AN A54 INITIATIVE

ISSUE 3: A TO Z ON MENSTRUAL CYCLE

Girls only

Selected for hundrED 2023 Global Collection

A MUST-READ PERIOD AND PUBERTY GUIDE FOR EVERY YOUNG GIRL

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PRINTED ON RECYCLED PAPER

The Team

PadHer is a women-led non-profit organization based in Lagos, Nigeria, and Nairobi, Kenya. Our organization educates young African schoolgirls from underserved communities on periods and puberty via the use of comic books so that they can effectively manage their periods and build the self-confidence they need to take control of the future and succeed.

We are ending period stigma, one comic at a time!

Chika Nwaogu *Founder / Executive Director*	***Thelma Ahamba*** *Director of Operations and Partnerships*	***Elvinah Nyambaso*** *Regional Director (East Africa)*	***Deborah Henshaw*** *Regional Director (West Africa)*	***Camilla Jussab*** *Regional Director (Central Africa)*	***Kelebohile Dalaseni*** *Regional Director (Southern Africa)*	***Karen Ashraf*** *Regional Director (North Africa)*	***Serah Wambui*** *Country Manager (Kenya)*

Menstruation is a natural and healthy part of life. Approximately half of the female population is of reproductive age, accounting for around 26% of the global population. Every month, most girls have their period for three to seven days. Menstruation, as common as it is, is still stigmatized over the world.

Lack of knowledge about menstruation can lead to harmful beliefs and discrimination. It can also prevent girls from participating in regular childhood activities. Young girls are denied the opportunity to learn about menstruation and develop healthy behaviors due to stigma, taboos, and myths.

Girls Only was created to make it **free, fun, easy, and comfortable** teaching young school girls such as yourself about periods and puberty.

Periods are normal. Every girl gets them at some point in life, so it is nothing to be ashamed of or embarrassed about. So always remember…It's normal, Period!™

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HELP US REACH MORE YOUNG SCHOOLGIRLS IN UNDERSERVED COMMUNITIES BY DONATING TODAY.
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Credits

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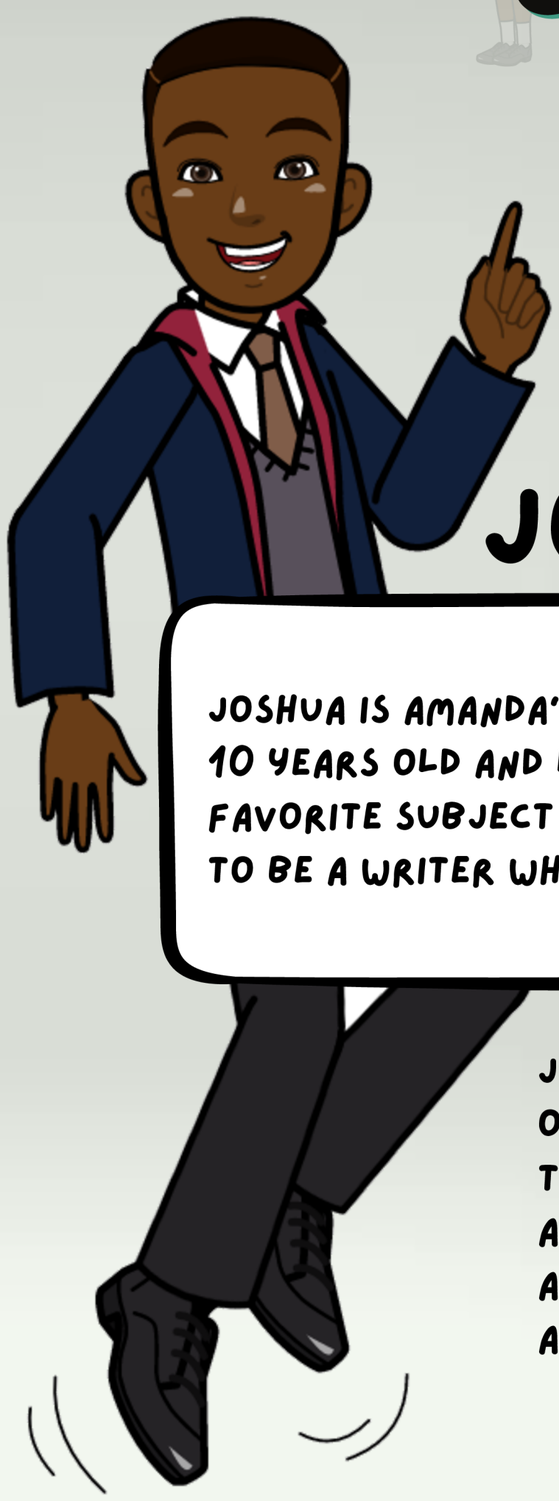
meet the characters

AMANDA

AMANDA IS THE MAIN CHARACTER OF THIS COMIC SERIES. SHE IS 12 YEARS OLD, AND SHE JUST GOT HER FIRST PERIOD. AMANDA'S FAVORITE SUBJECTS ARE MATH AND SCIENCE. AMANDA WANTS TO BE AN ENGINEER.



JOSHUA

JOSHUA IS AMANDA'S YOUNGER BROTHER. HE IS 10 YEARS OLD AND LOVES TO DANCE. JOSHUA'S FAVORITE SUBJECT IS ENGLISH, AND HE LOVES TO BE A WRITER WHEN HE GROWS UP.

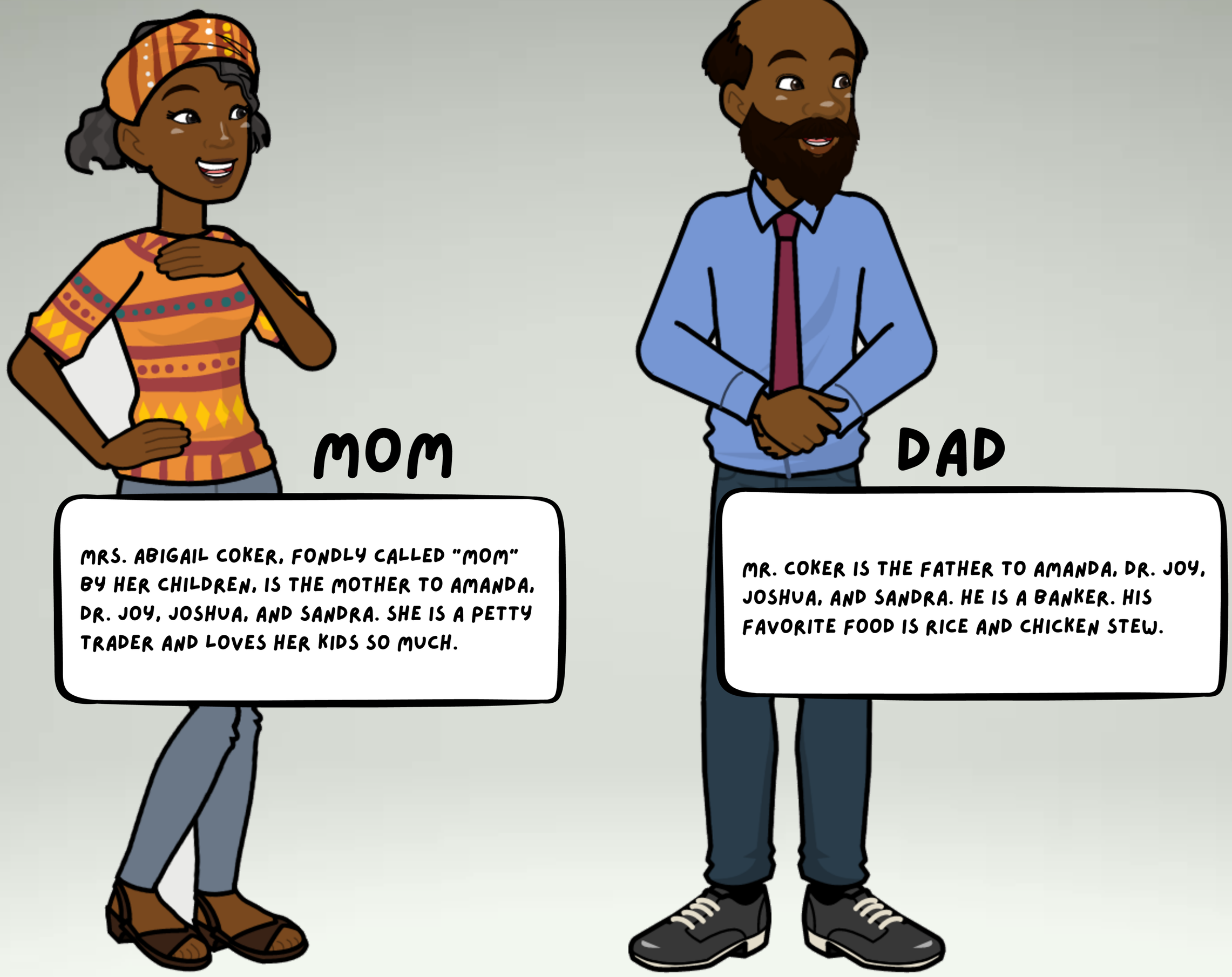
JOSHUA IS INCLUDED IN "GIRLS ONLY" BECAUSE WE BELIEVE THAT BOYS SHOULD LEARN ABOUT PERIODS TOO. JOSHUA ASKS COMMON QUESTIONS BOYS ASK ABOUT PERIODS.

