hertility

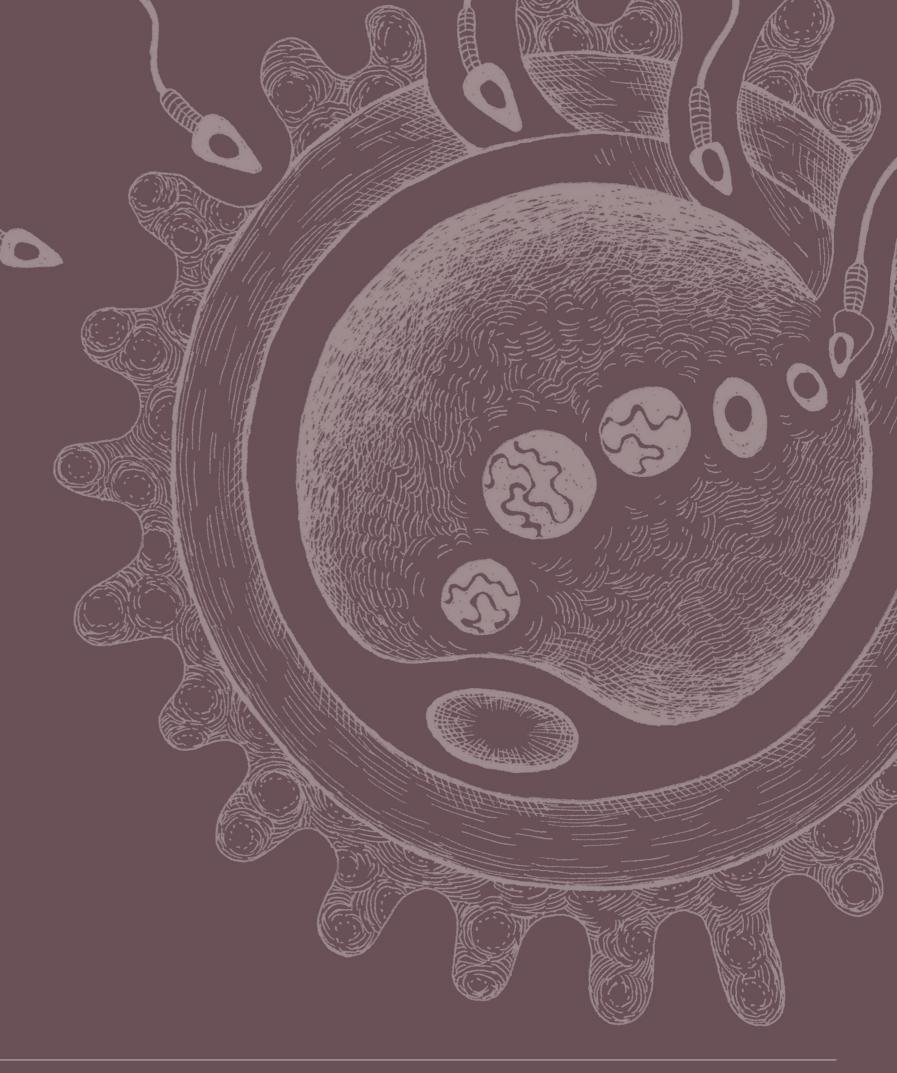
A guide to Egg Freezing

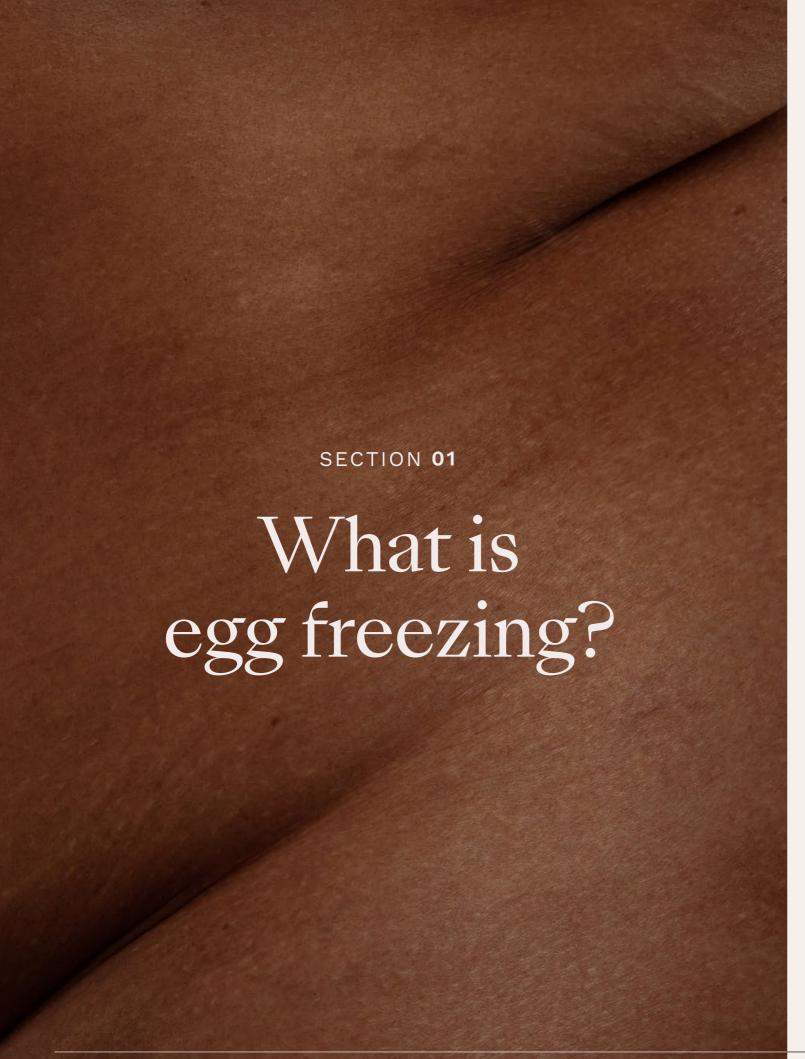


Published: 06/2023 | Last medically reviewed: 17/05/2023

Contents

- What is egg freezing?
- 02 Why egg freezing: Social egg freezing
- 03 Why egg freezing: Medical egg freezing
- **04** The egg freezing process: step-by-step
- 05 Is egg freezing right for me?
- **06** FAQs with our experts
- 07 How Hertility can help
- 08 Resources & references





What is egg freezing?

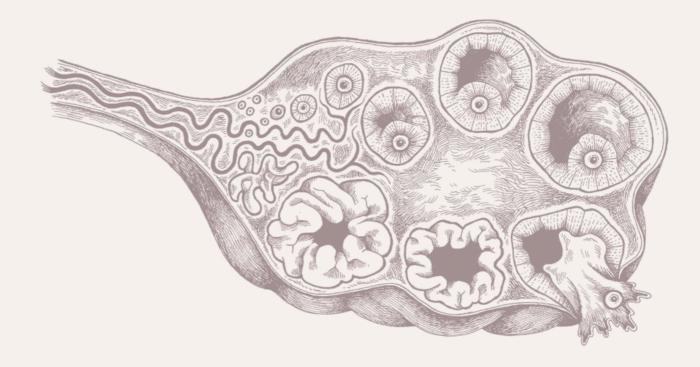
Egg freezing is a medical procedure which can help us to plan for our future fertility. It's what's known as a 'fertility preservation method, or scientifically speaking, 'oocyte cryopreservation'.

