

Family planning methods

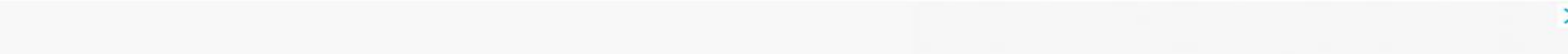
Assistant professor Mayasah A. Sadiq FIBMS-FM

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- Contraception is defined as the intentional prevention of conception through the use of various devices, sexual practices, chemicals, drugs or surgical procedures.
 - The preventive methods to help women avoid unwanted pregnancies are called contraceptive methods.
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FAMILY PLANNING

Need for contraception



- To avoid unwanted pregnancies.
 - To regulate the timing of pregnancy.
 - To regulate the interval between pregnancy.
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Ideal Contraceptive



- Safe
 - Effective
 - Acceptable
 - Reversible
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- Inexpensive
 - Long lasting
 - Requires little or no medical supervision
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Contraceptive methods

- Spacing methods

- Natural

- Barrier

- IUDs

- Emergency
contraception

- Terminal methods

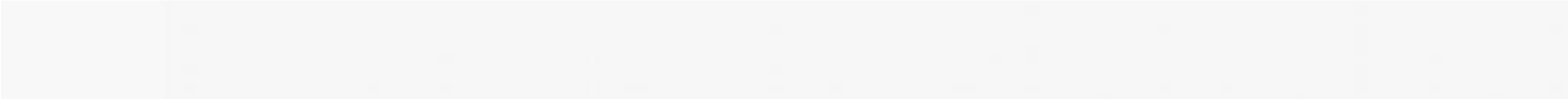
- Male fertilisation

- Female fertilisation

- **Hormonal**

Natural Methods



- Coitus **interruptus** / withdrawal
 - Rhythm Method **“Fertility awareness”**
 - Lactational Amenorrhoea
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The lactational amenorrhea method

- is based on three simultaneous conditions:
- (1) the baby is under 6 months;
- (2) the mother is still amenorrheic; and
- (3) she practices exclusive breastfeeding on demand, day and night.

Barrier methods

- **Mechanical**

Male : Condom

Female : Condom, Diaphragm, Cervical cap

- **Chemical**

Creams

Jelly –

Foam tablets

- **Combination**

Combined use of Chemical and Mechanical methods.

Male condom

- Most commonly known and used contraceptive.



Male condom

Advantages

- Low price
 - Easily available
 - Easy to use
 - Safe
 - No side effects
 - Protects against STDs
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Disadvantages

- May tear.
- Latex allergy.

Female condom



Female Condom

ADVANTAGES:

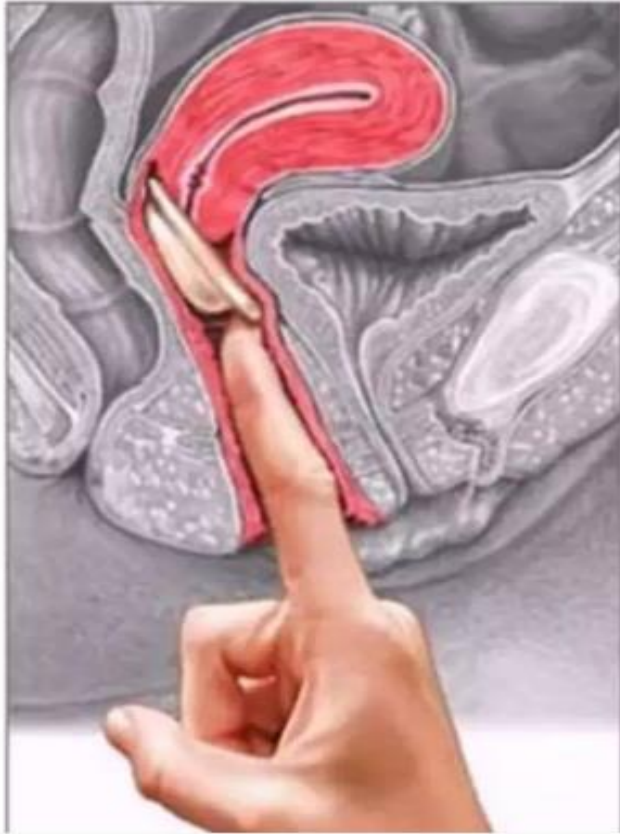
- Highly effective (95%)
- Prevents sexually transmitted diseases
- Available without prescription
- Can be inserted up to 8 hours before intercourse

DISADVANTAGES:

- Noticeable during sex
- Sometimes difficult to insert or use
- Can break or leak
- More expensive than a male condom



