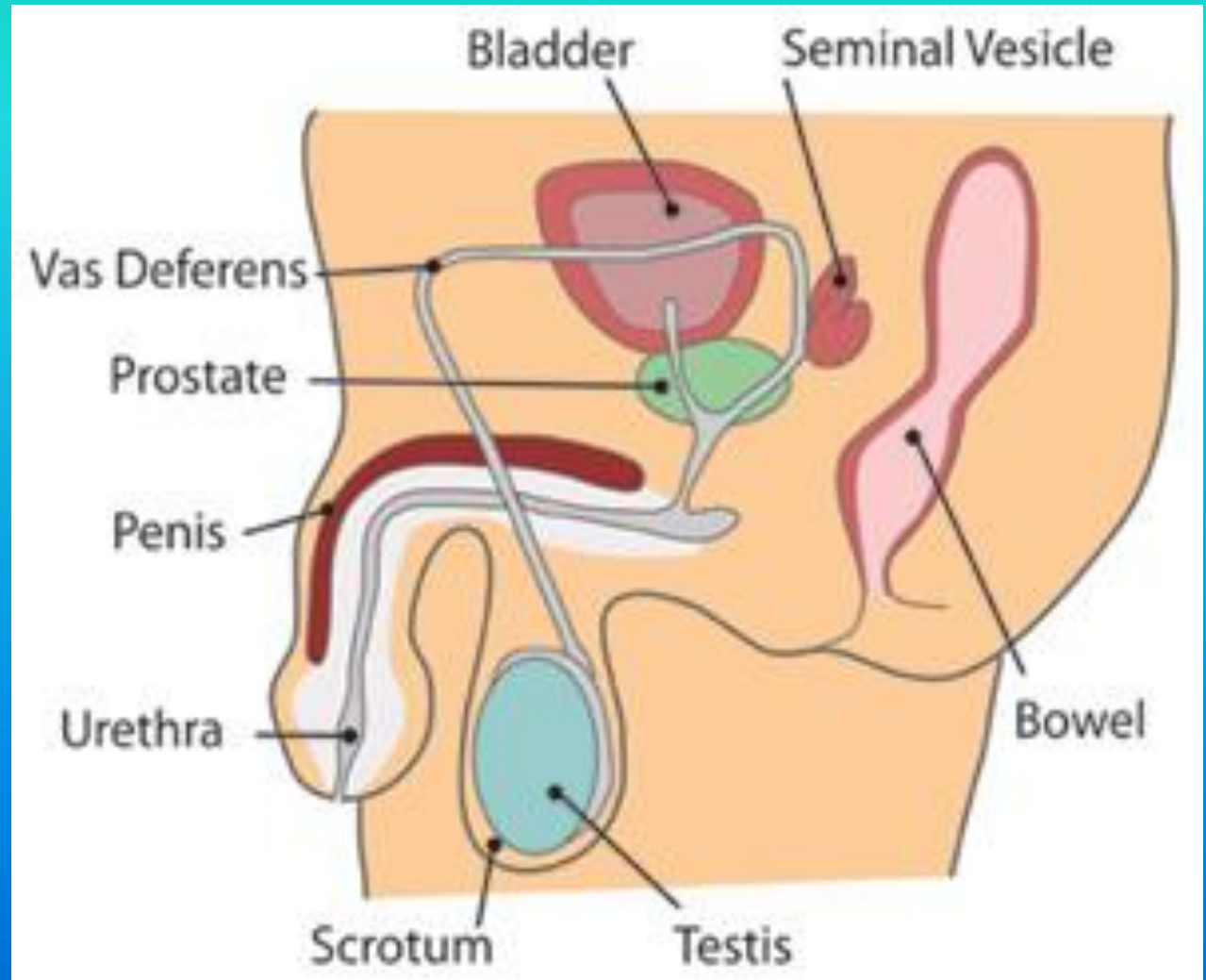


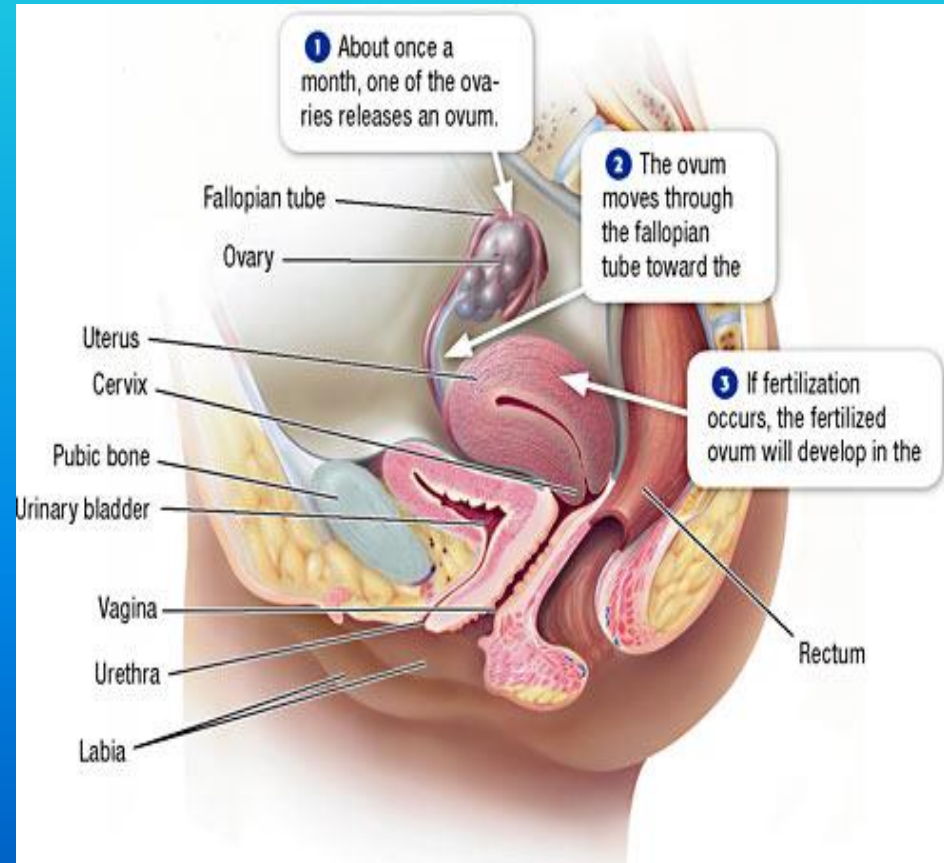
Pregnancy and Birth



Male Anatomy

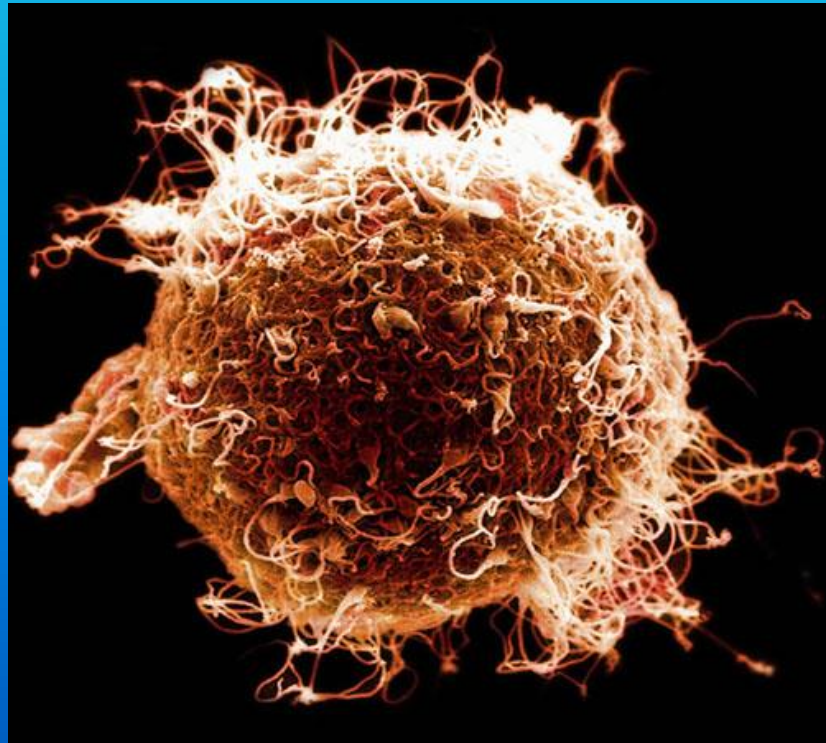


Female Reproductive



Reproductive Cells

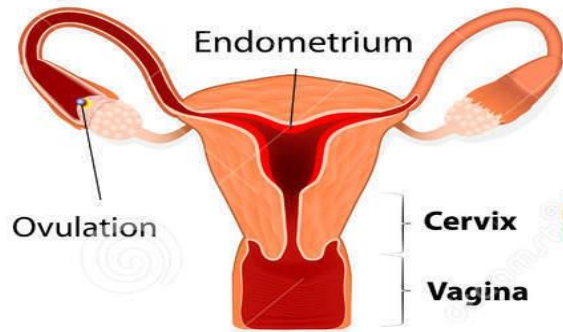
- Male= sperm produced in the testes
- Female= egg or ovum produced in the ovaries



