Fertility Preservation: Stop the Clock

ANATE AELION BRAUER MD, MS, FACOG LAURA J. MEYER MD, FACOG

GREENWICH FERTILITY CENTER IN AFFILIATION WITH NYU SCHOOL OF MEDICINE AND GREENWICH HOSPITAL

About Us



Anate Aelion Brauer MD, MS, FACOG



Barry R. Witt MD, FACOG



Laura J. Meyer MD, FACOG

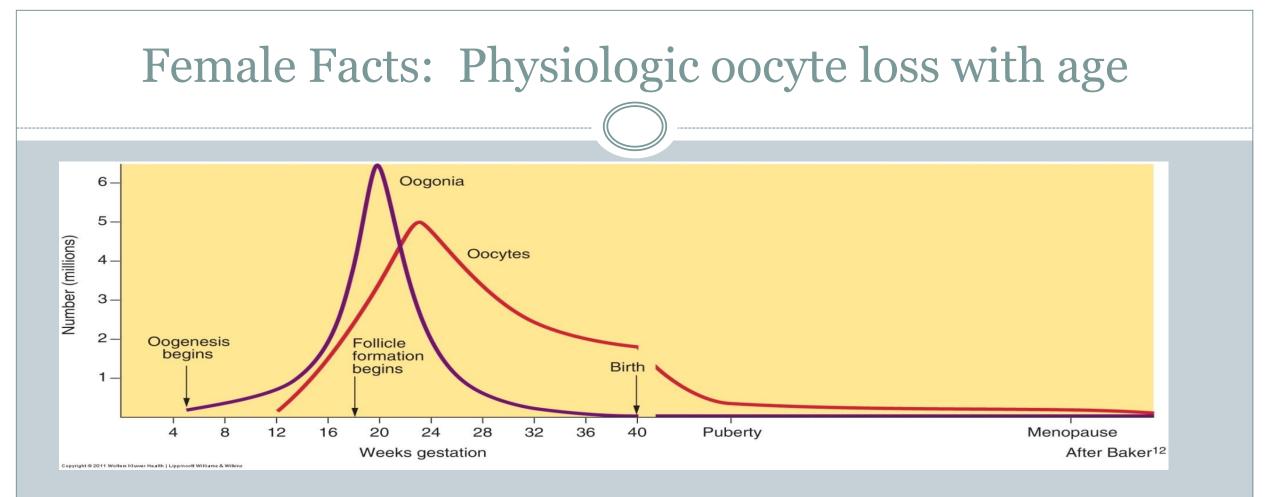


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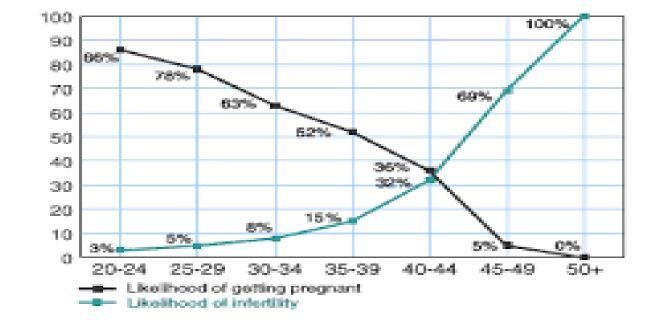
Outline

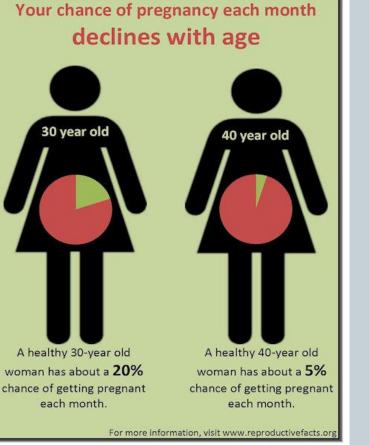
- Female facts
- Fertility facts
- Social dimensions
- What is egg freezing?
- What does the process involve?
- What are the success rates?
- Is egg freezing safe?
- The decision



- Peak oocytes at 24 weeks gestation: 6 to 7 million
- At birth: 2 million oocytes
- At puberty: 300 to 400,000 oocytes
- One oocyte ovulated per month (over about 400 lifetime ovulations)
- At menopause only about 500-1000 oocytes remain