Diaphragm

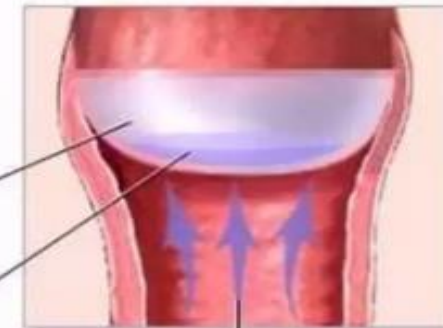


Barrier method:
The diaphragm fits over the cervical opening, preventing sperm from entering the uterus



Diaphragm blocks sperm from entering cervix

Spermicide



Cervix

Sperm



Spermicide inside diaphragm kills sperm

DIAPHRAGM

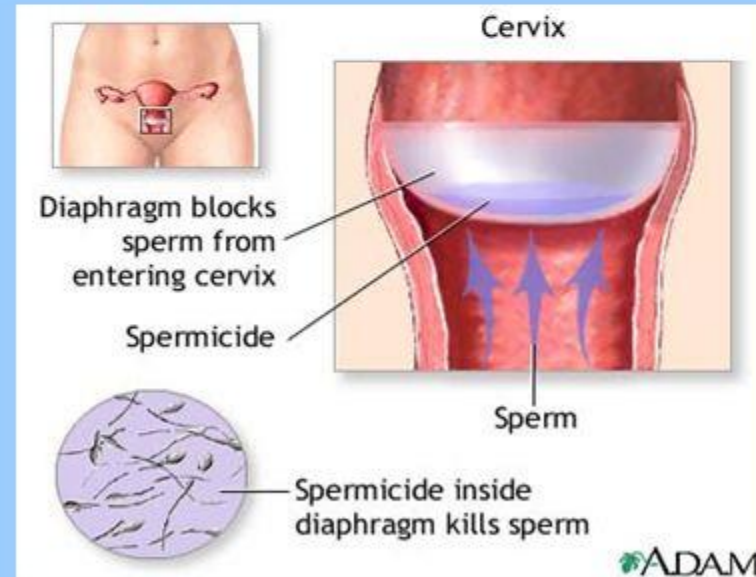
ADVANTAGES:

- Can last up to 2 years
- Easy to carry
- No effect on female's natural hormones
- Can be inserted before sexual activity



DISADVANTAGES:

- Difficult to insert
- May be pushed out of place
- May need to be refitted
- Can cause ulcerations
- Can cause irritation, urinary tract infections
- Must be used with spermicide

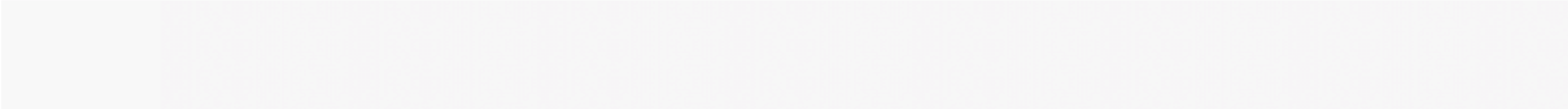


Spermicides



Spermicides are surface active agents which attach themselves to spermatozoa and kill them.

Available in various forms like

1. Foams
 2. Creams
 3. Suppositories
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Spermicides

- **A chemical that kills sperm**

Advantages:

1. **Available w/out prescription**
2. **Minimal health risk**
3. **Easy to carry & use**
4. **Some protection against STI's**

Disadvantages:

1. **Timing > must insert close to intercourse**
2. **May cause an allergic reaction**

Effectiveness:

75% - 80% if used correctly

98% if used with a condom

Intrauterine device

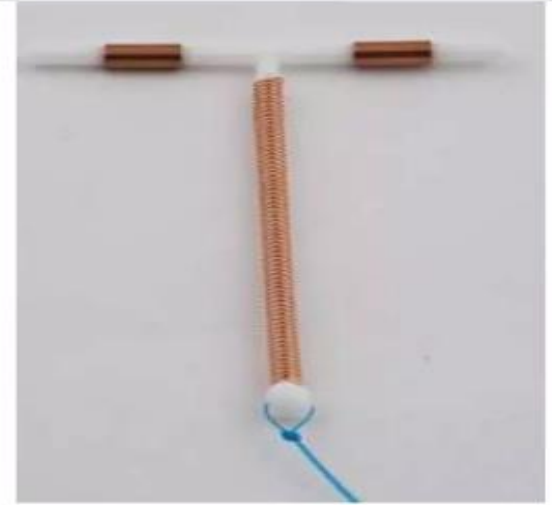
- MECHANICAL
- HORMONAL

Cu T 380A

- 380 mm square surface area of copper wire.
- Replacement 10 years.