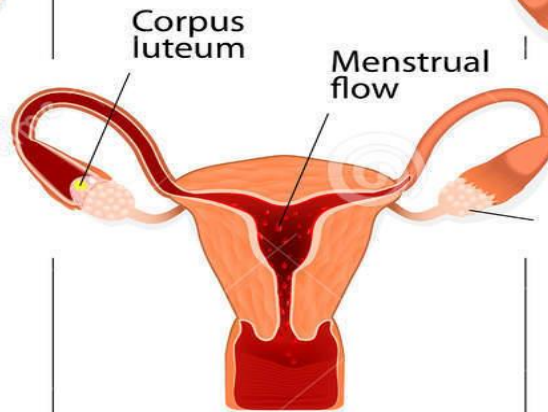
Menstrual Cycle

MENSTRUAL CYCLE

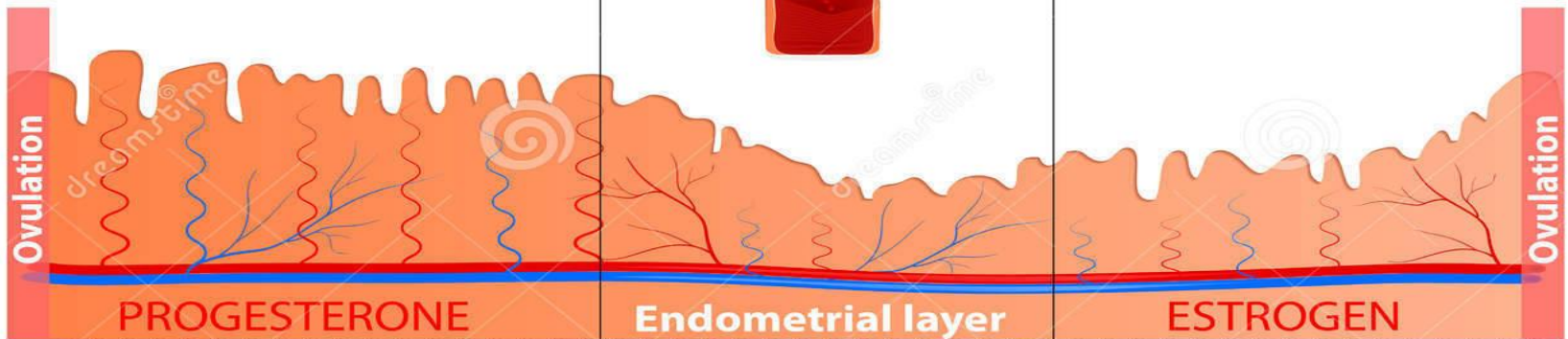
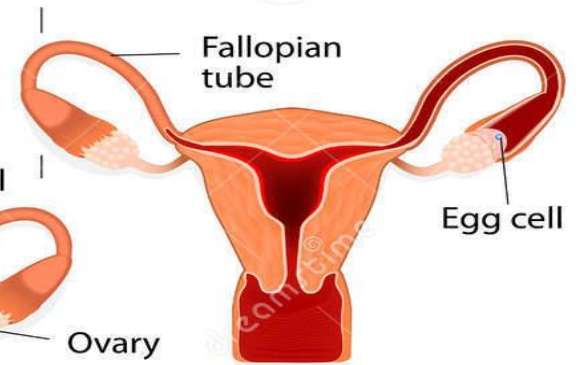
PREMENSTRUAL



MENSTRUAL



POSTMENSTRUAL



Download from
Dreamstime.com

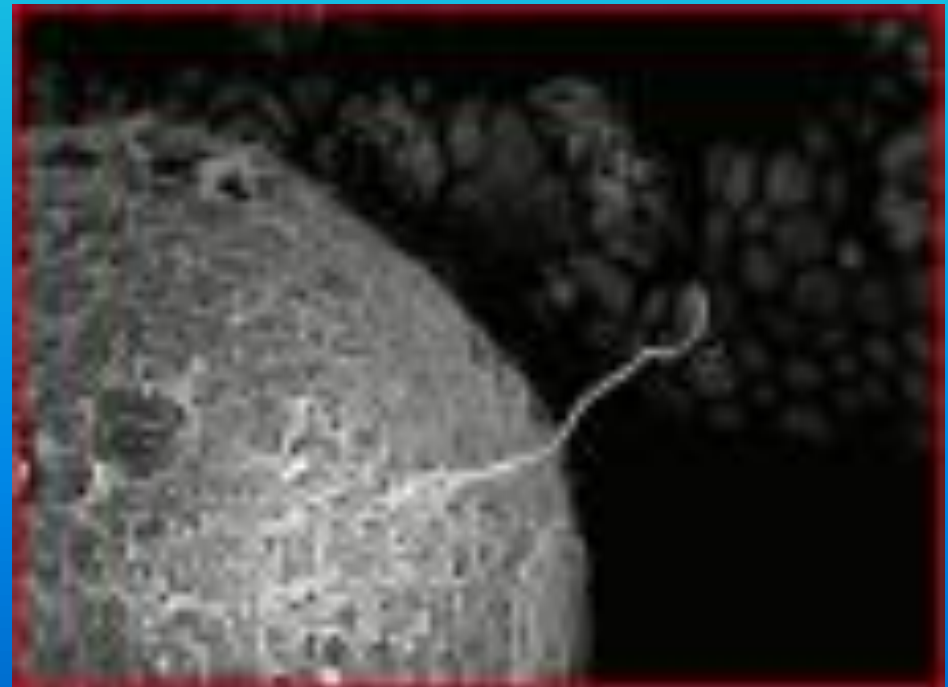
This watermarked comp image is for previewing purposes only.

ID 37934225

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Conception

- The joining of the egg and the sperm
- This is when hereditary traits are determined
- This is also referred to as 'fertilization'



Sex Determination

- Determined at the moment of conception
 - female= X male= X or Y

XX = girl

XY= boy

Who determines the sex of the baby?



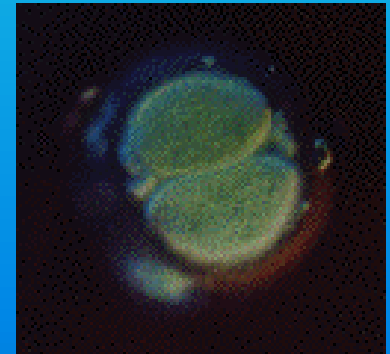
Zygote



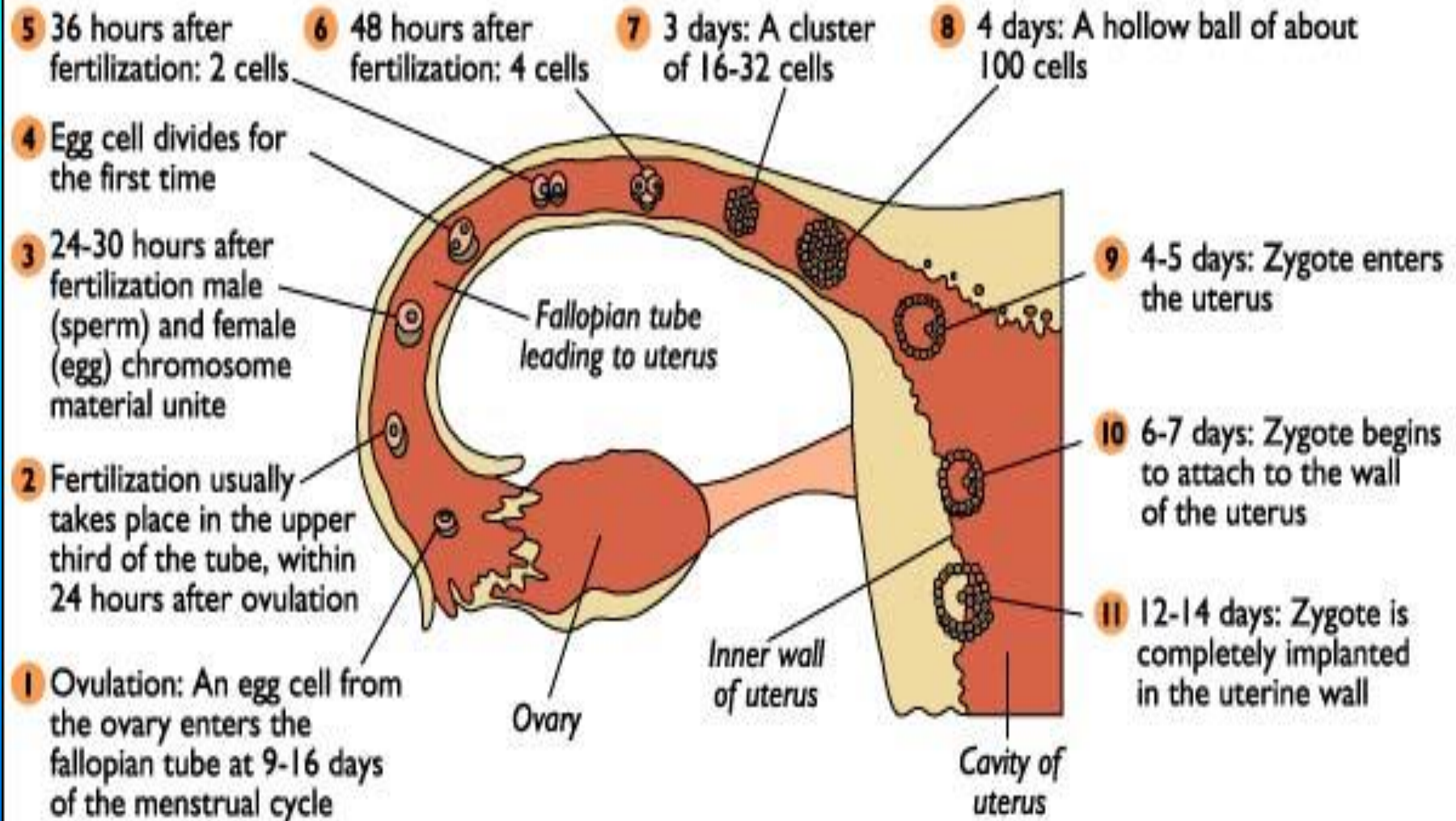
- starts with conception
- first 2 weeks of pregnancy
- This is formed when the egg and sperm unite and begin to develop

AMNION: fluid filled sac that surrounds the baby in the uterus

- **Yolk Sac – provides nutrients before the placenta takes over**



Period of the Zygote



PRENATAL

280

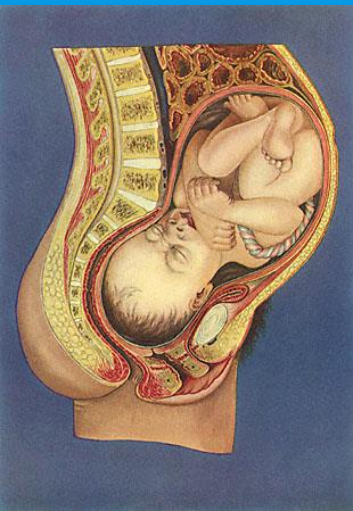
“pre”= before

“natal” = of or relating to birth

Days

40 weeks

development of a baby
during the period
before birth



Each Person:

Has **46**

chromosomes :

23 from MOM

23 from DAD



Changes for Mom...

