

The Miracle of Life

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Understanding the biological process of human development helps us to appreciate the miraculous nature of the creation of life, the sanctity of human life and encourages worship of God, the Creator of all life. Only by understanding the awesomeness of the creation of life and putting it side by side with the desolation of the destruction of life by abortion can we fully comprehend the enormity of the disaster befalling our world.

Sexual intercourse was designed by God to, within the boundaries of marriage, fulfill His commandment to “be fruitful and multiply” (Genesis 1:28). It was also a gift given to us to increase intimacy as well as to give us pleasure (Song of Solomon 2:3). It is within the bounds of matrimony that the two become one - where sexual intercourse can be freely given and freely received, without fear and without guilt (Genesis 2:24). It is within the bonds of matrimony where the conception of a child should always be cause for rejoicing (Psalms 127:3). And it is within the bonds of matrimony where a husband and wife in the eyes of God become mother and father and nurture a child to grow up in the fear and admonition of the Lord (Ephesians 6:4).

Miracle of Reproduction

The creation of a human being through the sexual union of two people is a miracle. At the exact moment of conception, a unique human being - body, soul, and spirit - comes into existence. Never before has one existed like this person and never again will another exist like this person. Human beings are the pinnacle of God’s earthly creations because we are made in His image.

The female reproductive system starts developing between weeks 4 and 5 of pregnancy. This development continues until the 20th week of pregnancy. Unlike men, who produce new sperm daily throughout most of their lifetime, every baby girl is born with about one to two million immature eggs (or follicles) in her ovaries. Each egg consists of one cell and has 23 Chromosomes, containing one half of all the instructions (DNA) needed for the creation of a human being.

A woman has two ovaries, one on the left and one on the right of her uterus. The uterus, or womb, is where a baby develops. Once a woman comes to sexual maturity (puberty), she will release one egg a month - called ovulation. This is in preparation for a possible pregnancy. The egg will travel from the uterus to the corresponding fallopian tube. The egg will then travel down the fallopian tube and will live 12 to 24 hours after ovulation.

However, the sperm can survive in the vagina and the uterus for 48 to 72 hours, meaning there is a window of around 6 days in which fertilization can take place. When a man and woman engage in sexual intercourse and a man comes to the point of orgasm, an average of 40 to 250 million sperm are released in a man’s semen and

introduced into the woman's vagina. Each sperm consists of one cell that has a head, midpiece and tail called the flagellum. The flagellum whips back and forth propelling the sperm forward. Each sperm has 23 Chromosomes. The DNA information in a single sperm contains 37.5 MB worth of data.

Due to the high level of acidity in the vaginal cavity, a large number of sperm die off in that area. Those that remain will try to get through the cervical slit, a tiny opening which leads into the uterus. Continuing their journey, the remaining sperm must swim through the uterus and make their way to the fallopian tubes. Half of the remaining sperm will go to the left fallopian tube, and half to the right. All those sperm choosing the fallopian tube where there is no egg will soon die. The remaining sperm that have chosen the correct fallopian tube will continue on their journey to find the egg. Because of the many obstacles faced by sperm, only a few hundred will even come close to the egg.

Fast-swimming sperm can reach the egg in half an hour, while others may take days. Only one sperm can enter the egg. The egg and sperm each contain 23 chromosomes - exactly one half of each parent's DNA. At the moment of fertilization, the 23 chromosomes from the sperm combine with the 23 chromosomes from the egg to create a unique human being with 46 chromosomes. When the sperm penetrates the egg, the surface of the egg changes so that no other sperm can enter. At the moment of fertilization, the baby's genetic makeup is complete.

Every detail of the child's development - sex, eye color, hair color, fingerprints, intellectual capacity, propensities and more - is determined at this point. Nothing else is added during the child's development in his mother's womb, for nothing else is needed - except nutrients and time. Even the child's blood type is often different from its mother's. To say that a baby in the womb is a "part" of the mother is incorrect. It is a distinct, living human being, created in the image of God, who is developing within the mother. It is not "potential" life - it is a person, a human life - with infinite potential.

Preborn Development

Psalm 139:13-16 (NIV) tells us that God takes credit for creating the child in the womb: *"For you created my inmost being, you knit me together in my mother's womb. I praise you because I am fearfully and wonderfully made; your works are wonderful, I know that full well."* It is a beautiful picture of our Creator God, lovingly and creatively forming us in our mother's womb. The miracle of a child developing in the womb is now better known than ever before through the amazing technology of the ultrasound. Having a rough understanding of how the child develops in the womb helps us better understand the continuing miracle that starts at conception.

Anywhere from 6-12 days after conception, the blastocyst (an embryo that has developed for 5 - 6 days after fertilization) will embed into the uterine lining and begin the embryonic stage. By weeks four and five gestational age, the heart is now beating at

a steady rhythm. At week six, a vaginal ultrasound could possibly detect an audible heartbeat at this time. At seven weeks, every essential organ has begun to form in the embryo's tiny body, even though it still weighs less than an aspirin. The hair and nipple follicles are forming, and the eyelids and tongue have begun formation. At week eight, the ears are continuing to form externally and internally.

During week eight, everything that is present in an adult human is present in the small embryo. The bones are beginning to form, and the muscles can contract. The facial features continue to mature, and the eyelids are now more developed. The embryo is at the end of the embryonic period and begins the fetal period. The embryo is about 1 inch long, and is the size of a bean. During weeks 14 thru 16 gestational age, the fetus's skin is transparent and a fine hair called *lanugo* begins to form on the head.

The fetus begins sucking and swallows bits of amniotic fluid. Fingerprints which individualize each human being have now developed on the tiny fingers of the fetus. Flutters may be felt in the mom's growing abdomen as the fetus begins to move around more. The fetus has reached six inches in length and weighs about 4 ounces.