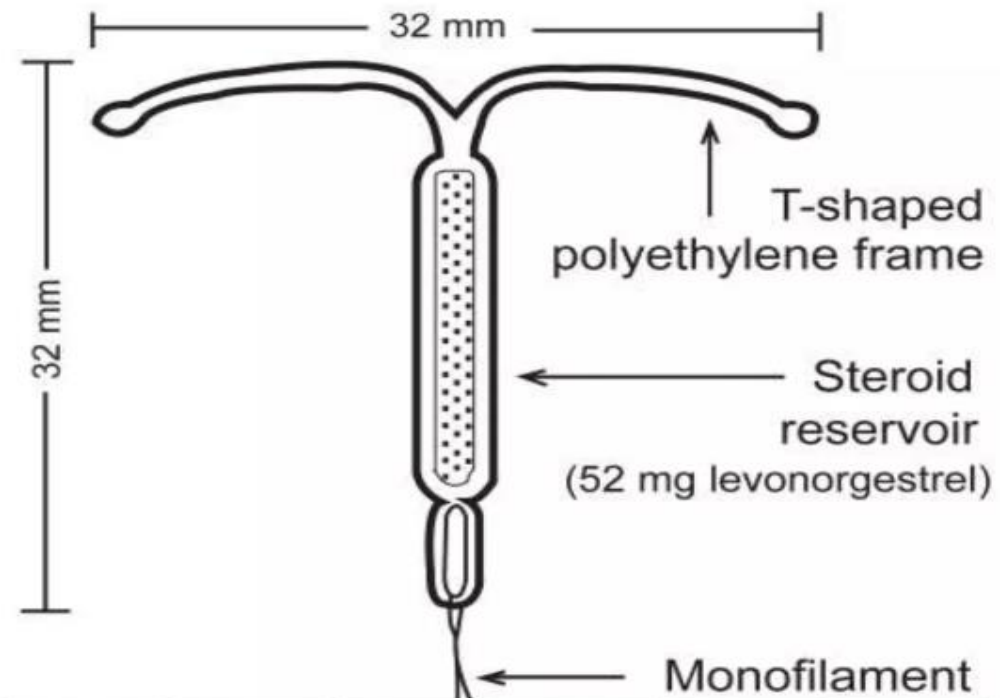
Multiload Cu 250

- 60-100 ug/day
- Replacement 3 years



Levonorgestrel IUS (LNG-IUS)

- Polydimethylsiloxane membrane around stem.
- Levonorgestrel 52 mg
- 20 ug/day



Mode of action

- Biochemical and histological changes in endometrium.
- Increased tubal motility.
- Endometrial inflammatory response.
- Prevents implantation.

Contraindication

- ❑ Presence of pelvic infection
- ❑ Genital tract bleeding (undiagnosed)
- ❑ Suspected pregnancy
- ❑ Uterine fibroid
- ❑ Severe dysmenorrhoea
- ❑ Ectopic pregnancy history

Time of insertion

- **Interval**

 - 2-3 days after menstrual phase.

