

Girls and Puberty

Objective: Participants will describe the internal and external changes females experience during puberty.

Structure: Presentation by educator with large group discussion.

Time: 45 minutes.

Materials: Blackboard or flipchart; “Female Anatomy” worksheet; female reproductive system resource sheet.

Procedure

1. **Introduce** the topic by stating:

Up until now, we have been discussing external changes of puberty. Today we will learn about the changes that happen inside the female body at puberty.

We can see external changes quite easily, but there are many more changes happening internally, which are also important. It is sometimes more embarrassing to discuss these parts because they are more private.

Review the ages that boys and girls go through puberty (if necessary).

We know that puberty happens to prepare males and females to be able to reproduce. What do the words reproduce and reproduction mean? (To make a baby, make another similar to the first.)

When we talk about the reproductive organs, we are talking about the parts of the body that help reproduction happen.

Today, we will learn about the reproductive organs of the female and how they change at puberty to make it possible for a woman to reproduce.

2. **Visible changes to girls**

Breast development—breasts may feel sore at times—one breast often develops before the other breast—it can take 3-5 years before breasts are fully grown.

Breasts are often unequal in size (e.g. one may be bigger than the other). Help the class to be aware that in addition to the job of making milk, a woman’s breasts can be a source of sexual pleasure—both to herself and to her partner.

Breast size is primarily determined by genes.

Breast size can be affected by nutrition, pregnancy and/or surgery.

Height and weight increases—an increase in body weight is normal and healthy. Because weight is an issue for many young women, be positive when you talk about this change. Explain that we all need fat for nutrition and energy. About 25% of the female adult body is fat and 15% of the male adult body is fat. 23% of the female body is muscle and 40% of the male is muscle. This means, generally, that men have more strength (can lift more) and run faster.

Women can endure some kinds of physical stress more easily than men. Women, in general, can survive famine, cold, and drought better and do very well in endurance sports (long distance swimming, marathons, etc.).

Hips broaden to prepare for the delivery of a baby.

Armpit hair, pubic hair develops and hair grows on the legs and arms.

Discuss the following questions:

What are breasts for?

What determines whether a girl will have small breasts, medium sized breasts, or large breasts?

Why might a girl worry about what size her breasts grow?

Why do a girl's hips get wider but a boy's don't?

3. **Introduce** the female reproductive system.

You may wish to have participants complete the worksheet on labelling the reproductive system during discussion.

Orient participants to chart being used – e.g. front view or side view and where these organs are located on the body.

External Genitals

Ones we are born with – sometimes they are altered.

Vulva

- Consists of labia majora and labia minora (outer and inner folds of skin)
- Function as protection for the internal sex organs

Clitoris

- Small, sensitive organ located above the opening to the vagina
- Function is one of sexual pleasure

Three openings

- Urethra, vagina, anus

4. **Introduce** the internal reproductive organs.

Vagina

- Leads to the other internal reproductive organs
- Used for menstruation, intercourse, childbirth
- Not used for urination – opening just above vagina, called the urethra, is used for this purpose (side view diagram explains this concept best)
- A thin membrane (the hymen) surrounds the vaginal opening, may not be noticeable in some

Uterus

- Also called the womb
- Special place in woman's body where baby grows
- Very low in abdomen, nowhere near the stomach, about the size of a fist
- It is the uterus that enlarges during pregnancy, not the stomach

Fallopian tubes

- Two tubes on either side of the uterus
- Passageway from the uterus to ovary

Ovaries

- Females have 1-2 ovaries
- Reproductive glands
- Start producing hormones at puberty
- Hold about 250,000 ova (eggs) until puberty when they start being released – one released per month

Ovum

- Also called egg cell
- Special cell which, when united with male sperm cell, can create a baby – this is called fertilization

All girls are born with their reproductive organs but they do not start to develop and function until puberty.

Tell participants to imagine a very small pear.

Explain that this is the usual size of a mature woman's uterus.

Have participants put their fist where they think the uterus is found in a woman's body.

Explain that the uterus is low down in the pelvis and can grow and stretch in pregnancy-up to the woman's rib cage.

Ask participants where they think their stomach is. How many were told that babies grow in their mother's stomach? Is this true?

5. **Discuss** changes in reproductive organs at puberty.

Discharge

- Keeps vagina clean and healthy
- One of the early changes in puberty. A girl may notice some discharge on her underwear or on toilet paper. It varies from whitish and pasty to clear and slippery. This means a girl's body is starting to mature and her period will be starting.
- If bad odour, itchy or unusual, may be an infection

Ovulation

- Once ovaries start producing hormones, the message is given to start releasing one ovum, once a month from one ovary
- Usually a girl cannot feel this happening
- If egg is not fertilized in a day or so, it dissolves

Menstruation

- Uterus must prepare for growth of a baby if fertilization occurs
- Hormones from ovaries send message to uterus to grow a thick, soft lining of tissue and blood
- This lining contains nutrients that would be needed to nourish the egg and sperm if fertilization occurred
- If the egg is not fertilized in the fallopian tube, the lining is not needed to nourish a baby, so a message from ovary (by hormone) tells the uterus to shed the lining, takes 5-7 days to shed lining – this is called menstruation (having a period) – usually menstruate once a month – bloody discharge trickles out of the body through the vagina
- Once the lining is completely shed, a new lining begins to grow
- Soon another egg is released, and if fertilization does not occur, the egg dissolves and that lining is shed. This continues to happen over and over again. That is why we call it the menstrual cycle
- This is a normal change of puberty – something to be proud of – not something dirty or bad
- Some women experience menstrual cramps which can be relieved with pain killers or hot water bottles

6. Discuss the following:

- How does it feel if you fall and get a cut on your knee?
- How does it feel if you have a nosebleed?
- Do you think having a period is more like cutting your knee or more like a nosebleed? Why?

7. Discuss personal care during menstruation using the following script:

- Menstruation is a normal change of puberty. It is not a sickness – usually can continue to participate in regular daily activities (e.g. physical education classes, gymnastics, swimming, etc.)
- Personal hygiene (i.e. bathing) even more important at this time as oil secretion from hair and skin may increase and menstrual blood may get dried in pubic hair
- Sanitary pads or tampons are used to absorb menstrual fluid
- You may want to show samples and explain their use
- Always wipe from front to back to help prevent infection

8. **Discuss** the following:

- Why does a girl get a period?
- How long does a period usually last?
- What does a girl use to absorb the menstrual blood?
- How does a woman decide which type of menstrual product she will use?

9. *Pads*

- Various sizes of pads available, as the flow varies
- Pads have adhesive strip which sticks to underwear
- Necessary to wear protection 24 hours a day
- Must change pads frequently, approximately every 3-4 hours
- Dispose of pads in wastebasket rather than toilet (wrap in toilet paper first)
- Scented pads may irritate some people's skin

Tampons

- Swimming requires the use of tampons
- With tampons, menstrual fluid is absorbed within the vagina
- Tampons often not used by girls when period first starts
- Should be changed every 3-4 hours (stress this point)
- Held in place by vagina – can't get lost or fall out
- String used to remove tampon – very strong

- Dispose of in wastebasket (wrap in toilet paper first)

Menstrual Caps

- Small, reusable cup that is inserted in the vagina to collect menstrual flow
- Not often used by girls when period first starts
- Available in health food stores

(Adapted with permission from: Regional Niagara Public Health Department (1999) *Growth and Development Lesson Plans for Grades 5 & 6* and Toronto Public Health (1998) *Changes in You and Me!*)