Birth Control
Birth Control Methods

• Used to regulate the number of children an individual or couple will have
• Also called contraception; often designed to prevent either ovulation, fertilization or implantation
• The most reliable method of birth control is abstinence – not engaging in sexual intercourse
• Also has the added advantage of preventing transmission of STDs
Sterilization

• A surgical procedure that renders an individual incapable of reproduction

  1. Vasectomy
  2. Tubal ligation
Vasectomy involves cutting and sealing the vasa deferentia.

a. External view of procedure.

b. Internal view of results.
Vasectomy Reversal

**Vasovasostomy**: vas deferens are attached together

**Vasoepididymostomy**: vas deferens is attached directly to the epididymis
Tubal Ligation Procedure

Tubal ligation involves cutting and sealing the uterine tubes.

a. Laparoscopy requires only two small incisions.

b. Internal view of results.
Tubal Ligation Reversal

Tubotubal Anastomosis

Tubouterine Implantation
Essure Permanent Birth Control System

- A non-surgical form of sterilization
- Approved for use by the FDA in 2002
- Takes about 13 minutes to perform
- A tiny spring-like device is inserted into each fallopian tube
- Mesh material in the coils irritates the lining to cause scar tissue to form and eventually plug up the tubes
Essure Procedure

• After 3 months, confirmation test is performed (contrast dye and X-rays)
• 99.8% effective based on 4 years of follow up data
• About $1000 after insurance
Essure vs. Adiana

- Adiana is a similar type of procedure approved in 2009
- Silicone instead of metal
- Taken off the market in 2012 due to patent infringement
Vasalgel (in trials)

One-Shot Male Birth Control: How the “Reversible Vasectomy” Works

A Sperm produced in the testes are transported via a duct called the vas deferens. RISUG, a synthetic polymer, is injected into the vas deferens connected to each testicle.

B RISUG coats the wall of the vas deferens. When sperm come into contact with the polymer they are rendered immotile (unable to swim).

C Reversal: Unlike vasectomy, the vas deferens is not severed and tied. RISUG can be flushed out by dissolving it with an injection of DMSO, a compound used in many medical treatments.
Birth Control Pill and Alternatives

- Enovid was the first birth control pill approved for use in 1960
- Still #1 form of contraception
- The birth control pill is usually a combination of estrogen and progesterone that is taken for 21 days out of a 28-day cycle
Biological Activity of the Pill

- Estrogen and progesterone shut down pituitary production of FSH and LH by the feedback mechanism.
- Prevents the spike that causes ovulation.
Biological Activity of the Pill

• If ovulation does occur, there are secondary actions:
  1. *Cervical mucus impenetrable by sperm*
  2. *Affects transport of embryo*
  3. *Prevents normal buildup of endometrium*
YAZ HELPS YOU SAY GOODBYE.

YAZ® is an oral contraceptive pill, 99% effective, but it's the first and only birth control proven to treat the emotional and physical premenstrual symptoms severe enough to impact your life, a condition doctors call PMDD. Symptoms could include:

- Irritability
- Moodiness
- Feeling anxious
- Headaches
- Muscle aches
- Increased appetite
- Fatigue
- Bloating

YAZ can also help keep your skin clear. In recent studies, 9 out of 10 women saw improvement in their moderate acne.

YAZ is for women who choose the Pill for contraception. It should be taken as directed, and is available by prescription only.

Why shouldn’t take YAZ?

YAZ contains a different kind of hormone that may increase potassium. Therefore, you should not take YAZ if you have kidney, liver, or adrenal disease because this could cause serious heart and health problems. Tell your doctor if you are on daily long-term treatment for a chronic condition such as cardiovascular disease or chronic inflammatory disease. Women who take certain drugs (see below) should have their potassium levels checked in the first month of taking YAZ. You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.

Only YAZ goes beyond birth control. Talk to your healthcare professional today to find out if YAZ can help you say goodbye.

BEYOND BIRTH CONTROL™

www.YAZ-us.com

1-866-YAZ-PILL

IMPORTANT SAFETY INFORMATION ABOUT YAZ:

What are the risks involved with taking any oral contraceptive (OC)? OCs can be associated with increased risks of several serious side effects. OCs do not protect against HIV infection or other STDs. Women, especially those 35 and over, are strongly advised not to smoke because it increases the risk of serious cardiovascular side effects including blood clots, stroke, and heart attack.