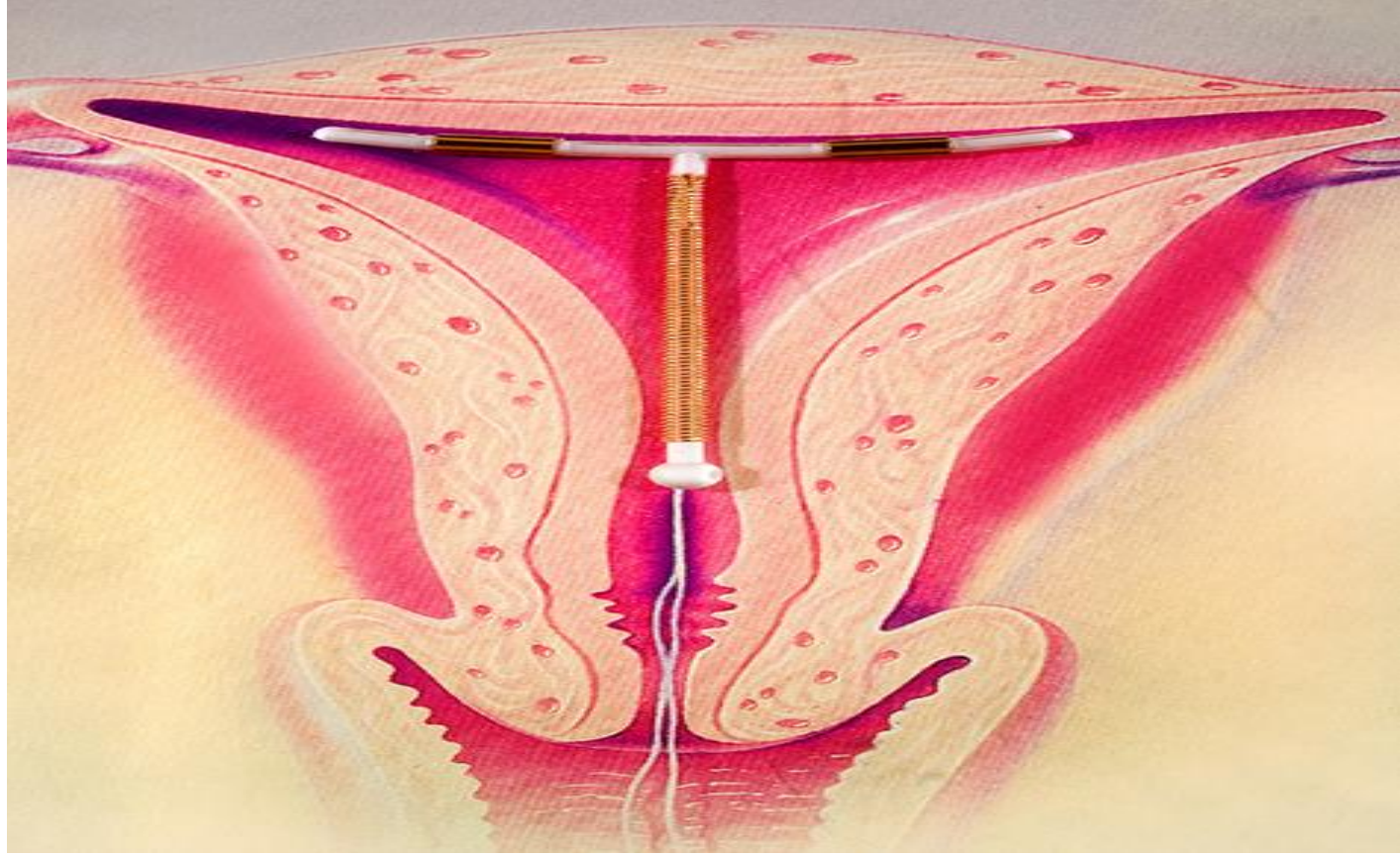
 - During lactational amenorrhoea.

- **Postabortal**

 - Done immediately following termination of pregnancy.

- **Postpartum**

 - After 6 weeks of delivery.



Instructions to the patient



- Possibility of pain
- Vaginal bleeding
- Routine check up 1 month then annually.



Fig. 1: Transabdominal ultrasound of IUD in place

Complications



□ Immediate

- Cramp-like Pain
- Syncopal attack
- Partial or complete perforation

□ Remote

- Pain
- Abnormal menstrual bleeding
- PID
- Spontaneous expulsion

Indication of removal

- ❑ Persistent excessive uterine bleeding.
- ❑ Expulsion of IUD.
- ❑ Pregnancy with device *in situ*.
- ❑ Missing thread.
- ❑ One year after menopause.

Advantages and the Disadvantages of (IUD)

- **Advantages:**

- - Once inserted, remain in place.
- - Remains effective while in place.
- - It prevents pregnancy for long period
- - Does not interfere with sexual activity.

- **Disadvantages :**

- - May cause bleeding and cramping.
- - Increased risk of ectopic pregnancy.
- - Doesn't prevent sexual transmitted diseases.

	Hormonal intrauterine device	Copper intrauterine device
Cost	high	low
Mechanism of action	May thicken cervical mucus Affects sperm/oocyte motility Thins endometrium May inhibit ovulation	Toxic to sperm Endometrial effect
Duration	5 years	5 or 10 years
Efficacy	99.8%	99.2%
Effect on bleeding	Significantly reduces menstrual bleeding	Can increase menstrual bleeding and pelvic pain
Hormonal adverse effects	Can occur	None
Other benefits	Protects the endometrium in women requiring hormone replacement therapy	Provides highly effective emergency contraception

Hormonal contraceptive methods

□ Oral

- Combined Prep
 - Monophasic
 - Biphasic
 - Triphasic
 - Emergency
- Single Prep
 - Progestin only pill
 - Oestrogen only

□ Parenteral

- Injectables
 - DMPA
 - NET-EN
 - Combined
- Implant
 - Implanon
 - Norplant
 - LNG rod

□ Vaginal ring.

□ Transdermal patch

Combined oral contraceptives

Mode of action

1. Inhibition of ovulation.
2. Producing static endometrial hypoplasia.
3. Alteration of cervical mucosa.
4. Alters tubal motility.



