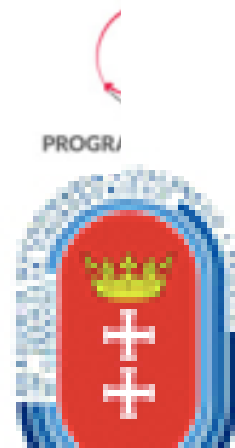
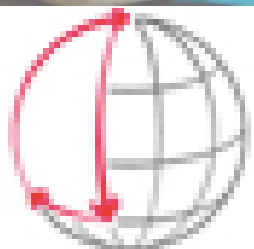
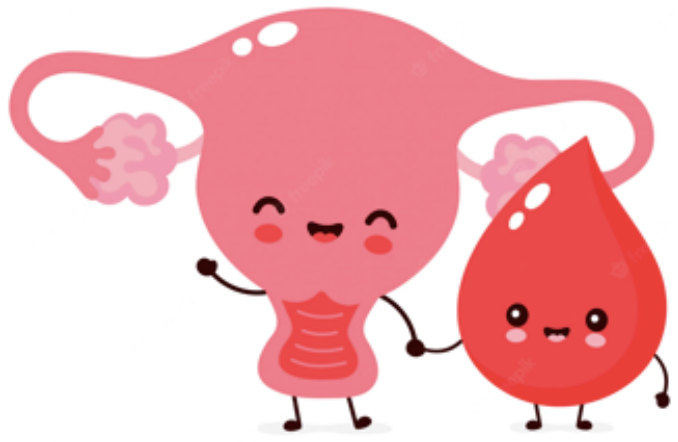




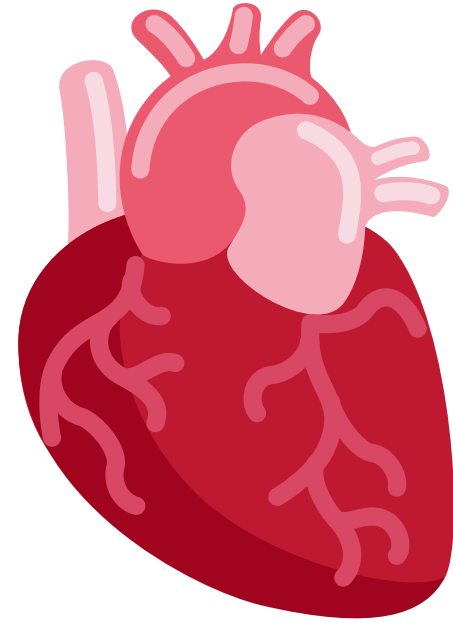
The basics of the physiology of postpartum period

