

In-Vitro Fertilization

T H E B A S I C S



An overview of the methods and
procedures of in-vitro
fertilization (IVF)

What is IVF?

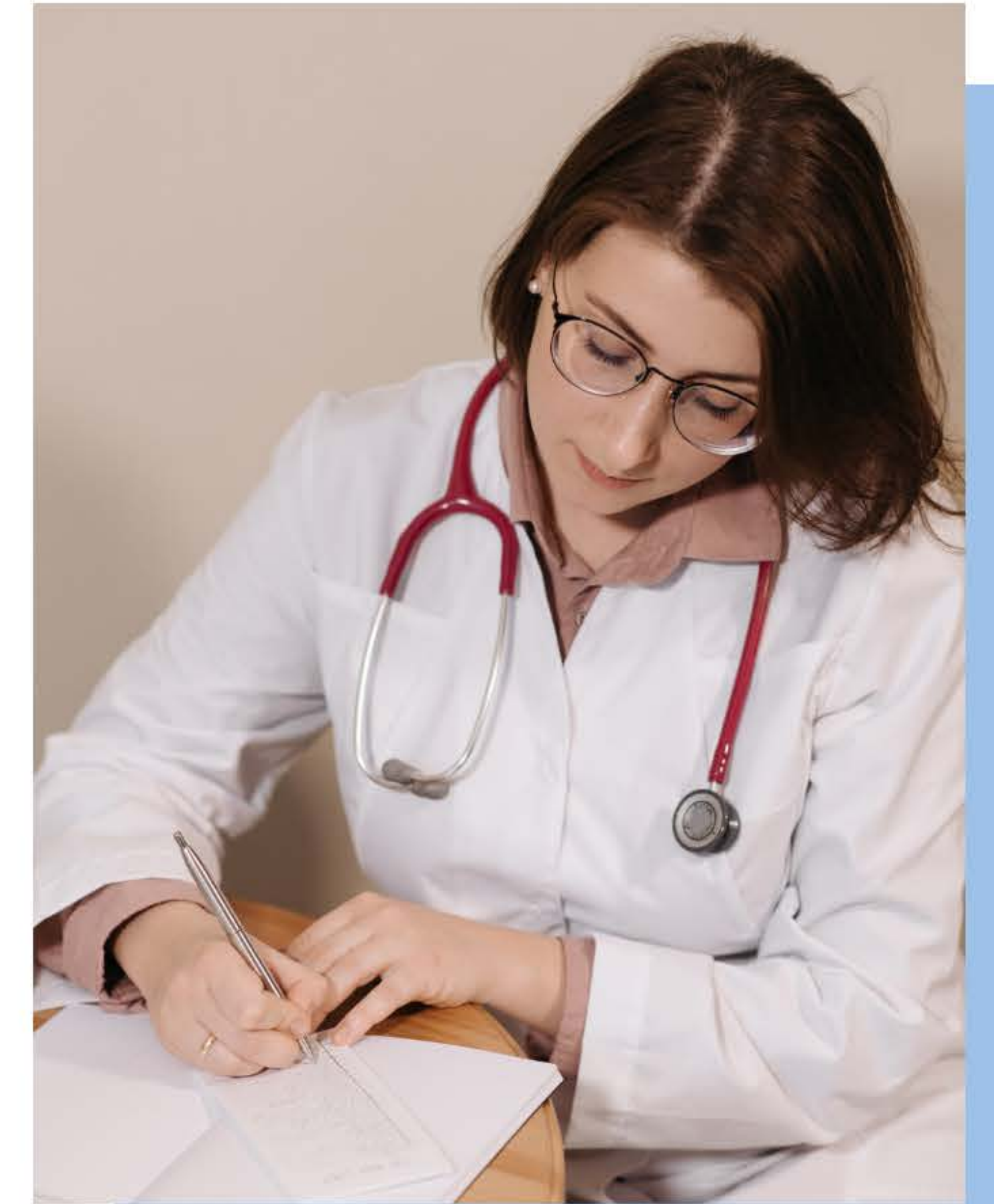
In general, IVF is a procedure that requires an egg to be fertilized by sperm outside of the human body in a Petri dish. In other words, a baby at its earliest stages is formed outside of the womb. Couples struggling with infertility might desire to pursue IVF as an option for conceiving their own biological children. Infertility is often difficult for a couple to bear. For this reason, we should speak sensitively about this life issue.

1.9%

of all babies born today are the result of IVF. Because of its frequency, it is very likely that you know someone who was conceived through IVF.

How does IVF work?

Usually, 7 or more eggs are harvested from the woman. To do this, she normally undergoes drug treatment that overstimulates her body to ovulate multiple eggs at a time. Sperm is collected from the man, and the sperm and eggs are mixed in a dish and incubated. A number of embryos result.



These embryos are then graded based on how "normal" they look. Those that look abnormal are often discarded immediately. Between 2 and 4 of the "highest grade" embryos are transferred into the woman's womb. The chances of embryo survival are relatively low, and the cost of IVF is relatively high; this is why multiple embryos are often introduced to the womb. The couple then waits to see if any embryos will implant.

the methods

the following are procedures/practices commonly used to increase the effectiveness of IVF or suit the couple's desires

01 Cryopreservation

a special freezing process that halts the embryo's development while keeping it alive

As discussed before, many embryos are created, since the survival/implantation rate is relatively low through IVF. The embryos that aren't immediately transferred to the woman's womb are cryopreserved. If the first IVF attempt does not result in a pregnancy, the couple can have the preserved embryos thawed and try again. Sometimes, cryopreservation itself causes the embryo to die.

Parents pay for storage of the cryopreserved embryos. If they decide they no longer want the embryos, they can stop paying the storage fee, and the embryos are thawed, die, and are discarded.

02 Gamete Donation

using eggs or sperm from someone other than the intended parents to facilitate fertilization

A "donor" will give their sperm or egg(s) for the fertilization process. The DNA of the resulting child will thus be half the donor's. This is an option used by couples who cannot provide eggs or sperm on their own.

03 Surrogacy

an agreement where a woman other than the intended mother carries and gives birth to a child for other people who will be the child's parents after birth

This is an option often pursued by a couple when the woman who desires the child does not have a uterus suitable for a fetus or does not want to undergo the process of being pregnant. Surrogacy can be done in combination with gamete donation, where the surrogate also gives her eggs to be fertilized. Usually, the surrogate is paid for her service.

04 Preimplantation Genetic Diagnosis (PGD)

testing done to detect specific genetic abnormalities that a couple's children are known to be at risk for

This genetic testing is done to determine which embryos are best to introduce to a woman's uterus. PGD is intended to prevent embryos with genetic abnormalities from actually being used in IVF so that a couple's child(ren) does not have genetic diseases.

To see what for-life and biblical worldviews have to say about the practices within IVF, see the "A 4Life View of IVF" infographic and visit y4life.org.