Progesterone only pills

- Contains very low dose of progestins in form of Levonorgestrel 75 ug.

Mechanism of action:

1. Thicker cervical mucous.
 2. Atrophic endometrium.
-

Absolute contraindications to OCs

- breast cancer
- history of deep venous thrombosis or pulmonary embolism
- active liver disease
- use of rifampicin
- familial hyperlipidemia
- previous arterial thrombosis
- pregnancy

relative contraindications

- smoking
- age over 35,
- hypertension,
- breastfeeding

POP VS COCP

- . Progestin only OCs have a higher rate of failure and irregular bleeding than combined pills
- their main use is for breastfeeding women and those with contraindications to estrogen.
- The pill of 1st choice should be a triphasic low-dose formulation.

Non contraceptive benefits of OCs

- Regulation of the cycle with ↓ amount & duration.
- So it helps in prevention & Rx of iron def. anemia.
- ↓ risk of epithelial ovarian tumors.
- ↓ Incidence of functional ovarian cysts.
- ↓ risk of ectopic pregnancy.
- ↓ risk of developing PID.
- ↓ risk of endometrial cancer.
- ↓ spasmodic dysmenorrhea and PMS.
- ↓ risk of benign breast lesions.

Injectable Progestins

- Depomedroxy progesterone acetate (DMPA).
- Norethisterone enethate (NET-EN).
- IM deltoid/gluteus muscle.
- OTC: Depo-Sub Q provera 104.



THE SHOT (DEPO-PROVERA™)

Benefits:

- # of pregnancies expected per 100 women per year: 1 - 3
- Each shot works for 12 weeks
- Helps protect against endometrial cancer
- Can be used while breastfeeding

Risks:

- May cause spotting, no period, hair or skin changes, weight gain, headaches, dizziness, abdominal bloating and discomfort, mood changes, or change in sex drive
- Does not protect against HIV or other STDs/STIs

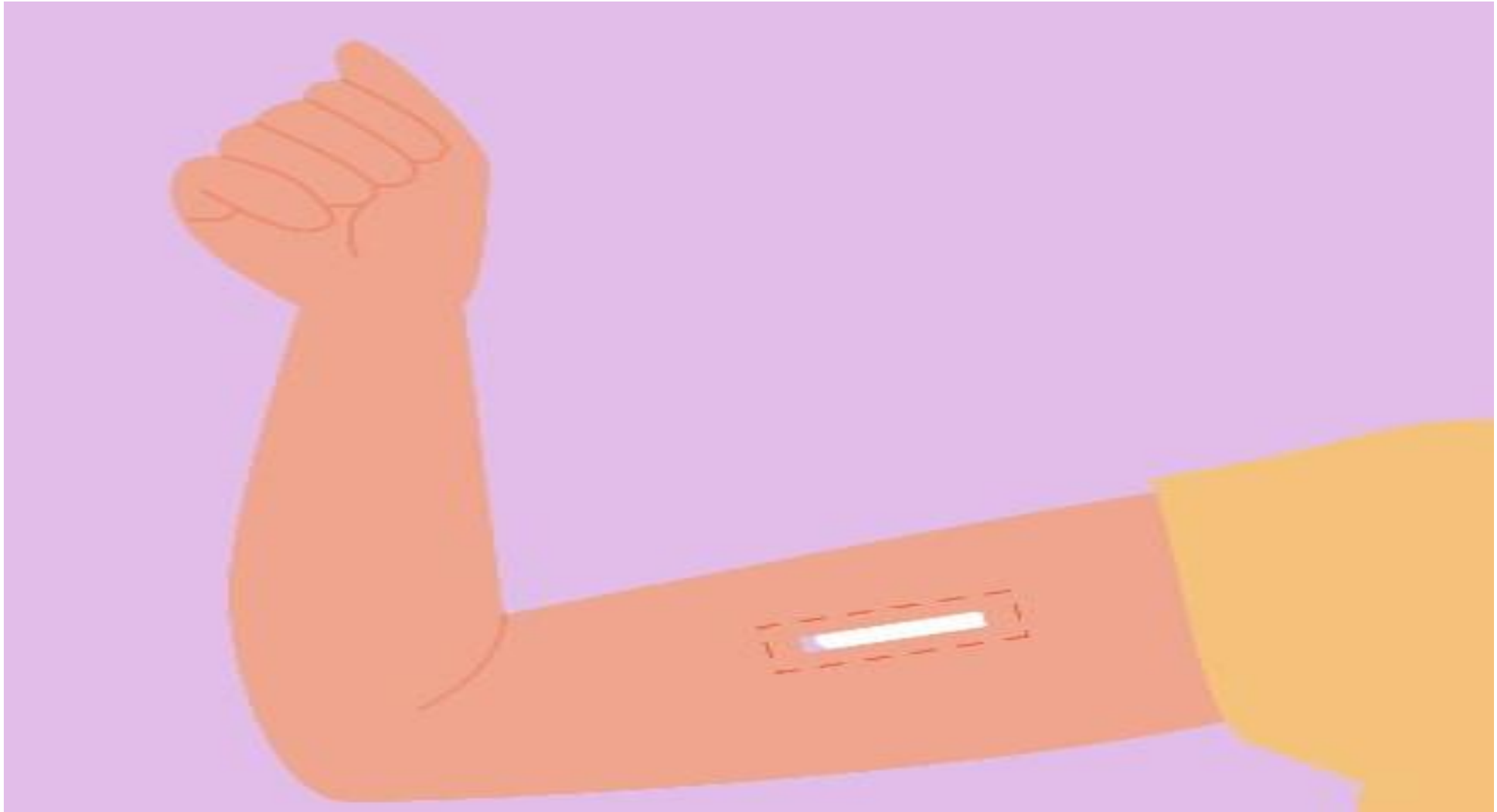
People who use the shot may have a temporary loss of bone density but the bone loss is largely reversible once the method is stopped.