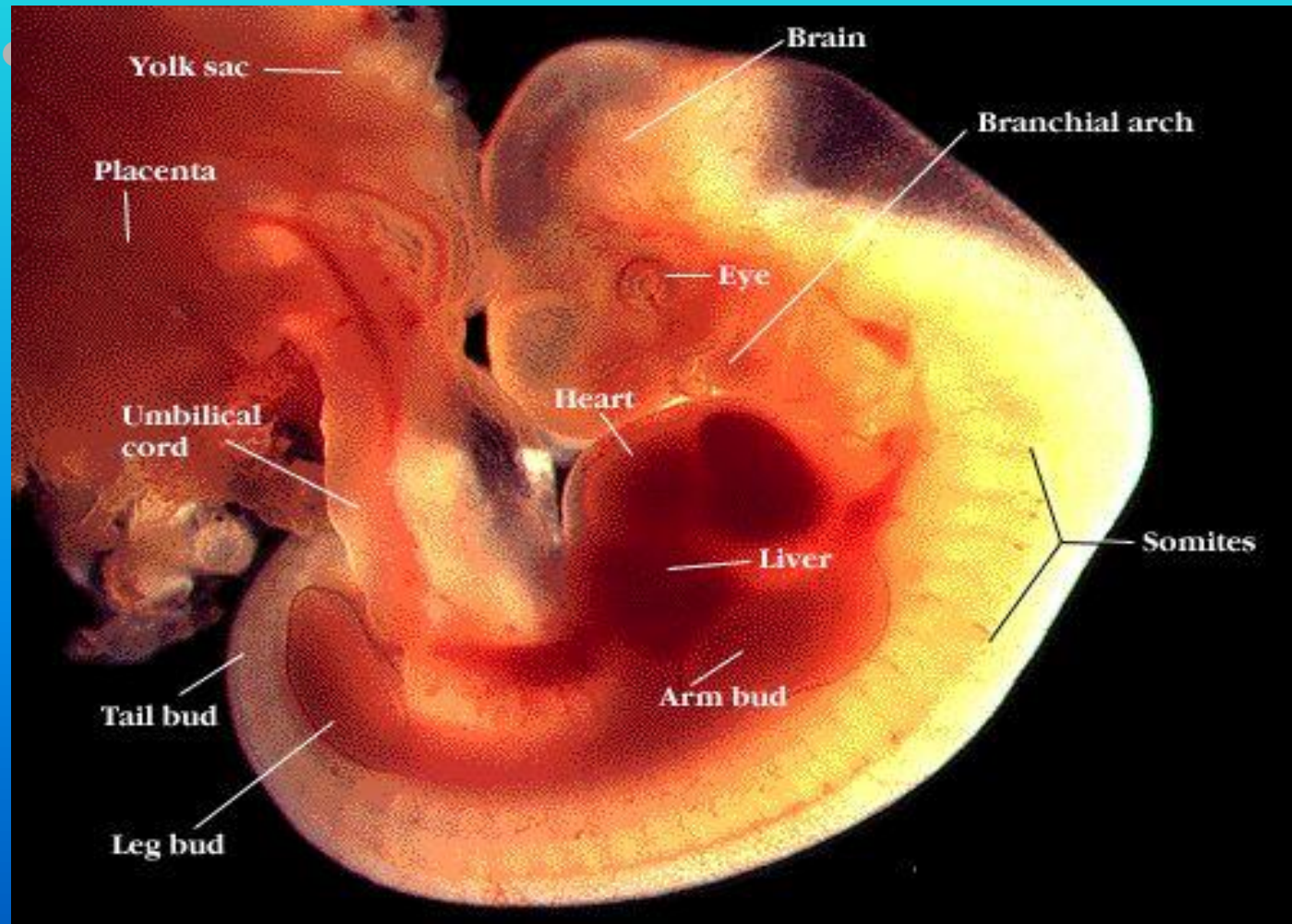
- Doctor visit to check progress
- Morning sickness, breast tenderness, increased urination, and fatigue are very common in early pregnancy
- The wife needs more sleep, healthy diet, less negative stress, regular exercise, no heavy lifting, only specific medicines from doctor.
- The husband needs to help the wife in all ways possible.(house chores etc.)

First Trimester

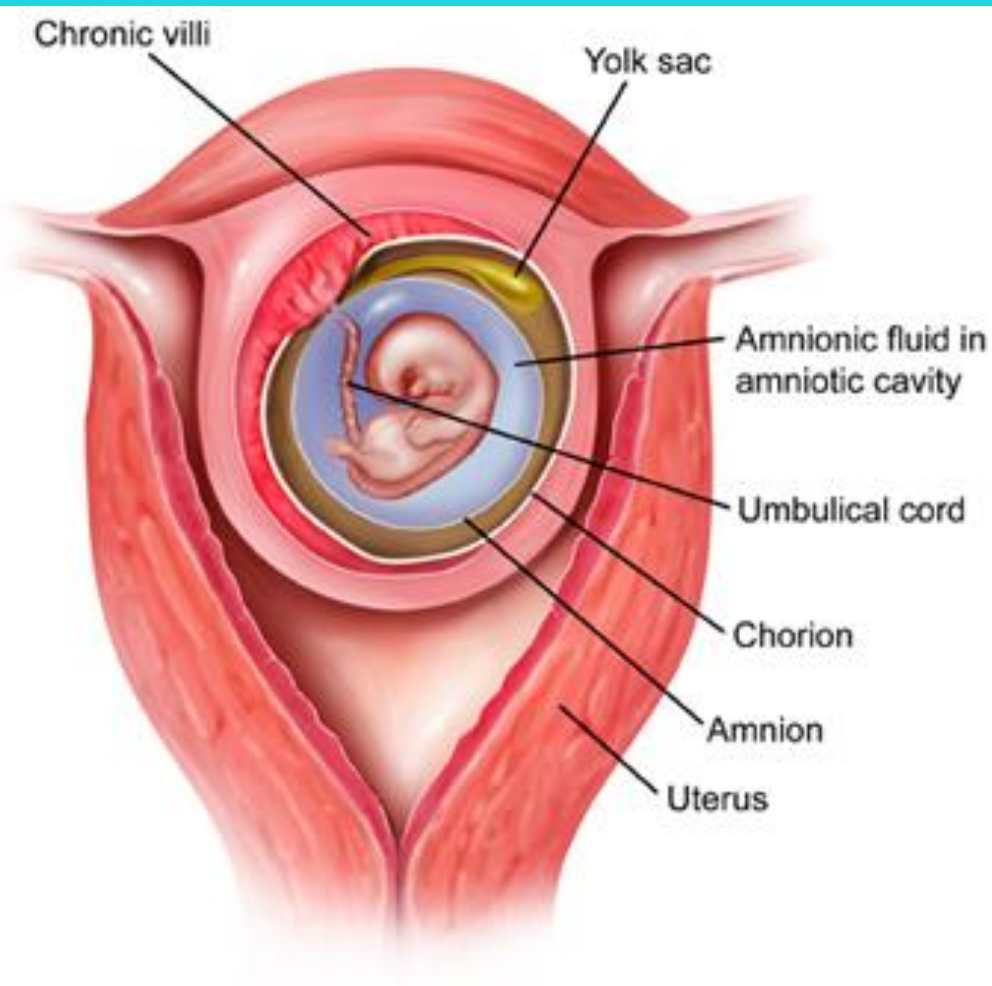
- Early pregnancy (Weeks 1-13)
- Most critical stage because all major organs begin to form
- Baby now receives good and/or harmful substance from the mother (through the umbilical cord)
- The heartbeat can usually be seen around 6 weeks via ultrasound, and heard around 9 weeks via doppler

First Month

- Placenta: organ filled with blood vessels that nourishes the baby in the uterus
- Umbilical Cord: connects the baby to the placenta



Weeks 5-8



- By the end of the first month, the embryo is about **1/10 of an inch long**. The heart, which is no larger than a **poppy seed**, has begun beating.