What cardiovascular or chronic inflammatory drugs may increase potassium? NSAIDs—ibuprofen (Motrin®, Advil®), naproxen (Naprosyn® Aleve®, and others); when taken long-term and daily for arthritis or other diseases or conditions. Potassium-sparing diuretics (spironolactone and others). Potassium supplements, ACE inhibitors (Capoten®, Vasotec®, Zestoretic® and others). Angiotensin-II receptor antagonists (Cozaar®, Diovan®, and others), Heparin, and Aldosterone antagonists. See important patient information on reverse side.
Which birth control pills may require a **BLOOD TEST**?

☐ Yaz®
(drospirenone and ethinyl estradiol tablets)

☐ Yasmin®
(drospirenone and ethinyl estradiol tablets)

☐ Loestrin® 24 Fe
(norethindrone acetate and ethinyl estradiol tablets, USP and ferrous fumarate tablets)

Ask your healthcare provider.

Are you taking birth control pills that contain drospirenone? You may be required to take a blood test to check your potassium levels when you take them with certain other medicines.

**Safety information you should know:** Oral contraceptives are not for everybody. Most side effects of the Pill are not serious and those that are, occur infrequently. Serious risks, which can be life threatening, include blood clots, stroke, and heart attack, and are increased if you smoke cigarettes. Cigarette smoking increases the risk of serious cardiovascular side effects, especially if you're over 35. Women who use oral contraceptives should not smoke. Some women should not use the Pill, including women who have or have had blood clots, certain cancers, a history of heart attack or stroke, as well as those who are or may be pregnant. The Pill does not protect against HIV or sexually transmitted diseases.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit [www.fda.gov/medwatch](http://www.fda.gov/medwatch), or call 1-800-FDA-1088.

For safety and other information, please see the Brief Summary of Patient Information on the next page.
Side Effects of the Pill

• Relief of discomforts associated with menstruation; also relief of acne
• Weight gain, headaches, dizziness, nausea, vomiting, painful breast swelling, irregular spotting
• Increased incidence of blood clots (thromboembolism)
Alternate Forms of the Pill

1. **Ovcon 35**: chewable tablet
2. **Mini-Pill**: contains progesterone only; will not affect milk supply for breastfeeding mothers; also a good option for women who cannot take estrogen
3. **Extended Cycle/Continuous Use Pills**: Seasonale, Seasonique, Lybrel
Birth control plus fewer periods

Satisfy your need-to-know side.

I know I need highly effective birth control. Well, that’s prescription SEASONIQUE®—it’s what you need your Pill to be. It’s 99% effective when taken as directed.

Do I take SEASONIQUE® every day?

SEASONIQUE® has a simple once-daily routine just like the typical Pill. You take a pill every day, at the same time each day, for 3 months instead of 3 weeks. Just let the convenient pill pack be your guide.

Are the risks with SEASONIQUE® similar to other birth control pills?

Like other birth control pills, SEASONIQUE® has serious risks, which can be life threatening. They include blood clots, stroke, and heart attack. Smoking increases these risks, especially if you are over 35, so Pill users should not smoke.

Can everyone take SEASONIQUE®?

Some women should not take the Pill, including women who have blood clots, certain cancers, a history of heart attack or stroke, as well as those who could be pregnant.

Does SEASONIQUE® protect against HIV or STDs?

No. The Pill does not protect against HIV infection and other sexually transmitted diseases (STDs).

And your get-up-and-go side.

But part of me wants fewer periods. That’s SEASONIQUE® too—it lets you have fewer periods than most Pills. That’s why it’s designed with 3 straight months of active pills.

What will my periods be like?

You’ll get 4 periods a year. They should last about 3 days and be as light as with a typical monthly Pill.

What else should I expect?

While you get 4 periods a year, you’re also more likely to have bleeding or spotting between periods. This can be slight to a flow like a regular period and should decrease over time.

I can really have fewer periods? Sure. SEASONIQUE® takes advantage of the fact that there’s no medical need to have a monthly period on the Pill.

To learn more, ask your healthcare professional.

Savings to get started*

Save big on your first prescription and refill at seasonique.com 1.866.610.FOUR (3687)

Offer ends soon, limitations may apply.

*Like prohibited in MA and TX and by any patient whose prescription costs are covered in whole or in part by a federal healthcare program, such as Medicare (including Medicare Part D) or Medicaid, or by any similar federal or state program. Including a state pharmaceutical assistance program.

