

HEALTH & WELLNESS

Would-Be Parents Try Infertility Treatments at Home

By MELINDA BECK

Juliana and Greg Tomlinson started trying to have a baby on their wedding night in 2011. After a year without success, the Lancaster, Pa. couple says doctors diagnosed double trouble: Greg has a low sperm count and Juliana has polycystic ovarian syndrome (PCOS), a hormonal disorder that can make ovulation irregular. They endured months of hormone treatments, and a heartbreaking miscarriage in 2014. Their Catholic faith put in vitro fertilization out of consideration.

Last February, their hopes soared when Juliana noticed an at-home insemination kit at the pharmacy. The over-the-counter device, called the Stork, helps deliver sperm to the cervix and keeps them there for hours, to increase the chance of fertilization. Their first attempt with it was unsuccessful. But the Tomlinsons are on a vitamin regime and plan to try it again. "It's important to keep your hopes high," Juliana says.

Many would-be parents are trying at-home products to help them conceive—often before, during and after they seek professional treatment for infertility. Products range from devices that mechanically assist the uniting sperm and egg, to tests that diagnose what's going wrong. Some are Food and Drug Administration approved; some are MacGyver-esque uses for ordinary household items.

They offer couples more privacy than a fertility clinic and at far less cost. A standard work-up for fertility issues can cost hundreds of dollars. A cycle of in vitro fertilization costs \$12,500 on average, the American Society for Reproductive Medicine says, and is seldom covered by insurance.

Fertility experts say some at-home products are helpful but others may be harmful. They caution couples against believing everything they read online. "There's a lot of emotion surrounding pregnancy and people look to do whatever they can to increase their odds and avoid seeing me," says reproductive endocrinologist Brian



Juliana and Greg Tomlinson, of Lancaster, Pa., at left, are trying to conceive and have used an over-the-counter device called the Stork to help. At right, Amber Carpenter, left, and Nicole Posluszny, right, with their son, Jacob Elliot. Ms. Posluszny is expecting their second son in March.



FROM LEFT: JT PHOTOGRAPHY; AMBER CARPENTER

Levine, New York practice director for the Colorado Center for Reproductive Medicine, a multistate fertility practice.

An estimated 10% to 12% of U.S. couples are struggling with infertility, defined as not being able to conceive despite frequent unprotected sex for at least one year, or six months for women over age 35. Many more are impatient, experts say. And single women and gay and lesbian couples eager to start families are using do-it-yourself conception kits with donor sperm or surrogates.

Doctors say the most useful products help couples understand and monitor the woman's monthly cycles. "Some couples are just having sex at the wrong time," says Dr. Levine.

Home tests to predict or confirm ovulation, by detecting hormone changes in urine, have been on the market for decades; some have gone high-tech. Dozens of smartphone apps help women graph their monthly cycles. Some include wearable sensors to monitor body temperature and chemical changes in the skin. Other ovulation predictor kits test for a

"ferning" pattern in saliva that appears up to 72 hours in advance.

Doctors say ovulation predictors are especially useful for women who have irregular cycles or may not ovulate every month. But predictor kits aren't infallible. They can be thrown off by illness or fertility drugs, and success-rate claims are hard to verify.

About 40% of fertility problems originate with the male partner, experts say. For about \$40, men can check their own sperm concentration with an at-home test. A normal level is considered 20 million per milliliter of semen.

Fertility experts say at-home tests shouldn't substitute for a formal semen analysis (costing about \$100), because an at-home test can't determine whether sperm are properly shaped and able to swim. "It could be false reassurance," says Owen Davis, a New York fertility specialist and president of the American Society for Reproductive Medicine.

Packaging information for SpermCheck Fertility says a negative test isn't definitive, either: Some 10% of men who have fathered children have sperm counts

below 20 million per milliliter.

Home tests to assess how many eggs remain in a woman's ovaries (the supply dwindles with age) also tell only part of the story, experts say. Most of the tests measure follicle stimulating hormone (FSH), which the brain sends to the ovaries to spur ovulation; a high FSH level may indicate diminished quality or quantity of eggs. Physicians say they now measure a different hormone made directly in the ovaries, or use ultrasound to see how many egg follicles are developing. Ovarian reserve test kits say an elevated FSH suggests further testing may be warranted.

The protective secretions that sperm must swim through can be another source of problems. Some nutritional supplements claim to help make cervical mucus more hospitable for conception. Some couples also use over-the-counter cough medications that thin out mucus. "I know some providers who swear by it. But it's an off-label use and there is little hard evidence," says Dr. Levine.

When intercourse isn't an option—say, for a single woman, or for couples using donor sperm—

syringes can serve as a stand-in. Amber Carpenter, 31, and her wife, Nicole Posluszny, 33, were successful on their first try using a male friend's sperm, a plastic Ziploc bag and the syringe from a bottle of liquid baby aspirin. "We thought, Why not try it at home first and if it doesn't work out, we'll go to a doctor," says Ms. Carpenter, who had a baby boy 17 months ago. The couple used the same donor and method again, and now Ms. Posluszny is expecting a baby boy in March.

A type of assisted insemination called cervical cap insemination holds semen in a cuplike device against the cervix, giving sperm more opportunity to swim through. Engineer Stephen Bollinger invented the Stork by using a racquetball split in half; he says it helped his wife and him conceive their two children. The \$80 over-the-counter device got FDA clearance in 2014. Fertility experts say cervical cap insemination shouldn't be confused with intrauterine insemination (IUI), a medical procedure in which sperm is placed directly into a woman's uterus.