the start of the next menstrual period. The number of days between ovulation and the start of the

menstrual period is the most consistent in a menstrual cycle. In a menstrual cycle of 28 days, it is 14 days.

After the egg is released, it moves down the *fallopian tube* to the uterus. An egg can survive in the fallopian tube for about 24 hours following ovulation. A man's sperm can survive inside a woman's body for about 3 days (and sometimes up to 5 days) after *sexual intercourse*. You can become pregnant if you have sex anywhere from 5 days before ovulation until 1 day after ovulation. Your chance of pregnancy is highest when live sperm are present in the fallopian tubes when ovulation occurs.



Ovulation typically occurs 14 days (but can vary between 12 days and 15 days) before the start of the menstrual cycle. These days are represented by the diagonal lines. In an average 28-day menstrual cycle, ovulation occurs on day 14. The fertile period includes the 5 days before ovulation and the day after ovulation.

# **Using Fertility Awareness**

Fertility awareness helps you recognize the signs and symptoms that predict ovulation and to know when the most fertile days occur in the menstrual cycle. If you are practicing fertility awareness as a birth control method to prevent pregnancy, you need to avoid having sexual intercourse or use a *barrier method* of birth control, such as a condom, during the fertile period. If you are trying to get pregnant, you should have sexual intercourse on your fertile days, ideally every day or every other day.

#### **Effectiveness**

When fertility awareness is practiced to prevent pregnancy, fewer than 1–5 women out of 100 will become pregnant during the first year of perfect use. Perfect use means using the method correctly and consistently throughout the menstrual cycle. With typical use—meaning that you use the method the way the average person does, which is sometimes incorrectly or inconsistently—pregnancy rates increase. Twelve to 24 women out of 100 will become pregnant in the first year of typical use.

Just as fertility awareness can increase your chances of not getting pregnant, practicing fertility awareness to time intercourse with ovulation may increase your chances of achieving pregnancy. Without using any special timing, a healthy woman in her twenties having regular intercourse has a 20% chance of becoming pregnant in any single menstrual cycle. Given

these chances with each cycle, about 85% of women will become pregnant within 1 year without the use of birth control.

# Types of Fertility Awareness-Based Methods

There are different types of fertility awareness-based methods. The following sections describe the different methods. They do not provide complete instructions. If you are interested in using fertility awareness to prevent pregnancy, it may be best to learn the method from a qualified teacher or group. Your health care provider or your state or county health department may be able to provide you with information about where to find a teacher. Tools such as smart phone apps and web sites also are available to help you record information about your menstrual cycle and calculate your fertile periods.

#### Standard Days Method

The Standard Days method follows a standard rule of what days during the menstrual cycle are the most fertile. If

your cycle is between 26 days and 32 days long, the Standard Days method considers days 8 through 19 to be the most fertile days. To prevent pregnancy, you should avoid having intercourse or use a barrier method of birth control on these days. To promote pregnancy, you should try to have intercourse between day 8 and day 19, either every day or every other day.

The Standard Days method works best if your cycles are regular and are consistently between 26 days and 32 days long. If they are not, the Standard Days method is less helpful in either promoting pregnancy or preventing pregnancy.

# **Cervical Mucus Method**

Also called the ovulation method, the cervical mucus method involves recognizing changes in the mucus produced by the *cervix* and in how the mucus looks and feels. With this method, you need to check the mucus at the opening of the vagina with your fingers each time you urinate and assess it for changes. You should begin doing this on the first day after menstrual bleeding has stopped.

Just before ovulation, the amount of mucus made by the cervix noticeably increases, and the mucus becomes thin and slippery. The last day this thin and slippery mucus is present is called the Peak Day. Ovulation occurs within 24 to 48 hours of the Peak Day. Just after ovulation, the amount of mucus decreases, and it becomes thicker and less noticeable. To prevent pregnancy, you should avoid sexual intercourse or use a barrier method of birth control from the time you first notice any cervical mucus until 4 days after the Peak Day. To promote pregnancy, you should have intercourse every day or every other day when the thin and slippery cervical mucus is present.