SANDRA

SANDRA IS 8 YEARS OLD AND LOVES TO SING. HER FAVORITE SUBJECT IS COMPUTER SCIENCE, AND SHE WILL LOVE TO BE A COMPUTER PROGRAMMER WHEN SHE IS OLDER.

DR. JOY

DR. JOY IS AMANDA'S OLDER SISTER, AND SHE IS A MEDICAL DOCTOR. SHE IS 28 YEARS OLD AND LOVES TO TEACH AMANDA AND HER SIBLINGS ABOUT PERIODS AND PUBERTY.



"GIRLS ONLY" HELPED ME UNDERSTAND PERIODS BETTER.
— Beryl (10 years old, Nairobi)

padher | it's normal, Period!™

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This comic book is a work of fiction that may be based on some personal experiences.

DISCLAIMER: The content in this comic book is offered solely for educational purposes and should not be regarded as a substitute for professional medical advice.

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IT WAS A BEAUTIFUL SATURDAY MORNING...

... AMANDA'S OLDER SISTER DR. JOY CAME VISITING

Look who's here!

Oh, Mum!

I just miss you, my daughter!

I miss you too, Mum!

Come on in!

...SAYS AMANDA'S MUM

JOY REPLIES...

Okay!

AMANDA SAYS...

Hello Big Sis!

Hello Amanda, How are you?

I am fine, Big Sis. I just saw my period today after a month of not seeing it.

It's common for a girl to skip or have irregular periods in the first two years after getting her period.

DR. JOY EXPLAINS

DR. JOY CONTINUES...

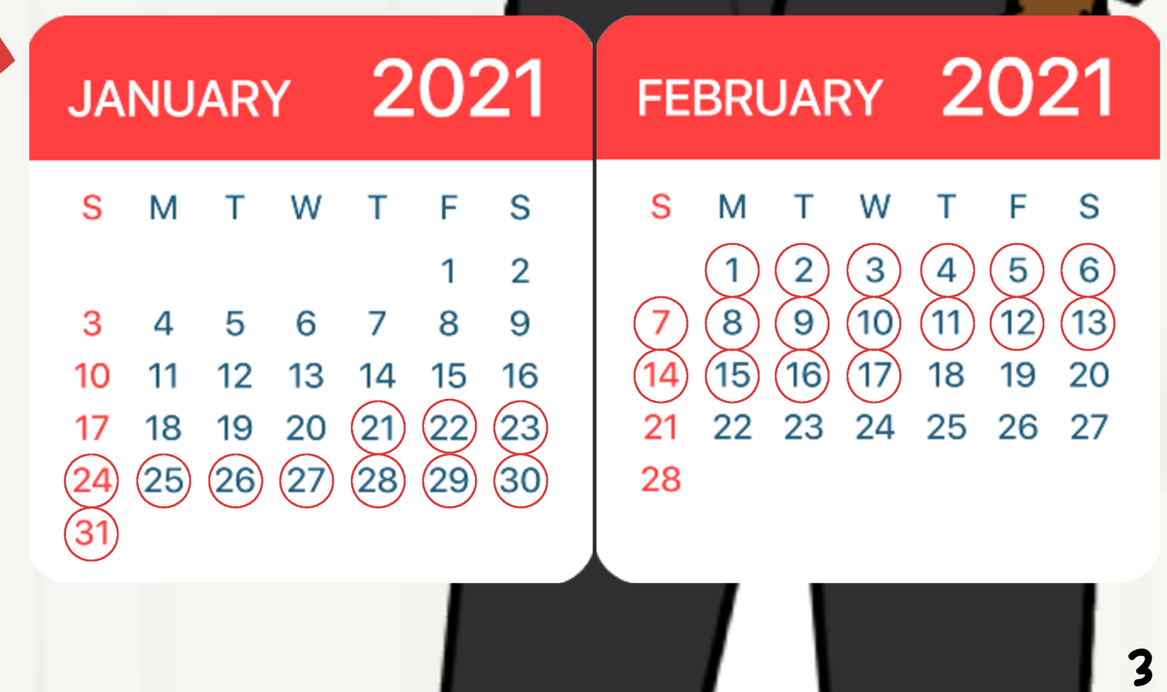
But expect your periods to become regular and come around once every 4-5 weeks in 2-3 years.

Okay, Big Sis!

The average menstrual cycle lasts 28 days, but this varies between girls and from one cycle to the other. Your menstrual cycle is calculated from the first day of your period to the day before your next period begins.

for example...

...if you start your period on January 21st and your next period arrives on February 18th, the length of your menstrual cycle is counted from January 21st to February 17th (the day before your next period begins), which is 28 days.
Meaning, you will get your periods approximately every 28 days.



DR. JOY CONTINUES...

Because most girls' menstrual cycles are close to 28 days long, it appears that periods occur once every month.

But you should know that some girls have menstrual cycles as short as 21 days, while some girls have menstrual cycles as long as 35 days...

...which means that some girls can have their periods twice a month, and some girls can have theirs once in two months.

If a girl has a menstrual cycle length of 21 days and gets her period on January 5th, she should get her period again around January 26th, making it twice in one month.

On the other hand, If a girl has a menstrual cycle length of 35 days and gets her period on January 29th, she should get her period again around March 5th, making it once in two month.

Periods do not come regularly after your first period. It takes about two years for your period to become regular. This is because your body takes time to adjust, and your menstrual cycle may vary as a result.

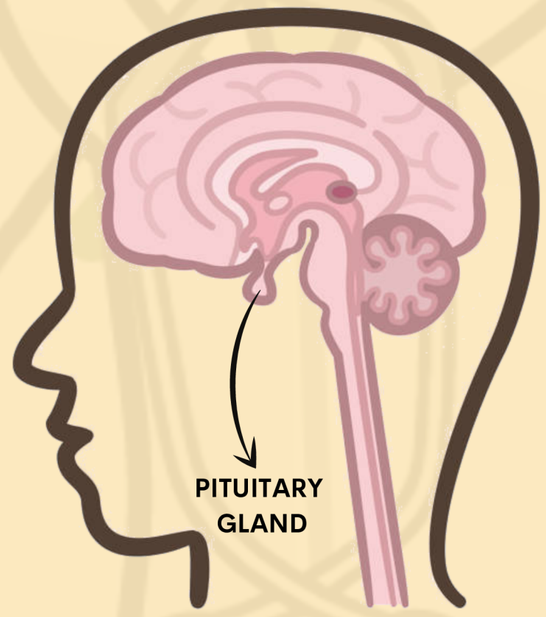
DR. JOY CONTINUES...

Some girls may begin seeing their period as early as 9 years old, while some may not see their periods until they are 14. However, for most girls, it begins around the age of 12.

On average, girls get their first period (menarche) between the ages of 11 and 14 years. Other sexual characteristics, such as pubic hair and budding breasts, have developed by this stage.

A girl's body undergoes several changes each month to prepare for a possible pregnancy. The menstrual cycle refers to this series of hormone-driven events.

The menstrual cycle is the recurring cycle of physical changes in the uterus (womb), ovaries, and other sexual structures that occur from the beginning of one period to the beginning of the next.