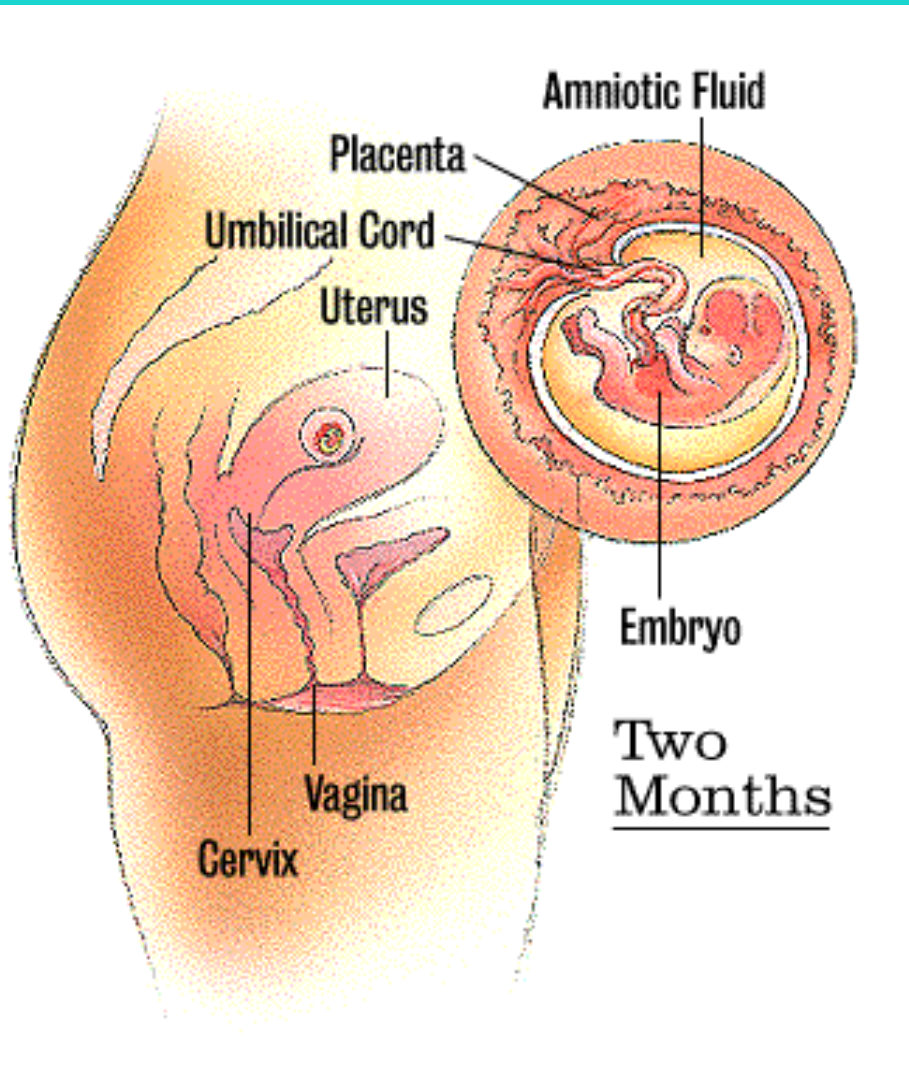
GS

5 Weeks

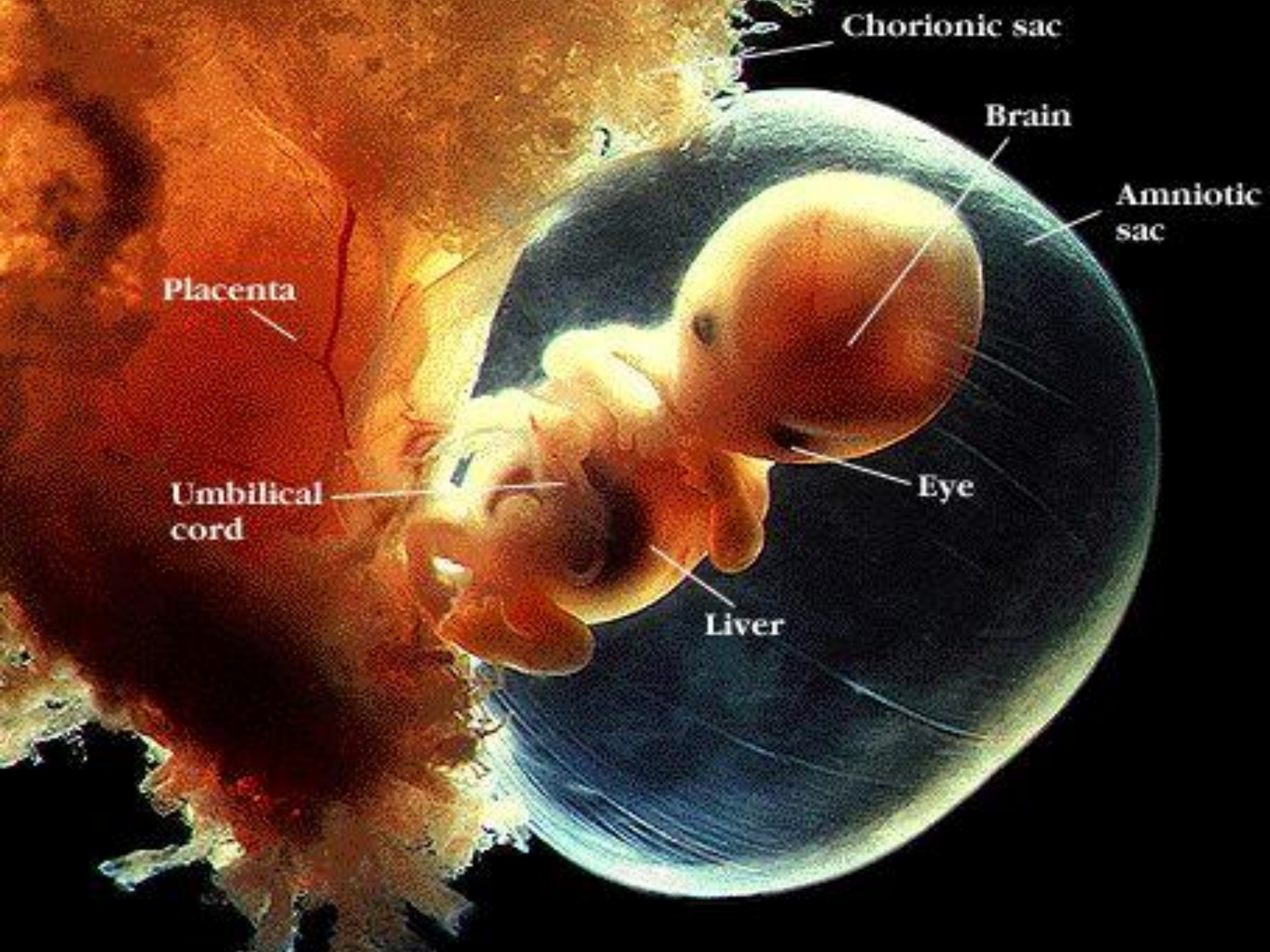
[2D] 0.0/7.5cm
G50/P80/
FA4/6.5M
TIs 0.1/M



Weeks 9-12



- The embryo is about **1/4 inch long** and has distinct, slightly webbed fingers. **Veins** are clearly visible. The **heart** has divided into right and left chambers.



Chorionic sac

Brain

Amniotic sac

Placenta

Eye

Umbilical cord

Liver

Second Trimester

- Starts at the 13th week and ends at week 27 of pregnancy
- Bone cells replace cartilage
- All parts of the body mature
- Overall size quickly increases

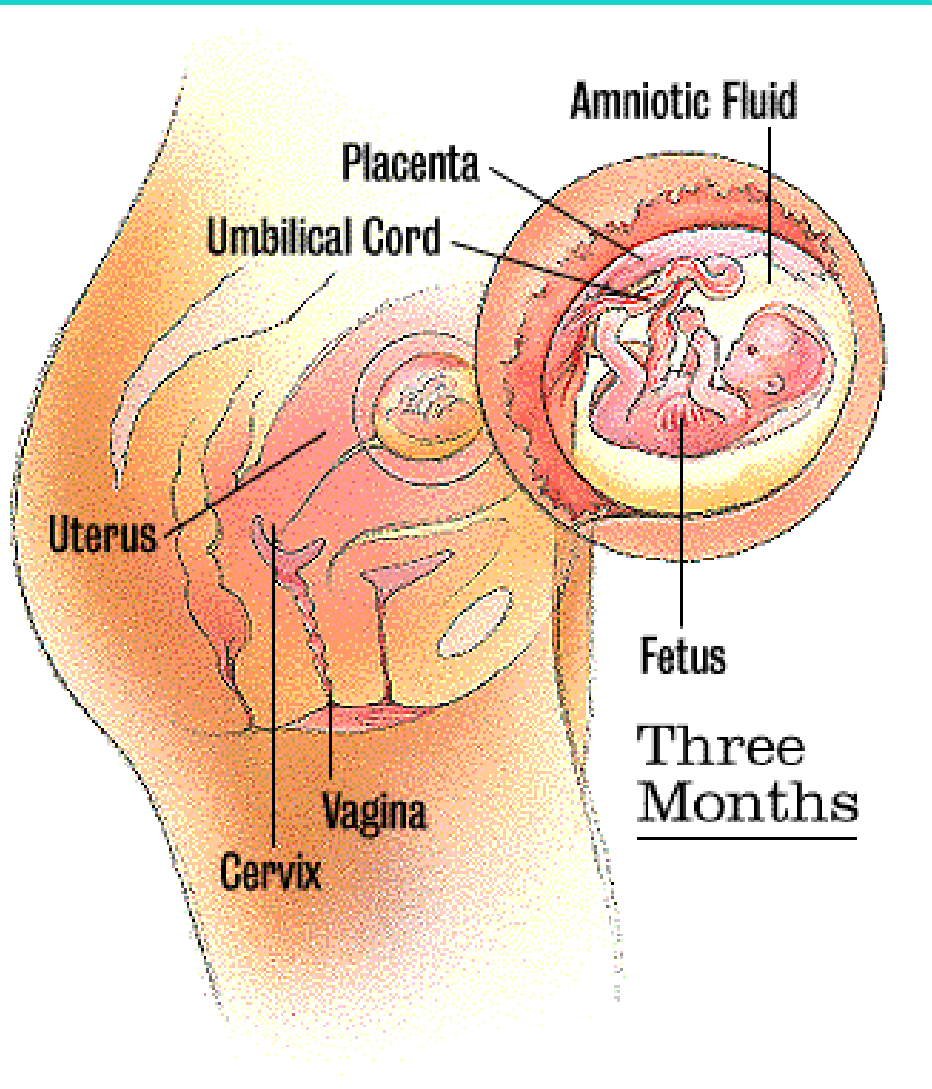


Second Trimester

Highlights of this stage...

