

Reproductive technologies

[Science](#), [Anatomy](#)



Reproductive Technologies Introduction Twenty years ago, the only reproductive technologies available to infertile couples were artificial insemination and in vitro fertilization. Since that time, there has been an increase of reproductive technologies, and a multitude of options are now available to those couples who are infertile. Infertility affects ten percent of men and women. One in six Canadian couples is infertile. To overcome infertility many couples have chosen the path of reproducing artificially using reproductive technologies.

Reproductive technologies are a term referring to methods used to achieve pregnancy by artificial or partially artificial means. They help improve a couple's chance of conceiving and carrying a child to term. The Canadian government had recognized the importance of reproductive technology and created the Bill C-13 which was introduced into the House of Commons on October 9th, 2002. This act is respecting assisted reproduction and related research. Attempts at the first non-human embryo transfer date back to the 1980's.

Improvements and discoveries over the following decades lead to the first successful IVF births in 1959 in rabbits by a Chinese scientist. The first human in vitro pregnancy was achieved in Australia in 1973, but it resulted in an early miscarriage. Louise Brown was the first baby conceived through in vitro fertilization. She was born on July 25, 1978, in Oldham, England. Dr. Robert Edwards and Patrick Steptoe had been researching fertility methods since 1968 that included artificial insemination and in vitro fertilization.

In vitro fertilization is the most common type reproductive technology. This process involves sman's spermand the women's eggs being collected and
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combined in a laboratory dish. The embryo is then transferred to the women's uterus. One cycle of IVF costs on average \$12,400. It has a success rate of approximately twenty eight to thirty five percent. Artificial insemination or intrauterine insemination is another reproductive technique. A sample of sperm is directly injected into a women's uterus. This allows the sperm to be screened for genetic disorders.

The success rate is approximately five to twenty five percent. A new development in IVF is in vitro maturation. Immature eggs are collected from the ovary and ripened outside the women's body. They are then fertilized through IVF. This treatment is suitable for women who cannot produce mature eggs. IVM has a success rate up to thirty percent. Technology is not the only type of fertility treatment for infertile couples. Couples may also take fertility drugs. Women can take these drugs to act hormones for women who aren't producing eggs properly.

Fertility drugs can range from fifty dollars to five thousand, depending on the type of treatment. Though reproductive technology helps infertile couples conceive, it also has its setbacks. Risks with reproductive technologies include bleeding or infection, birth defects, increased risk of cancer physical and financial stress and the chances of miscarriages at twenty percent. Key Questions How has reproductive technologies affected fertility? Reproductive technologies have increased fertility. Couples who are unable to have children can now do so due to assisted reproductive technologies.

It has provided happiness and hope for couples who were first deemed as infertile. Reproductive technologies have also helped same sex couples of having children. Women can conceive through donated sperm through in <https://assignbuster.com/reproductive-technologies/>

vitro fertilization or through artificial insemination. Also men can have children through a surrogate who can conceive with the multitude of reproductive technologies. Couples who settle down later in life with lower fertility rates can still have children with assisted reproductive technologies. What issue has arisen from assisted reproductive technologies?

Reproductive technologies have caused an ethical dilemma. Many individuals do not believe that using technology is proper to have children. The Catholic Church does not support reproductive technologies. The church regards these procedures as dehumanization and depersonalization of reproducing. Many believe that children should come into being as a direct result of sexual intercourse of the parents, where they are accepted as a 'gift' and blessing and not as a 'product' of doctors. Technology can be used to assist the fertility of a couple's sexual act, but it should never replace it.

Is reproductive technology negatively or positively affecting couples? Reproductive technologies are positively affecting couples. Couples can fulfill their wish of having children. There are many forms of reproductive technologies to help address every couple with conceiving a child. However, the couple's family view on reproductive technology can negatively affect them. If a couple comes from a family who does not believe in having a child through technology that can put great stress on the couple. The couple would not like to go against their family's belief but still would like a child.

Their family could tell them to wait and have a child naturally which could result the couple to further decrease their chances of conceiving. Will there be more types of reproductive technologies in the future? With technology constantly changing and new items being brought out every few years, it

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could be likely for different types of reproductive technologies to be discovered. As technology keeps growing, we are constantly coming up with new ways to do things. With advanced technology we are likely to find new ways to help couples to conceive a child. Will fertile couples use reproductive technologies to have children?

Fertile couples may use reproductive technologies to have children. With men and women fully establishing their careers before settling and having children they may not have the time to raise children in the earlier stages of their relationship. When they are ready to they could use reproductive technologies to speed the process of having children. ASP Connections Anthropologists would look at the point of view of cultures toward reproductive technology. They would see the beliefs and opinions of a culture and how the society develops based on reproductive technology.