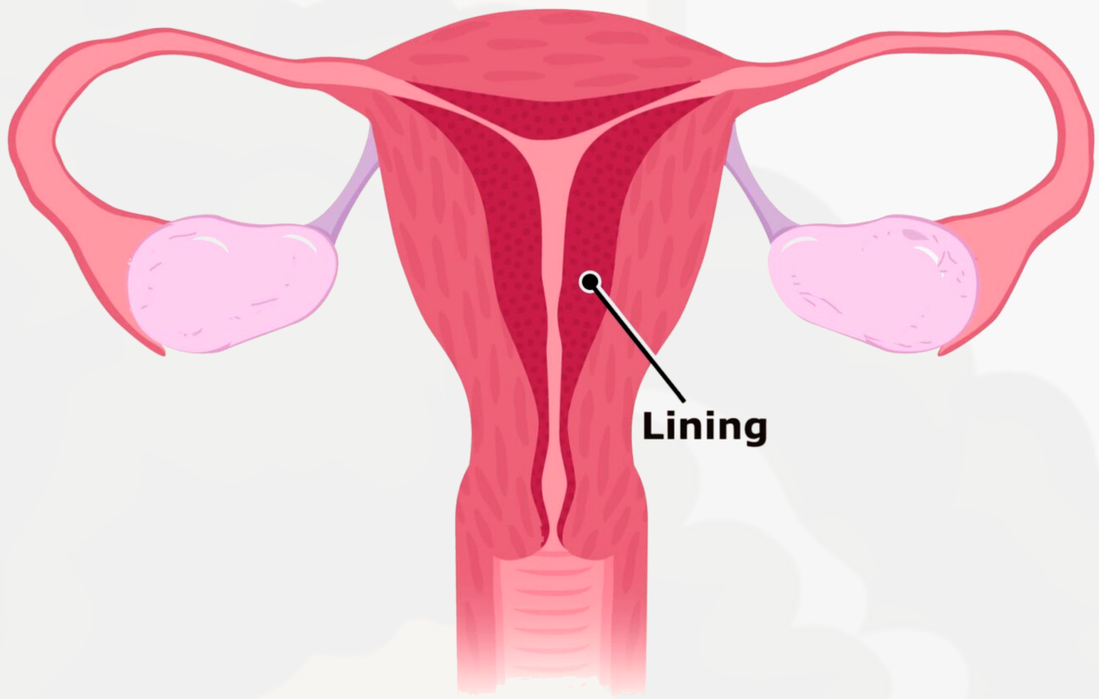


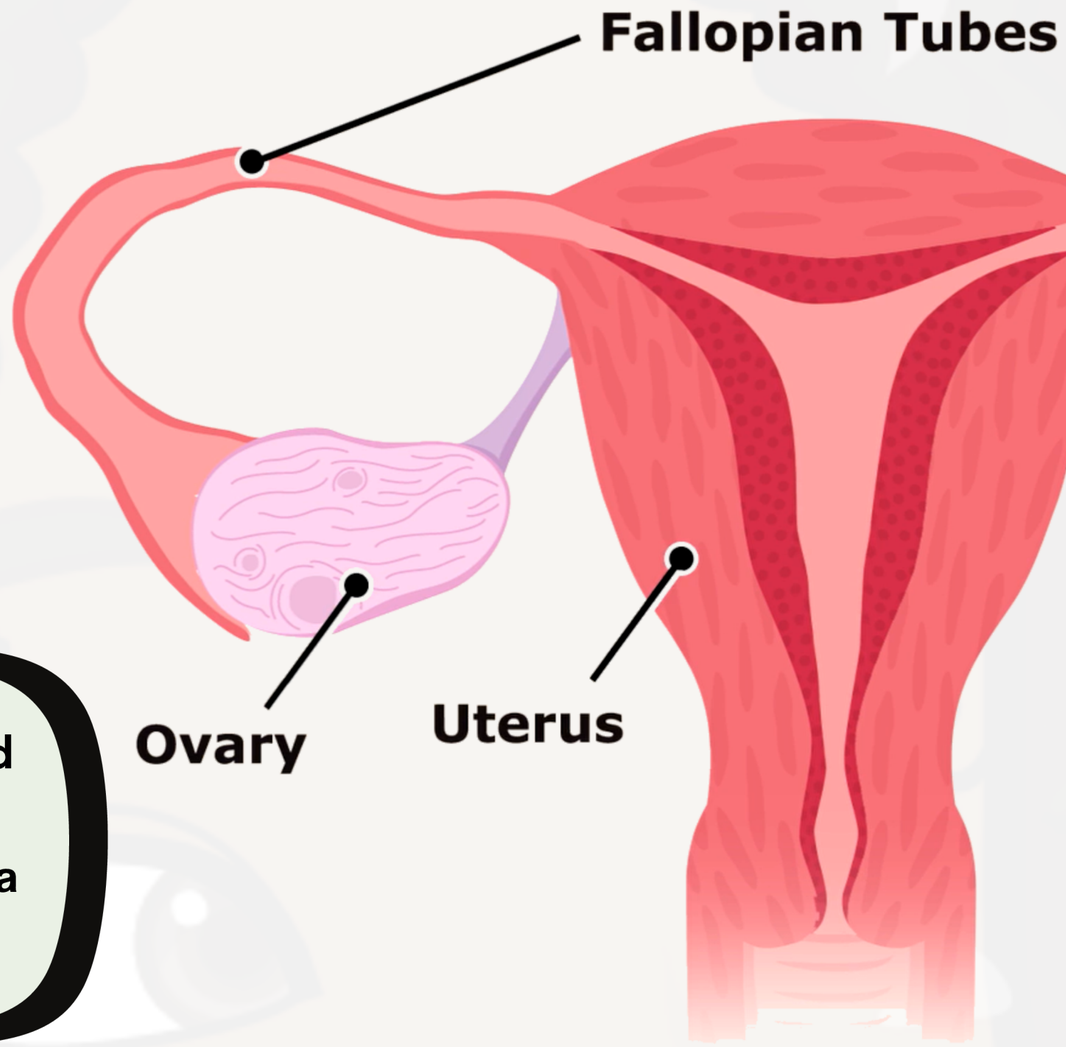
Many glands and the hormones they produce help regulate the menstrual cycle. The hypothalamus, for example, is a brain structure that causes the pituitary gland to produce chemicals that cause the ovaries to produce estrogen and progesterone hormones. Estrogen then helps in the regulation of the menstrual cycle.

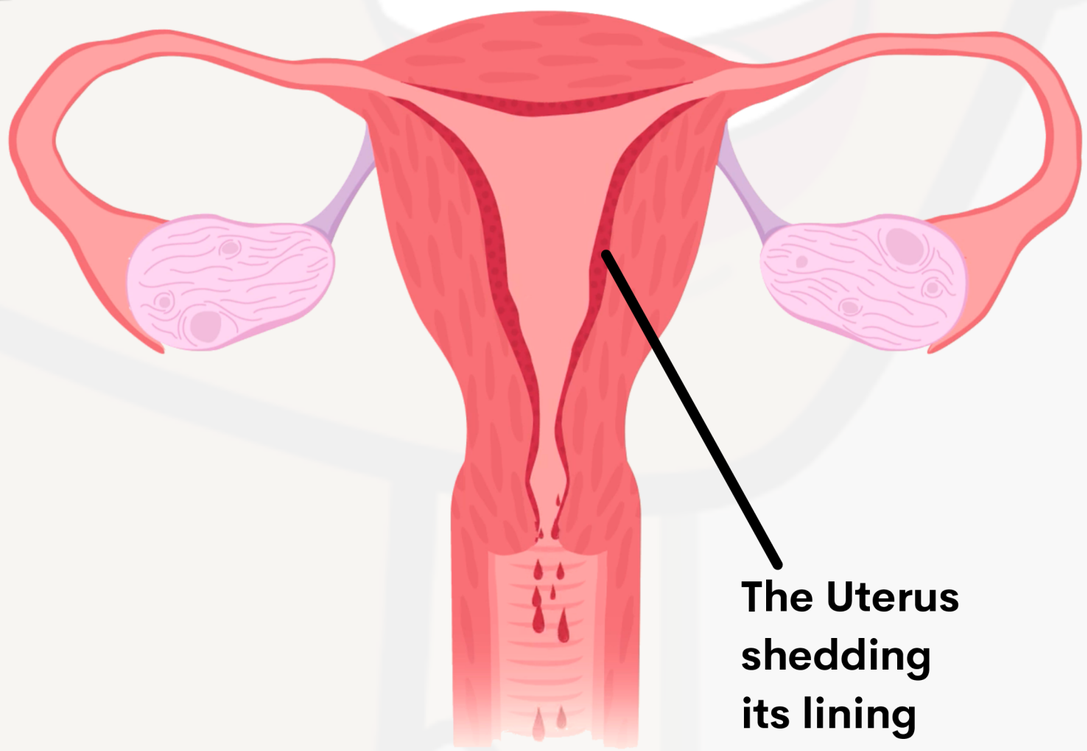
DR. JOY CONTINUES...

During each menstrual cycle, an egg develops and is released from the ovaries and the lining of the uterus thickens. If a pregnancy does not occur, the uterus sheds its lining during a menstrual period. Then the cycle begins again.

The menstrual cycle of a girl is divided into four stages. These phases are the menstrual phase, the follicular phase, the ovulation phase, and the luteal phase. Each phase's length varies from girl to girl and can change over time.