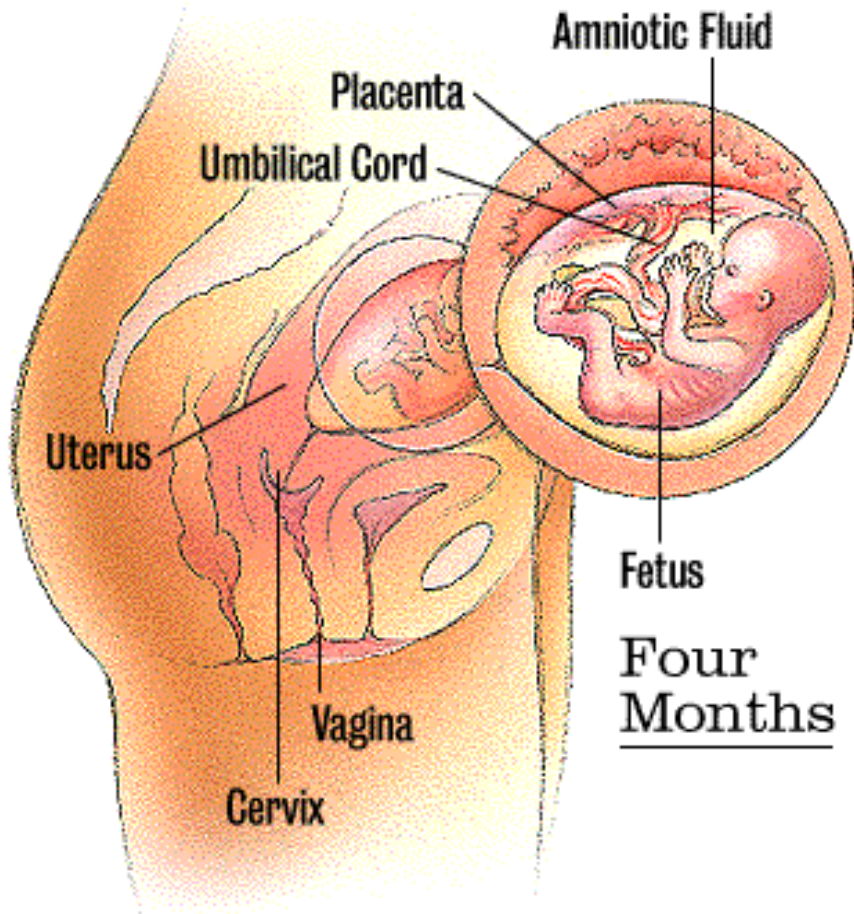
- Quickening occurs: mother feels the baby move for the first time (4th or 5th month or 16 to 20 weeks)
- Referred to as the “best” time in pregnancy for mom
- The gender can be detected around week 20
- Baby begins to hear

Three Months (Weeks 13-16)

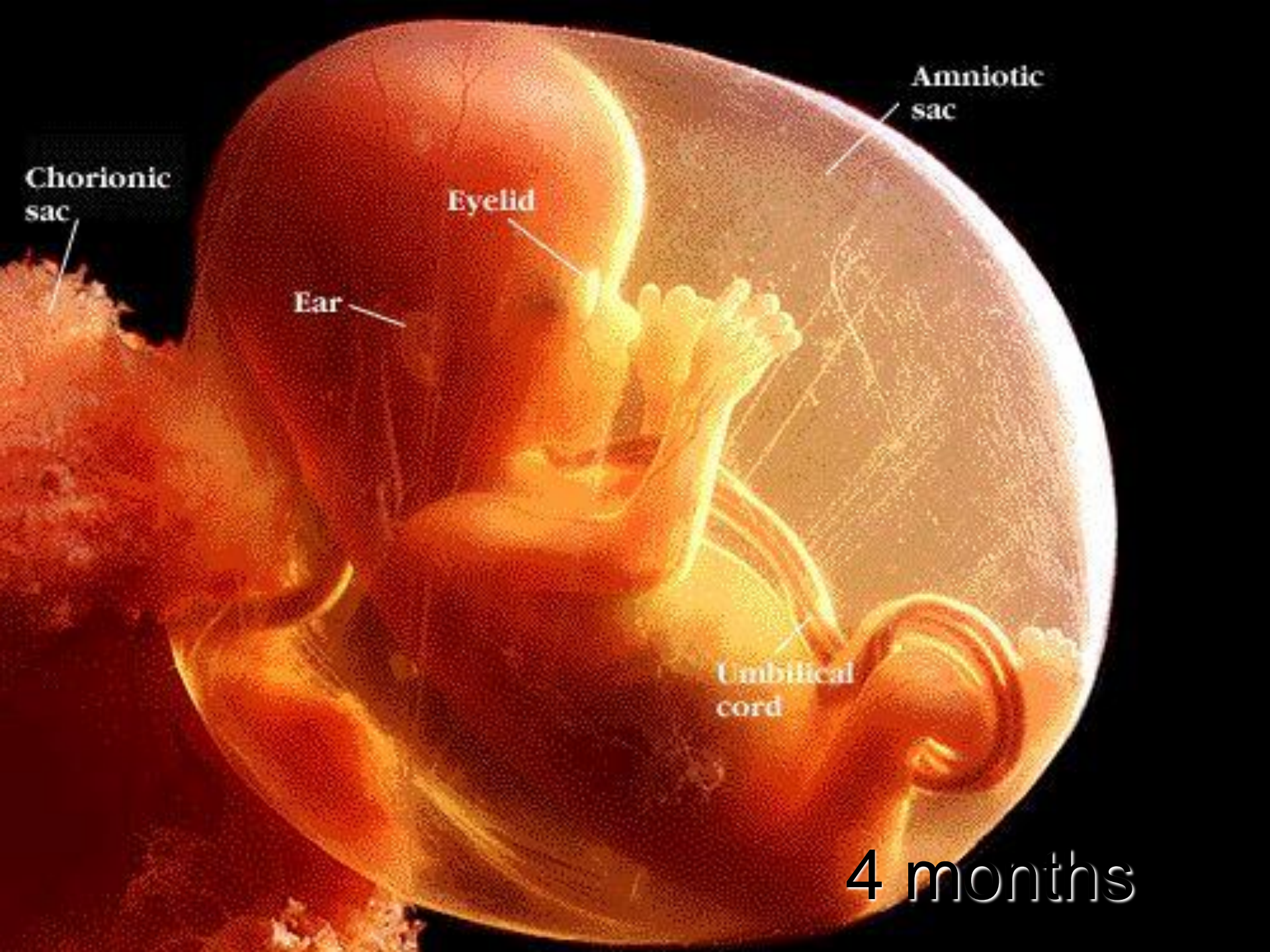


- By now the fetus is **1 inch long** and is fully formed. He/she has begun swallowing and kicking. All **organs** and **muscles** have formed and are beginning to function.

Four Months (Weeks 17-20)



- 3" long
- The baby is covered with a layer of thick, downy hair called **lanugo**. His/her heartbeat can be heard clearly. This is when the mom may feel his/her baby's first **kick**.



Chorionic sac

Amniotic sac

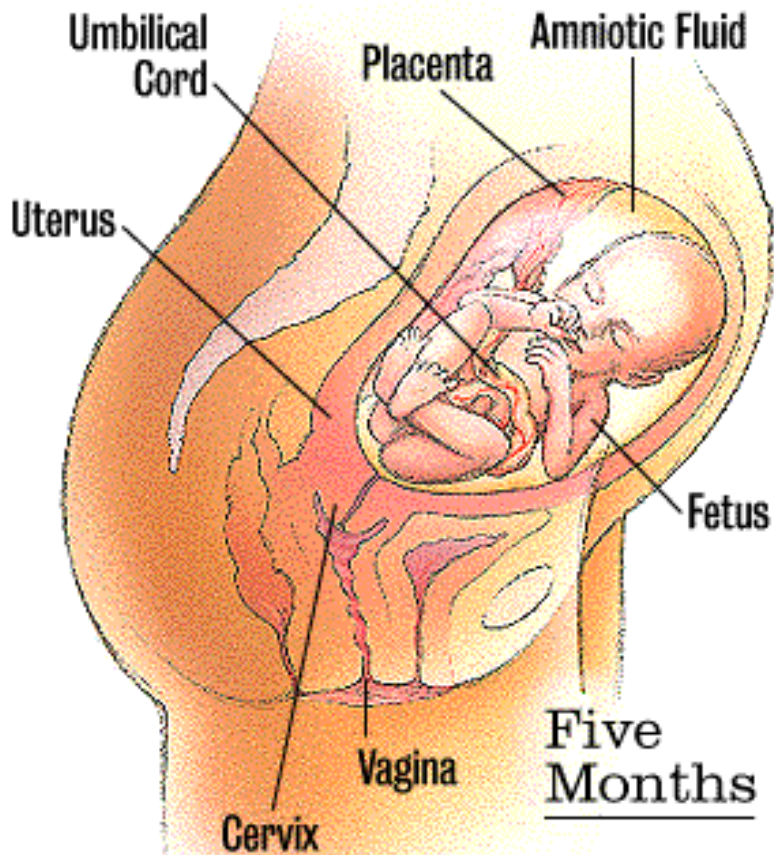
Eyelid

Ear

Umbilical cord

4 months

Five Months (Weeks 21-24)



