

What Mother Didn't Tell You About Fertility...

Because

No

One

Ever

Told

Her

By Richard Scott, MD

& Pamela Madsen

with The

American

Fertility

Association



We consider ourselves a reasonably savvy, open and educated population regarding reproduction. Kids learn, to a greater or lesser extent, the fundamentals of reproduction and contraception in school. There isn't a magazine or sitcom, not a talk-fest on TV or radio that hasn't boosted ratings by "tackling" the pregnancy issue — avoiding it, achieving it, the hard-knock consequences or the wondrous joy of it.

We're saturated with information. Or so you'd think. It turns out, many of us don't have much of a grip on the realities of fertility. And by "fertility" we mean our bodies' reproductive capability, what enhances or diminishes it, or even how long it lasts.

In fact, out of 12,382 women who responded to a 15-question survey about basic fertility facts, only one (that's right, ONE) got them all right. Sure, everyone knew something about the subject and answered 46.1% of the questions correctly. Looked at from the other side, though, the results lead to one sobering conclusion: The majority of women don't understand their reproductive lifecycles.

That's because until now, there's been no meaningful effort to disseminate that knowledge. No one saw the need. It was assumed that producing offspring was a biological function as involuntary as breathing. So the emphasis has been on preventing pregnancy. A remarkable job of educating ourselves, we have done, too. 90% of respondents knew the risks of some contraceptives — a good thing.

But responsible family planning, a term we associate with contraception, really means making fully informed decisions about all aspects of reproduction. It requires a clear understanding of when and why women are at their most fertile, not just during a given month, but over the course of a lifetime.

For example, no one is surprised that a 45-year-old woman is likely to have trouble conceiving. But it never occurs to us that a 34-year-old may have age-related problems as well. Fertility, an unpredictable

thing, generally begins its decline much earlier than we think. 88% of the women who took our survey overestimated by five to ten years the age at which it begins to diminish. There are no tests that can guarantee someone who is fertile today that she'll be fertile in a year, or two or ten.

The information gap leaves us all vulnerable. Women who delay first-time parenthood until after 30, about one in seven of those in their childbearing years, are stunned and furious when they discover that age compromises fertility. People are not more infertile than they were 35 years ago, as 63% of our respondents mistakenly believed. Instead, the increase in infertility we're seeing today is largely a function of people waiting longer to begin their families.

Misinformation is rampant. Nearly half of the respondents answered that general health is a good indicator of fertility. It's not. A normal gynecological check-up isn't the same thing as a normal fertility workup – even that isn't foolproof. Passing a general physical with flying colors isn't a reliable pregnancy prognosticator, even though a healthy lifestyle can help preserve fertility.

With essential reproductive knowledge, women can better shape their futures. We might not change the decisions we make, but we don't have to – shouldn't have to – make them blindly.

AGE AND CHILDBEARING

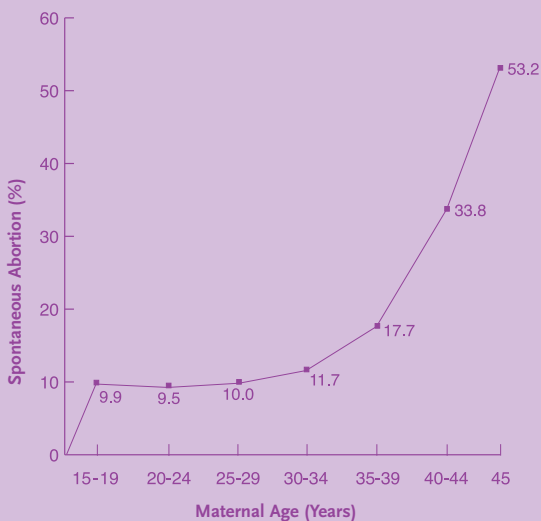
– The Best Kept Worst Secret

Biology rules: Female fertility inexorably diminishes with age, beginning in their late twenties, statistically speaking. Barring any extraordinary medical conditions or physiological anomalies, there are two reasons.

First, straightforward attrition. Every woman is born with all the oocytes (eggs) she is ever going to have, usually seven million or so. By the time the average female hits puberty, there are about 250,000-

300,000 remaining eggs in her ovaries. During each menstrual cycle, one egg matures – ripe for fertilization – and is released, but many others are not. This is how women start with 7 million eggs, ovulate 400 times and then run out.

Second, eggs age right along with the rest of the body. Older oocytes have a greater incidence of chromosomal problems that increase the likelihood of miscarriage.



Risk of Miscarriage with Increased Age

Of course, some women in their late 30s and a few in their 40s conceive, carry and deliver healthy babies. The probability of that happening without medical intervention, however, becomes more remote with each passing year. For women under 30, it's estimated the chance of becoming pregnant in any one cycle is 20-30%. By 40, it plummets to approximately 5%.

Men aren't immune to the effects of time either. While the changes may not be as clearly defined as they are in women, 50-and-over males often may find a decline in the quality of sperm, and sometimes dis-

cover a slight drop in testosterone levels and a shrinking libido.

But we have been deluded. Inundated by images of “older” celebrity moms, we believe that we can create our progeny whenever we want. If it doesn’t happen naturally, then we’re confident the answer resides in one high-tech treatment or another, that reproductive medicine will override nature. Well, guess again.