ISABEL CORRALES GUTIÉRREZ

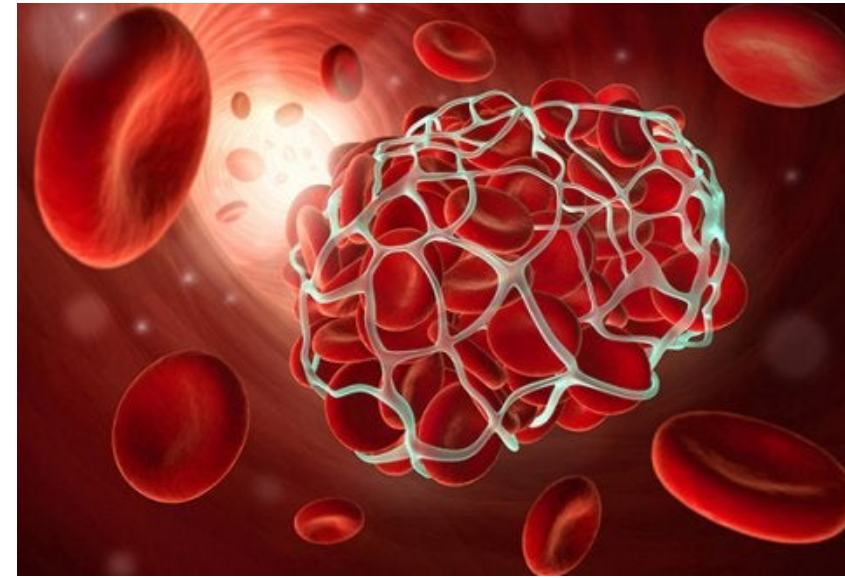




Reproductive system



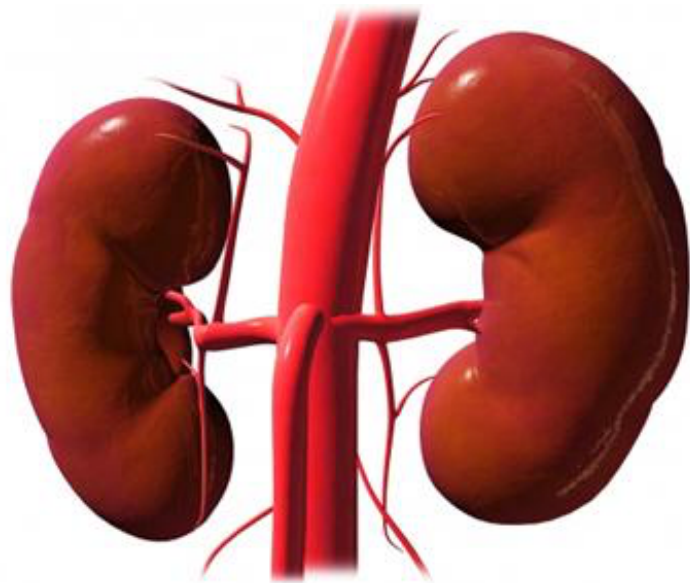
Cardiovascular system



Hematologic system



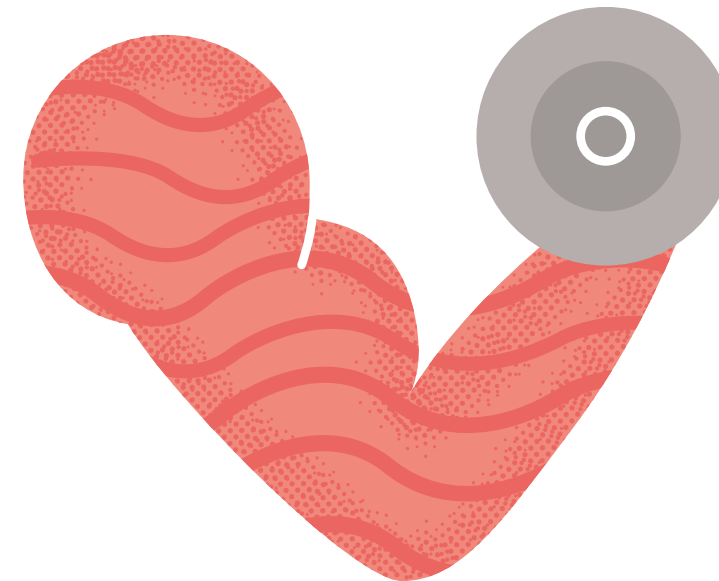
Endocrine system



Renal system



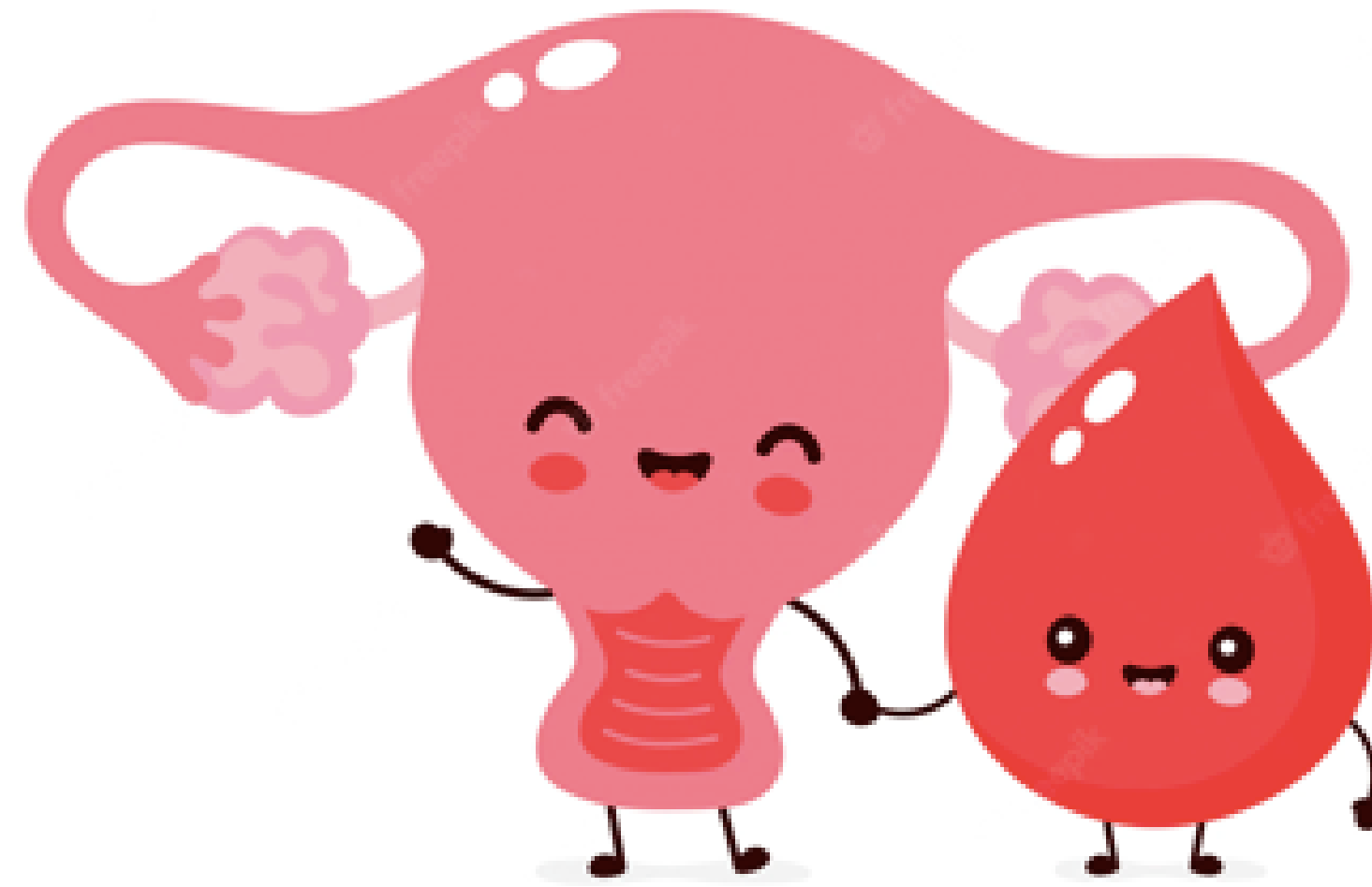
Gastrointestinal system



Musculoskeletal System



Mind

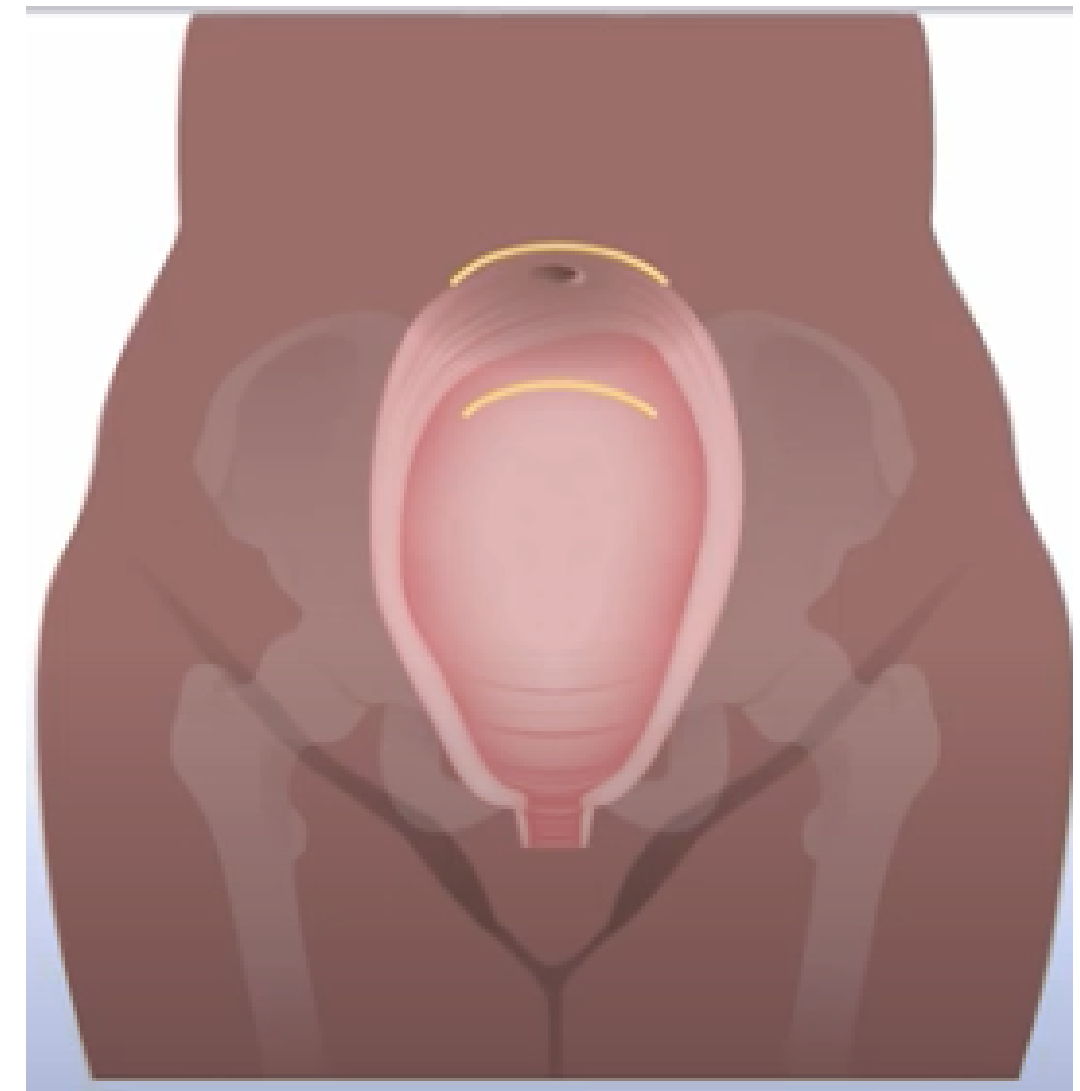


Reproductive system



Involution: The process of the uterus returning to non pregnant state

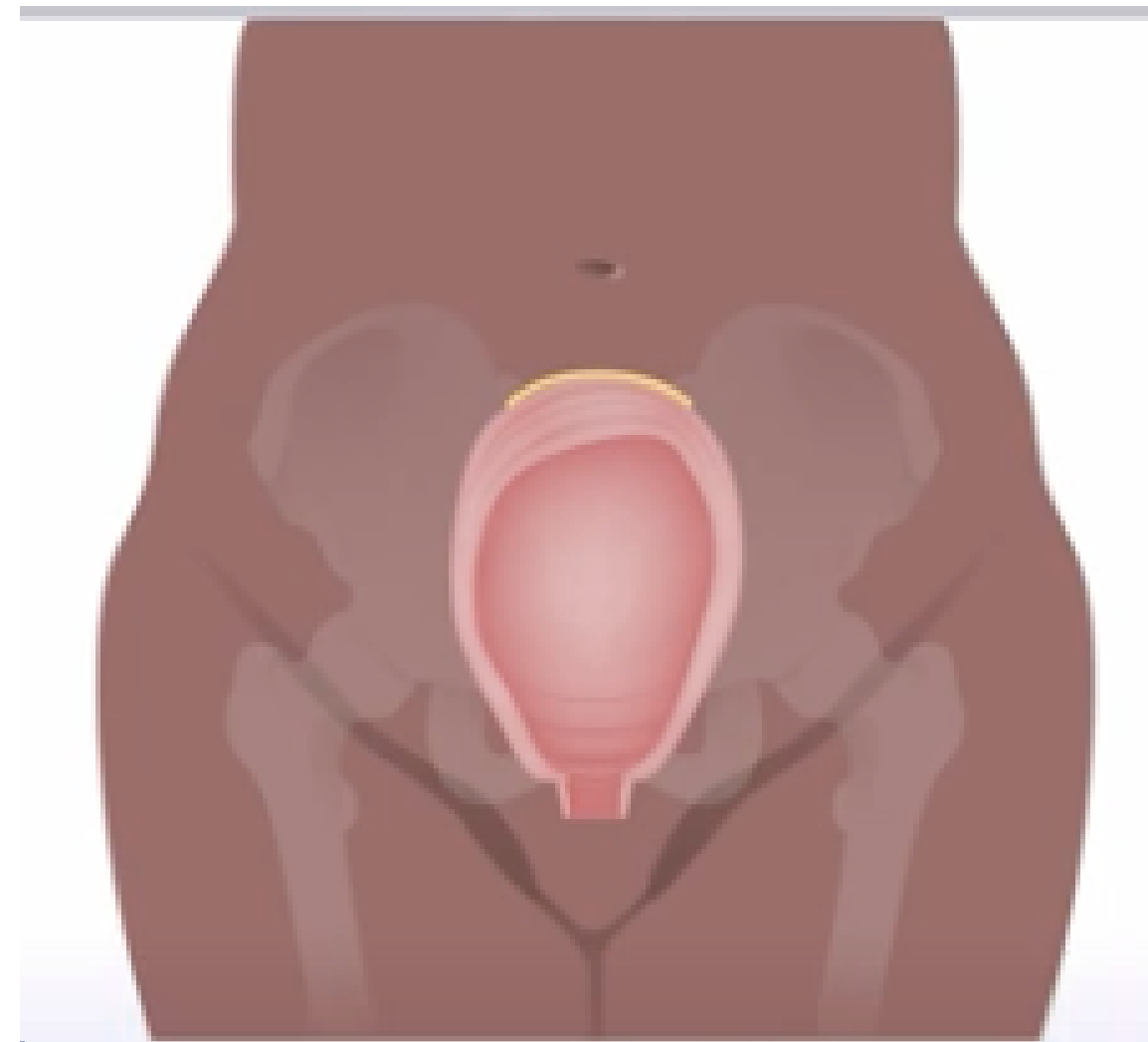
Immediately after the delivery of the placenta, the uterus is 2 cms above the umbilicus.





Involution: The process of the uterus returning to non pregnant state

At 24 hours after delivery, the uterus is 1 cm below the umbilicus

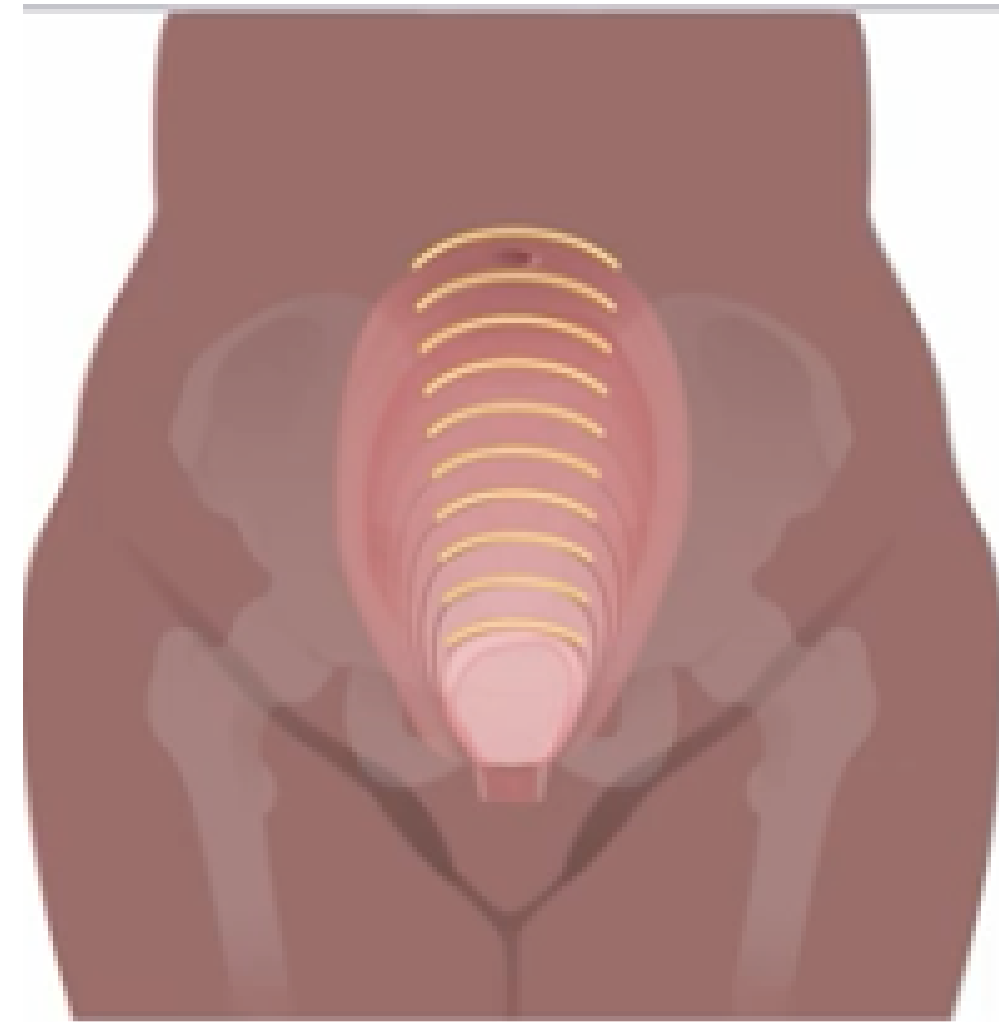




Involution: The process of the uterus returning to non pregnant state

The uterus descends about 1 cm per day.

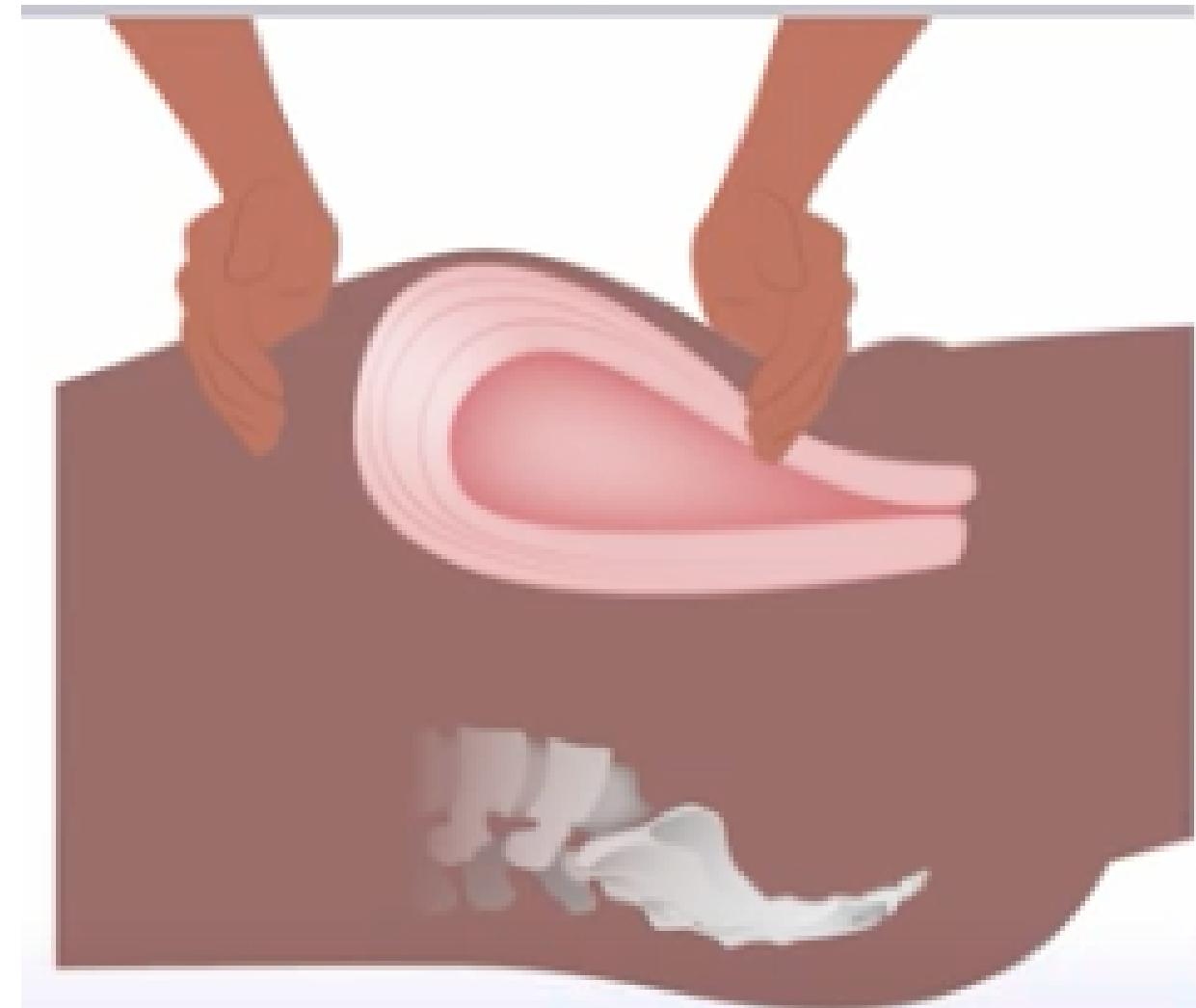
By two weeks postpartum, the uterus should be non palpable





