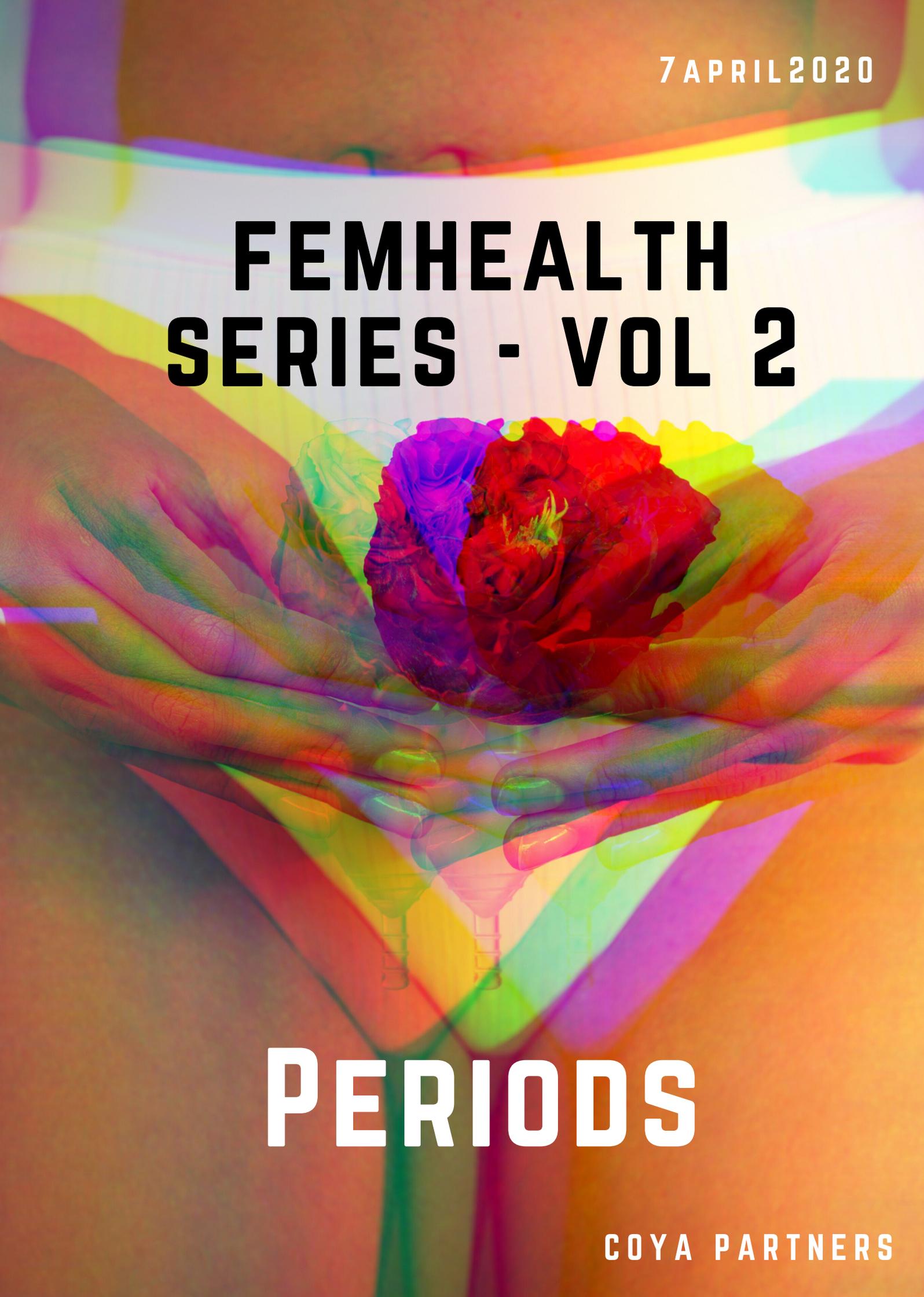


7 APRIL 2020

FEMHEALTH SERIES - VOL 2



PERIODS

COYA PARTNERS

THE FACTS

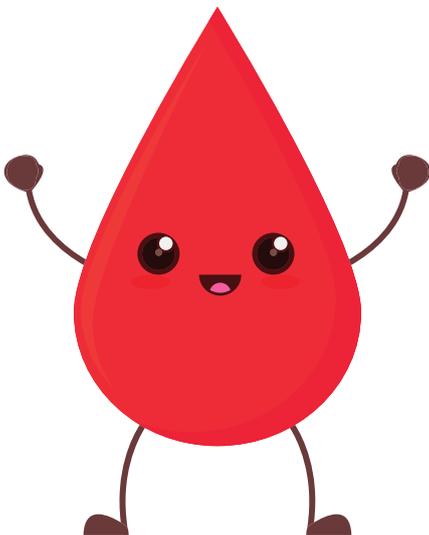
1 WE'RE SPECIAL! ONLY A FEW SPECIES HAVE PERIODS

10 primate species, 4 bats, humans and possibly elephant shrews are the only species that have menstrual cycles.