Implant



- ❑ Implanon progestin only delivering system containing 68 mg of 3 Ketodesogestrel.
- ❑ 3 years life
- ❑ The capsule is inserted subdermally.

In the non-dominant arm



Vaginal ring

- a type of hormonal contraception that works in a similar way to the combined oral contraceptive pill to prevent pregnancy.
- It can be a good option for those who find it hard remembering to take a pill every day or who are not comfortable using contraceptive implants or intrauterine devices.



Ortho Evra patch

- It contains 2 hormones: a progestin (norelgestromin) and an estrogen (ethinyl estradiol)
- transdermal system uses a 28-day (four-week) cycle.
- A new patch is applied each week for three weeks (21 total days). Week Four is patch-free.
- wear on belly, upper arm, or back.





Emergency Contraception



- Hormones
- IUD
- Anti-progesterone



NDC 51

PlanB
One-Step

Emergency Contraceptive
One Tablet, One Step

LOT 35806622A
EXP 11/2017

PlanB One-Step

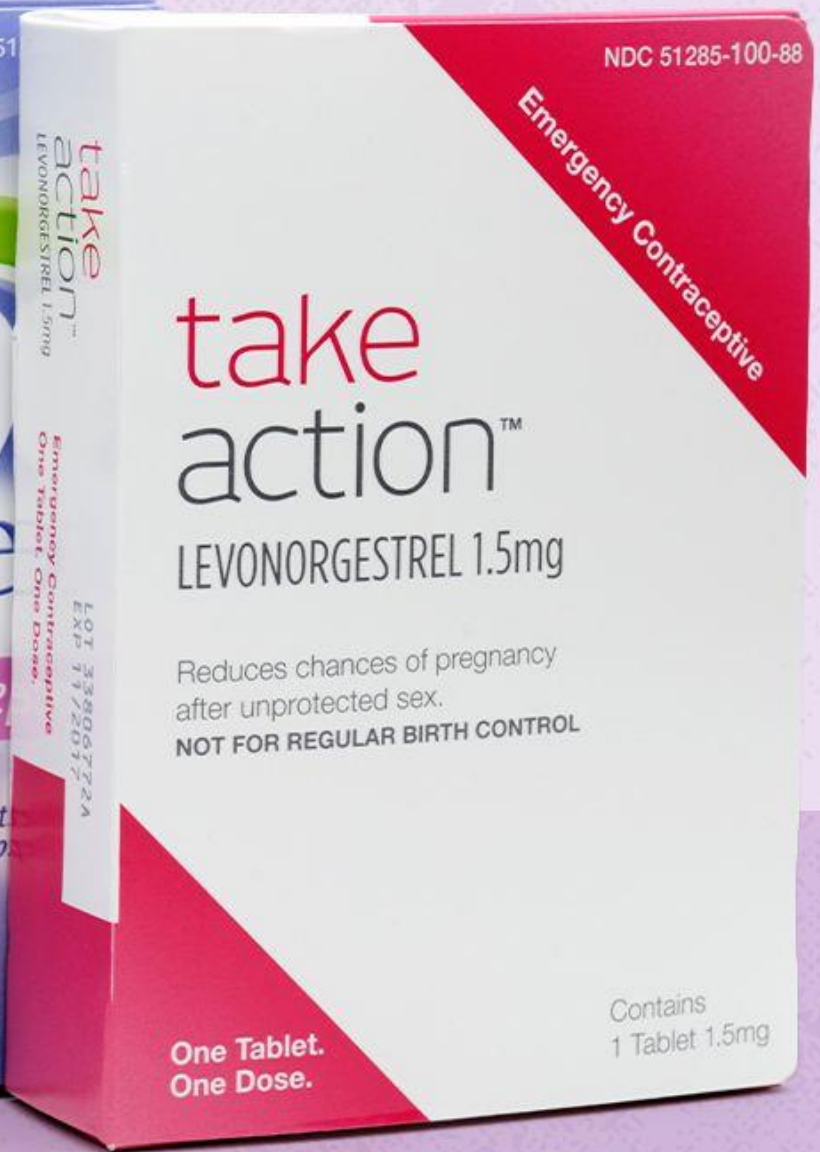
levonorgestrel 1.5 mg

emergency contraceptive

Reduces chance of pregnancy after unprotected sex.
Not for regular birth control.

One Tablet
One Step

Contains 1 Tablet 1.5mg



NDC 51285-100-88

take
action™

Emergency Contraceptive
One Tablet, One Dose

LOT 33806722A
EXP 11/2017

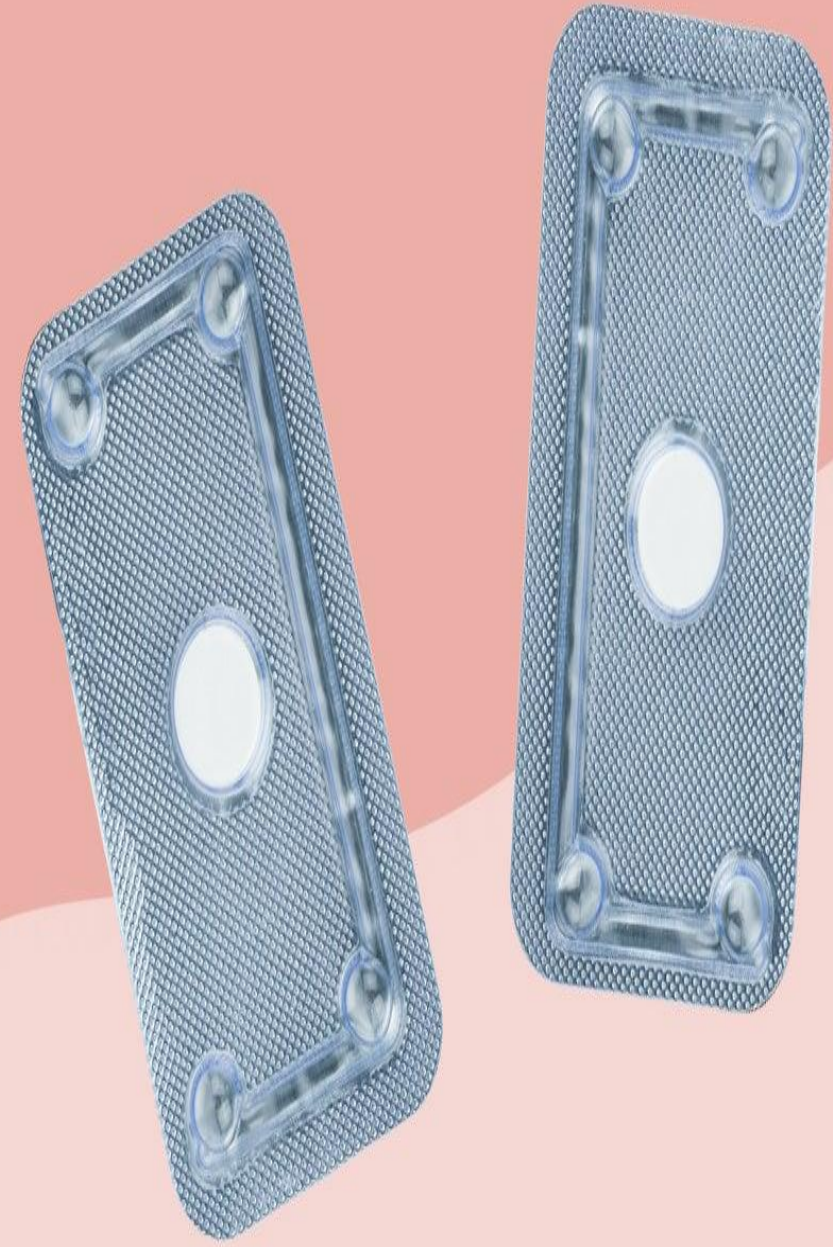
take action™

LEVONORGESTREL 1.5mg




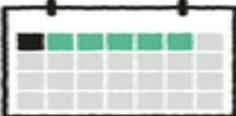
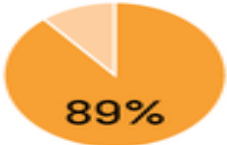

Reduces chances of pregnancy after unprotected sex.
NOT FOR REGULAR BIRTH CONTROL

One Tablet.
One Dose.