Involution: The process of the uterus returning to non pregnant state

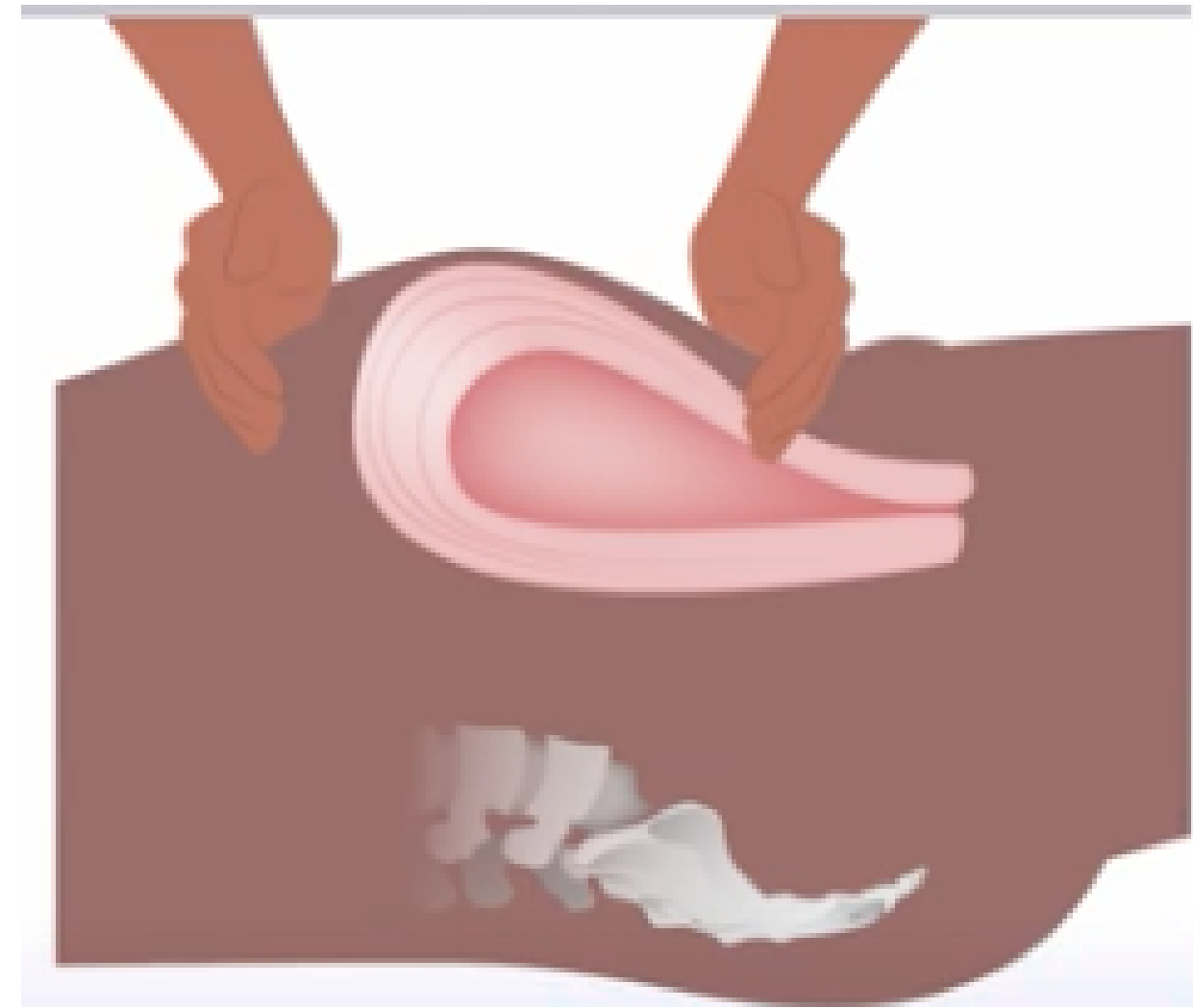
By two weeks postpartum, the uterus should be non palpable





Involution: The process of the uterus returning to non pregnant state

Subinvolution :
The failure of the uterus
to return





Reproductive system: Uterus

Immediately after delivery up to 3 weeks postpartum, the uterus is sensitive to oxytocin.

For multiparous women, uterine contractions may be more intense than from primiparous.

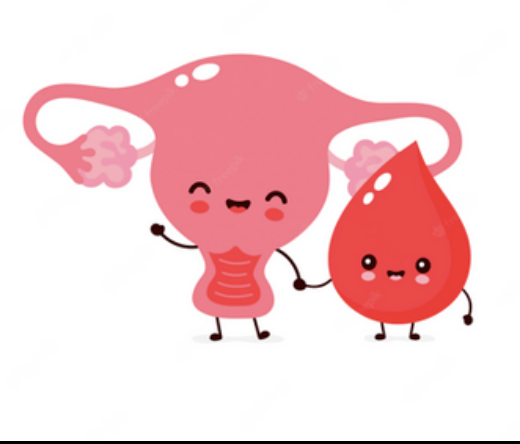




Reproductive system: Uterus

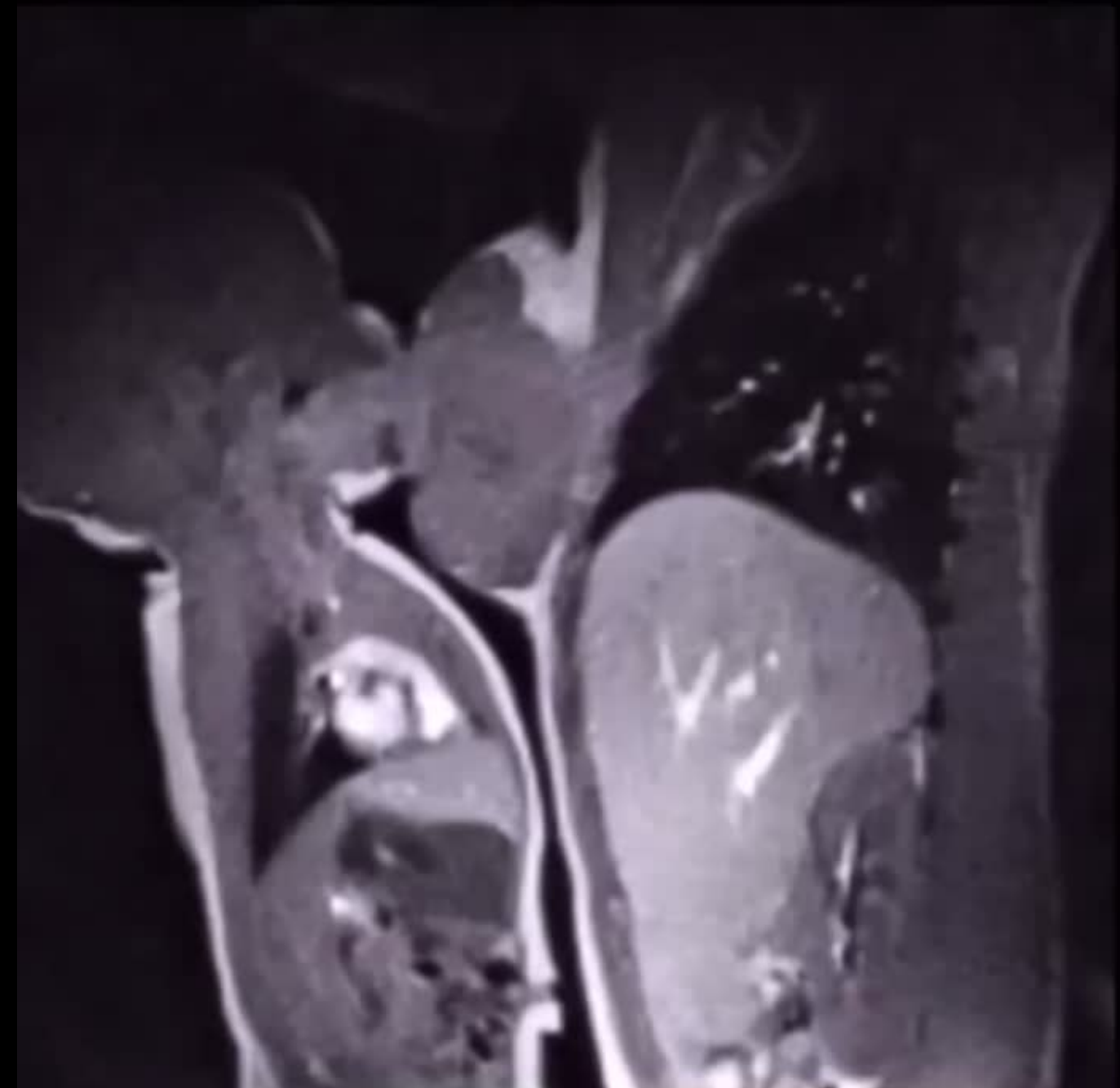
For multiparous women, uterine contractions may be more intense than from primiparous.