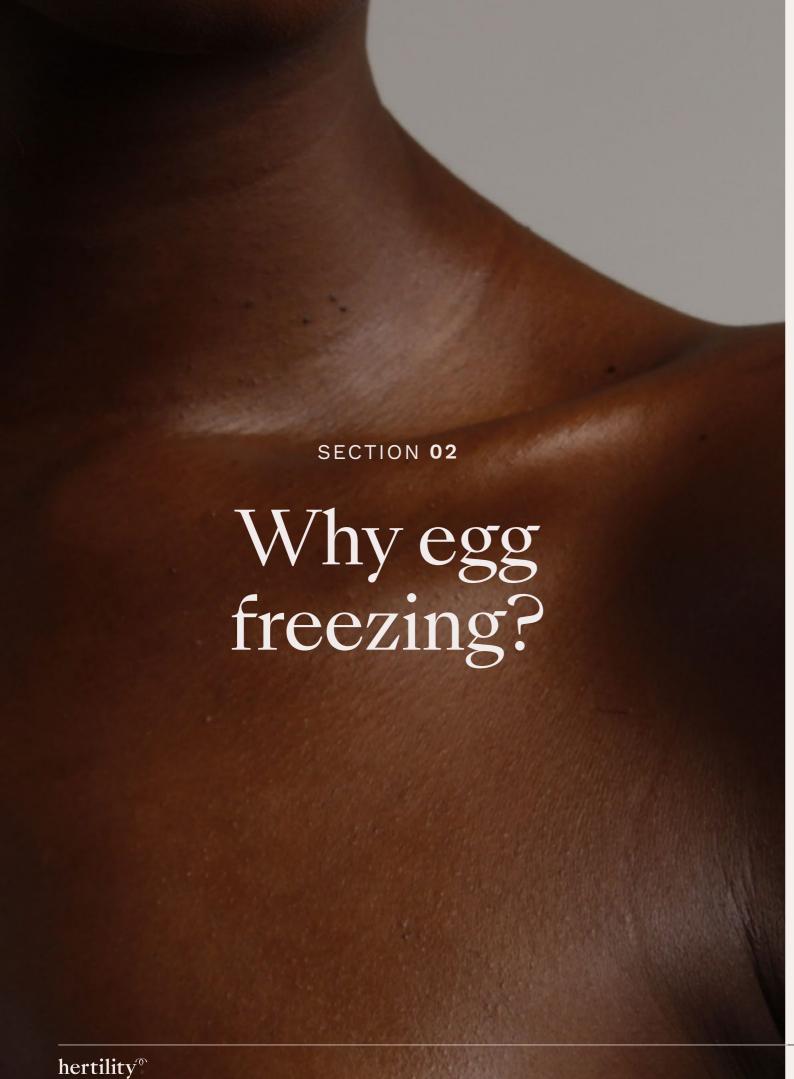
Egg freezing involves taking medicine to encourage the growth of the eggs in our ovaries, which will then be collected during a short surgical procedure.

Viable eggs will be frozen and stored and since the eggs are preserved in liquid nitrogen (-196°C), they do not decline in quality—like they would do if they remained in your ovaries as you age.

These eggs can be thawed at a later date whenever you are ready to start a family through fertility treatment.

This whole process is what's called an 'egg freezing cycle'. We will explain each stage in detail throughout this guide. It's important to note that egg freezing is not a fail-proof method and it's success relies on healthy eggs.





Social Egg Freezing

Social egg freezing, sometimes referred to as elective egg freezing, is when we choose to freeze our eggs for any reason that isn't considered as a medical purpose.

This can include if we are worried about our natural fertility decline with age, but we aren't quite ready to have children yet. Or if we aren't sure if we want children at all, but would like to keep our options open for the future.

Ovarian Reserve and Natural Fertility Decline

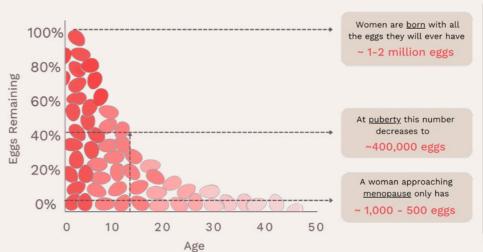
As women or people assigned female at birth, we were born with all of the eggs we will ever have, known as our ovarian reserve. Everyone is different, but on average we're born with around 1-2 million eggs. Although this sounds like a lot, by puberty, our egg count has dropped to about 300,000. Once we start our periods, multiple immature eggs will mature each month, but only one

(the most mature) will be released during ovulation. As this chosen egg makes its way to our Fallopian tubes in the hope of meeting an eligible sperm, the rest of the eggs that were growing along with it are dissolved.

As we are continuously losing some immature eggs due to natural processes, this means our egg count declines with age and this decline will generally speed up after the age of 35—although everyone is different and this will also depend on various genetic, medical and lifestyle factors too.

In some rare cases, fertility decline may take place much sooner than expected, such as in case of Premature Ovarian Insufficiency (POI), where the ovaries stop functioning before the age of 40, or premature menopause, when someone experiences menopause before the age of 45. The average age for menopause in the UK is 51.

Ovarian Reserve Decline with Age



Did you know? Every menstrual cycle a woman loses ~ 1,000 eggs MM . Only 400 eggs reach the stage at which they are mature enough to produce a baby during a woman's lifetime

How does age affect our chances of getting pregnant?

