

Bonding with Your Unborn Baby

First Trimester

The first trimester is one of the busiest as all of the major *organs* and external structures are fashioned including, but not limited to the *brain*, the *heart*, the spine, the eyes, and the lungs. Involuntary movement begins at five to six weeks.⁵ A few weeks later, the four chambered heart is complete and beating like an adult's and her tiny brain is becoming highly developed.⁵ By just *eight* weeks, generally around the time a mother realizes she is pregnant, her baby has grown from a *single* cell to over one billion cells. The baby now has more than *90* percent of the body structures found in an adult.⁵

Second Trimester

- · Mom begins feeling better.
- Life gets more "back to normal".
- Nausea eases up.
- Mom has more energy.
- Her hormones even out.
- The exhausting work of creating life becomes more comfortable.

You Are More Connected Than You Realize

Around 18 weeks, babies begin producing the same hormones found in adults. Cortisol is released when the baby feels pain or distress. Your state of mind also has an impact on your baby. Moms who suffer extreme stress during their pregnancies have greater risk of delivering babies who are:^{12,13}

- Premature,
- Lower in birth weight, and
- Fussier and more temperamental.

What moms feel, babies feel. The good news is that moms who have good social support, who are able to gain some control over their stressful situations, and who can get good rest and light exercise, may be able to buffer the effects of stress on their babies.

Unborn babies are comforted by:

- The gurgle and rumble of mom's body
- Mom's heartbeat
- Mom's voice⁹
- Singing

The Third Trimester

Bonding during the third trimester is easier in many ways. Mom can now feel the baby *moving* and can often feel the baby's kicks and jabs, too. Some ways to bond with your baby during the third trimester include:

- Sharing music by putting headphones on your belly
- · Stretching and calming exercises
- Nesting using that last burst of energy to prepare your home for after your baby's birth

Conclusion

Enjoy the nine months you have of watching and feeling your baby develop within you. Your baby is a unique little person who is connected to you in such a special way. Regardless of whether you give birth to a son or a daughter, the bond between a parent and a child is lifelong. Soon you'll be celebrating a very special birthday.

Resources include:

- 1. National Human Genome Research Institute. Chromosomes. Found at https://www.genome.gov/26524120/chromosomes-fact-sheet/, accessed 9/24/2018, updated June 16, 2015
- 2. Lindemann, Dr. Charles. Oakland University. Mechanisms of Sperm Mobility. Found at http://www2.oakland.edu/biology/lindemann/spermfacts.htm, accessed 9/24/2018.
- 3. Eveleth, R. Smithsonian Institution. There are 37.2 Trillion Cells in Your Body. Found at http://www.smithsonianmag.com/smart-news/there-are-372-trillion-cells-in-your-body-4941473/, accessed 9/24/2018.
- 4. Hum, A. Biol. An estimation of the number of cells in the human body. 2013 Nov-Dec;40(6):463-71. Found at https://www.ncbi.nlm.nih.gov/pubmed/23829164, accessed 9/24/2018.
- The Endowment for Human Development. Prenatal Form and Function. Found at http://www.ehd.org/dev_article_intro.php, accessed 9/24/2018.
- 6. The Endowment for Human Development. Heartbeat Calculator. Found at http://www.ehd.org/pregnancy-heartbeat-calculator.php, accessed 9/24/2018.
- 7. NOVA. Amazing Heart Facts. Found at http://www.pbs.org/wgbh/nova/heart/heartfacts.html, accessed 9/24/2018.
- 8. The Endowment for Human Development. Age of Viability. Found at https://www.ehd.org/movies.php?mov id=235, accessed 9/24/2018.
- 9. Heritage House '76, Inc. The Human Fetus. 2018.
- 10. Murkoff, H. What to Expect When You're Expecting. The Fifth Month. p. 233. Workman Publishing, 2016.
- 11. The Endowment for Human Development. Prenatal Summary. Found at https://www.ehd.org/prenatal-summary.php, accessed 9/24/2018.
- 12. DiPietro, J.A. (2004). The role of maternal stress in child development. Current Directions in Psychological Science, 13(2), 71-74.
- 13. Huizink, A.C., Mulder, E.J.H., Buitelaar, J. K. (2004). Prenatal stress and risk for psychopathology: Specific effects or induction of general susceptibility? Psychological Bulletin, 130(1), 115-142.
- 14. American Pregnancy Association. Pregnancy Week 28. Found at http://americanpregnancy.org/week-by-week/28-weeks-pregnant/, accessed 9/24/2018, updated September 2, 2016.