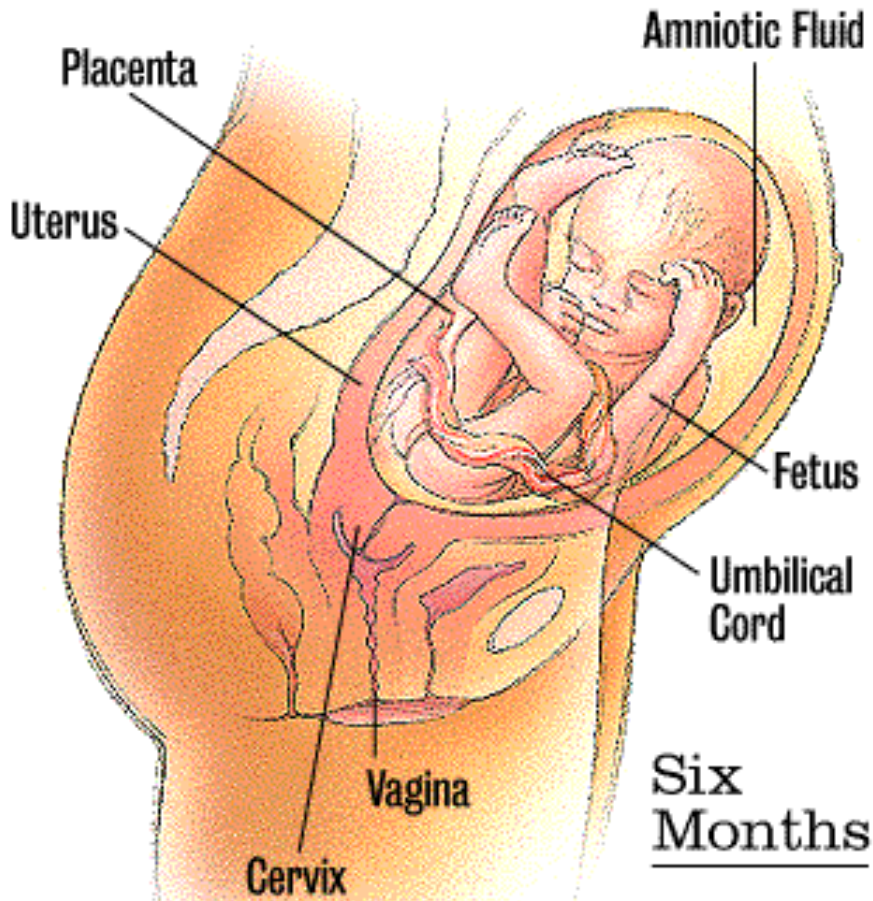
- A protective coating called **vernix** begins to form on baby's skin. By the end of this month, the baby will be about 7 inches long and weigh around $\frac{1}{2}$ lb.



My name is Michael Clancy and I am the photojournalist that photographed Samuel Armas reaching from his mother's womb and reacting to the touch of his surgeon at twenty-one weeks in utero during a spina bifida corrective procedure in 1999."

"Out of the corner of my eye I saw the uterus shake, but no one's hands were near it. It was shaking from within. Suddenly, an entire arm thrust out of the opening, then pulled back until just a little hand was showing. The doctor reached over and lifted the hand, which reacted and squeezed the doctor's finger. As if testing for strength, the doctor shook the tiny fist. Samuel held firm. I took the picture! Wow! It happened so fast that the nurse standing next to me asked, "What happened?" "The child reached out," I said. "Oh. They do that all the time," she responded."

Six Months (Weeks 25-28)



- **Eyebrows and eyelids** are visible. The baby's lungs are filled with **amniotic fluid**, and he/she has started breathing motions. If someone would **talk** or **sing**, he/she can hear you.



Lanugo (downy hair)