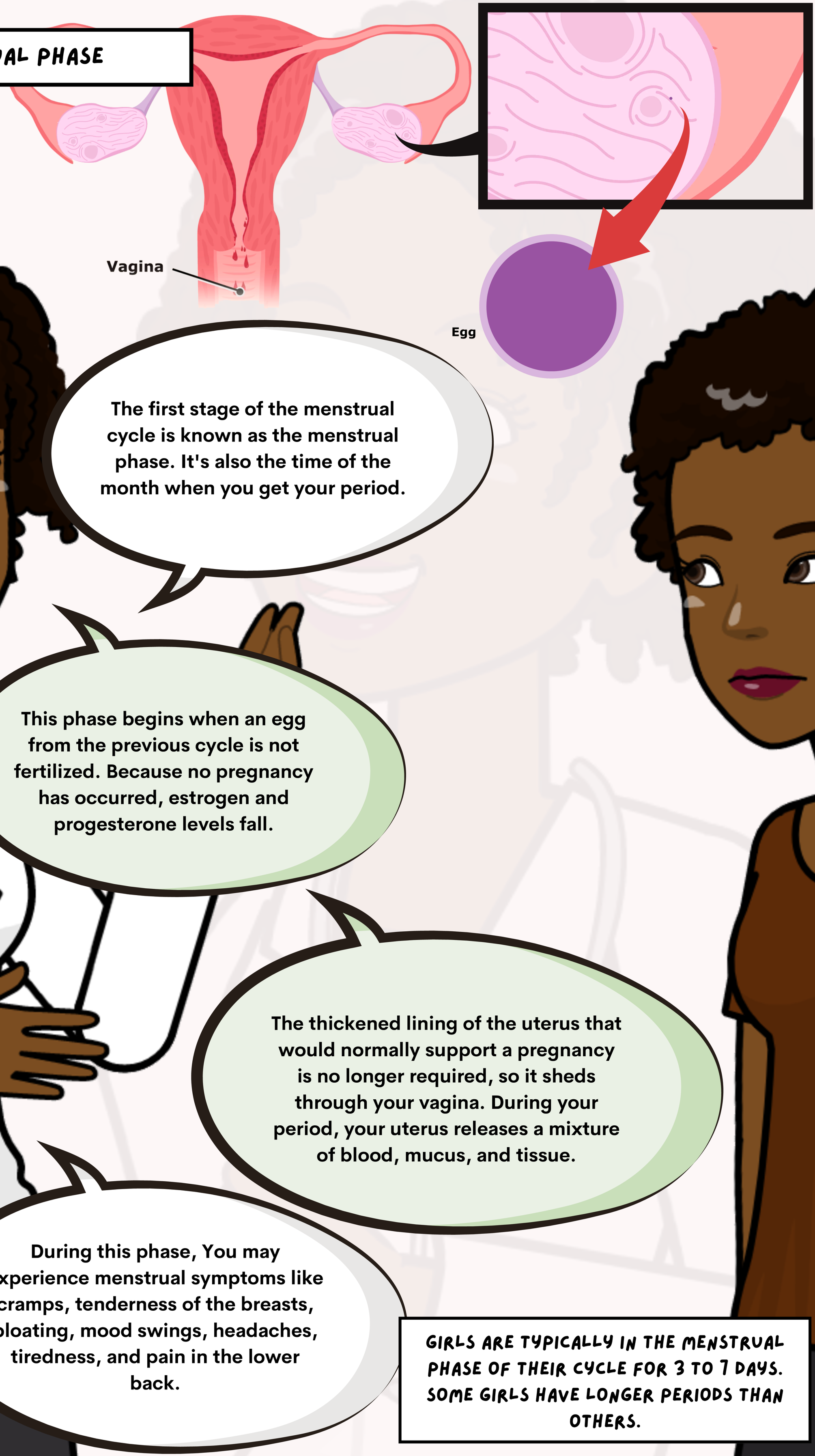






MENSTRUATION IS ALSO KNOWN AS A MENSTRUAL PERIOD OR JUST PERIOD.

MENSTRUAL PHASE



The first stage of the menstrual cycle is known as the menstrual phase. It's also the time of the month when you get your period.

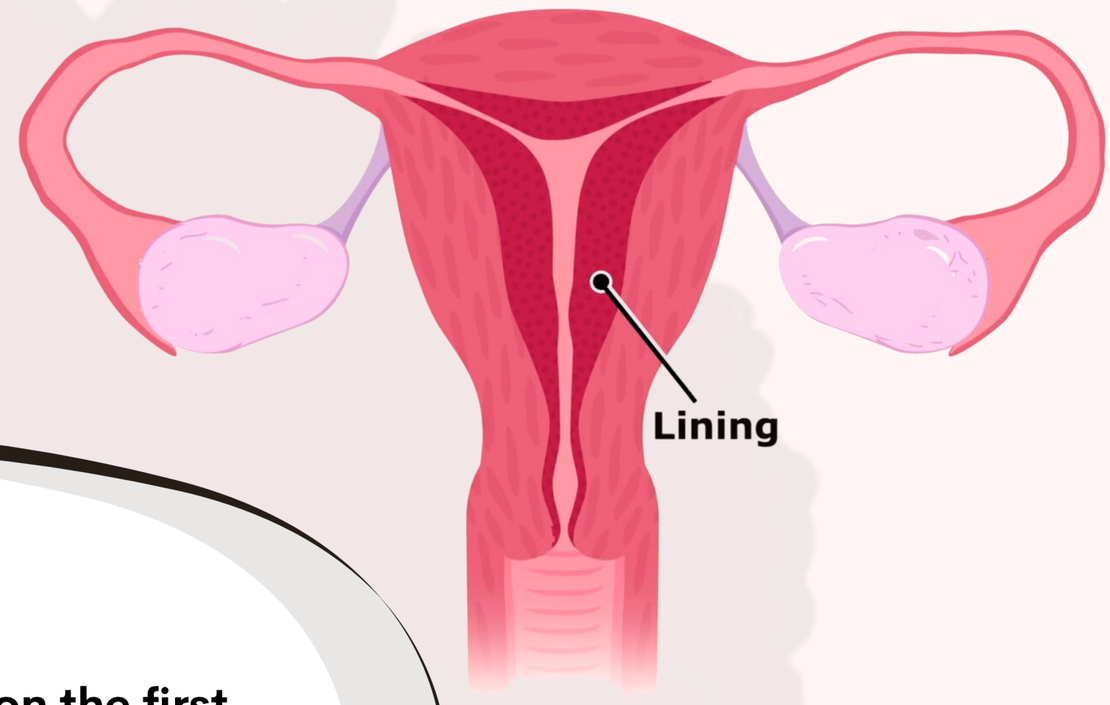
This phase begins when an egg from the previous cycle is not fertilized. Because no pregnancy has occurred, estrogen and progesterone levels fall.

The thickened lining of the uterus that would normally support a pregnancy is no longer required, so it sheds through your vagina. During your period, your uterus releases a mixture of blood, mucus, and tissue.

During this phase, You may experience menstrual symptoms like cramps, tenderness of the breasts, bloating, mood swings, headaches, tiredness, and pain in the lower back.

GIRLS ARE TYPICALLY IN THE MENSTRUAL PHASE OF THEIR CYCLE FOR 3 TO 7 DAYS. SOME GIRLS HAVE LONGER PERIODS THAN OTHERS.