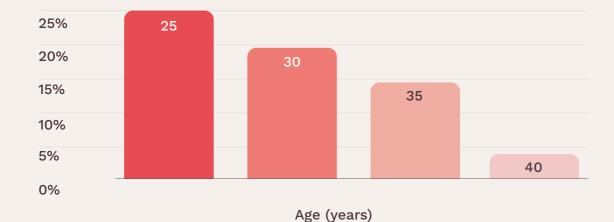
As we age, our egg quantity and quality declines. This can make getting (and sometimes, staying) pregnant more difficult.

In our early to mid-20s, we are at our most fertile—but there's still only a 25–30% chance of us getting pregnant each cycle.

This gradually reduces during our 30s to around 5% by age 40.

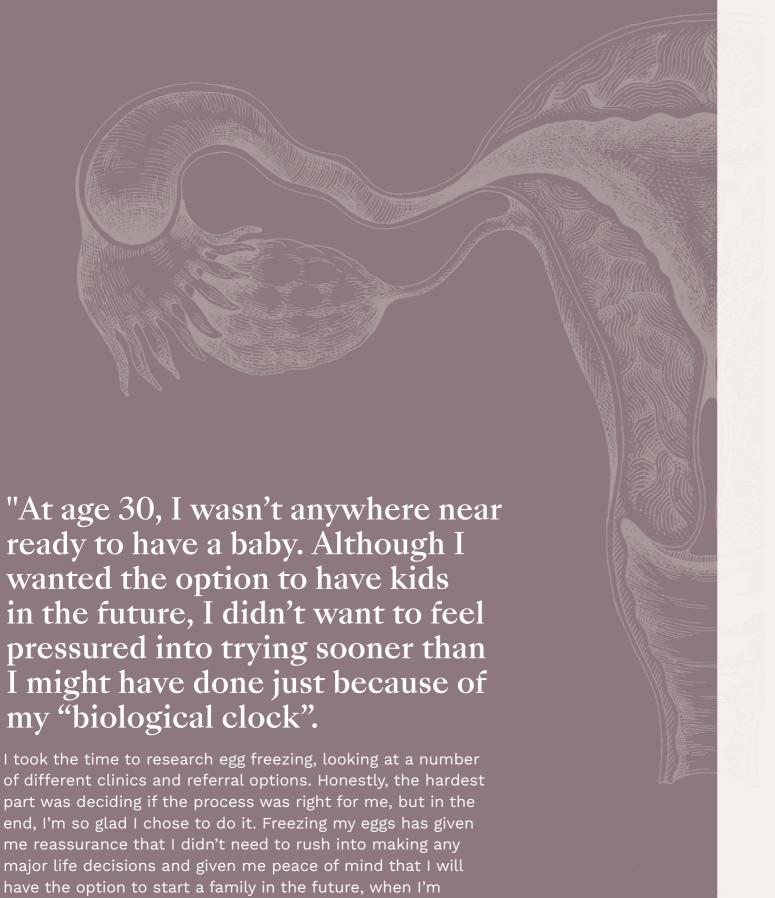
Age, also increases the risk of pregnancy-related complications, like miscarriage, genetic disorders in the baby and gestational diabetes, especially after our mid to late 30s.

Chance of successful natural pregnancy each month*



*Source: The American Society for Reproductive Medicine (ASRM)





Opting for Social Egg Freezing

In the UK, social egg freezing is not available on the NHS, only privately. One of the most important decisions you will make going private is choosing the right clinic for you.

This isn't just one that has good treatment outcomes, but one that creates a supportive environment for you and provides good communication throughout your journey.

When looking for a clinic, here is a small checklist that you should consider:



✓ TREATMENT OPTIONS OFFERED	✓ PATIENT REVIEWS
✓ COST OF TREATMENT	☑ BIRTH & MULTIPLE BIRTH RATES
✓ LOCATION	WAITING TIMES FOR DONOR SPERM (IF APPLICABLE)
✓ OPENING HOURS	STORAGE PROVISION FOR EGGS (AND SPERM/EMBRYOS IF APPLICABLE)
✓ WAITING LIST LENGTH	✓ COUNSELLING PROVISION
ELIGIBILITY CRITERIA (CHECK FOR AGE AND BMI LIMITS)	INCLUSIVITY FOR LGBTQ+ FAMILIES (IF APPLICABLE)
✓ CLINICIAN AND EMBRYOLOGIST EXPERIENCE	✓ GOVERNING BODY ACCREDITATIONS AND REVIEWS

ready to."