When you swim
the water
pressure
prevents blood
from leaking
out.

2 WOMEN SPEND ON AVERAGE 10 YEARS MENSTRUATING DURING THEIR LIFETIME

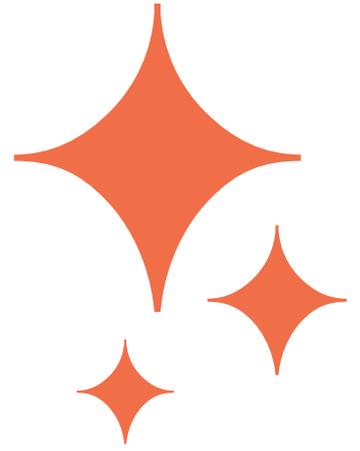


Women also use on average **17 000** tampons or pads in their lifetime which end up costing several thousand dollars.

3

MENSTRUATION IS PART OF THE PROCESS OF SCREENING EGGS AND EMBRYOS

Humans have evolved to sustain only healthy eggs and embryos. Each unsuccessful ovulation will cause a period. This is a protective process!



super ✨
✨ **duper**

Average periods are 1-3 ounces of blood

4

MOST MAMMALS, BUT NOT HUMANS, CAN EXPEL OR REABSORB EMBRYOS, C IF REQUIRED

In humans, once the foetus is connected to the blood supply, severing that connection can result in hemorrhage and if the foetus develops poorly or dies the mother's health can be endangered.



THE MENSTRUAL CYCLE

The menstrual cycle has four phases:

1 Menstrual phase where an unfertilised egg triggers the shedding of the endometrium (lining of uterus) due to decreasing estrogen and progesterone levels. This causes bleeding as well as release of mucus and tissue.

3 -7 days on average

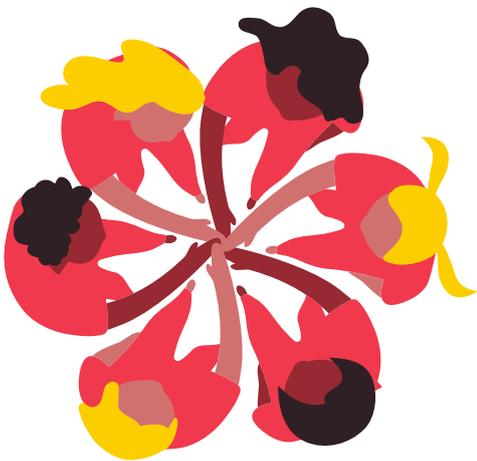
2 Follicular phase lasts from first day of period until ovulation. The hormone FSH stimulates ovaries to make 5-20 follicles with immature eggs. Usually 1 will mature and triggers an increase in estrogen levels which will thicken the lining of the uterus to prepare it for an embryo. The rest of the eggs will be reabsorbed.

16 days on average but ranges btw 11-27 days

3 Ovulation starts when the hormone LH triggers the release of the mature egg from the ovary. The egg then travels down the fallopian tube to the uterus.

happens in the middle of the cycle usually at 14 days

4 Luteal phase is when the follicle of the mature egg transforms into the corpus luteum which releases progesterone and some estrogen to keep the lining of the uterus thick. If the egg is not fertilised the corpus luteum will shrink and be resorbed leading to a decrease in estrogen and progesterone and the cycle starts again.

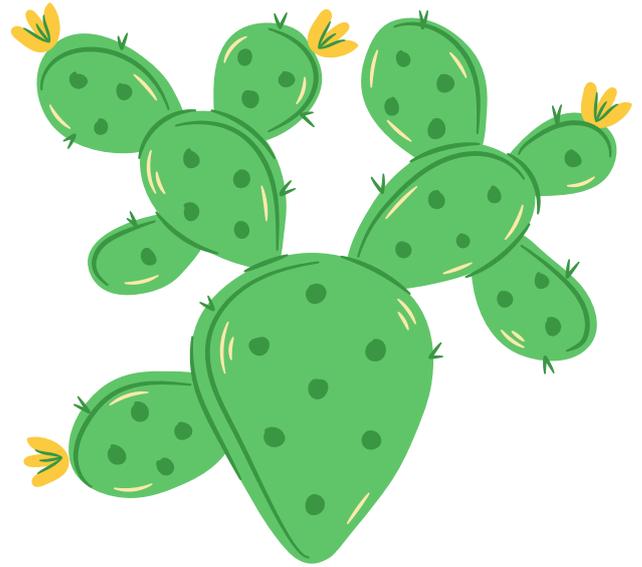


28% OF WOMEN GET PERIOD DIARRHEA

This is thought to be caused by menstrual cramps and the inflammatory mediator, prostaglandin which makes the uterus, and in turn the intestines, contract.