FOLLICULAR PHASE



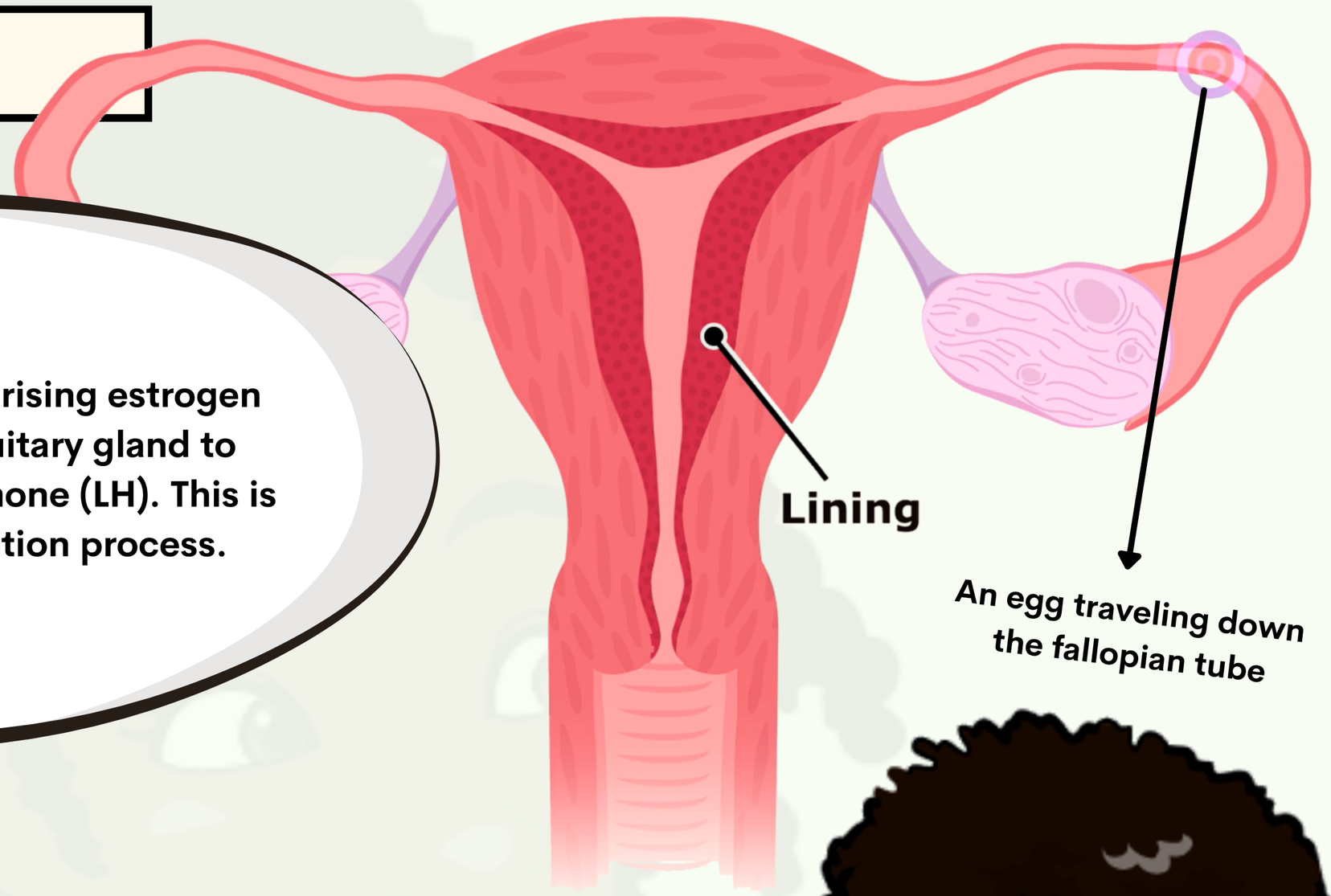
The follicular phase begins on the first day of your period (there is some overlap with the menstrual phase) and ends when you ovulate.

The process begins when the hypothalamus signals the pituitary gland to release follicle-stimulating hormone (FSH). This hormone causes your ovaries to produce 5 to 20 small sacs known as follicles. Each follicle contains a developing egg.

The most healthy egg will become mature, leaving the rest of the follicles to be reabsorbed by your body. The maturing follicle then causes an increase in estrogen, which thickens the lining of the uterus.

The follicular phase lasts about 16 days on average.
Depending on your cycle, it can last anywhere from 11 to 27 days.

OVULATION PHASE



In the follicular phase, rising estrogen levels cause your pituitary gland to release luteinizing hormone (LH). This is what starts the ovulation process.

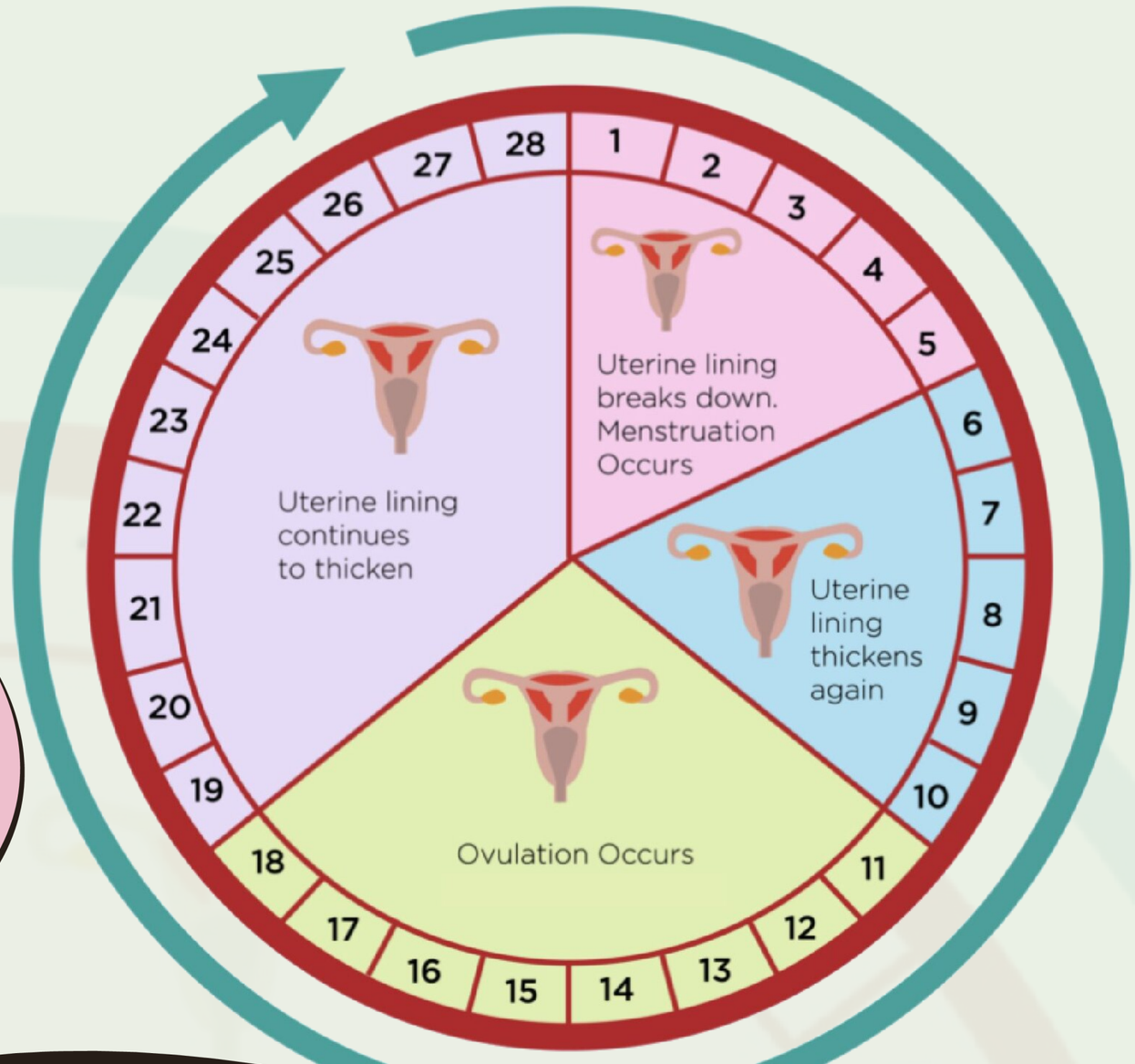
When your ovary releases a mature egg, this is known as ovulation. The egg is fertilized by sperm as it travels down the fallopian tube toward the uterus.

You can only become pregnant during the ovulation phase of your menstrual cycle. Symptoms such as a slight rise in basal body temperature (your temperature when you're fully at rest) and thicker discharge with the texture of egg whites indicate that you're ovulating.

If you have a 28-day cycle, ovulation occurs around day 14 — right in the middle of your menstrual cycle. It lasts approximately 24 hours. If the egg is not fertilized within a day, it will die or dissolve.

BECAUSE SPERM CAN LIVE FOR UP TO FIVE DAYS, A GIRL CAN BECOME PREGNANT IF SHE HAS SEX UP TO FIVE DAYS BEFORE OVULATION.

LUTEAL PHASE



The egg bursts from its follicle during ovulation, but the ruptured follicle remains on the ovary's surface. Over the next two weeks or so, the follicle transforms into a structure known as the corpus luteum...

This structure produces progesterone and small amounts of estrogen. While waiting for a fertilized egg to be implanted in the uterus, this combination of hormones thickens the lining of the uterus.

If a fertilized egg implants in the lining of the uterus, it produces the hormones required to maintain the corpus luteum. One of these hormones include human chorionic gonadotrophin (HCG), the hormone detected in a pregnancy urine test. The corpus luteum continues to produce the increased levels of progesterone required to keep the lining of the uterus thickened.