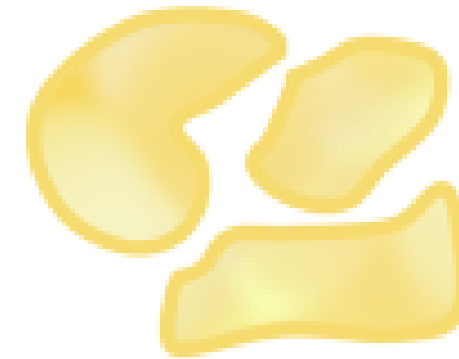
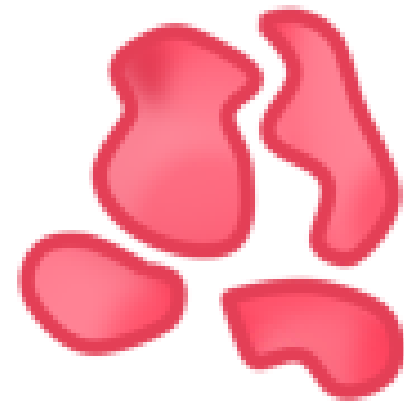
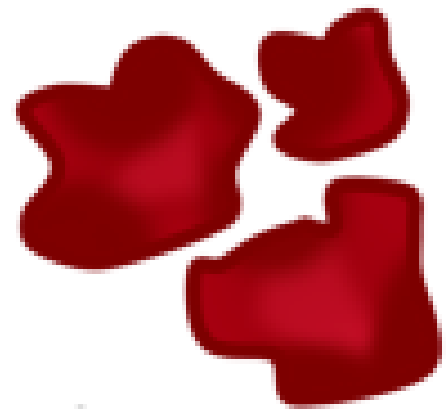
Reproductive system: Uterus

Breastfeeding may intensify uterine contractions





Reproductive system: Lochia



Lochia persists for up
to six weeks
postpartum



Reproductive system: Lochia

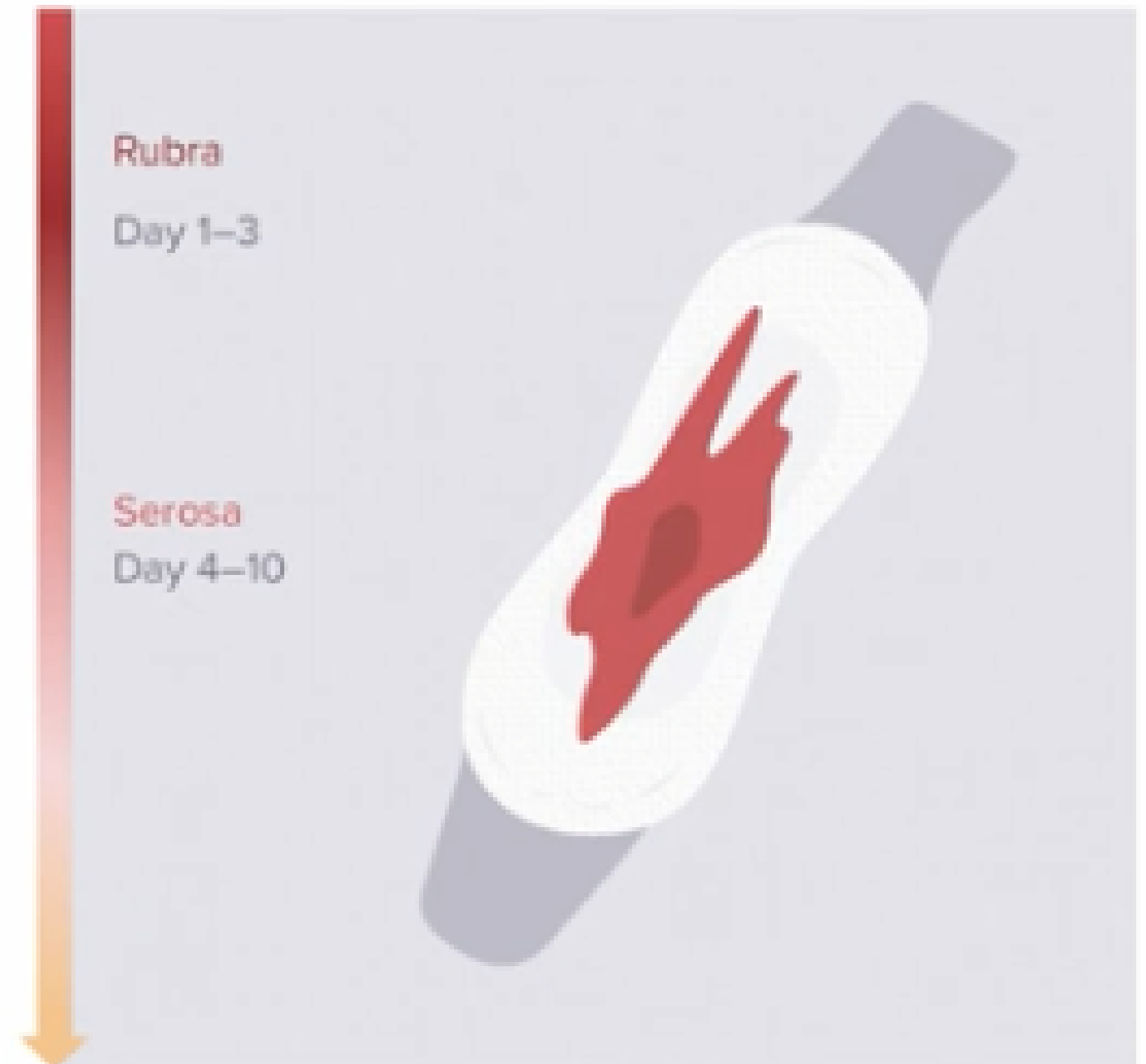
Bright red bleeding,
known as lochia rubra
is present on days 1-3





Reproductive system: Lochia

Lochia serosa is pinkish bleeding and is noted in days 4-10

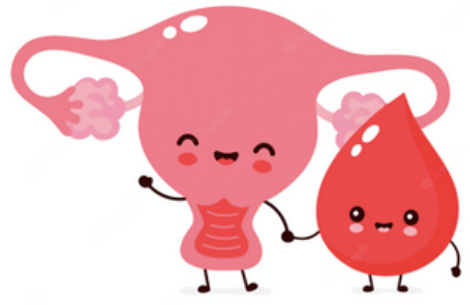




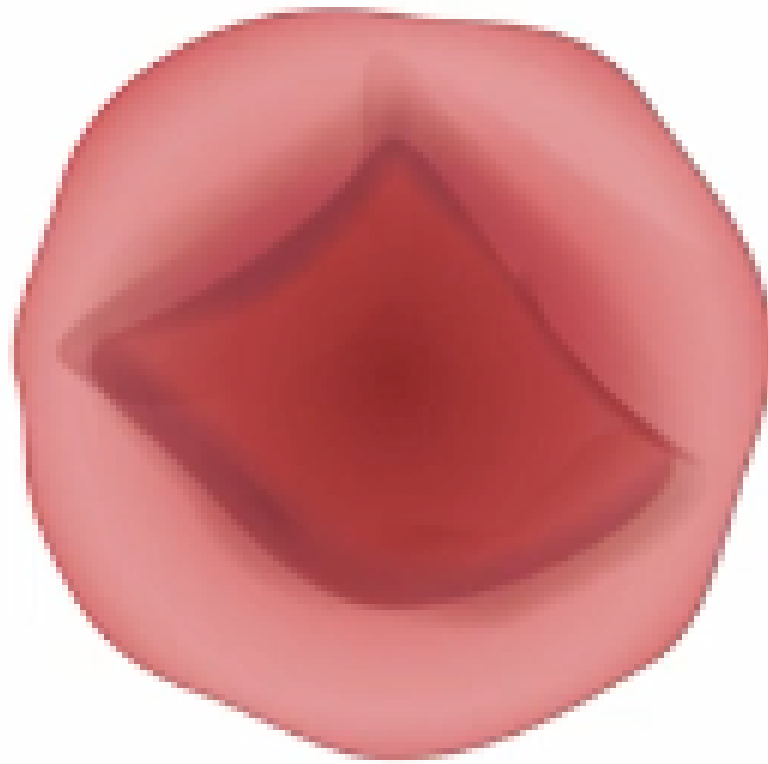
Reproductive system: Lochia

Alba is whitish yellow and is typically present days 11-14 but can continue up to 6 weeks postpartum