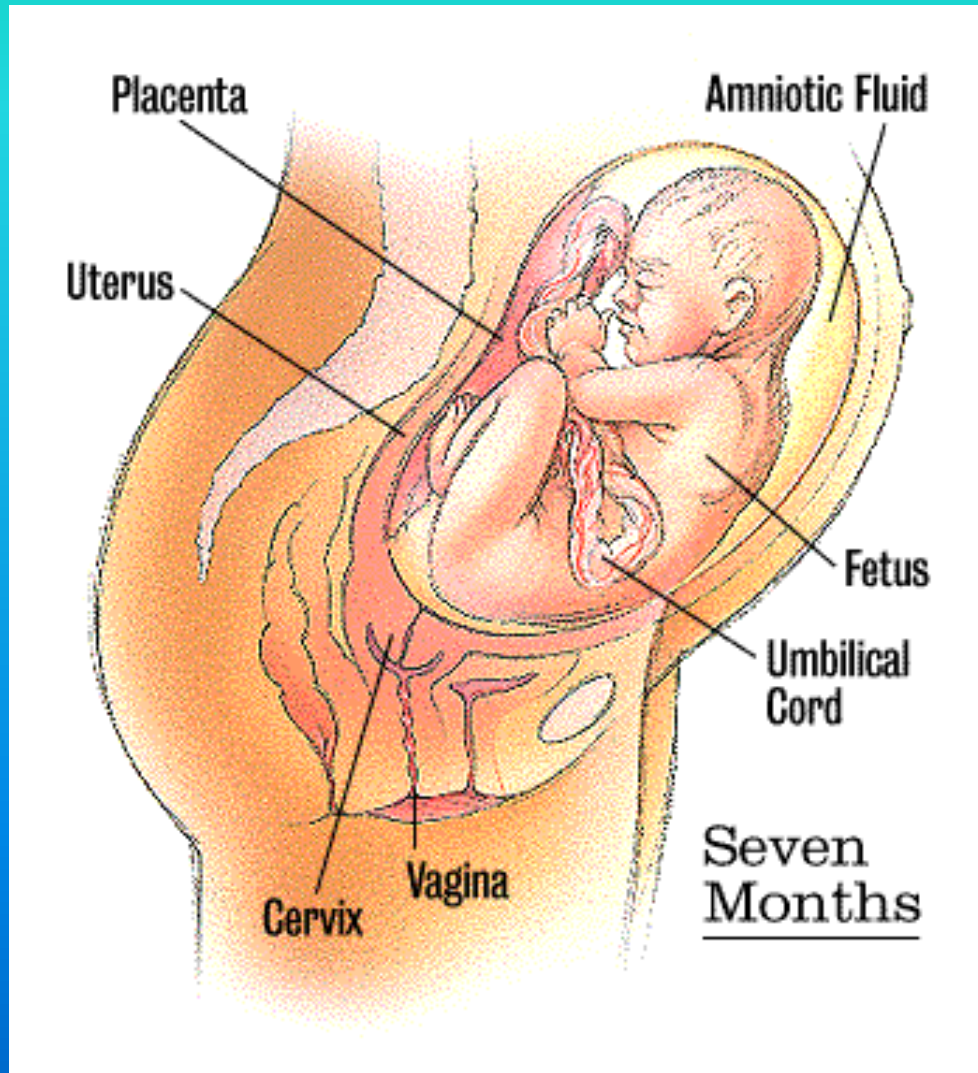
Vernix

6 Months

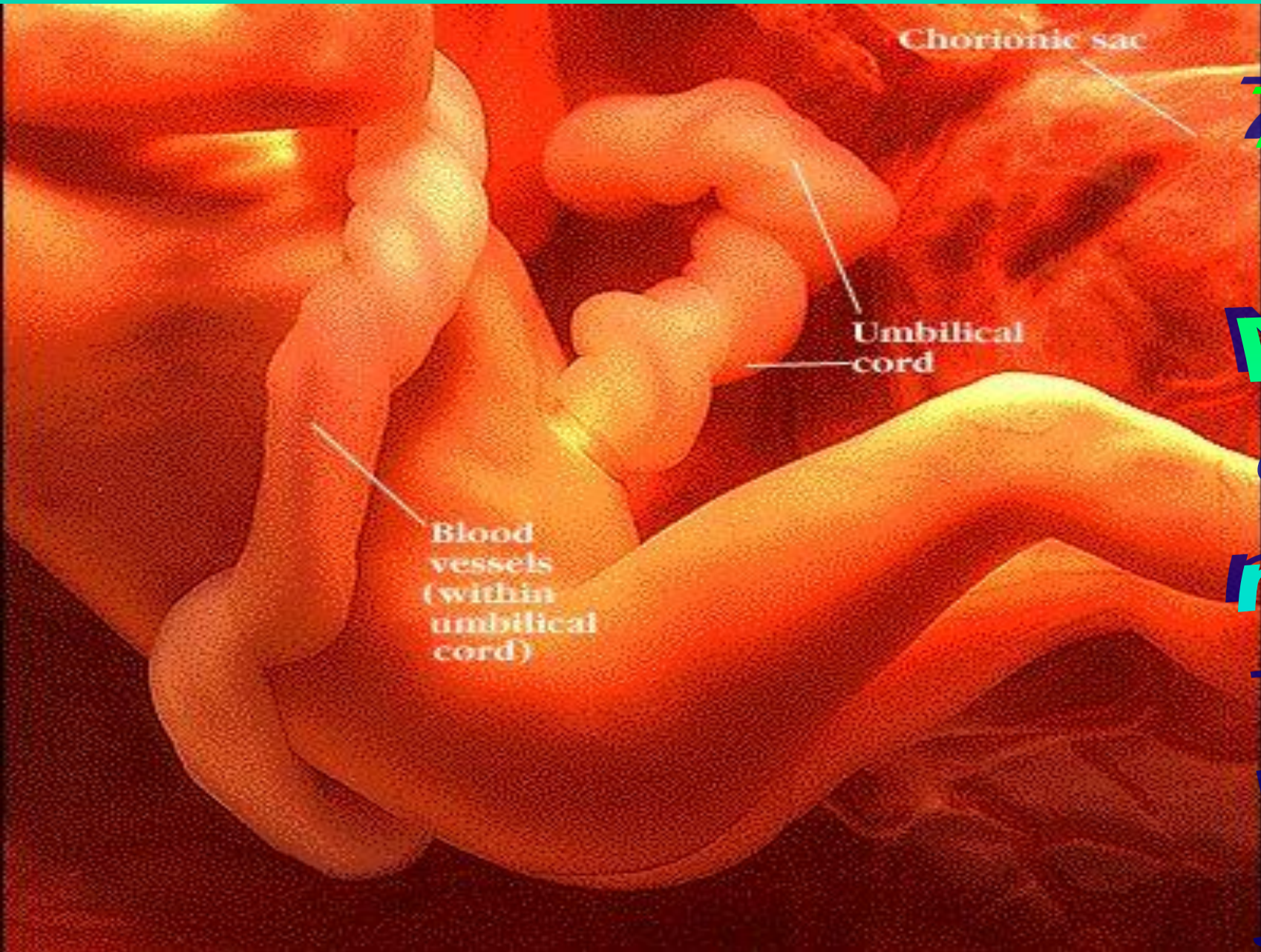
Third Trimester

- Starts at 27 weeks and ends at birth (40 weeks is standard)
- Age of viability: most babies could survive if they were born (around 28 Weeks)
- Baby is fully developed, and just needs to grow and mature in order to be ready for its big debut
- During the 9th month, the placenta provides antibodies to help protect the baby and the lungs are now mature

Seven Months (Weeks 29-32)

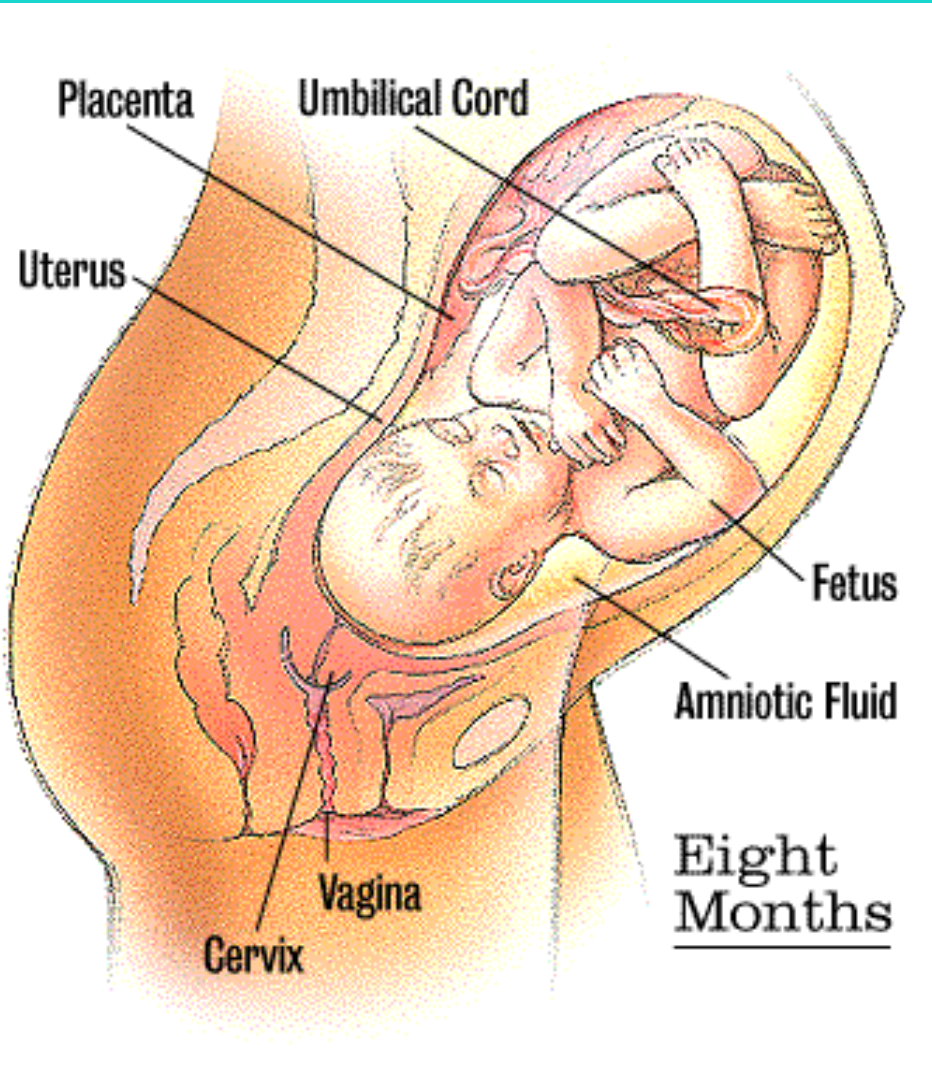


- By the end of the seventh month, the body is well-formed. **Fingernails** cover the fingertips
- Mother may feel Braxton-Hicks contractions during this month



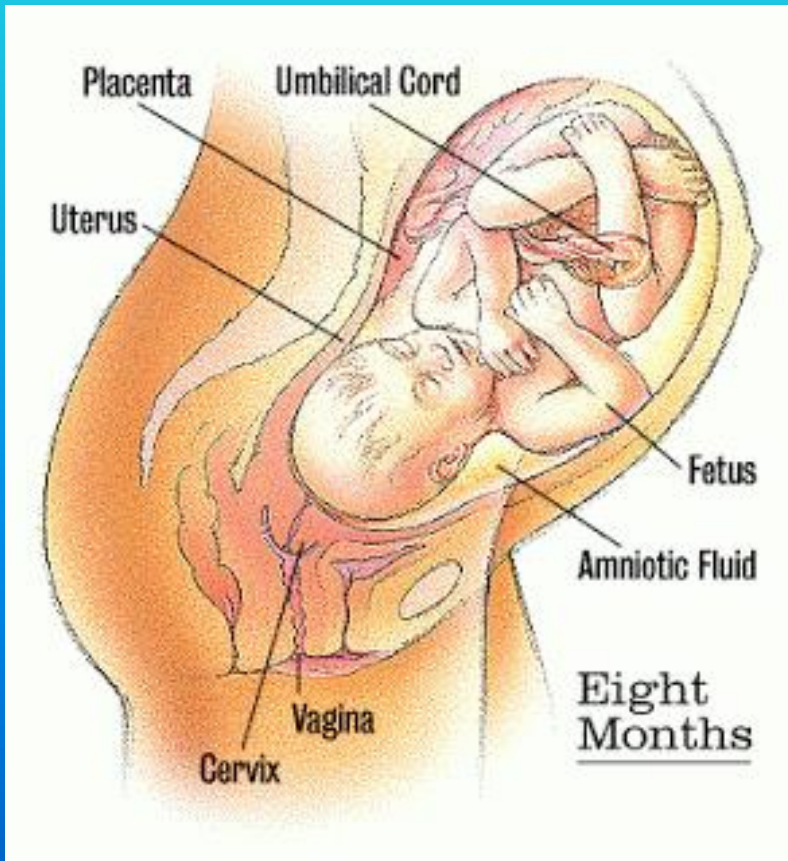
7
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Eight Months (Weeks 33-36)

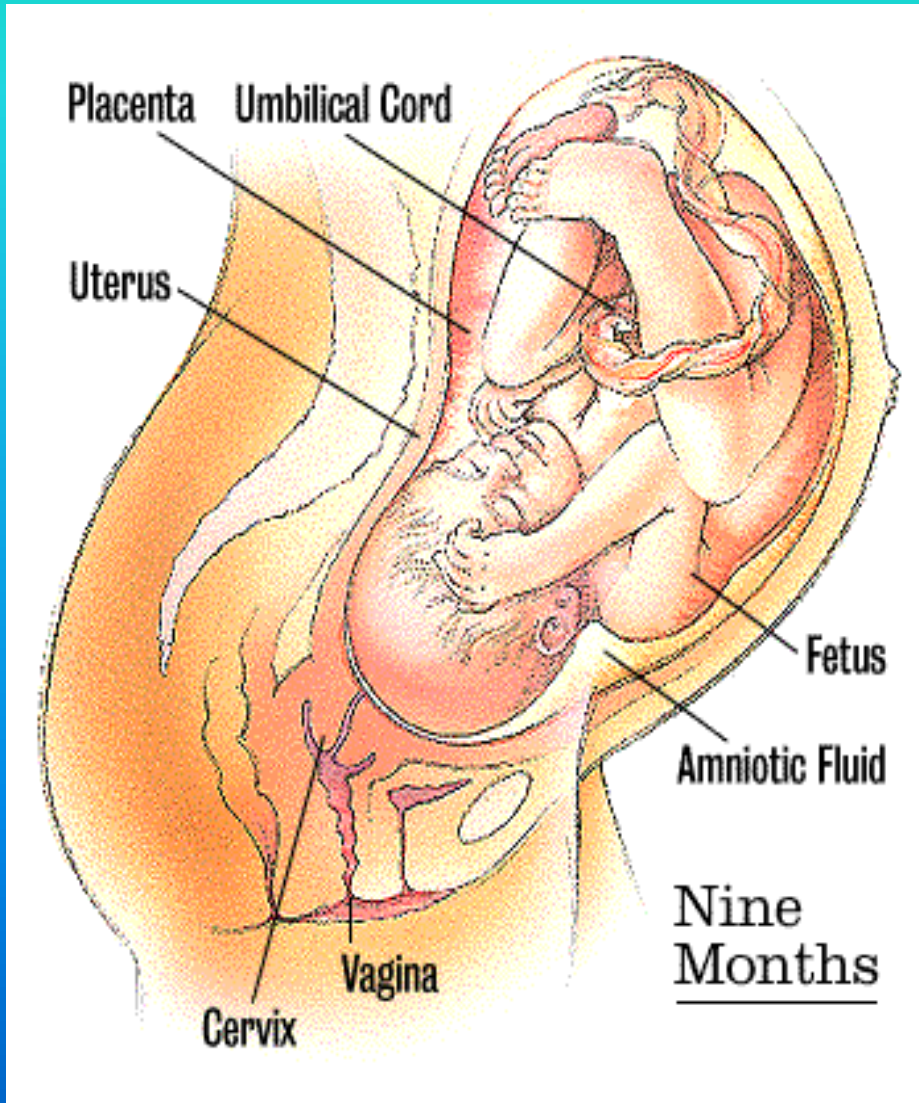


- The baby is gaining about **half a pound per week**, and layers of fat are piling on. He/She has probably turned head-down in preparation for birth. He weighs around **3 – 4 pounds**.