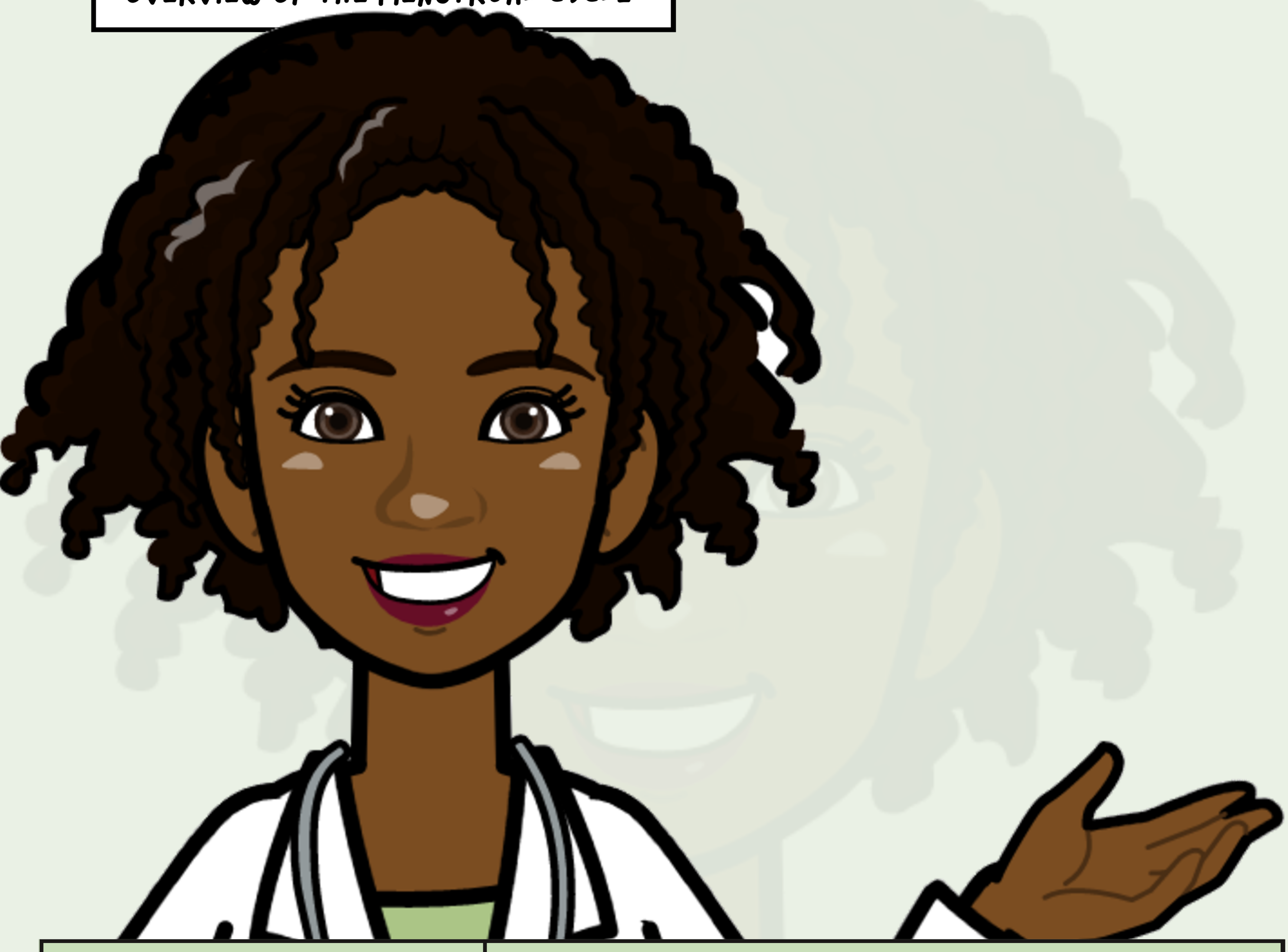
The corpus luteum withers and dies if pregnancy does not occur, usually around day 22 of a 28-day cycle. The lining of the uterus begins to shed as progesterone levels drop. The cycle then starts all over again. The luteal phase can last anywhere between 11 and 17 days. The average time is 14 days.

IF YOU DON'T GET PREGNANT DURING THIS TIME, YOU MAY DEVELOP PREMENSTRUAL SYNDROME SYMPTOMS (PMS) SUCH AS BLOATING, TENDERNESS OF THE BREAST, MOOD SWINGS, HEADACHES, WEIGHT GAIN, CHANGES IN SEXUAL DESIRE, FOOD CRAVINGS, AND DIFFICULTY SLEEPING.

OVERVIEW OF THE MENSTRUAL CYCLE

CYCLE DAYS (APPROXIMATE)	EVENTS OF THE MENSTRUAL CYCLE
DAYS 1-5	DAY 1 OF THE CYCLE BEGINS ON THE FIRST DAY OF MENSTRUAL BLEEDING. YOUR PERIOD CAN LAST ANYTHING BETWEEN 3 TO 8 DAYS, BUT THE AVERAGE IS 5 DAYS. THE FIRST TWO DAYS OF BLEEDING ARE USUALLY THE HEAVIEST.
DAYS 6-14	THE LINING OF THE UTERUS (ALSO KNOWN AS THE ENDOMETRIUM) BEGINS TO PREPARE FOR PREGNANCY ONCE THE BLEEDING STOPS. THE LINING OF THE UTERUS THICKENS AND BECOMES MORE ENRICHED IN NUTRIENTS AND BLOOD.

OVERVIEW OF THE MENSTRUAL CYCLE



CYCLE DAYS (APPROXIMATE)	EVENTS OF THE MENSTRUAL CYCLE
DAY 14-25	AN EGG IS RELEASED FROM ONE OF THE OVARIES AND JOURNEYS DOWN THE FALLOPIAN TUBES TO THE UTERUS. THIS HAPPENS SOMEWHERE AROUND DAY 14. FERTILIZATION CAN OCCUR IF SPERM IS PRESENT AT THIS TIME IN THE FALLOPIAN TUBE. THE FERTILIZED EGG WILL THEN TRAVEL TO THE UTERUS AND TRY TO IMPLANT IN THE WALL OF THE UTERUS.
DAYS 25-28	IF THE EGG ISN'T FERTILIZED OR FAILS TO IMPLANT, HORMONAL CHANGES SIGNAL THE UTERUS TO SHED ITS LINING, AND THE EGG BREAKS DOWN AND ITS SHED ALONG WITH THE LINING OF THE UTERUS. ON DAY 1 OF MENSTRUAL BLEEDING, THE CYCLE STARTS OVER.

YOU SHOULD SEE A DOCTOR IF:

FOR MORE THAN 90 DAYS, YOU HAVEN'T HAD YOUR REGULAR PERIOD. THIS COULD BE DUE TO A VARIETY OF ISSUES IN YOUR BODY.

YOUR MENSTRUAL PERIOD LASTS LONGER THAN 10 DAYS.

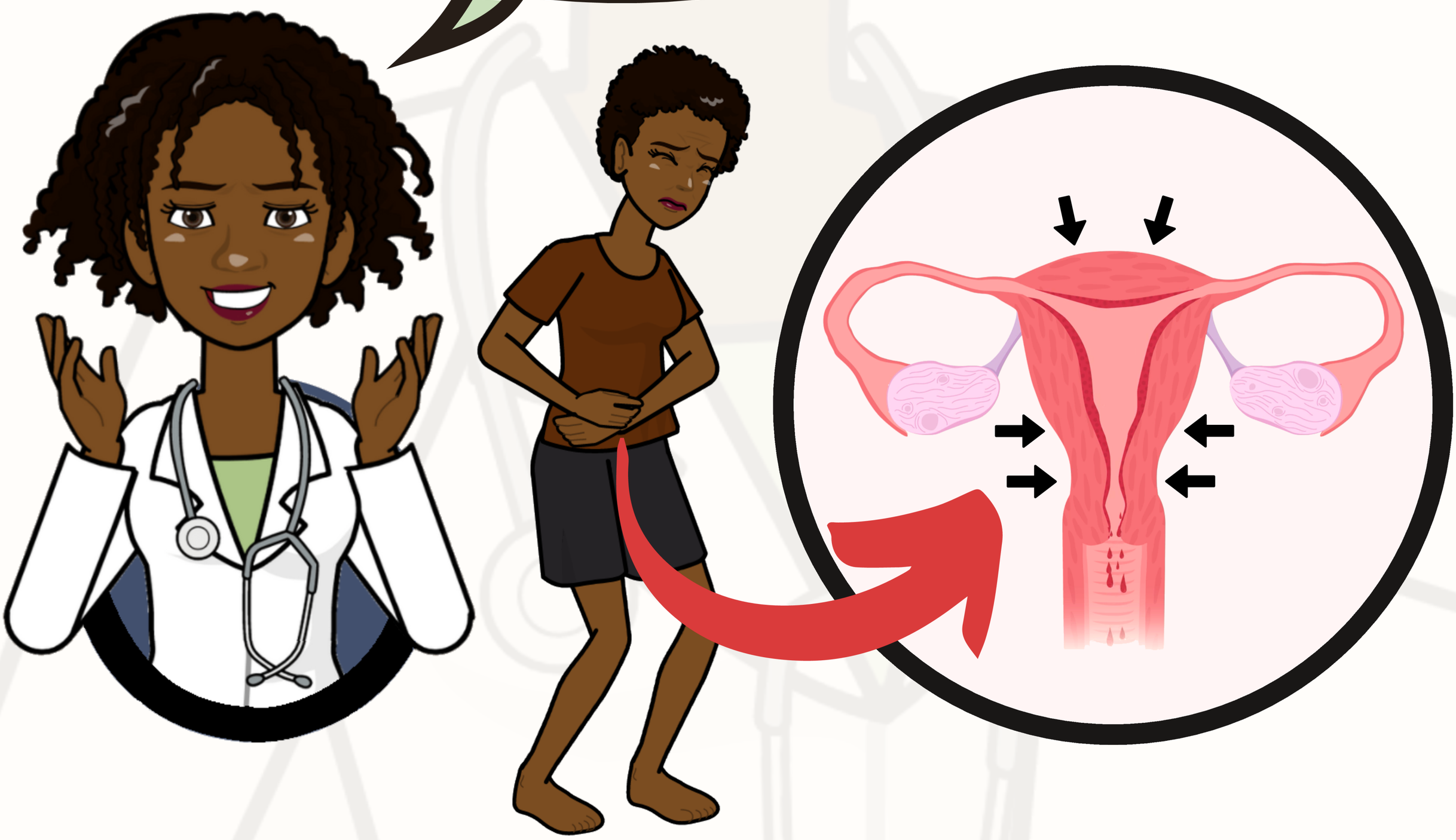
YOU ARE OVER THE AGE OF 16, AND YOUR PERIODS HAVE YET TO BEGIN.