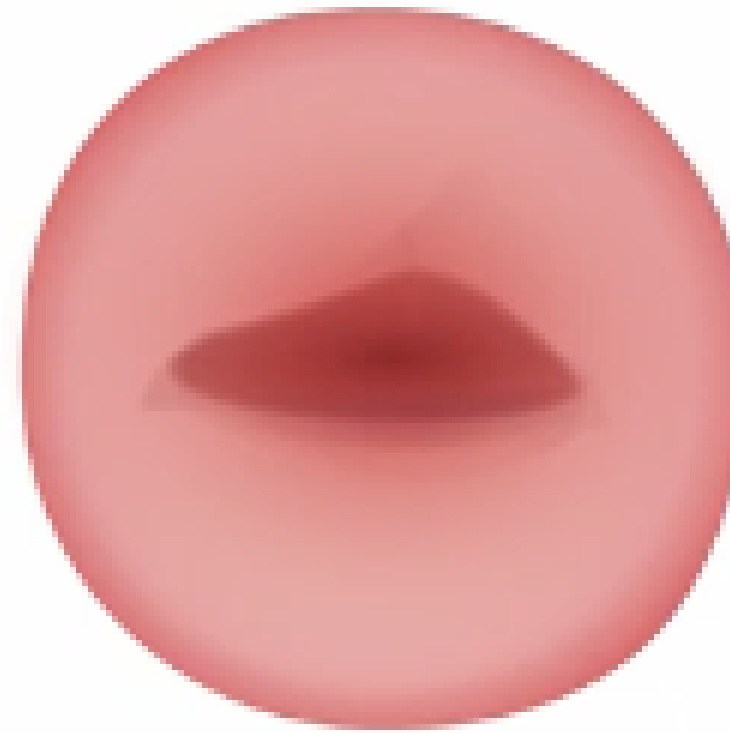




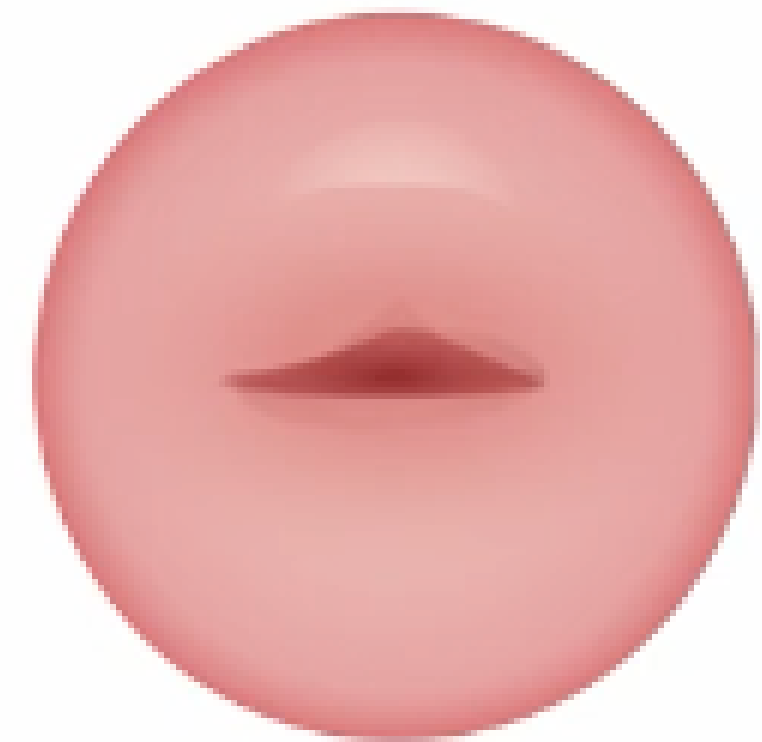
Reproductive system:Cervix



After vaginal delivery:
cervix is immediately soft
and bruised



2-3 days postpartum:
cervix is usually firm,
regained its normal shape



1 week postpartum:
cervical os* may be
decreased to 1 cm



Reproductive system: Breast

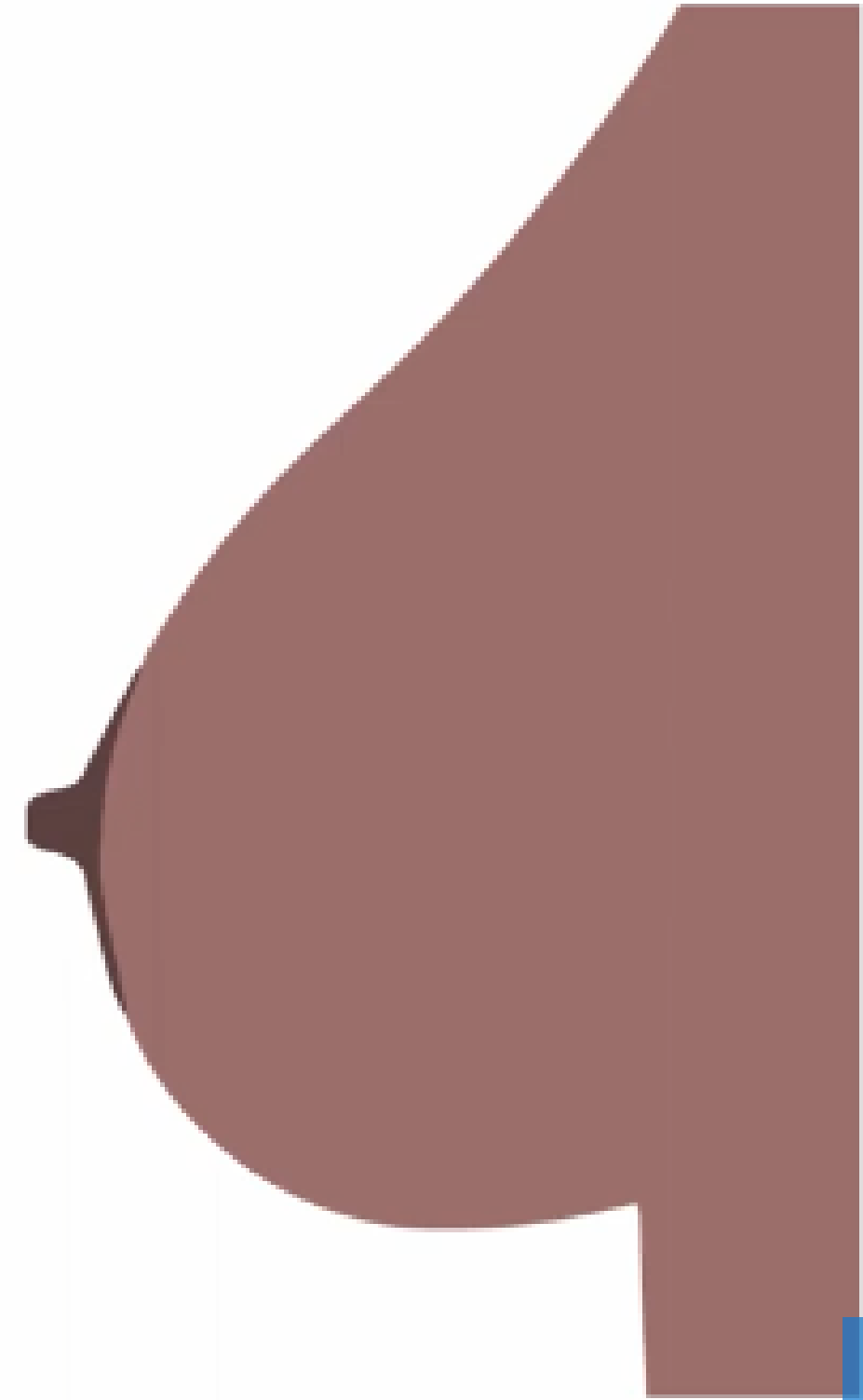
Collostrum is yellow and slightly thick milk that is present up to 72-96 hours after birth.





Reproductive system: Breast

The breast will become heavier and fuller. The breast may become engorged or nodular from the milk.

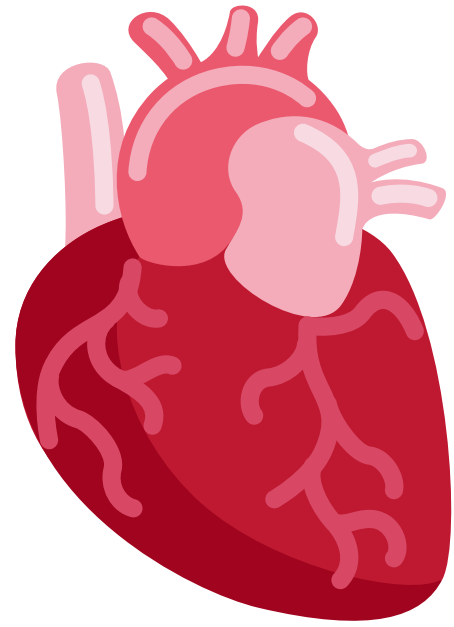




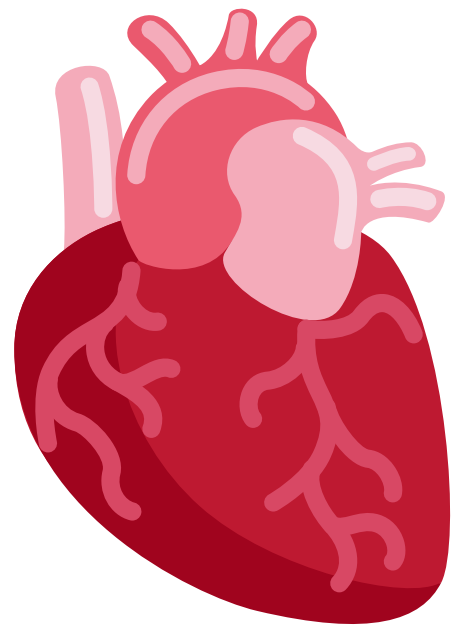
Reproductive system: Breast

Engorgement is very uncomfortable and may result in a slight increase in maternal temperature.



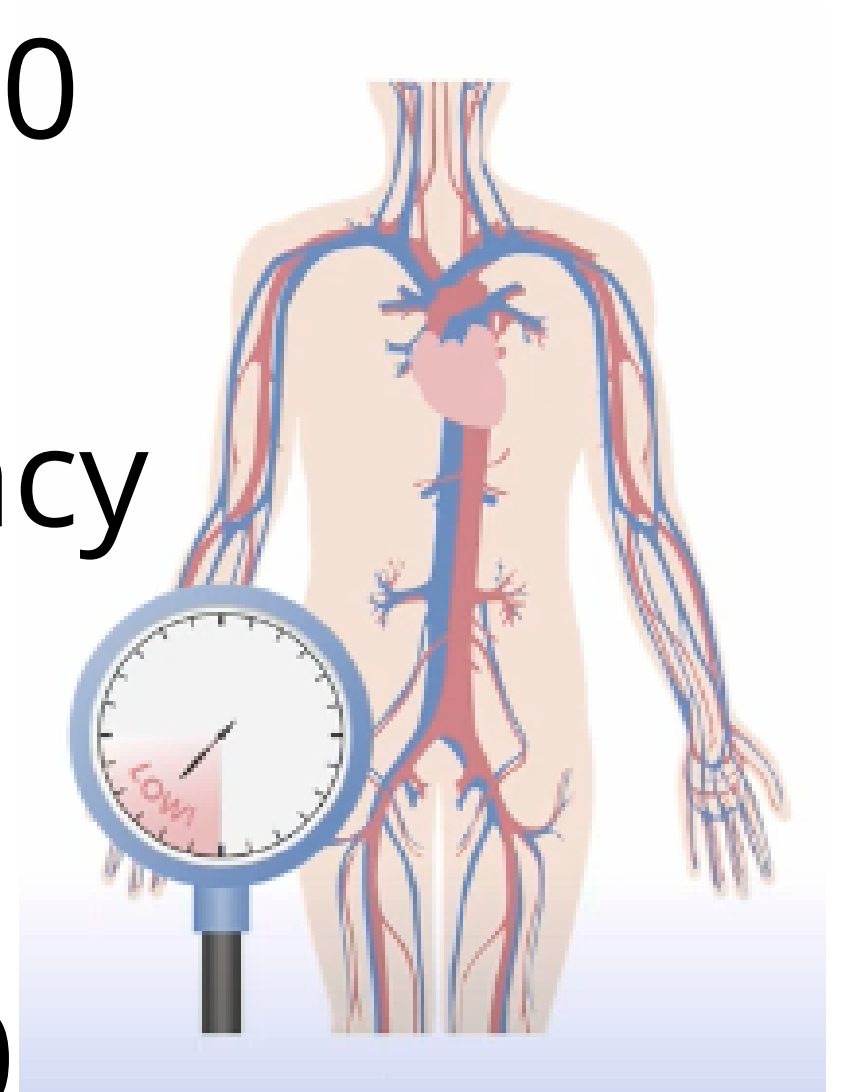


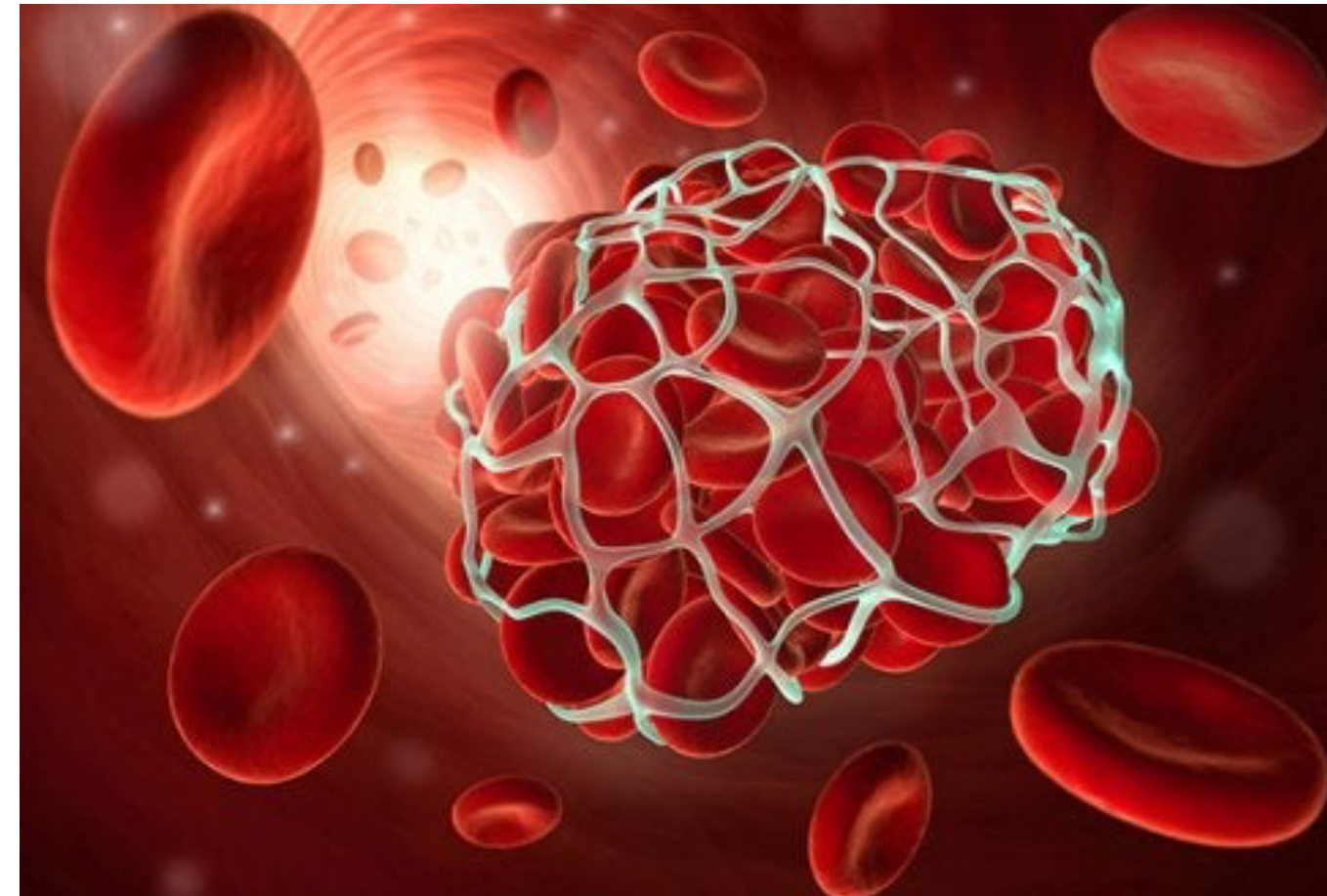
Cardiovascular system



Cardiovascular system

- The plasma volume is reduced by 1000 ml.
- The elevation in pulse during pregnancy decreases about one hour after delivery.
- The heart rate may be as low as 40-50 bpm