SECTION 03 Medical egg freezing

About Medical Egg Freezing

Egg freezing is available on the NHS for certain medical conditions that can put your fertility at risk. Your specialist will be able to advise about your eligibility for treatment, or you can contact your integrated care board (ICB), formally known as clinical commissioning group (CCG) directly.

Reproductive health conditions:

Some reproductive health conditions such as Premature Ovarian Insufficiency (POI) and early menopause can affect fertility. Additionally conditions such as endometriosis or fibroids might require surgery around the pelvic organs to manage it, your doctor may suggest fertility preservation prior to this incase there is risk of damage to the ovary.

Cancer

Certain cancers and cancer treatment, including chemotherapy and radiotherapy (especially targeting the pelvic organs), or surgeries impacting the ovaries, can impact our fertility. Egg freezing may be suggested based on a case by case basis for those who are looking to have children post cancer treatment.

Gender Affirming Treament

If you're undergoing gender affirming treatment, you might want to preserve your fertility before starting hormone therapy or having reconstructive surgery.



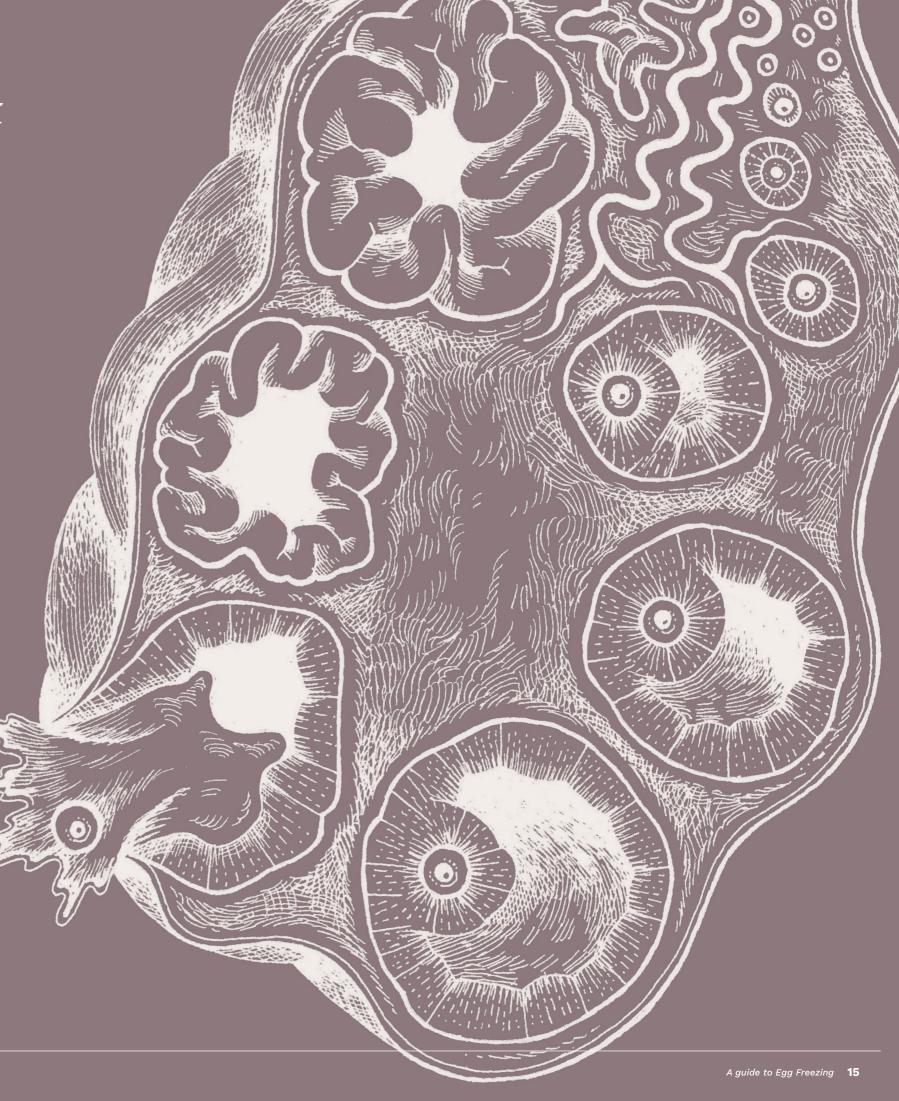
Gender Affirming Treatment

If you're undergoing gender affirming treatment, you might want to preserve your fertility before starting hormone therapy or having reconstructive surgery.