Fertile Fact: Pregnancy rate decreases with age

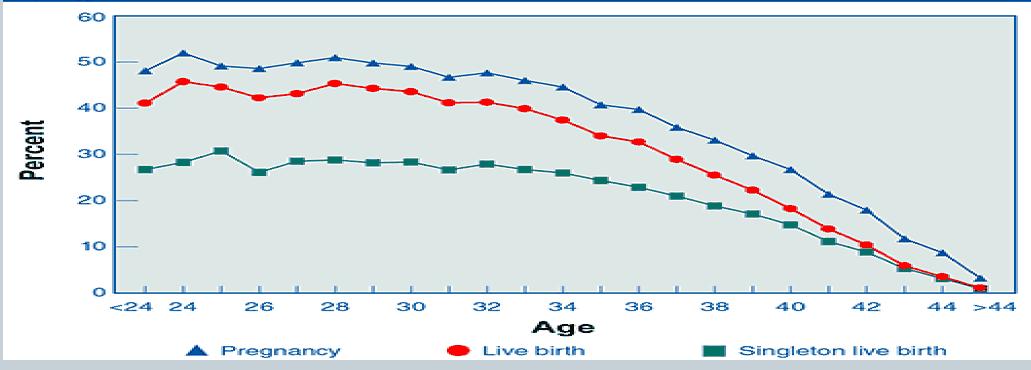




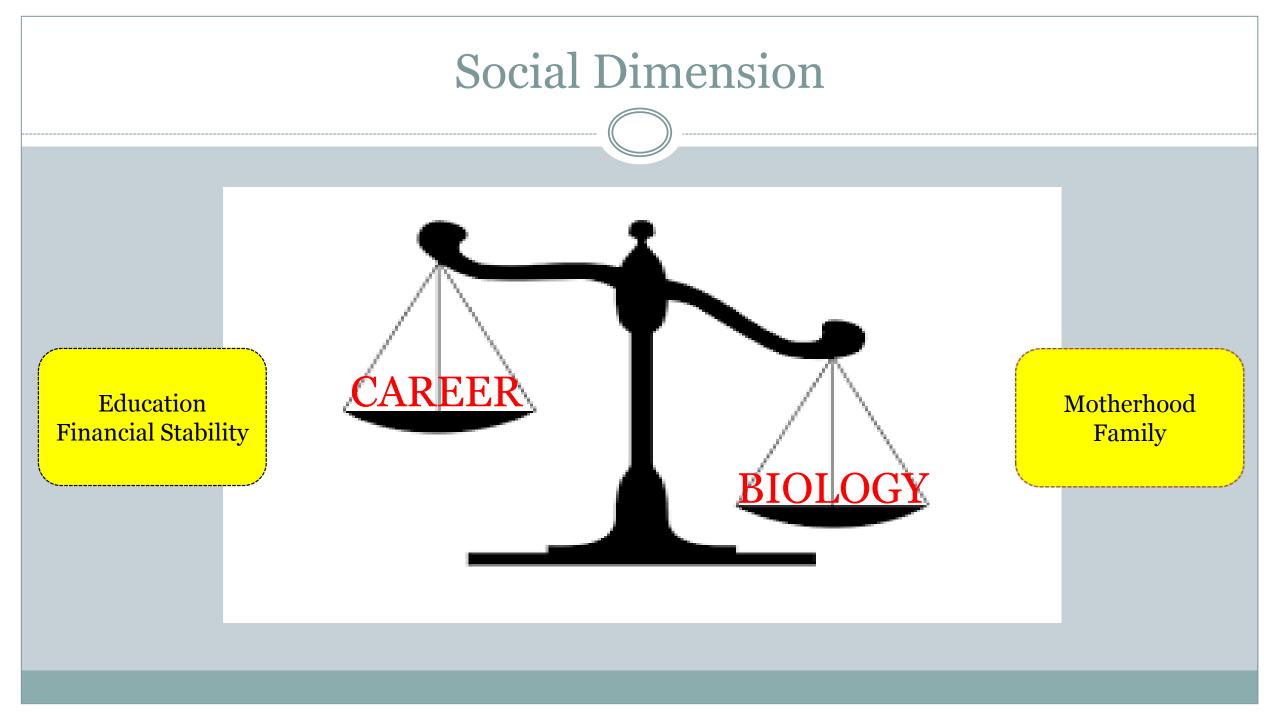
www.asrm.org

Fertile Fact: IVF success rates decrease with age

Percentages of ART Cycles Using Fresh Nondonor Eggs or Embryos That Resulted in Pregnancies, Live Births, and Singleton Live Births, by Age of Woman,* 2010