WHY PAIN?

The 120 mL of mercury pressure generated in the uterus during menstruation is equivalent to the pressure experienced when **pushing during the second stage of labor.**



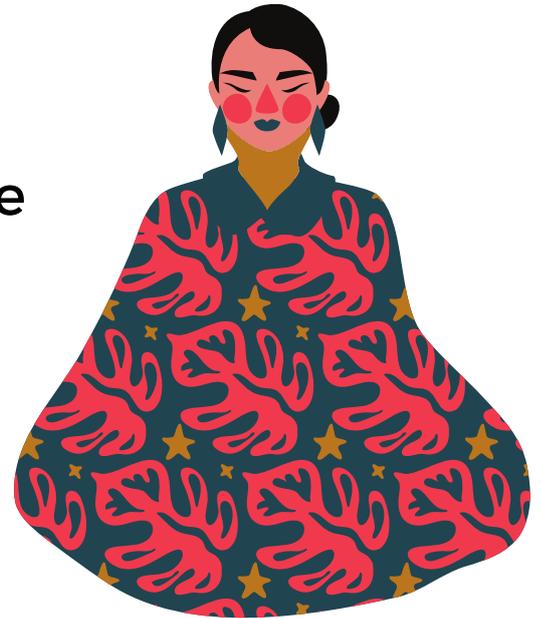
THE SCIENCE

During menstruation, the lining of the uterus releases chemicals (prostaglandins and other inflammatory mediators) that cause it to cramp.

This chemical release **squeezes the blood vessels of the lining to stop the bleeding** and may also affect general blood flow to the uterus which causes inflammation and worsens the pain. The pain experienced is also called dysmenorrhea and affect 1 in 5 women.

PAIN RELIEF

- **Non-steroidal anti-inflammatory** medication blocks prostaglandin release which can reduce pain by 80%.
- TENS units use **electrical impulses** to reduce pain.



- **Hormonal contraception** decreases prostaglandin production and cramping.
- **Warm foods** may help blood circulate and alleviate pain.
- **Magnesium-rich foods** such as leafy greens can relax uterine muscles.
- Increasing **calcium** intake and vitamin D may reduce menstrual pain by reducing inflammation.



EXERCISE WITH CARE



- At the start of menstruation **hypermobility and inflammation** in the lower back may increase risks during intense exercise.



- A week before menstruation **knee joints can become more loose** due to nerves around the knee firing more often in the 'late luteal phase' of the cycle.



- **Endurance increases** with high estrogen levels so when ovulating (high peak of estrogens) is time to bring your cardio exercise to the next level !

NEED FOR CHANGE

Only **22** states mandate sex education in the US, and only **13** require the information to be medically accurate.

The majority of US states treat period products like luxury items by slapping high sales taxes on them.

A recent survey found that 1 in 10 girls aged 14 to 21 in Britain cannot afford essential feminine products.



POSITIVE CHANGE

Some countries such as Canada have brought **the tax rate** on sanitary products **to zero** and other countries are following suit! The UK will do so as soon as EU rules no longer apply.

In February 2020, the Scottish parliament approved a bill that would make Scotland the first country to make essential **feminine hygiene** **available for free**.

In the Quebec province of Canada **sex education begins in kindergarten**.



THE FUTURE: INNOVATION

- **CBD**-INFUSED TAMPONS TO MANAGE PAIN
- **REUSABLE** PERIOD PANTIES, PADS & TAMPON APPLICATORS
- PAIN RELIEVING GADGETS USING **ELECTRICAL PULSE** TECHNOLOGY
- **SMART** MENSTRUAL CUPS, TAMPONS & PADS THAT CAN ANALYSE FLOW AND OTHER HEALTH INDICATORS
- **ECO** FEMININE HYGIENE BRANDS EMBRACING INGREDIENT TRANSPARENCY
- BRAND **NEW PRODUCTS** SUCH AS MENSTRUAL DISCS