Contains
1 Tablet 1.5mg



Plan B vs. Ella

	PLAN B	ELLA
1 What's the active ingredient?	LEVONORGESTREL	ULIPRISTAL
2 What forms does it come in?	 ONE TABLET	 ONE TABLET
3 When can you take it after unprotected sex?	 ASAP, MAX 3 DAYS AFTER	 ASAP, MAX 5 DAYS AFTER
4 How effective is it?	 89%	 95%
5 Do you need a prescription?	NO	YES
6 At what body weight may it become less effective?	165 lbs*	195 lbs*

Sterilisation



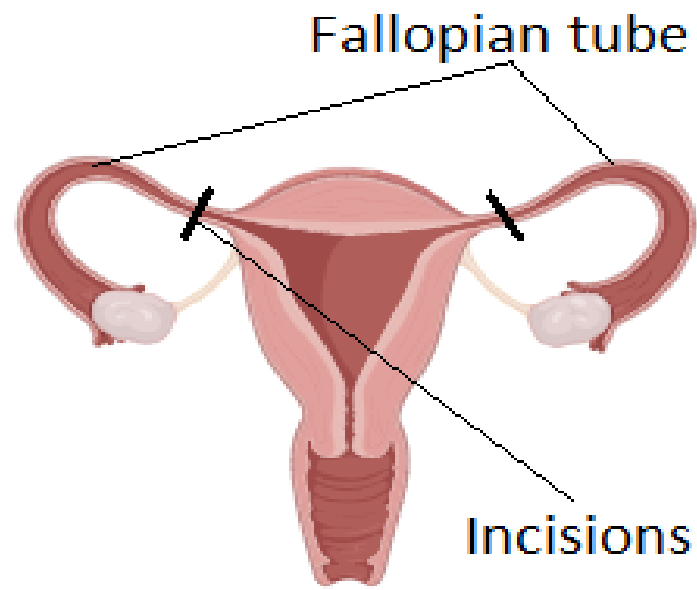
- Permanent surgical contraception.
- Voluntary sterilisation.
- Male - vasectomy
- Female - tubal occlusion/tubectomy

Female sterilization

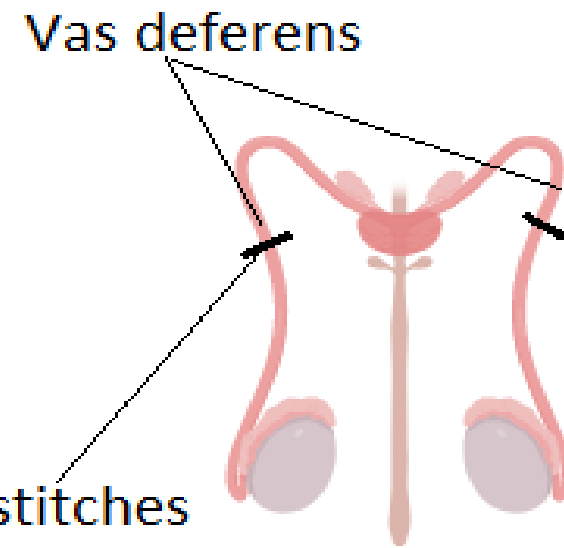
Occlusion of fallopian tubes.

Indication:

1. Family planning
2. Socioeconomic
3. Medicosurgical indications



Tubectomy



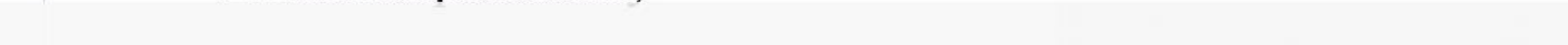
Vasectomy



Time of operation:

1. Post puerperium.
2. Interval.
3. Concurrent with **C SECTION**

Methods of female sterilisation:

1. Tubectomy
 2. Minilaparotomy
- 

TUBAL LIGATION	NO NEEDLE/NO SCALPEL VASECTOMY
Done in a hospital operating room	In-office procedure
General Anesthesia required	Local anesthesia only (administered without a needle)
30 minutes to 1 hour duration	15 minutes
Procedure is done in the abdominal cavity (risk of damage to surrounding structures)	Done through a 3/16" scrotal opening
Significant recovery required	24 hours down time
Significant pain and discomfort	Minimal to no discomfort
Sexual activity after incision heals	Sexual activity in 48-72 hours
4 times more expensive	¼ the cost
Rarely reversible	Reversal usually possible