The school of thought theory that relates to this is cultural materialism. Cultural Materialism is based on the idea that the true explanation of a culture can be derived by examining members decisions regarding human reproduction and economic production This connects to reproductive technologies because it is based on the idea that the true explanation of a culture can only be taken by examining member's decision regarding human reproduction. It also believes in that the type of technology that is adopted by a culture determines what type of society they develop in.

A culture could be fine regarding couple using technology to help them conceive or they could be against it because the child is not conceived naturally. Anthropologists could ask; how reproductive technology is viewed in cultures and groups and does other cultures belief influences another's?

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Sociologist would explain reproductive technology as something that is helping society grow. Reproductive technology is helping infertile couples have children, therefore growing their society and economy. These children will grow up and help our economy by buying items and replacing workers who are retiring.

The school of thought theory that relates to reproductive technologies is Neo-Marxism. Neo-Marxism relates to reproductive technology because it looks specifically to economic power to see the various ways in which it influences society. All aspects of reproductive technology are very expensive. If a wealthy couple is infertile they can easily go to reproductive technology and undergo the treatments. For a couple who are lower or middle class it will be harder for them to afford the treatments. The wealthy have more power to easily access anything they need.

Sociologist could ask whether reproductive technologies are positively or negatively affecting society and if only the wealthy make up the most users of reproductive technology? Psychologists would focus on the behaviour of the individuals who know reproductive technology. They would find out personal opinions on how reproductive technologies are changing society. They would also look at individual reactions of couples who are undergoing reproductive technology. They would see how their emotions are to failure rates of reproductive technologies and success rates.

The school of thought theory that relates to reproductive technologies is behaviourism. Behaviourism focuses on childhood experiences and the practices parents use to raise their children. If a child grows up in a family that follows religious beliefs and one of those beliefs is having children the

natural way then that will affect their emotions and behaviour towards reproductive technology. An individual may be hesitant in accepting reproductive technology as a method of conceiving and fear what their family may think of them.

Questions that a psychologist could ask is if family values affect an individual's behaviour toward reproductive technology and are individual thoughts toward reproductive technology positive or negative? Case Study Obstetrics and Gynaecologists at the University Hospital in Ghent, Belgium completed a case-control study of all pregnancies obtained with assisted reproduction technology in the Dutch-speaking part of Belgium from 1992 until 1997 to investigate differences in peripartum obstetric events and the prenatal outcome.

They studied three thousand fifty-seven singleton and 1241 twin pregnancies were studied. About 90% of pregnancies resulted from in vitro fertilization; the remainder resulted from intracytoplasmic sperm injection. Control subjects were selected from a regional register and were matched for maternal age, parity, fetal sex, plurality, and date of delivery. The main outcome measures were duration of gestation, birth weight, prenatal death, prenatal morbidity, incidence of congenital malformations, and incidence of caesarean delivery.

The results were odd ratios and 95% confidence intervals were 2.6 (1.4-4.8) for prenatal mortality, 3.5 (2.2-5.7) for birth before 33 weeks of gestation, and 1.7 (1.5-1.9) for caesarean delivery in singleton pregnancies that resulted after in vitro fertilization. Twin pregnancies obtained with in vitro fertilization, were similar for all outcome measures, except for the <https://assignbuster.com/reproductive-technologies/>

incidence of caesarean delivery (odds ratio, 1.4; 95% confidence interval, 1.2-1.6) compared with spontaneously conceived twin pregnancies. The prenatal outcome of singleton pregnancies obtained with in vitro fertilization is significantly worse than that of spontaneously conceived pregnancies, mainly because of the increased rate of preterm birth. The outcome of twin pregnancies obtained with in vitro fertilization is comparable with that of normally conceived twins. For both singleton and twin pregnancies obtained with in vitro fertilization, the incidence of caesarean delivery is increased.

This is important to reproductive technologies because it shows that using reproductive technologies could cause defects in children and having more children than intended. Bibliography (No author) At Issue: Human Reproductive Technology. (n. d.). SIRS Issues Researcher. Retrieved October 12, 2012, from sks.sirs.com/cgi-bin/hst-article-display?id=S200008707-0-6416&artno=0000307357&type=ART&shfilter=U&key=&title=At%20Issue%3A%20Human%20Reproductive%20Technology&res=Y&ren=N&gov=Y&lnk=N&ic=N (No author) Louise Brown. (2012). Biography.com. Retrieved 07:50, Oct 28,