While it’s true that science has refined techniques to help infertile women become biological mothers, medicine has its limits. Age, at its most extreme point, is one of those unbreachable barriers.

There’s an inverse relationship between the success rates for all assisted reproductive technologies and maternal age. For example, the national average data indicate that IVF works 33% of the time for women 30 and under, 29% for women in their mid 30s, and 5% to 15% for those 40 and over. While some clinics do much better (up to roughly double these chances), these numbers represent typical success rates in most “good” centers which strive to provide high quality care. Many fertility clinics won’t accept women over age 44 for treatment unless they are willing to use a younger woman’s egg (ovum donation) to experience pregnancy and birth.

CONTRACEPTIVE CONCEPTS: Protecting What You’ve Got

It may seem like a contradiction in terms, but certain contraceptives not only prevent pregnancy, but also help preserve your fertility.

Women may want to be cautious about IUD use. While IUD’s are highly effective and may be safe, some clinicians believe they may increase the risk of developing pelvic inflammatory disease, an infection of the upper genital tract that can cause infertility (90% of survey-takers knew that).

Birth control pills do several positive things. First, tubal disease is less likely to develop because

oral contraceptives make the cervical mucus a “hostile” to some infections, keeping them from reaching the upper genital tract. Birth control pills also minimize the growth of the endometrium, the lining of the uterus. That reduces the incidence of endometriosis, a condition in which cells of the lining of the uterus migrate to the pelvis, implant and continue to grow, causing infertility. 76% of respondents missed this.

Condoms and diaphragms (barrier contraception) reduce the chances of contracting a sexually transmitted disease that can lead to infertility. 65% of respondents missed this.

PRESERVATIONISTS' MISSION:

Lifestyle Matters

Diet, exercise, weight, cigarettes, caffeine and alcohol have an impact on your reproductive health. While you never know how fertile you are until you actually start trying to have a baby, there are things you can do to preserve your base.

No smoking. If you don't smoke, don't start. If you do, quit. It makes you more susceptible to sexually transmitted diseases, cervical cancer and pelvic infections.

Too much weight or not enough and there's trouble. Either extreme can get in the way of regular, healthy ovulation.

Eat fruits, vegetables and lots of low-fat protein. Without sufficient protein, estrogen metabolizes into inactive products more rapidly and menstrual cycles become longer. Limit caffeine intake to one cup a day; more may cause delays in conception. Avoid any herbs or herbal remedies. They're the equivalent of untested, unregulated medicines.

Exercise is good, but too much exercise such as long-distance running puts you at risk for amenorrhea—having no periods at all.

Alcohol in moderation may not have a deleterious effect. But consume significant amounts and

ovulatory dysfunction may kick in.

Recreational drugs (marijuana, cocaine, Ecstasy) are uniformly bad for your fertility. Prescribed pharmaceuticals need to be looked at with a cautious eye. Psychotropic medications, for instance, can impinge on normal ovulation.

INFERTILITY: Facts and Fictions

Let's set the record straight. A lot of people suffer with the disease of infertility; current estimates put the number at one in ten U.S. couples. 28% of respondents grossly underestimated the risk, putting it at one in fifty.

Couples are considered infertile when they're unable to conceive after a year of unprotected sex—the standard definition. On average it'll take six months for a 30-year-old couple to achieve a pregnancy and nine months for those five years older.

Indeed, at age 37 approximately half of all couples will fail to conceive within a year. By the time they reach 42, that number may be much higher.

All that said, it's crucial to understand that infertility does not equal sterility. Because a couple can't conceive on their own doesn't necessarily mean they can't conceive at all. In fact, as many as 90% of infertile couples achieve families with the assistance of a vast array of increasingly refined medical therapies and treatments, including oocyte and sperm donation.

There are surgeries to fix pathophysiological problems (e.g., clearing blocked fallopian tubes or laparoscopic lasers to clear endometriosis). There are hormone treatments designed to correct imbalances that inhibit or prevent ovulation.

There are technologies that bypass intercourse as the route to fertilization. They include superovulation (stimulating the production of multiple eggs) with coordinated intrauterine insemination; intrafollicular insemination, gamete intrafallopian transfer

and in vitro fertilization (IVF). These technologies are a progression that put the sperm closer to the egg until, with IVF, the sperm and egg are combined outside the body in a culture dish in a laboratory.

While many couples exult in positive outcomes, the success rates do decline with the age of the prospective mother. A 48-year-old may look 32 on the outside, but her eggs are 48.

CHOICE WORDS:

The Power of What You Know

How fertile any one woman may be is a complicated equation with genetics, physiology, lifestyle, environment and age all assigned different values in the calculus. Although you can't know how fecund you are unless and until you put it to the test, you can take action that keeps the options open.

It's also important to remember that women can build a wonderful family at any age. Ovum donation and adoption are used by thousands of women every year to bring much-wanted children into their lives.

That's choice. That's power.

For more information about fertility, infertility, treatments and support, please contact The American Fertility Association at our toll-free number, 888-917-3777, or visit our website at www.theafa.org. Also, log on to the American Society for Reproductive Medicine site (www.ASRM.org) to mine a rich vein of knowledge provided by one of the leading associations of medical professionals.

This brochure was funded by an unrestricted educational grant from Organon, Inc.
www.organoninc.com

