



**BANKING ON KIDS:** Egg storage tank, McCarthy (below)

# Fertility and the Freezer

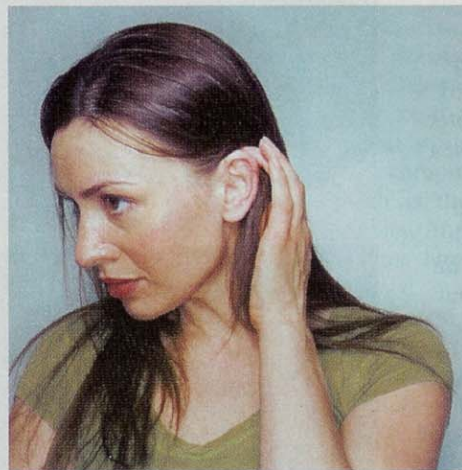
New technology allows women to put their eggs on ice. Doctors urge caution, but some people can't wait.

BY CLAUDIA KALB

**S**AUNTERING INTO A COFFEE shop in Pasadena, Calif., Cassandra McCarthy—pink flip-flops, big smile—looks carefree. But McCarthy, 34, is worried: will she find a mate and have kids before her fertility plummets? A few months ago she Googled the Web and hit on a new company, Extend Fertility. For about \$13,000, plus a \$500 annual storage fee, doctors would freeze her eggs for later use. In June, McCarthy took out her credit card, signed up and breathed a sigh of relief. “There’s a peace of mind knowing I didn’t leave my fertility to chance,” she says.

For decades, frozen sperm and embryos have created thousands of babies for infertile couples, making young single women with old-fashioned dreams (husband first, then kids) bystanders to the reproductive revolution. Now there’s egg-freezing. While still evolving—only about 100 babies have been

born so far—the science, researchers say, has advanced significantly in the last few years. Extend Fertility, launched this spring by Harvard M.B.A. Christy Jones (34 years old, 12 frozen eggs), is now recruiting patients and partnering with fertility centers across



the country, from California to New York, to create a nationwide network of egg-freezing clinics. For women who see their fertility nearing its shelf life, egg-freezing is the greatest thing since birth control.

The procedure starts with hormone injections, which increase the number of eggs a woman produces, ideally to about a dozen. The eggs are then extracted, treated with a protectant and submerged into a tank of liquid nitrogen. Years later, a woman has them thawed, fertilized and implanted into her womb. There are numerous challenges. The drugs can cause side effects and don’t always work perfectly, as McCarthy knows well. Her first hormone shot sent her estrogen surging; now she’s waiting to try again. And there are significant technical hurdles. Because the human egg is large and watery, it is highly susceptible to freezer burn. Its delicate spindle apparatus, which divides chromosomes after fertilization, can be damaged during freeze or thaw. And there’s the supply problem: frozen sperm come in batches of millions—lose a few thousand, no big deal. With eggs, there’s no room for error. “It’s not a guarantee,” says Dr. Bradford Kolb of Huntington Reproductive Center, Extend Fertility’s first clinic. “It’s an evolving technology.”

Egg-freezing data are extremely limited, but accumulating. Dr. Eleonora Porcu, of the Infertility and IVF Center in Bologna, Italy, has been freezing eggs for a decade. A few weeks ago she gathered scientists for the first international workshop on “oocyte cryopreservation,” to share statistics. Porcu says that as many as 80 percent of eggs survive the freeze, and pregnancy rates, while variable, can be as high as 20 percent. Rebecca Holverson, who recently went through a miscarriage and then divorce, was ready to play the odds. In April, she banked her eggs at Assisted Fertility Services in Indianapolis as a 30th-birthday present to herself.

Is egg-freezing ready for prime time? Many doctors believe it should be offered to certain patients: women undergoing chemotherapy or infertile couples opposed to freezing embryos for religious reasons. But, without more data, not all are convinced that the cost and the burdens—both physical and emotional (what if it doesn’t work?)—make it appropriate for “biological-clock patients.” By this fall, the American Society for Reproductive Medicine expects to publish its first guidelines, saying egg-freezing should be offered only as an experimental therapy under strict oversight and that it should not be marketed to “defer reproductive aging”—at least not yet. Caution makes sense. But it may not stop single thirtysomethings from lining up with their credit cards and their dreams. ■