YOU'RE BLEEDING TOO MUCH AND REQUIRE CHANGING PADS EVERY HOUR, AND LARGE BLOOD CLOTS ARE FORMING IN YOUR FLOW.

On the first day of the period, blood flow is the heaviest, and it gradually decreases until it stops after a few days. Due to blood coming out of the vagina, you may experience dampness in your underwear when your periods begin.

...DR. JOY EXPLAINS

During your period, the uterus contracts to shed and squeeze the menstrual fluid out. It's for this reason that you might feel pain in your lower abdomen during your period. This pain you feel is normal.



AMANDA ASKS...

Big Sis, why do I feel sick when I get my period?

Hormones are the most common cause. Feeling nauseated during or before your period is a normal part of pre-menstrual syndrome (PMS). During your period, a hormone known as prostaglandin circulates throughout your body. It can cause nausea, vomiting, diarrhea, and headaches. Staying physically active during your period helps you feel less uncomfortable.

DR. JOY REPLIES...

YOGA POSES TO RELIEVE PERIOD PAIN

Place your body in each of these yoga poses and hold the posture for five deep breaths.

DOG POSE

CAT POSE

CHILD POSE

SEATED FORWARD BEND POSE

LEGS-UP POSE

WIND REMOVING POSE

SUPINE SPINAL TWIST POSE

If you have pains in your lower abdomen during your period, apply a hot water bottle wrapped in a towel to the area. Taking a walk can also helo with period pain.

Period pain and sickness are normal and nothing to worry about. In most cases, your body will recover in a few days. If it doesn't, you should see a doctor.

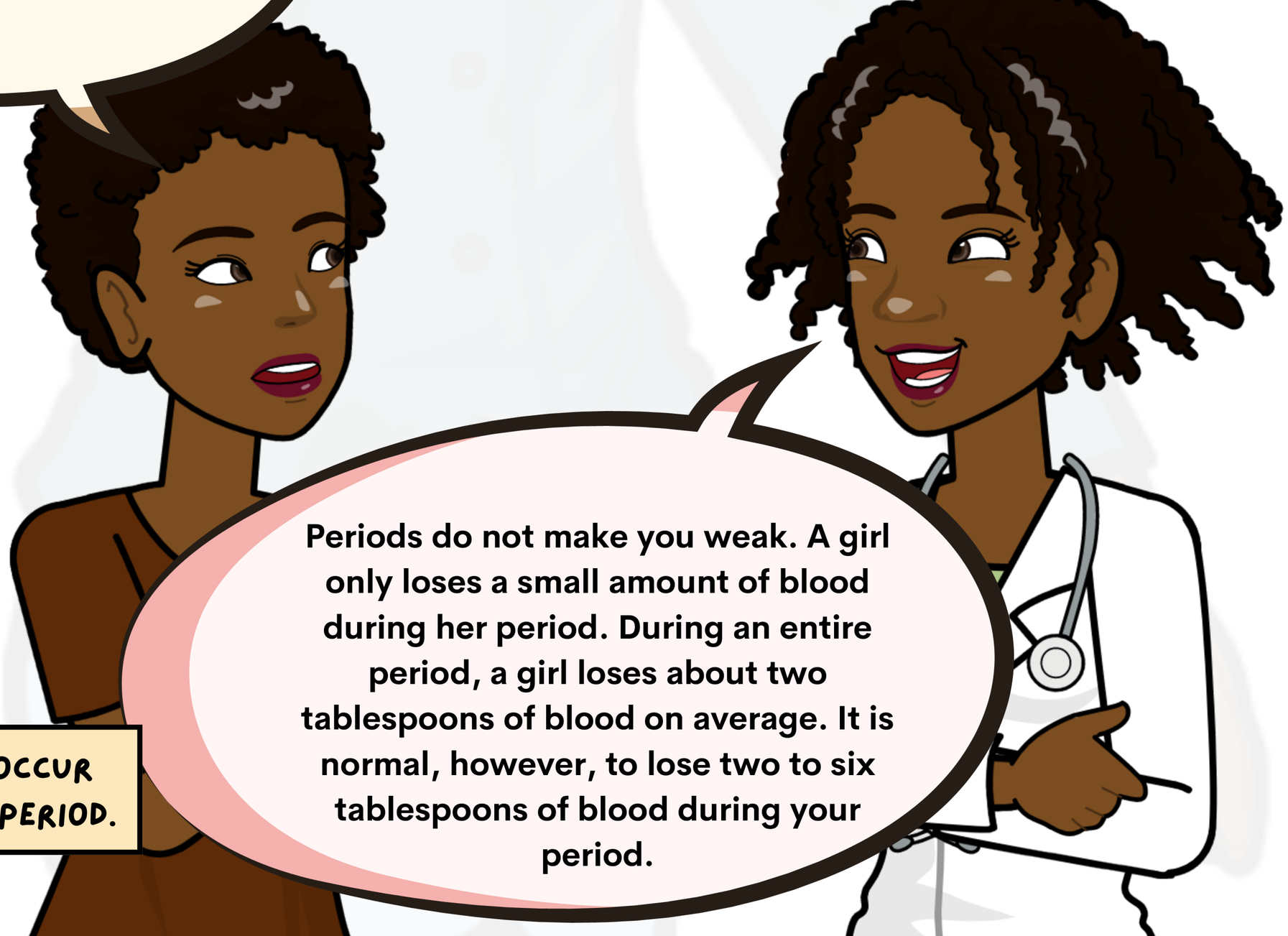
TAKING A WALK CAN HELP WITH PERIOD PAIN

It's normal to have irregular periods for the first one or two years after your first period; during this time, your period can be as short as 2 days or as long as 10 days.

DR. JOY EXPLAINS...

How much blood does a girl lose during her period? I've heard that periods make girls weak.

AMANDA ASKS...



Periods do not make you weak. A girl only loses a small amount of blood during her period. During an entire period, a girl loses about two tablespoons of blood on average. It is normal, however, to lose two to six tablespoons of blood during your period.

THE HEAVIEST FLOW WILL OCCUR ON THE FIRST DAY OF YOUR PERIOD.

AMANDA ASKS...

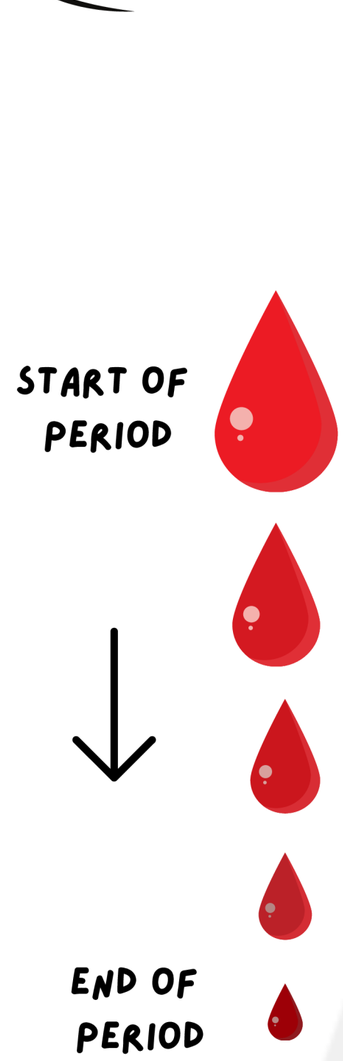
Do girls have periods for the rest of their lives?

DR. JOY REPLIES...