"I discovered the importance of [egg freezing] literally the same day that I was diagnosed with gender dysphoria and recommended for Testosterone HRT.

Luckily, this is when I was introduced to Hertility—finally some humane guidance, clarity and crucially being seen and understood as a trans person. The whole process became a lot clearer and felt more manageable, and honestly I started to feel inspired by the gift of being able to do this. The actual process wasn't nearly as bad as I imagined, especially in relation to triggering my dysphoria"





Step by Step Egg freezing



STEP 1 Preliminary tests

In order to freeze your eggs, you'll need to complete two preliminary steps, including a blood test and an ultrasound scan to ensure that undergoing an egg freezing cycle is right for you.

Blood tests: You will need a number of blood tests to check in on your hormones and fertility as well as to test for infections such as HIV, hepatitis B and hepatitis C. This is the first step in getting all of the information you'll need to decide if egg freezing is right for you. If you're taking hormonal contraception, it is recommended you wait at least 3 months before coming off it to take your tests for an accurate result as it can affect your hormone levels.

A Pelvic Ultrasound scan: This will examine the inside of your abdomen, uterus, Fallopian tubes, ovaries, cervix, vagina and give you your Antral Follicle Count (AFC), i.e. an estimate of your egg count.. This step is also essential for deciding if this process is right for you and whether you have enough eggs to successfully do an egg freezing cycle.



STEP 2 Stimulation

Depending on the results of the initial investigation, your doctor will work out the best protocol, dosage of medication and how many cycles you might need. You will start taking fertility medication to encourage the growth of eggs in your ovaries for up to two weeks - this is called stimulation. You will be closely monitored during this time and have to take regular trips to the clinic for further pelvic ultrasounds and blood tests to track the growth of your follicles.



STEP 3 Trigger injection

Once your eggs are large enough, you'll have a trigger injection of a hormone called Human Chorionic Gonadotropin (HCG) which will fully mature your eggs and prepare them for release.

The timing of this is really important and your doctor will plan it in accordance with your egg retrieval to make sure you do not ovulate before your doctor collects the eggs.



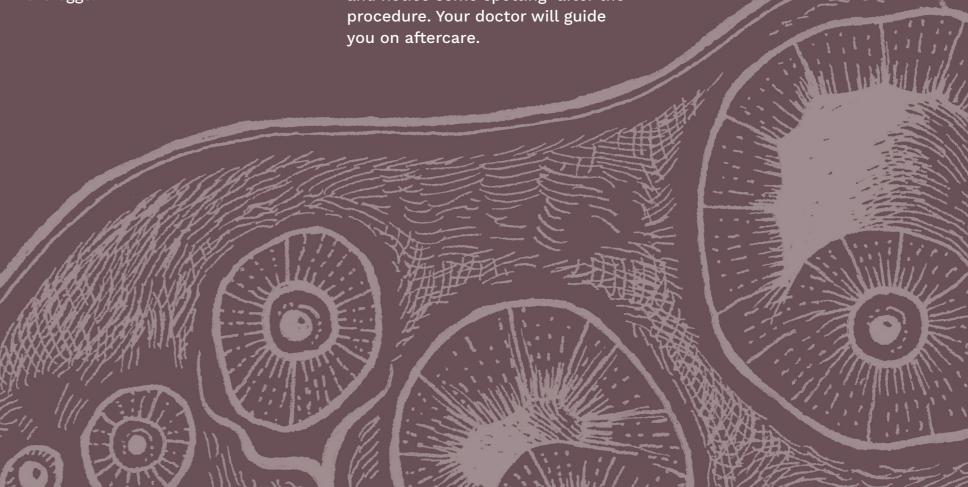
STEP 4 Egg retrieval

36 hours after the trigger injection, you'll undergo a minor egg retrieval surgery performed under general anaesthesia or sedation. A long, thin ultrasound-guided needle is inserted via your vagina to retrieve your eggs. You can go home after an hour or two of the procedure and some people do return to work the next day, while others also rest the day following the retrieval. You might feel slight pain or discomfort and notice some spotting after the procedure. Your doctor will guide you on aftercare.