Hematological
system



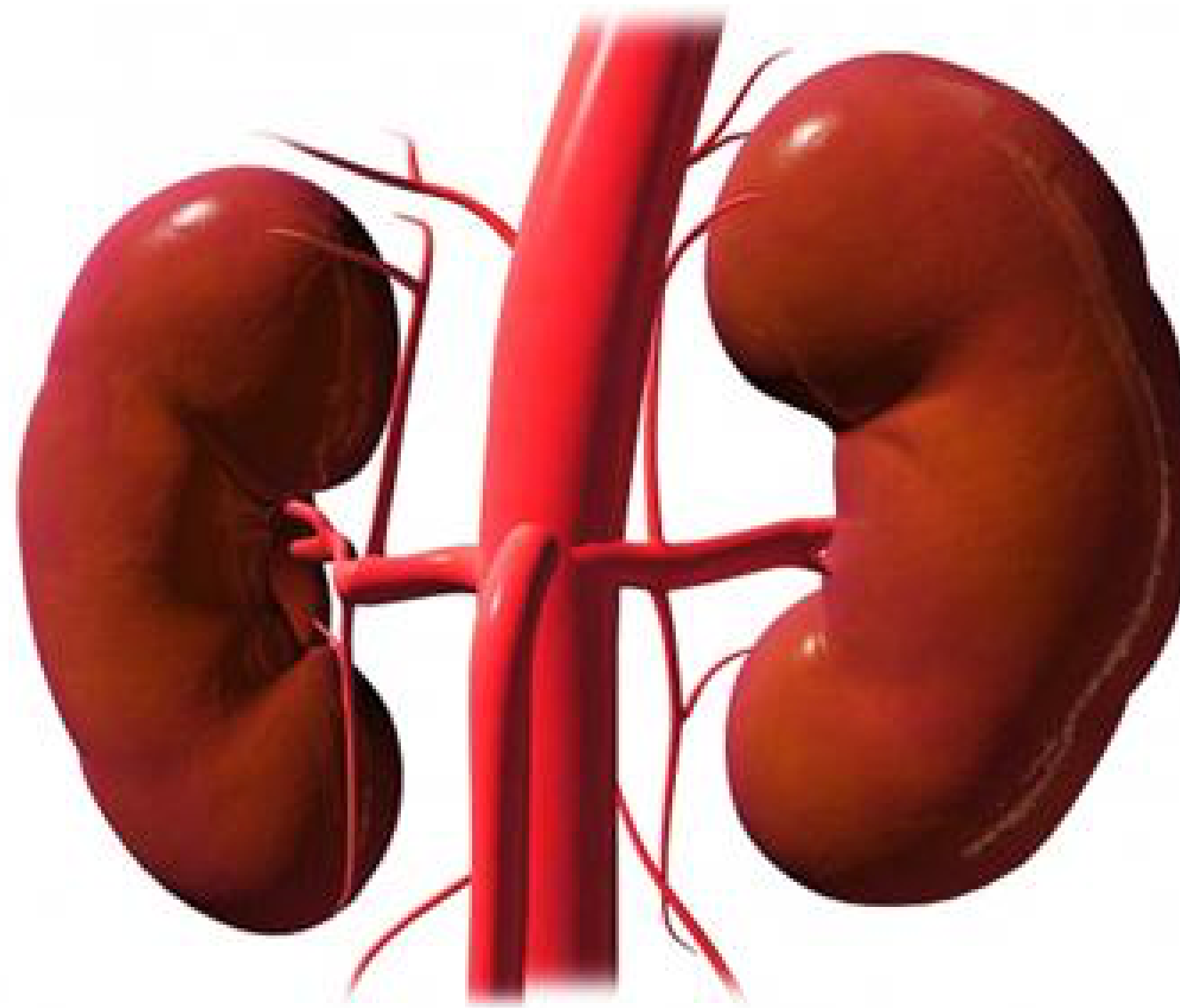
- Hematocrit drops during the first 3-4 days, eventually stabilizing by 8 weeks.
- White blood cell count up to 25000/m³ is normal.
- Coagulation and fibrinogen levels increase and will normalize by 2-3 weeks postpartum.



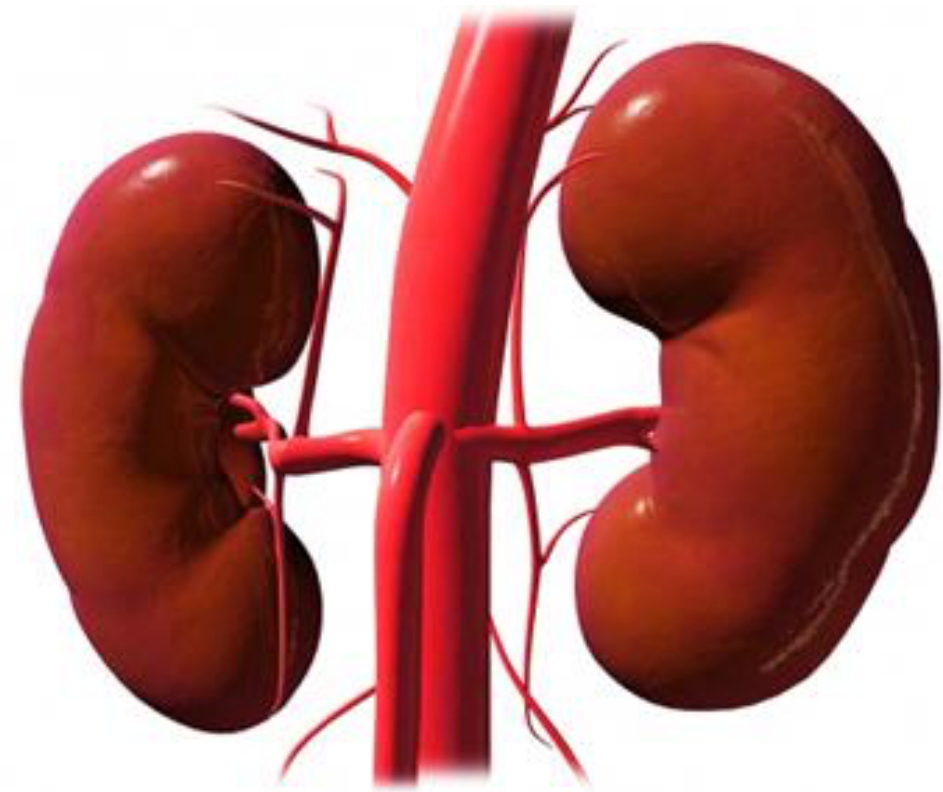
Endocrine system



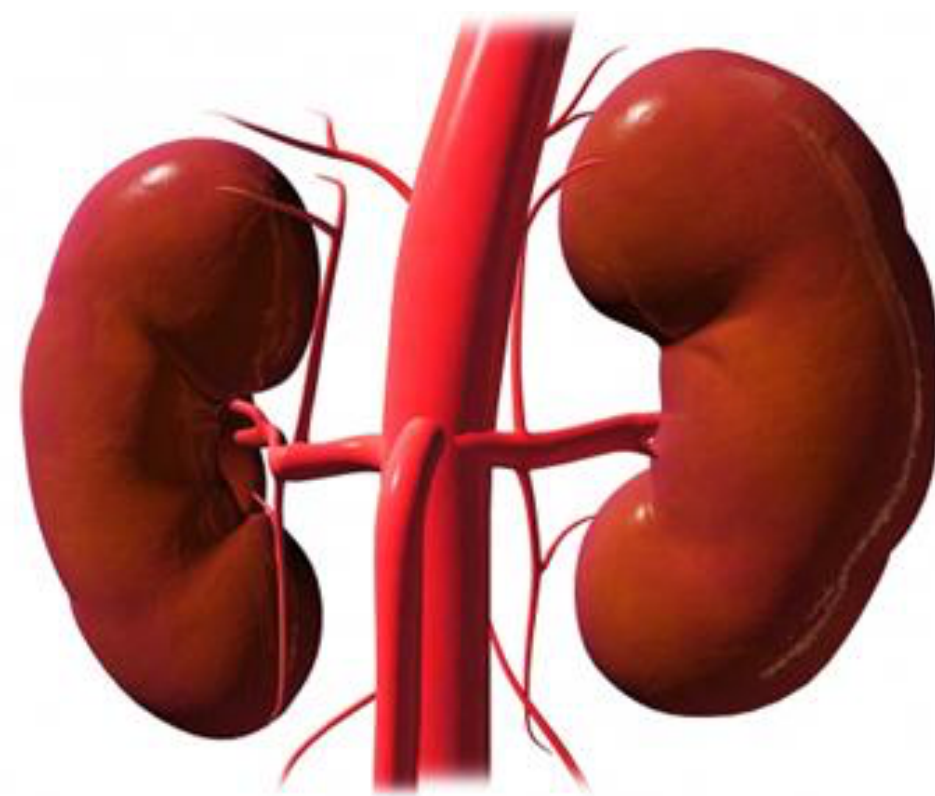
- Prolactin levels will remain elevated if the woman is breastfeeding.
- If she is not lactating, prolactin levels will return to normal by 3 weeks postpartum.
- Without lactation, ovulation may return in as soon as 45 days.
- Ovulation may be delayed by as much as 6 months for breastfeeding women.



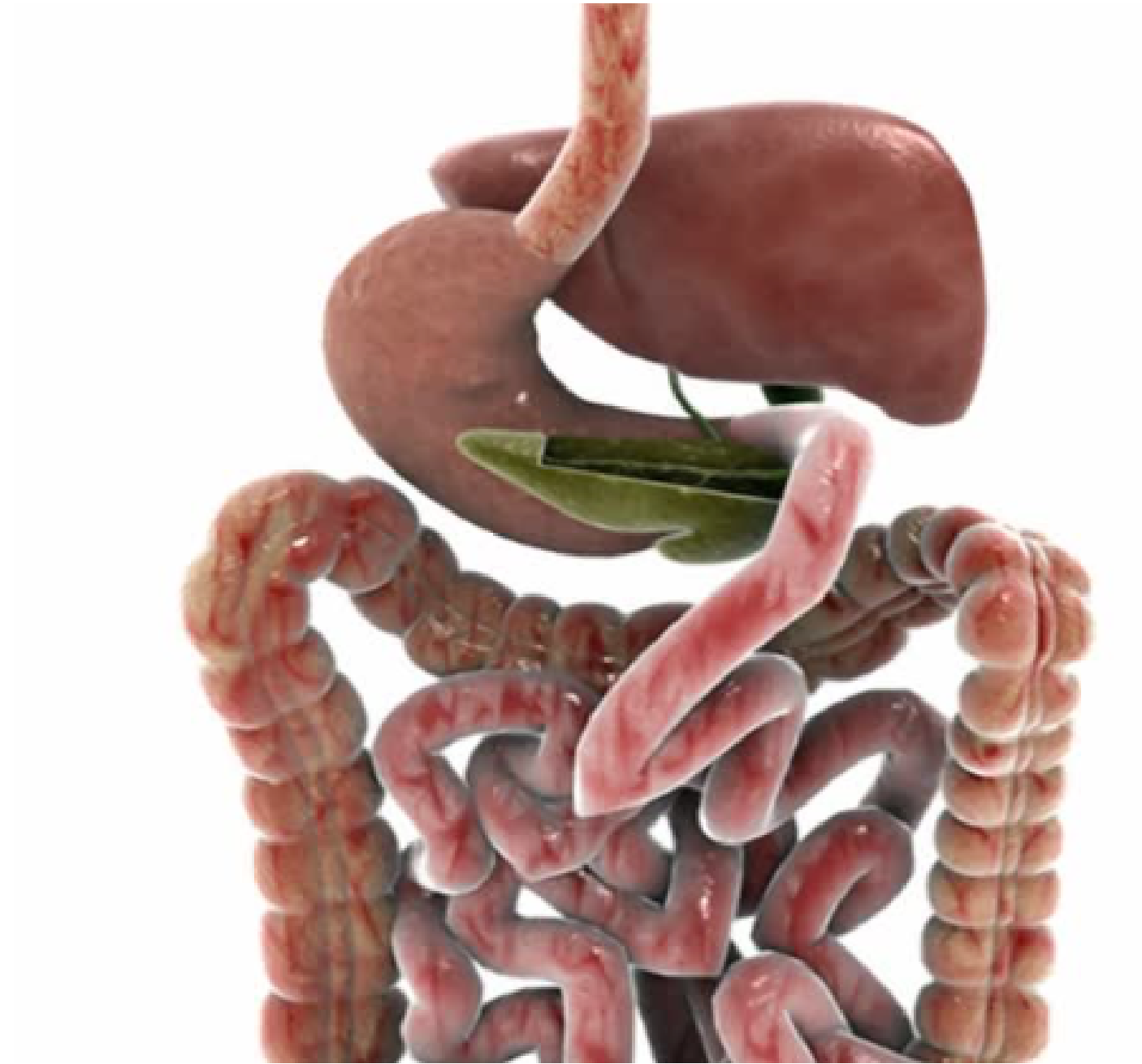
Renal System



- Diuresis is normal after 12 hours postpartum.
- Glomerular filtration rate remains elevated for a few weeks postpartum returning to normal.