A variation of the cervical mucus method is the TwoDay method. With the TwoDay method, you check your cervical mucus at least twice a day and then ask yourself two questions:

- 1. Did I notice any secretions today?
- 2. Did I notice any secretions yesterday?

If you noticed cervical mucus today or yesterday, you most likely are fertile. To prevent pregnancy, you should avoid sexual intercourse or use a barrier method of birth control. To promote pregnancy, you should have sexual intercourse every day or every other day when you notice secretions. If you did not notice any cervical mucus today and yesterday (2 dry days in a row), pregnancy is less likely.

When using methods that rely on cervical mucus, it is important to be aware of any changes in your health or daily routine that could make reading the signs of ovulation difficult. Medications, feminine hygiene products, douching, sexual intercourse, breastfeeding, or having a pelvic exam in which lubrication is used all can change how the cervical mucus appears.

#### **Basal Body Temperature Method**

The *basal body temperature* (*BBT*) is your body's temperature when you are fully at rest—in the morning before getting out of bed. In most women, the body's normal temperature increases slightly during

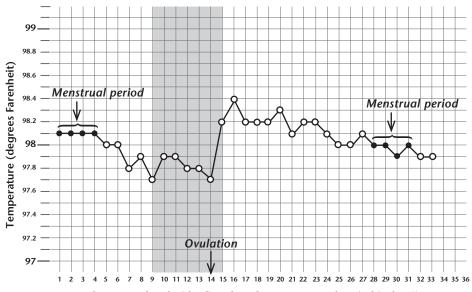
ovulation (0.5–1°F) and remains high until the end of the menstrual cycle. The most fertile days are the 2–3 days before this increase in temperature. To monitor your BBT, take your temperature every morning after waking up, before any activity, getting out of bed, or having anything to eat or drink. Record these temperatures daily.

BBT by itself is not a good way to prevent or promote pregnancy. It shows only when ovulation has already occurred, not when it is going to occur. A cervical mucus method can be used to find out when your fertile time begins (see "Symptothermal Method"). The BBT method may be used to estimate the end of your fertile period. If you have 3 continuous days of higher temperatures following 6 days of lower temperatures, ovulation has probably occurred, and your fertile period has ended. If you are trying to get pregnant and have not been successful, keeping a record of your BBT for several months can help you determine whether you are ovulating. BBT monitoring sometimes is one of the first steps in an infertility evaluation.

#### Symptothermal Method

The *symptothermal method* is a combination of methods. The two most commonly used are the BBT method and the cervical mucus method. The Marquette method combines BBT and cervical mucus tracking with use of an electronic hormonal fertility monitor. The monitor detects hormones in urine to confirm fertile days. It can be purchased online or at a pharmacy. Other methods or signs can be used, such as the Standard Days method, as a double check to identify when the fertile time begins and ends.

# **Basal Body Temperature Graph**



Day of menstrual cycle (the first day of your menstrual period is day 1)

Basal body temperature starts to increase 24–48 hours after ovulation and stays high for at least 3 days. If you are trying to prevent pregnancy, tracking your basal body temperature is useful in estimating the end of your fertile period.

## Using Fertility Awareness to Prevent Pregnancy: Advantages and Disadvantages

There are many advantages to using fertility awareness-based methods to prevent pregnancy. They cost very little to use. Many women like the fact that fertility awareness is a form of birth control that does not involve the use of medications or devices.

There are disadvantages as well. Unlike other methods, such as condoms, using fertility awareness to prevent pregnancy does not protect against sexually transmitted infections (STIs), including human immunodeficiency virus (HIV). Fertility awareness-based methods may not be a good choice if you are at high risk of getting an STI. These methods also need the

cooperation of your male partner. If getting pregnant is not recommended for you because of medical risks, fertility awareness-based methods may not be right for you because they are less effective than other birth control methods.

