

Dr. Jenn Dr. Jenn Berman

The first question people ask when they find out that you are pregnant is "Is it a boy or a girl?" Most

parents give the politically correct answer "we just want a healthy baby," although the truth is that most couples do have a preference.

Although it is not something we like to admit, gender often determines everything from how we relate to our baby to our expectations of our child.

Now, thanks to current technology, parents can actually choose the gender of their unborn child.

These methods range from whimsical home activities to highly invasive laboratory and surgical techniques.

laboratory and surgical techniques. The science was originally developed as a means of screening out, based on gender, the likely candidates for developing and transmitting to future generations genetic diseases which are passed down only to specific genders. Now that the technology is available, however, families are choosing sex selection for a variety of other reasons, including the balance of their family.

While these methods are controversial, every parent has a right to know what is available. Here are some of the most commonly used methods, in order from least to most invasive.

The Shettles' Method

Created by Landrum Shettles, M.D., Ph.D., an associate professor of obstetrics and gynecology at Columbia University's College of Physicians and Surgeons, the Shettles' Method is based on the premise that male-producing sperm are smaller and faster but are not able to survive as long in a woman's body, whereas the female producing sperm are larger and slower moving but are more resistant to stress and are able to survive longer while waiting for the egg to drop. Shettles recommends that couples wanting a girl should time intercourse 2-5 days prior to ovulation. That way the male sperm, which cannot survive as long, will no longer be available when a fertile egg is released increasing the chances of a female baby. Conversely, couples that want to have a male baby are advised to time intercourse as close to ovulation as possible. Shettles recommends trying to conceive from one day before until two days after for boys. He also recommends creating a more acidic or alkaline environment for the sperm based on the gender desired. Shettles claims his techniques are 75 % accurate. His methods are the most highly regarded of the at-home methods.

CONTINUED ON PAGE 28

CONTINUED FROM PAGE 27 Sperm Spinning (The Ericsson Albumin Method)

Sperm Spinning, also known as the Ericsson Albumin Method, was created by Ronald J. Ericsson, Ph.D. Doctors using this method filter a sperm sample through a water-soluble protein called albumin. Because the Y-

are lighter, they rise to the top whereas the X-chromosome bearing sperm (male) are lighter, they rise to the top whereas the X-chromosome bearing sperm (female) are heavier and sink to the bottom. The doctor then performs artificial insemination using the X or Y sperm depending upon the couple's preference. Because some of the sperm that makes the opposite gender can get into the isolated pack this is not a perfect method. It is believed that this method is 78 to 85 % accurate for boys and 73 to 75 % for girls.

Sperm Sorting (MicroSort)

The MicroSort Method stains the semen sample with a fluorescent dye that binds to chromosomes. A laser light is then used to illuminate the dye. The X chromosomes, which are bigger and have absorbed more dye, glow brighter and therefore are distinguishable from the Y-chromosomes. The sperm then pass by an electrode that gives the X's a positive charge

and the Y's a negative one. This makes the Y glow a green color and the X glow red. They are then separated into different receptacles. Either sample can then be used to fertilize a woman's eggs. The accuracy of this method depends on the purity of each sample. This method has

been cited to be 74 % accurate for boys and 91 % accurate for girls.

Embryo Selection (Preimplantation Genetic Diagnosis)

Preimplantation Genetic Diagnosis (PGD) was originally created to prevent the transfer of serious genetically linked diseases that are gender related, such as cystic fibrosis or hemophilia. PGD is the only gender selection method that

is 100 percent accurate but it is also the most invasive and expensive of all the methods. The woman's eggs are retrieved and fertilized with sperm in the laboratory creating embryos. After three days in a Petri dish these embryos have reached the six to eight cell stage of development and are ready for a biopsy. One of their cells is then removed for molecular diagnosis. This allows the doctor to determine the gender of each embryo as well as screen for hundreds of genetic diseases prior to implantation.

It is very important that parents who

choose to use these methods fully think through the long-term consequences of their choices. In addition, despite the great effort and cost you may go through to get pregnant using one of the above methods, since no techniques is truly guaranteed, you must be prepared to get pregnant with a child of the opposite gender.

Recommended books:

How to Choose the Sex of Your Baby: The Method Best Supported By Scientific Evidence By Landrum B. Shettles, M.D., Ph.D. and

David M. Rorvik

Chasing the Gender Dream: The Complete

Chasing the Gender Dream: The Complete Guide to Conceiving Pink or Blue with the Latest Sex Selection Technology and Tips from Someone Who Has Been There By Jennifer Merrill Thompson

Taking Charge of Your Fertility: The Definitive Guide to Natural Birth Control, Pregnancy Achievement, and Reproductive Health By Toni Weschler, MPH