

# Scenario #1: Family Profile



- Mom, 46 & Dad, 35
- Upper Middle Class
- White
- Residence: Delancey Ave.
- Safe Environment
- Pet Cat

# Scenario #2: In Utero Development



- In embryos, the skeletal system is primarily comprised of hyaline cartilage. It does not contain any nerves or blood. Once the baby is born and becomes a small child, the cartilage will be almost fully replaced by bone. This process of bone formation is called ossification.

- The nervous system goes through various different stages of development between the fetus and the baby child. The nervous system gradually develops in a baby between its inception and its birth.

- From the third week of the baby's inception, pieces of the digestive system begin to appear, including its ectoderm, endoderm and mesoderm. The embryo receives nutrients via a yolk sac, a membranous sac which functions as the baby's circulatory system in early embryo stages.

Since our birth issue was congenitally transmitted, no problems that the baby may have had before birth are contributing factors to its birth issue.

# Scenario #3: Birth



Upon birth, our baby was congenitally transmitted a disease known as toxoplasmosis. The mother had been previously and unknowingly infected by the family cat's feces and litter.

# Scenario #4: Early Childhood Nutrition



Because of our baby's toxoplasmosis, she experienced muscle tone reduction. Thus, the parents were instructed by doctors to put the childhood on a protein heavy diet, because muscles require protein to rebuild. In addition, 75-150 OZ of water per day is mandatory to help regulate body functions.

# Scenario #5: You're getting so big!



The baby is growing!! Once the baby is born and becomes a small child, the cartilage that used to be its bones will be almost fully replaced by bone. This process of bone formation is called ossification. Once cartilage has concreted itself at certain spots and joints in the skeletal system, bones begin to both lengthen and widen simultaneously, eventually growing into full adult-sized bones.

# Scenario #6: Playground Accident



Patricia was being pushed on the swing by her crush Brandon when Brandon accidentally shoved her off the spring. Upon impact Patricia crushed her pelvic bone, rupturing it into several dislodged pieces. Patricia would end up unable to walk for 12 weeks, and having to attend physical therapy for over a month.

# Scenario #7: Recovery



It took Patricia some time, but her pelvic bone eventually fully healed. The healing process is a 4 step process. In order, the steps towards a bone healing are: Hematoma formation, fibrocartilage callus formation, bony callus formation, and bone remodeling. Patricia is now up and walking around, healthy as could be.