The ureters and renal pelvises that were dilated in pregnancy under the influence of progesterone will return to normal 6-8 weeks postpartum



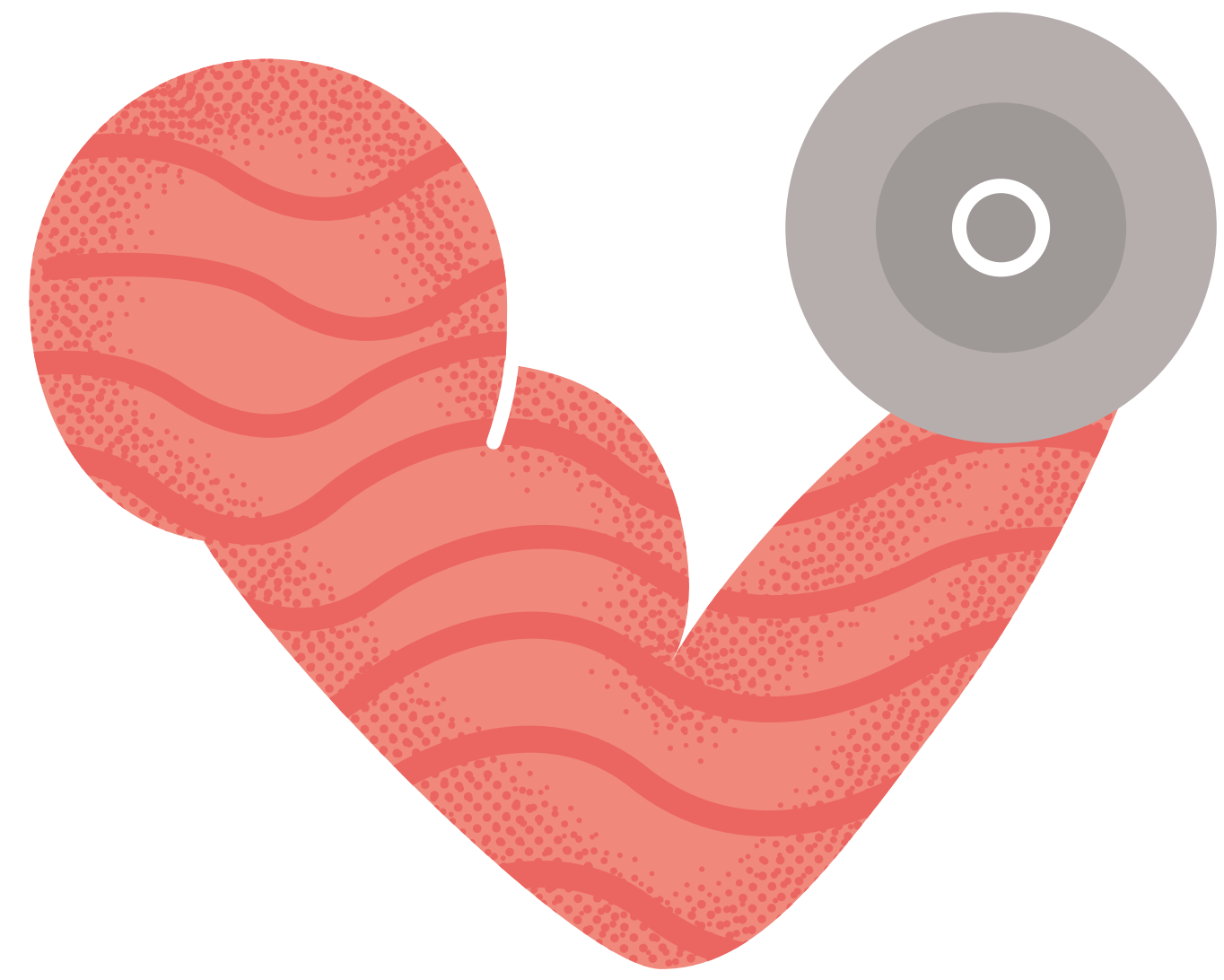
Gastrointestinal
system



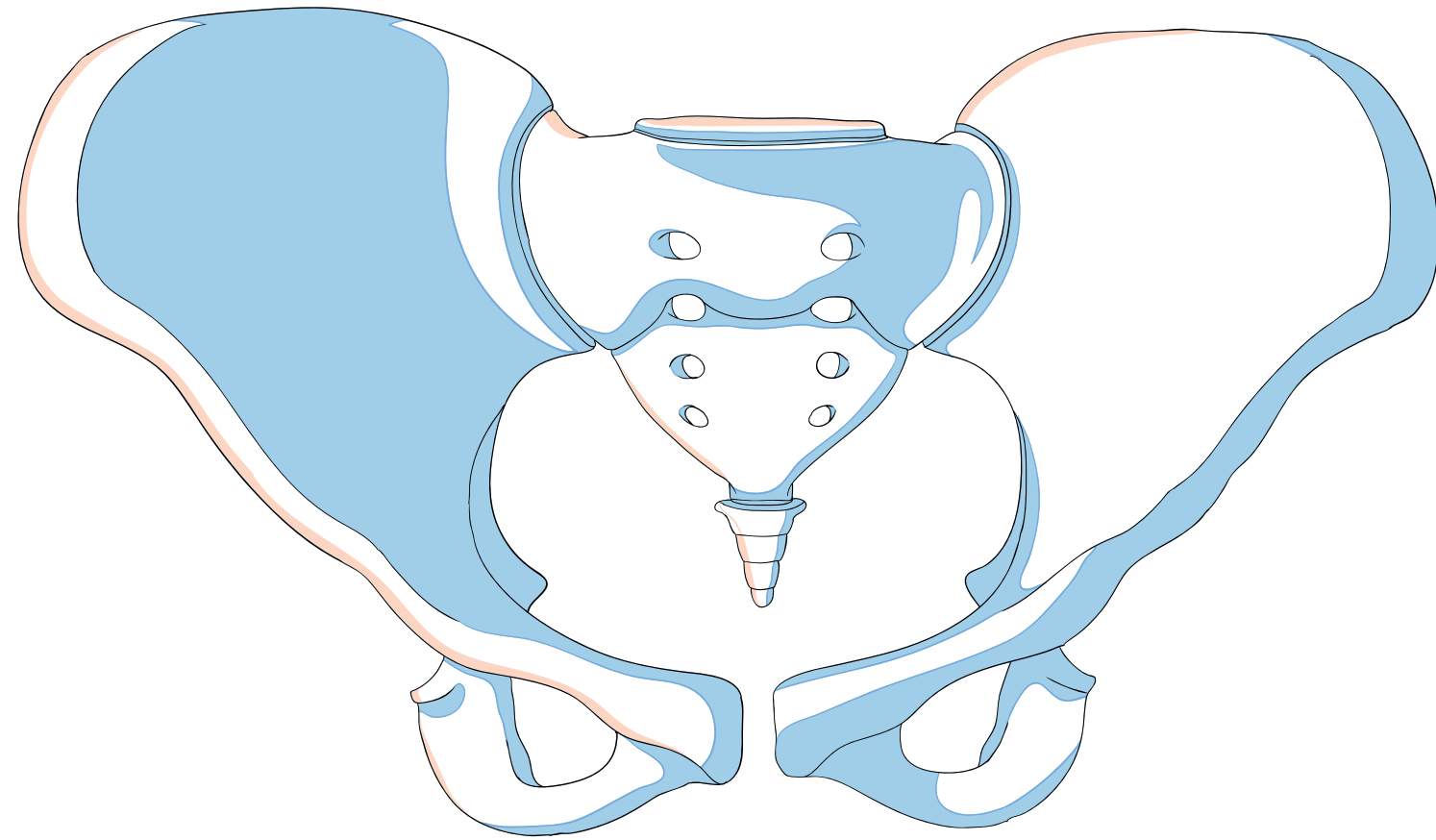
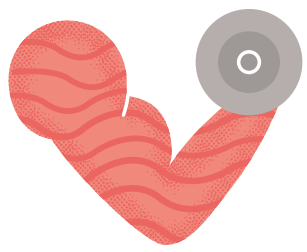
Women may experience an increase in appetite after delivery



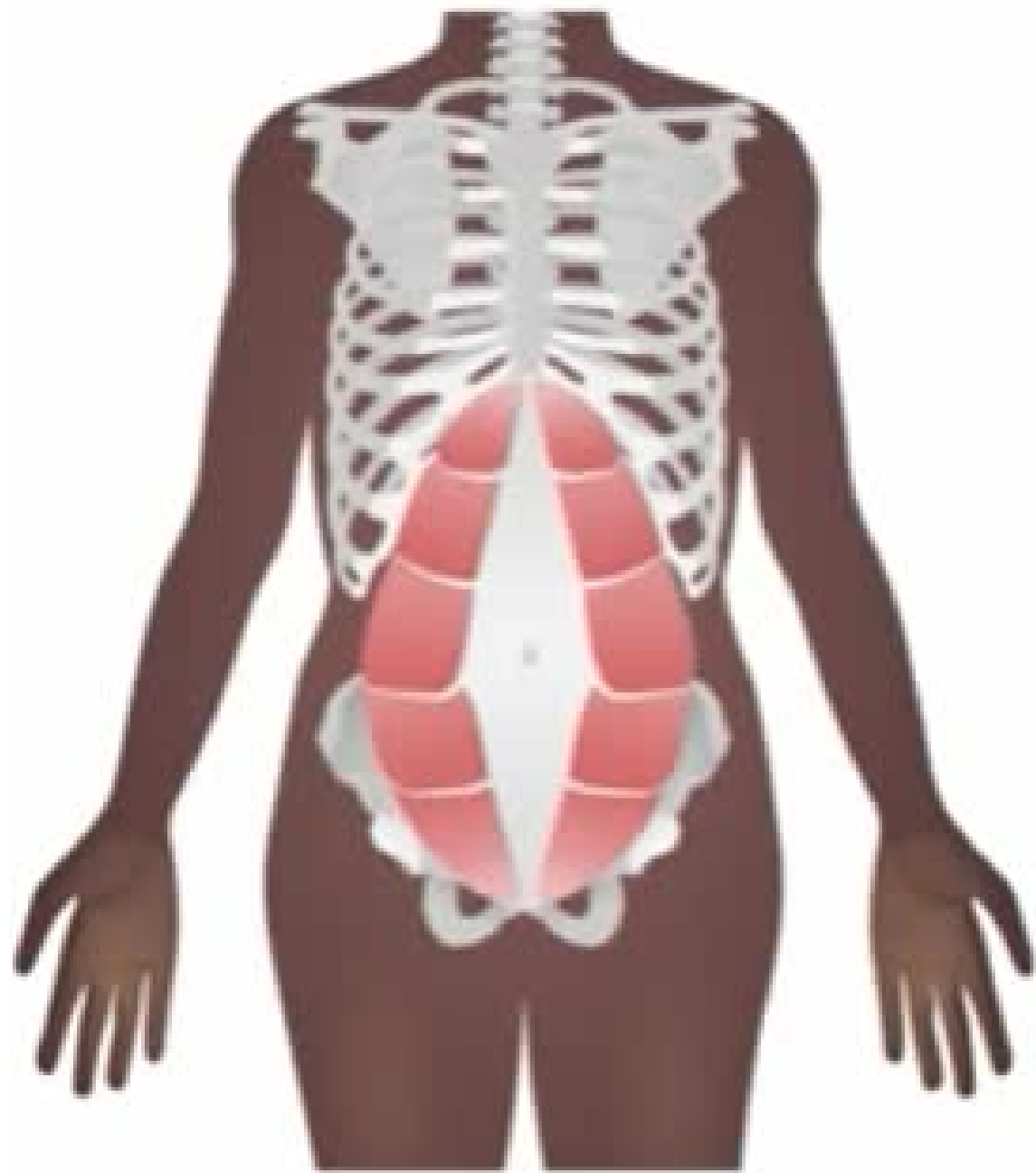
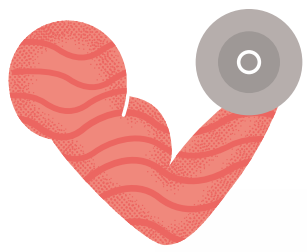
Bowel movement may get delayed 2-3 days postpartum because of decreased peristalsis, emptying during labour, or side effects of pain medications