No, Amanda, periods usually end when you're in your late 40s or early 50s. Menopause is the term for this.

Is it always necessary for menstrual blood to be red?

Because when I have my periods, the blood is sometimes watery and bright red, while other times it is thick and dark brown.

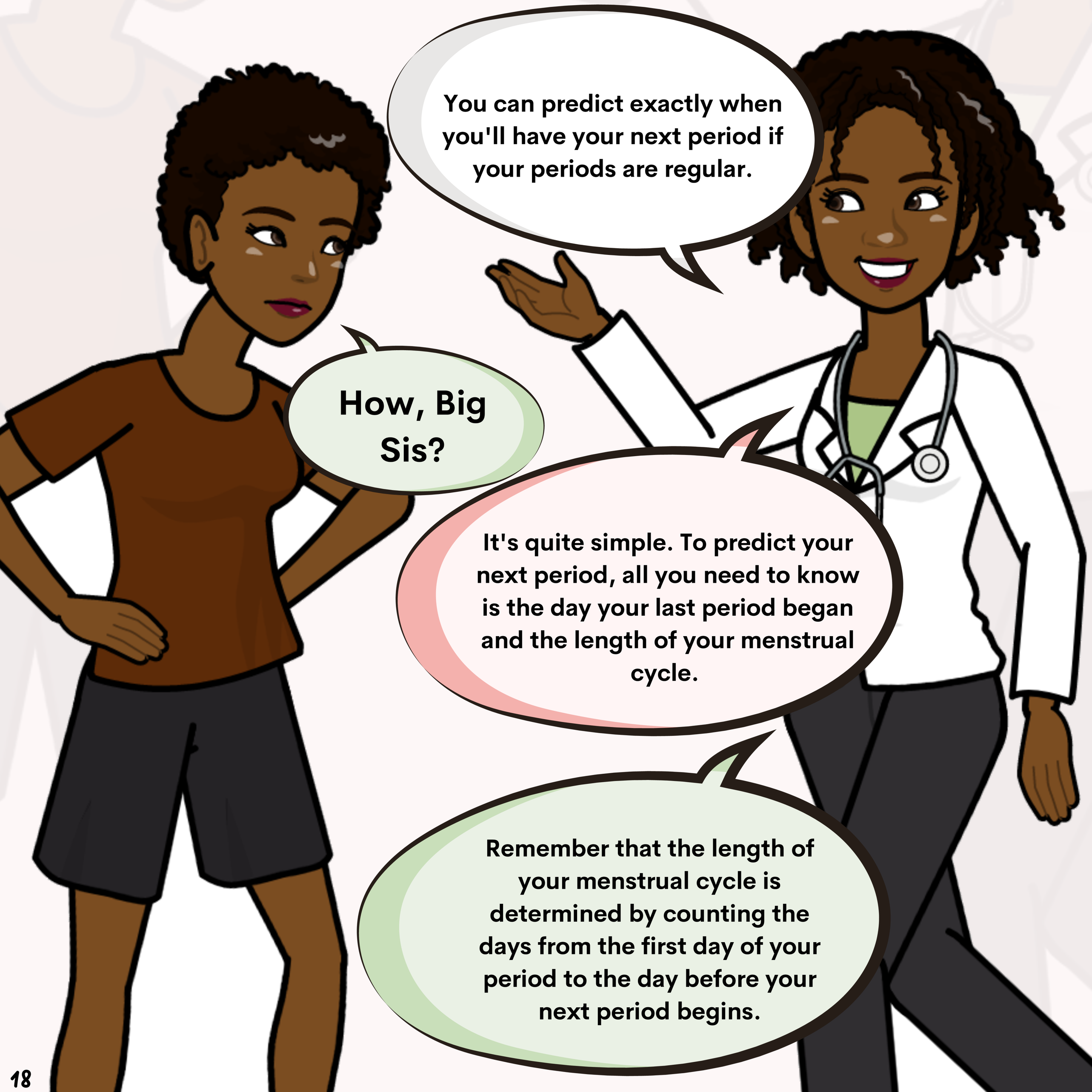


It's perfectly normal, Amanda. The color of blood changes from one period to the next. For example, it will be bright red at the start of your period and gradually change to a dark brown color towards the end of your period. You might even come across some dark bits in your menstrual flow. All of this is perfectly normal.

Thank you, Big Sis, for explaining.

PREDICTING YOUR NEXT PERIOD

THE DAY OF YOUR NEXT PERIOD = THE DAY YOUR LAST PERIOD BEGAN + THE LENGTH OF YOUR MENSTRUAL CYCLE.



PREDICTING YOUR NEXT PERIOD

Tracking your menstrual cycle on a calendar can help you figure out how long your menstrual cycle is.

So, let's say you got your periods on July 10th. You'll circle that date on your calendar. If your bleeding lasts until July 14th, draw a line under each day until July 14th.

Assume you got your next period on August 7th, circle August 7th on your calendar. If the bleeding continues until August 11th, draw a line under each day until August 11th. Count the days from July 10th to the day before August 7th, which is August 6th, to calculate your cycle length. That's 28 days

Using this, expect your next period in another 28 days from August 7th, which should be around September 4th. This is only true for girls with regular periods.

DEALING WITH PREMENSTRUAL SYNDROME

AMANDA SAYS...

I had no idea it would be so simple to predict our periods.

DR. JOY REPLIES...

Yes, Amanda, predicting your periods is simple. All you have to do is keep track of our periods regularly. Around two weeks before their periods, many girls experience sudden physical and emotional changes. Premenstrual syndrome or PMS refers to the physical and emotional changes that occur before or during a girl's period.

It will help if you eat iron-rich foods during your menstrual cycle. Your body's demand for iron increases and an iron deficiency can result in a condition in which the blood lacks enough healthy red blood cells (anemia), causing you to be weak.

Fish, potatoes, spinach, and nuts are examples of iron-rich foods. It's also good to combine iron-rich foods with vitamin C-rich foods. Doing this will improve iron absorption in the body. Mango, orange, and lemon are examples of vitamin C-rich foods.

Avoid junk foods such as french fries, potato chips, and crackers as well. Drink plenty of water, exercise daily, and try getting plenty of sleep. Doing this will help you deal with PMS and also stay healthy.

AMANDA SAYS...

Thank you, Big Sis. I learned a whole lot about menstrual cycles today.

You are welcome, Amanda. Next time, I will teach you all about taking care during your periods. This is known as menstrual hygiene management.

AMANDA REPLIES...

Okay, Big Sis!

SANDRA SAYS...

Hello Big Sis.

Hi Sandra, how are you? What about Joshua?

I am fine, Big Sis. Joshua is outside playing football.

Where is mom?

I am here, Joy.
I was making lunch.

Food is ready, everyone!

Someone should go and call Joshua to come and have his lunch.

Let me do that.

JOY SAYS...

Joshua, food is ready, come inside and have your lunch.

JOSHUA REPLIES...

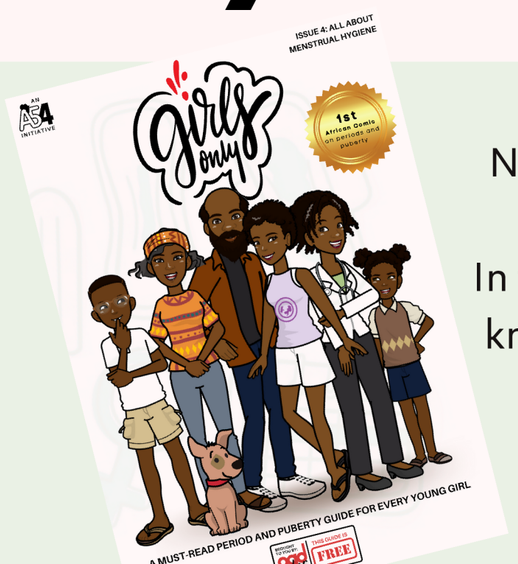
Okay, Big Sis!

Ask Dr. Joy

Hi, I am Dr. Joy, and I am here to answer all your questions on periods and puberty. Have a question?

visit: **padher.org/askdrjoy**

ON THE NEXT ISSUE!



Next month, Girls Only will return with an all-exciting new issue titled **All About Menstrual Hygiene.**

In the upcoming issue, Dr. Joy teaches Amanda everything she needs to know about staying prepared and caring for herself during her periods.

To download this issue for free and/or newer issues, please visit

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WHAT MAKES GIRLS ONLY GREAT?

- Well-researched
- Designed for Boys Too!
- Medically accurate contents
- Based on real-life experiences
- Fun for school girls
- Comfortable for Parents and Teachers

...I DEEPLY APPRECIATE PADHER'S WORK TO INCREASE ACCESSIBILITY AND EQUITY FOR GIRLS...

— **Meghan Hammond**, Project Manager, HundrED

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