SEASONIQUE® tablets are indicated for the prevention of pregnancy. Please see following page for brief summary of Prescribing Information.
Take a look at LYBREL.

Birth control approved to be taken 365 days a year.

What is LYBREL?
LYBREL is the first and only FDA-approved low dose combination birth control pill that you take every day, 365 days a year without placebos. This means it's possible to go without your monthly period while taking LYBREL. While women stop having their regular monthly periods, most women initially experience breakthrough bleeding and spotting. This usually lessens over time. For some, this may continue, but regardless of any unexpected bleeding, LYBREL remains highly effective birth control.

Is it OK to not have my period?
Many health care professionals agree that there is no need to have a period while taking the Pill. Just ask yours.

How do I learn more about LYBREL?
Ask your health care professional. You can also visit www.lybrel.com or call 1-877-LYBREL-0.

IMPORTANT SAFETY INFORMATION

The Pill does not protect against HIV or other sexually transmitted diseases.
Some women should not use the Pill, including women who have blood clots; breast, uterine, or liver cancers; a history of heart attack, stroke, or breast cancer; and those who are or may be pregnant.
Serious risks associated with the Pill which can be life threatening, include blood clots, stroke, and heart attacks.

Cigarette smoking increases the risk of serious adverse effects on the heart and blood vessels from oral contraceptive use, especially if you are over 35. Women who use the Pill are strongly advised not to smoke.

LYBREL provides more hormonal exposure per year than conventional cyclic oral contraceptives containing the same or similar strength of the hormones estrogen and progestin. Because regular monthly bleeding does not occur on LYBREL, it may be difficult to recognize if you get pregnant. If you suspect pregnancy, or if you have symptoms such as nausea/vomiting or unusual breast tenderness, you should take a pregnancy test and contact your health care professional.
The most common side effects reported with LYBREL in a clinical trial were headaches, menstrual cramps, upper respiratory infection, vaginal bleeding, and nausea.

Learn more at www.lybrel.com

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.
DO YOU REALLY NEED YOUR PERIOD?

Newer forms of the Pill can put your period on pause for months at a time—or permanently. But is this safe? We asked experts to address women’s top concerns on going period-free. —Emily Sohn

“Periods are natural. Isn’t stopping them unhealthy?”

EXPERTS SAY Many women think periods are necessary to “flush out” some accumulation of stuff that builds up in the uterus. Not true: “There are no known medical benefits of menstruation,” says Andrew Kaunitz, M.D., an ob/gyn at the University of Florida College of Medicine in Jacksonville.

“Doesn’t my body need a break from the Pill’s hormones?”

EXPERTS SAY Lybrel, a period-stopping, continuous-dose pill, delivers fewer hormones over the course of a year than many three-weeks-on, one-week-off formulations do. Whichever brand you choose, the Pill is safe and even lowers the risk for certain cancers, including ovarian, by up to 80 percent.

“How will I know if I do get pregnant?”

EXPERTS SAY You’ll crave pickles and ice cream. Kidding! Doctors advise their patients to watch for pregnancy symptoms such as nausea, fatigue and breast tenderness, and to take a test if they’re concerned. And don’t worry—there’s no evidence that taking birth control after a pregnancy has occurred can harm the baby.
Emergency Contraceptive Pills/Morning-After Pill

- Medication that will prevent pregnancy after unprotected intercourse; can begin one to seven days after unprotected sex
- Upsets the normal female reproductive cycle, making it difficult for an embryo to implant
If your birth control method failed, be calm.

Sometimes things don’t go exactly as planned. You should know there’s a backup plan—Plan B. Plan B is emergency contraception, it helps prevent pregnancy after birth control failure or unprotected sex. What it isn’t: Plan B is not regular birth control and should not be used that way. It simply isn’t as effective. Also, Plan B is not the abortion pill. Where you get it: If you’re 18 or older, you don’t need a prescription. Go directly to the pharmacy. If you’re under 18, you’ll need to see a healthcare professional. When you take it: You have a 72-hour window to prevent pregnancy. The sooner you take Plan B, the more effective it is. When taken as directed, Plan B reduces the chance of pregnancy by up to 89%. Take the first pill as soon as possible after unprotected sex, and the second pill 12 hours later. Learn more at 1-800-336-1271 or go2planb.com.