STEP 5 Egg freezing (vitrification)

Eggs which are mature and suitable for freezing will be mixed with a cryoprotectant (freezing solution) to protect them from any damage during the freezing process. Once frozen, the eggs can be stored at your clinic until you want to use them



What happens when I'm ready to use my eggs?

When you're ready, your frozen eggs will be thawed, fertilised with sperm, either from your partner or a donor if needed, and allowed to develop into embryos in the lab before being transferred into your uterus via a thin, flexible catheter.

Sometimes people may opt to undergo add on testing such as genetic testing of the embryos before they are transferred to select the best quality embryo. This is not a required step, may not be recommended for everyone and may have an additional cost.

"The reason I did this was because I had not had a period since coming off the pill (it had been 3.5 years) and I literally was getting no answers from doctors after 10,000 tests.

I did the hormone testing kit which I'm SO grateful for. My AMH which is an indicator of your egg reserve was really low - within range of a 55-65 year old, so they recommended that I freeze my eggs straight away."





SECTION 05 Is it right for me? hertility

Is Egg Freezing right for me?

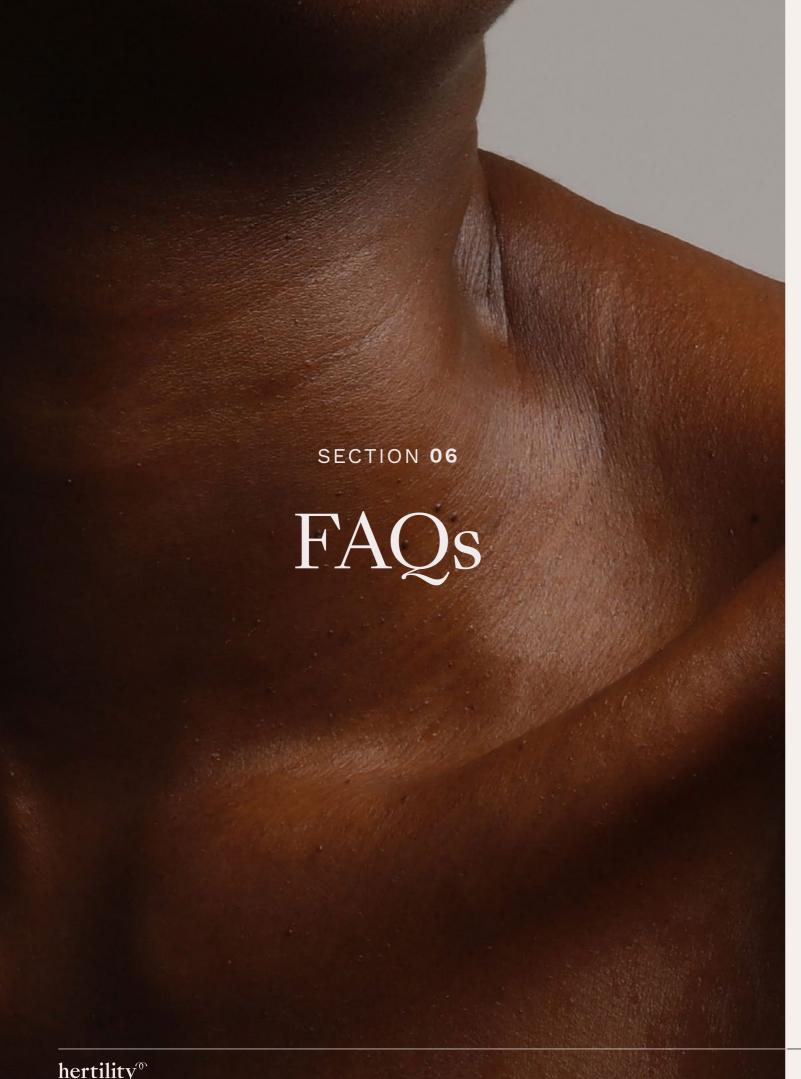
Deciding to freeze your eggs is a HUGE decision. Whether or not it's right for you will depend on lots of different factors. Some will be simpler—like, 'can I afford to?' Others may be more complex—like, 'am I in the right place emotionally right now?'.

It's personal—no two of us will be the same. It's okay not to have all the answers.

Making this decision is a process, but you're not alone—ever. Our team at Hertility is here to support you and give you all of the information you need to make the right decision, at the right time.