8 months



Nine Months (Weeks 37-40)

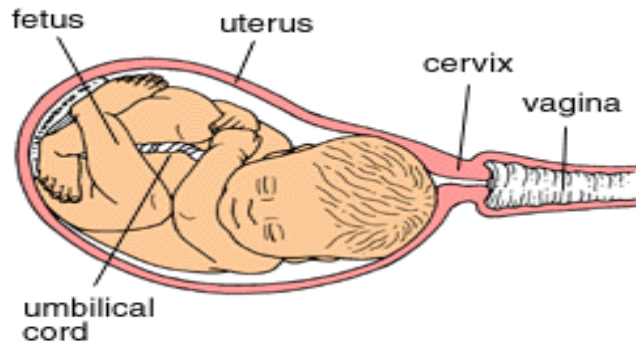


- The baby gains more weight this month and usually weighs between 7-9 lbs. and is 19 - 22 inches when he/she is born. As he/she becomes more crowded, the mom may feel him/her move around less.

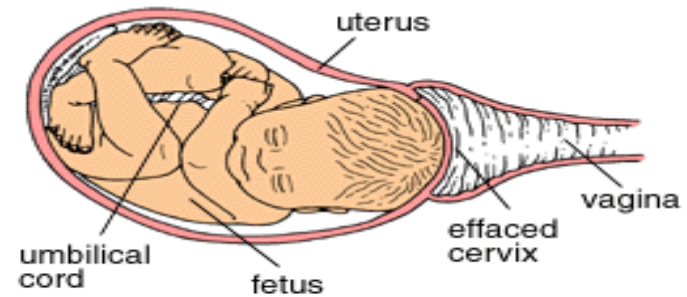
Stages of Delivery

Stage 1

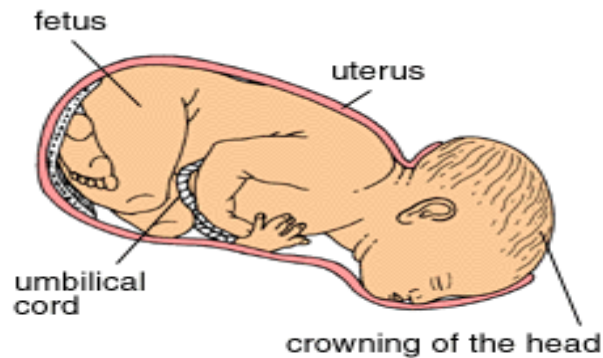
initial (latent) phase



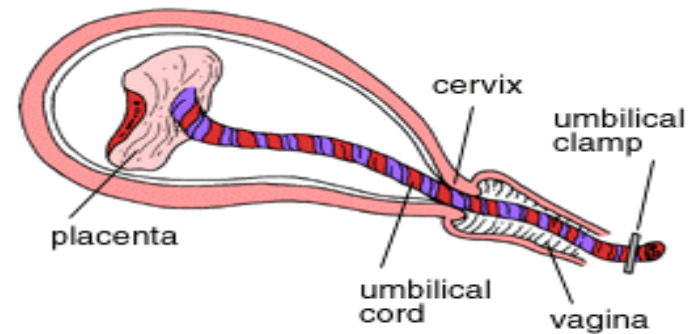
active phase



Stage 2

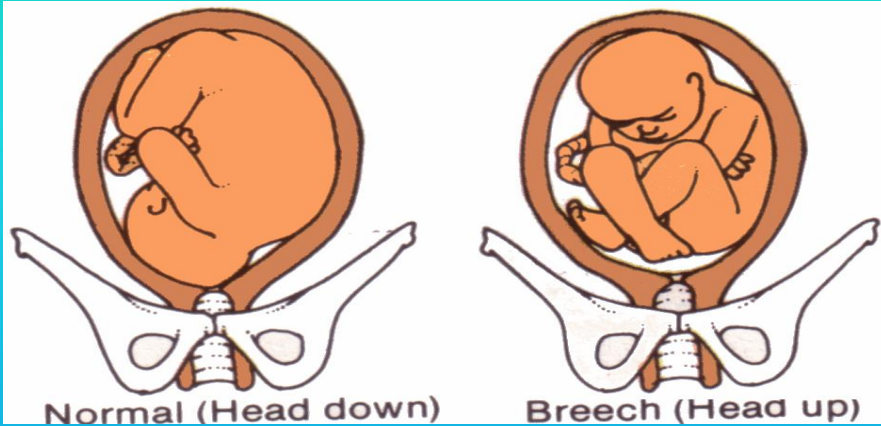


Stage 3

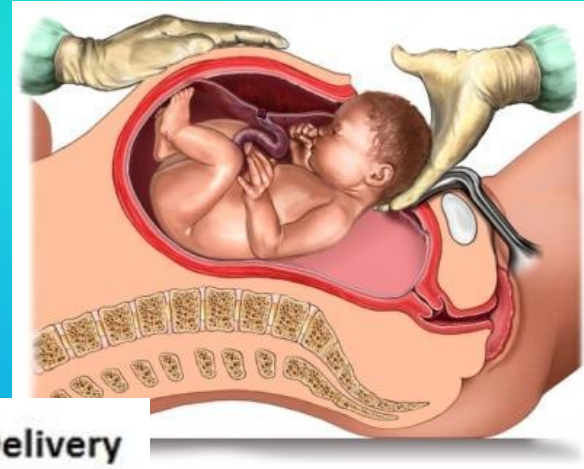


Difficulties of Delivery

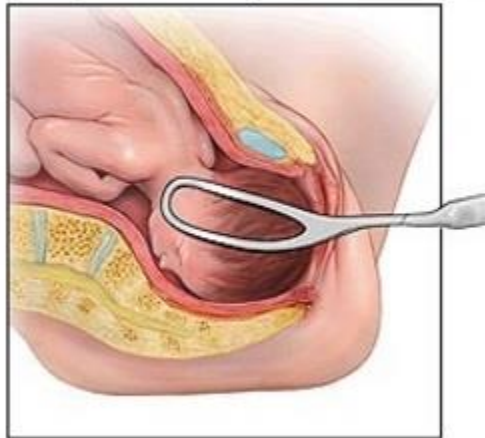
- Breech



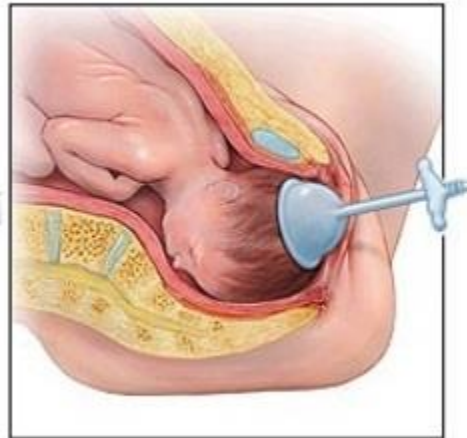
- C-section



Forceps Delivery



Vacuum Extraction Delivery



Parenting Requires Emotional Maturity

- An emotionally mature parent does not take their anger out on their child.



Shaken Baby Syndrome

Damage caused when a baby is shaken

Babies are especially susceptible to injury when they are shaken because their connecting tissues and bone structure have not sufficiently developed to offer any protection.

- 1** Baby's brain bings against its skull when shaken.
- 2** Small blood vessels between the brain and skull can tear, causing bleeding.
- 3** Large blood clots can form, pressing against the brain and causing massive swelling.
- 4** Baby's undeveloped neck muscles offer no resistance to shaking; vertebrae can crush the spinal cord.
- 5** Injuries can result in brain damage, retardation, paralysis, blindness, deafness and death.

Shaking motion

Source: Utah Education Network "Shaken Baby Syndrome" The Salt Lake Tribune

A diagram showing a baby's head and neck in profile, illustrating the effects of shaking. Green arrows indicate the direction of shaking motion. The diagram shows the brain, skull, and neck muscles. Red arrows point to areas of damage, including brain injury, torn blood vessels, and crushed vertebrae.

Average Cost of Raising a Child

- The average cost of raising a child born in 2013 up until age 18 for a middle-income family in the U.S. is approximately \$245,340 (or \$304,480, adjusted for projected inflation), according to the latest annual "Cost of Raising A Child" report from the U.S. Department of Agriculture. The estimate is 1.8 percent higher than the previous year.
- That equates to roughly \$12,800 - \$14,970 per child per year for a two-parent family with a median annual income between \$61,530 and \$106,540. The annual cost can vary based on factors like the child's age, the number of children in the family and the family's income and location.
- The overall cost is a good deal higher than figures estimated in 1960 by the USDA's first "Cost of Raising A Child" report. Back then, "a middle-income family could have expected to spend \$25,230 (\$198,560 in 2013 dollars) to raise a child until the age of 18," according to the new report, which also notes that "health care expenses for a child have doubled as a percentage of total child-rearing costs during that time."