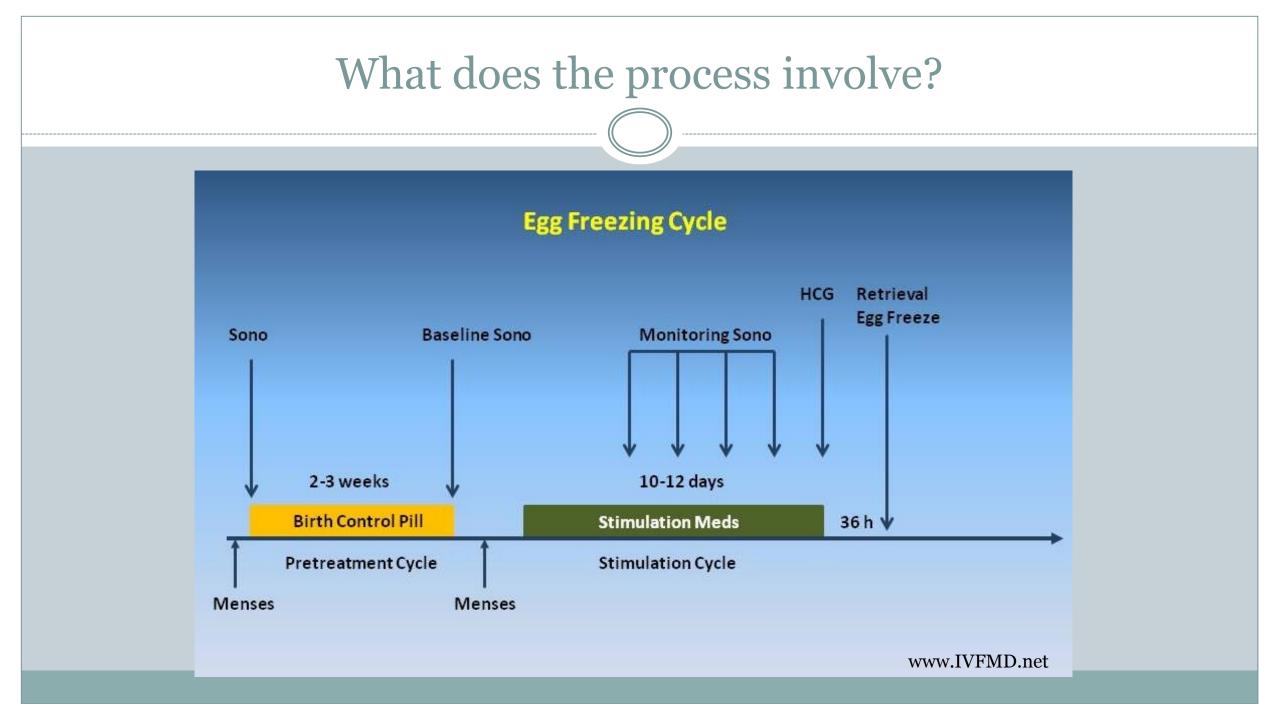
CDC, ASRM, Society for Assisted Reproductive Technology. 2010 Assisted Reproductive Technology



What is egg freezing?

- Egg freezing dates back to 1986
- Allows women to preserve their eggs in a frozen state until they are ready to become parents
- Slow freezing method
- Vitrification method





What does the process involve?

- Women take medication to stimulate egg growth for 10-14 days
- Egg harvest done under anesthesia with ultrasound guidance
- Mature eggs are frozen for future use
- Eggs can then later be thawed and fertilized for embryo creation and transfer



What are the success rates?

• Pregnancy rates similar to fresh per cycle IVF rates by age:

<35: 40-50% 35-37: 30-40% 38-40: 20-30% 41-42: 10-15% >42: <10%



• Preferable to freeze when younger than 35

Society of Assisted Reproductive Technologies clinic summary report 2012

Is egg freezing safe?

- Risks for women:
- -Hyperstimulation syndrome
- -Bleeding
- -Infection
- -Risk of anesthesia



- Risks for babies:
- -~1500 Babies born from cryopreserved eggs
- -No difference in incidence of congenital anomalies or birth weight

The Practice Committee of the American Society for Reproductive Medicine, 2008 Noyes et al. Reprod Biomed Online , 2009

The decision making process

- Choose the right lab
- Become fully and accurately informed of risks/benefits
- Understand success rates
- Understand personal goals of family building
- Understand cost and coverage