What you should know about Plan B: Plan B does not protect against HIV and other sexually transmitted diseases. Plan B isn’t effective if you’re already pregnant, and it won’t terminate an existing pregnancy. Side effects may include nausea, abdominal pain, fatigue, headache, changes in your period, dizziness, and breast tenderness. If your period is more than a week late, you may be pregnant. If you have severe abdominal pain, you may have an ectopic pregnancy, and should get immediate medical help. Please see important product information on adjacent page. You are encouraged to report negative side effects of prescription drugs to the FDA at fda.gov/medwatch or call 1-800-FDA-1088.
Alternate Routes of Administration

1. **Depo Provera**: injectable form of progesterone that is administered every 3 months
Alternate Routes of Administration

2. **NuvaRing**: E & Pr; worn for 21 days and removed for 7

3. **Ortho Evra**: a hormone patch (E & Pr); expected to stay in place for a week
Intrauterine Device (IUD)

- Small piece of molded plastic inserted into the uterus by a physician
  1. Copper type (Paraguard)
  2. Progesterone-releasing type (Mirena)
Biological Activity and Side Effects of IUD

- Most likely prevents implantation through an inflamed endometrium
- Also alters tubal motility so embryo arrives at uterus before it is ready to receive it
- Pain, irregular bleeding or profuse menstruation; can also be expelled
- Puncturing the uterus is rare
- May lead to pelvic inflammatory disease (PID)
Contraceptive Implant

- Norplant (6 tubes) - no longer on the market in the U.S.
- Implanon (1 tube)
- Implanted under the skin; releases progestin
Diaphragm

- Soft rubber or plastic cup with a flexible rim that fits over the cervix
- Must be individually fitted
contraceptive cream or jelly

diaphragm
Cervical Cap

- Thicker and smaller than the diaphragm
- Fits snugly around the cervix
- Can be left in place for several days
The FemCap

- Uterus (womb)
- The FemCap covering the cervix
- Vagina
- Prevents sperm from entering the cervix
Cervical Shield  
(Lea’s Shield)

- Silicone cup that has a one-way valve that creates suction and helps it fit against the cervix
- One size fits all, but need a prescription
Vaginal Sponge

- Shaped to fit the cervix; permeated with nonoxynol-9
- One size fits all
- Reapproved by the FDA in 2005
Male Condom

- Plastic sheath (latex) or thin skin (lambskin) that fits over the erect penis
- Ejaculate is trapped inside and therefore does not enter the vagina
Female Condom

- Large polyurethane tube with a flexible ring that fits onto the cervix
- Open end has a ring that covers the external genitals
Barrier Methods (Review)

- Diaphragm
- Cervical Cap
- Cervical Shield
- Sponge
- Male Condoms
- Female Condom
Coitus Interruptus

• Also known as withdrawal; interrupting the sex act to discharge semen outside the vagina
• Requires careful timing and positioning by the male, since it is possible for sperm deposited near the vagina to work their way in
Spermicidal Jellies, Creams, and Foams

- Contain sperm-killing ingredients (such as nonoxynol-9)
- Inserted into the vagina with an applicator up to 30 minutes before intercourse
- Allergies to spermicidal agents may occur
Natural Family Planning

- Formerly called the rhythm method
- Also known as periodic abstinence or fertility awareness methods
- Based on the fact that a woman ovulates only once a month and that the egg and sperm are viable for a limited number of hours or days
Key:

- Fertile period—unsafe days

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CycleBeads

- Place a ring over a series of color-coded beads; color tells whether it is a fertile or non-fertile day
- Based on the Standard Days Method
Apps for Smart Phones

Period Tracker

projected start date is Jan 31

16 Days Left

period just started!

Watch for flowers, they appear during your 8 day fertile window

Upgrade To Deluxe For CHARTS!
Abortion

• The termination of a pregnancy before the fetus is capable of survival
• Spontaneous abortions are called miscarriages
• Why would a woman seek an abortion?
History of Abortion

• Can be traced back to ancient times
• English law forbade abortion after the “quickening”
• Soviet Union and Iceland - first two countries to legalize abortion
• Roe v Wade in 1973 - violated a woman’s right to privacy
• Pro-Life v Pro-Choice Debate
Abortion

• Surgical removal:
  - Uterine aspiration: up to the first 3 months
  - Dilation and evacuation: 4th – 5th month

• Other methods
Abortion Pill

• 2-drug regimen to induce a miscarriage:
  1. Mifepristone: an antiprogestin, it causes the uterus to shed lining and dislodge embryo
  2. Misoprostol: induces contractions that expel the embryo