There are some situations in which the use of fertility awareness-based methods to prevent pregnancy may be more difficult. If any of the following conditions apply to you, you may need extra training to make sure you are using fertility awareness correctly:

- You are approaching menopause.
- You have just started having menstrual periods.
- You have recently stopped using a hormonal birth control method or are using other drugs that can affect the signs of fertility.

If you have recently had a baby, you may want to delay using certain fertility awareness-based methods until your menstrual periods are regular.

These methods are not recommended if you have bleeding between menstrual periods that is difficult to distinguish from your normal menstrual period or that makes assessing your cervical mucus difficult. You should not use the Standard Days method if you have irregular menstrual periods. If you have an ongoing vaginal infection or discharge, you should delay using methods that rely on cervical mucus until after your condition is treated and the infection has gone away. If you have a fever (for example, if you have an ongoing medical condition or if you get sick with the flu), the BBT method may not be reliable. If you are not able to avoid sex or use a barrier method during your fertile days, you should use another method of birth control.

#### Finally...

Fertility awareness can help you know which days during your menstrual cycle you are most likely to get pregnant. It can be used to prevent or plan for pregnancy. If you would like to use a fertility awareness-based method to prevent pregnancy, it is a good idea to learn from a qualified teacher or group. You will want to be sure that your partner is willing to use this form of birth control and is motivated to help you make it successful. You also may want to talk with your health care provider about any conditions you may have that may make fertility awareness-based methods difficult to use.

# **Glossary**

**Barrier Method:** Birth control that stops sperm from entering the uterus, such as condoms.

**Basal Body Temperature (BBT):** The temperature of the body at rest.

*Cervix:* The lower, narrow end of the uterus at the top of the vagina.

*Egg:* The female reproductive cell made in and released from the ovaries. Also called the ovum.

**Fallopian Tube:** Tube through which an egg travels from the ovary to the uterus.

Fertility Awareness: A collection of ways to track a woman's natural body functioning and determine when she is most likely to get pregnant.

Human Immunodeficiency Virus (HIV): A virus that attacks certain cells of the body's immune system. If left untreated, HIV can cause acquired immunodeficiency syndrome (AIDS).

*Menopause:* The time when a woman's menstrual periods stop permanently. Menopause is confirmed after 1 year of no periods.

Menstrual Cycle: The monthly process of changes that occur to prepare a woman's body for possible pregnancy. A menstrual cycle is defined as the first day of menstrual bleeding of one cycle to the first day of menstrual bleeding of the next cycle.

*Ovary:* Organ in women that contains the eggs necessary to get pregnant and makes important hormones, such as estrogen, progesterone, and testosterone.

Ovulation: The time when an ovary releases an egg.

*Sexual Intercourse:* The act of the penis of the male entering the vagina of the female. Also called "having sex" or "making love."

Sexually Transmitted Infections (STIs): Infections that are spread by sexual contact. Infections include chlamydia, gonorrhea, human papillomavirus (HPV), herpes, syphilis, and human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

*Symptothermal Method:* A fertility awareness method used to predict when a woman might be fertile. The method uses body temperature and other signs and symptoms of ovulation.

This information was designed as an educational aid to patients and sets forth current information and opinions related to women's health. It is not intended as a statement of the standard of care, nor does it comprise all proper treatments or methods of care. It is not a substitute for a treating clinician's independent professional judgment. Please check for updates at www.acog.org to ensure accuracy. Copyright November 2018 by the American College of Obstetricians and Gynecologists. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, posted on the internet, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission from the publisher. This is EP024 in ACOG's Patient Education Pamphlet Series. ISSN 1074-8601 American College of Obstetricians and Gynecologists 409 12th Street, SW PO Box 96920 Washington, DC 20090-6920