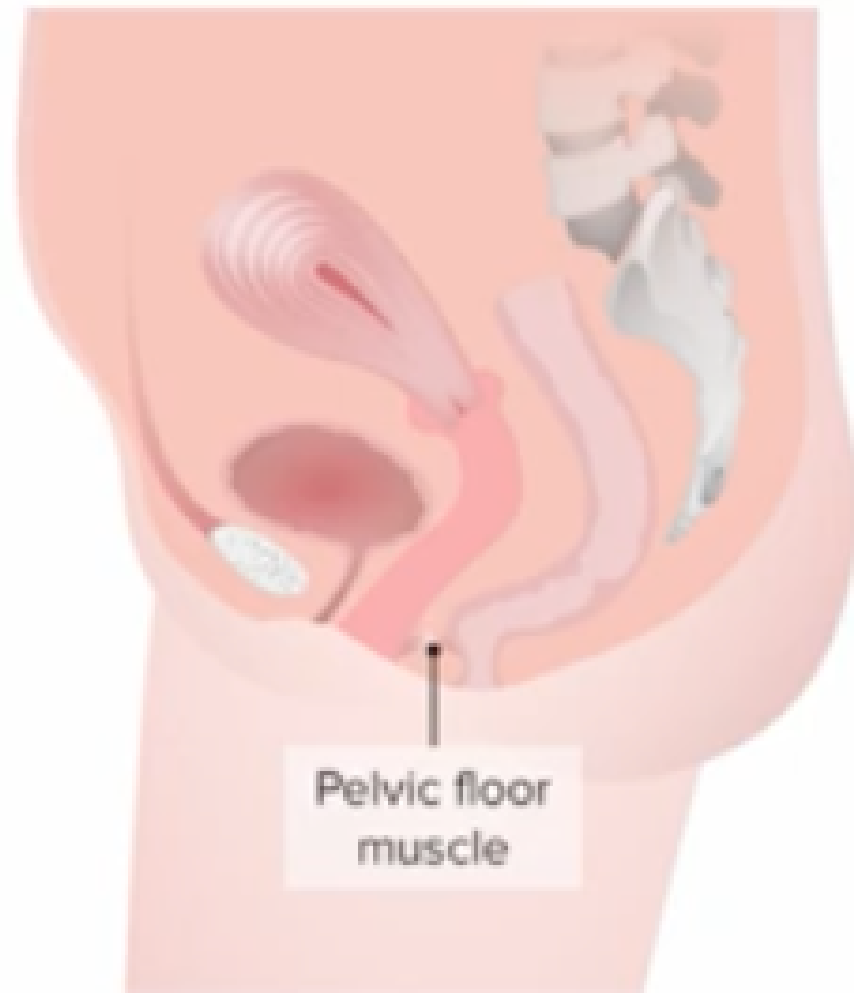
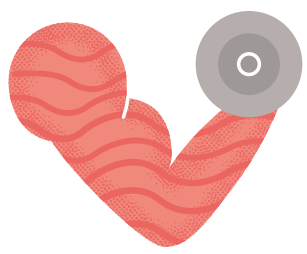
Musculoskeletal System



The hormonal influence on the joints is completely reversed by 6-8 weeks postpartum.



The rectum muscle returns to normal by 6 weeks.



The pelvic floor muscle (pubococcygeus) should return to normal by 6 weeks.



Mind



Psicological adaptation



Baby blues are normal, about 80% of women experience transient moments of feeling anxious or overwhelmed. These symptoms should disappear within 2 weeks.



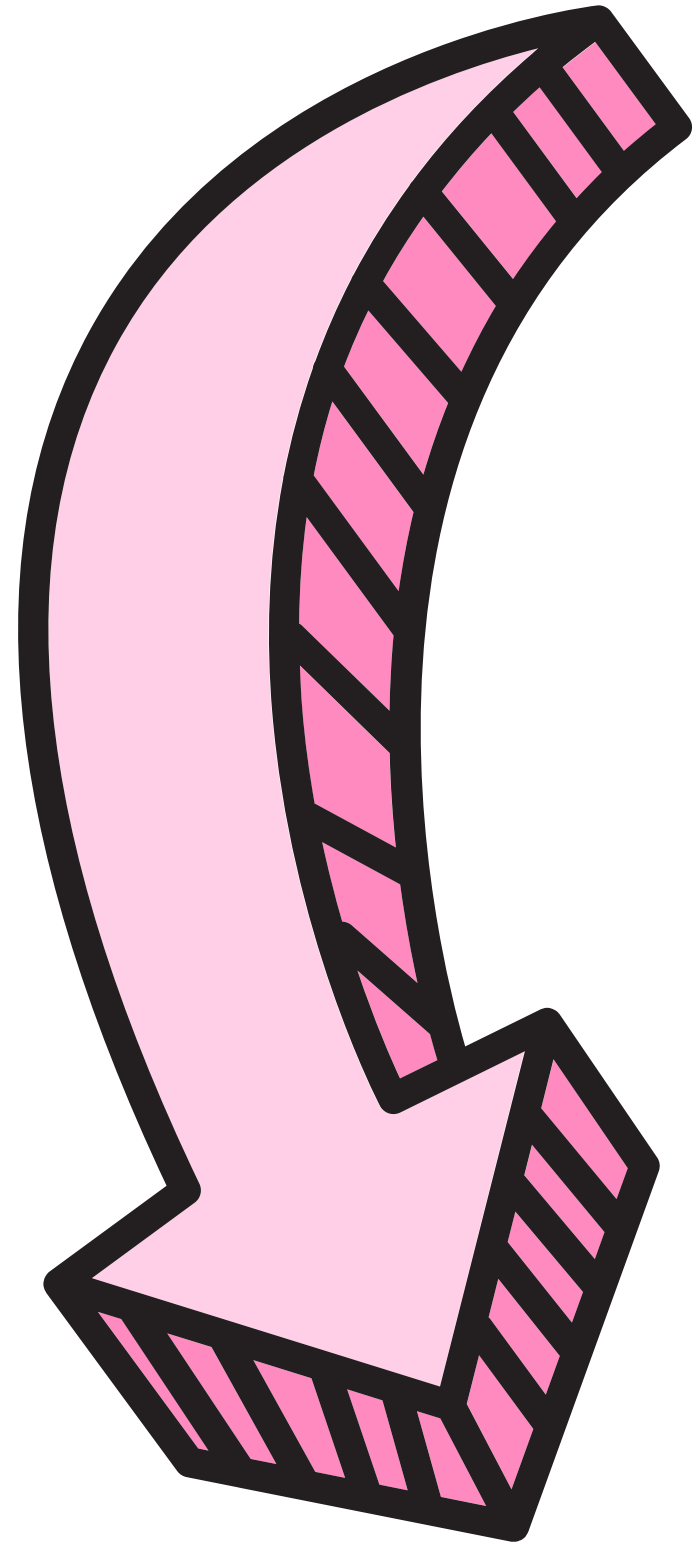
Psychological adaptation



Any feeling of sadness beyond 2 weeks should be assessed for postpartum depression.



Phases of Psychological adaptations



Taking in

During this phase, women are oriented primarily to her own needs. The primary focus is on sleeping and eating. They may be quite passive and dependent.

Taking hold

Letting go



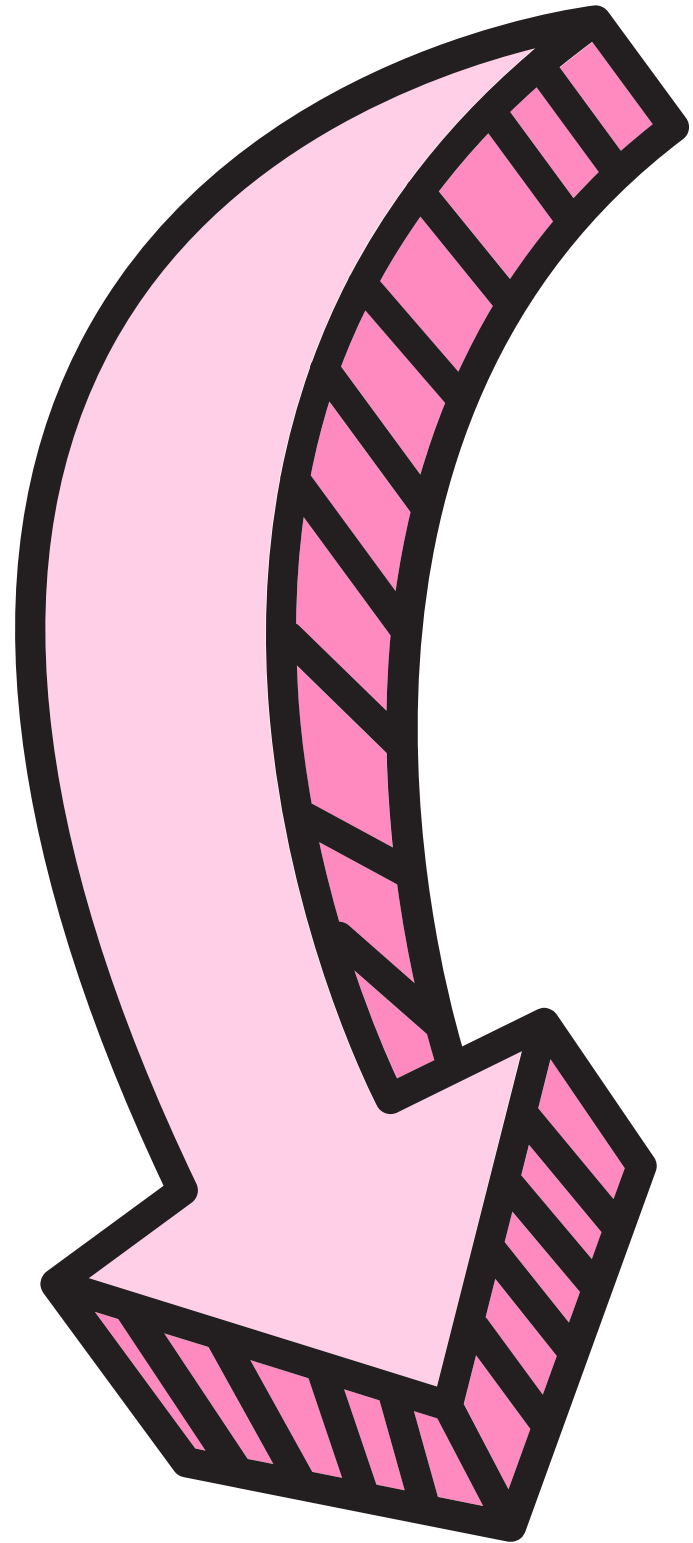
Phases of Psychological adaptations

Taking in

Taking hold

During this fase, women strive for independence and autonomy. They begin to take care of the baby independently.

Letting go





Phases of Psychological adaptations

Taking in

Taking hold

Letting go

Generally, this phase occurs when women return home. At this stage, they fully accept that the infant is dependent on them, and they relinquish a former childless status and freedom.



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