If you're still unsure about the process, or have any concerns, consider chatting to one of our <u>Fertility Advisors</u>, who are experts in fertility treatments and services. Dani, Emily and Ellie will all be able to give you information personal to your circumstances that may help you in your decision making process.

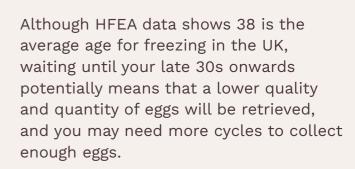




FAQs with Our Egg **Freezing Experts**



Dr. Benjamin Jones MBChB BSc (Hons) MRCOG PhD Obstetrician, Gynaecologist and Fertility specialist



The optimum age usually suggested is probably late 20s to mid 30s, and, recent research by our Doctors, Dr Lorraine Kasaven and Dr Benjamin Jones looked at data over 10 years and found those who froze their eggs before 36 had better outcomes.

However, a study suggested that from an economic perspective, it is not cost effective for a 25 year old to undergo social freezing if they are looking to delay parenthood because the chances they will conceive naturally are higher and they then might not end up using the frozen eggs.

Meet Dr Ben BSc (Hons) PhD MRCOG, our in-house obstetrician, gynaecologist and fertility expert. Here's what he had to say to some frequently asked questions.

How long can you store your eggs for?

Different countries have different laws, but in the UK as of July 2022, you can store your eggs for 55 years, as long as you renew your consent every 10 years. If you are thinking of freezing your eggs outside of the UK, contact us for regionspecific information.

What is the best age to undergo egg freezing?

Technically, you can freeze your eggs at any age before menopause, but eggs retrieved in your 20s and early 30s usually result in better outcomes than those in your late 30s and 40s. This is largely to do with the quality of the eggs at the time they are retrieved, as generally our eggs begin to decline more rapidly from 35 onwards.

How many eggs should you aim to freeze?

There is no one-size-fits-all approach to egg freezing. Research suggests that the older you are, the more eggs you'll need to freeze to achieve the same results as someone younger. Some eggs may not survive the egg freezing and thawing process and not all implanted eggs will result in a successful pregnancy or live birth. Our Fertility Advisors will be able to talk you through the process and give you more in depth information depending on your personal circumstances.

How effective is egg freezing?

Egg freezing does not guarantee successful pregnancy or live birth and data on success rates are limited because of it being a relatively new technology. However, one study found that 17.4% of those who froze their eggs had a baby or ongoing pregnancy at the time of analysis.

The HFEA also reports a success rate of 18% in women using their own eggs and a success rate of 30% in women using frozen donor eggs. How effective egg freezing is for you will depend on your personal circumstances and medical history.

Recent research by our Hertility Doctors, showed that out of a total of 373 women who froze their eggs, only 36 returned to use them, which resulted in 12 live births. 82% of the babies were born to those who froze their eggs between the ages of 36 and 39 years of age. Unfortunately, no one who froze their eggs after the age of 40 had a successful pregnancy during the study period.

So what does this mean? Whilst egg freezing has recently become known as a fail-safe way of preserving fertility, this research shows that this is not always the case, and highlights the importance of evidence-based decision-making.

It shows that although egg freezing is a viable option for having children later in life, it does not guarantee a successful live birth. Women should be encouraged to freeze their eggs earlier than has been previously thought and be made aware of the risks and low likelihood of success when doing it in their late 30s and 40s.

Can I get egg freezing on the NHS?

Social egg freezing is not funded by the NHS. Egg freezing is available on the NHS for certain medical conditions that can put our fertility at risk. Your GP or specialist will be able to advise about your eligibility for treatment, or you can contact your local ICB.

How expensive is egg freezing?

If you have to undergo egg freezing because of an underlying health condition or are undergoing a treatment that might affect your fertility, you might be eligible to get NHS funding. If you choose to undergo social egg freezing, you will have to undergo treatment privately, the average cost of having your eggs collected and frozen is about £3,350, with medication being an added £500-£1,500.

You will also have to pay an annual storage cost, which can be up to £500 per year. When you are ready to use the eggs, you will have to pay for thawing, fertilisation and transferring them to the womb costs an average of £2,500. So, the whole process for egg freezing and thawing costs an average of up to £7,000-£8,000.

Make sure you get a full cost treatment plan from your clinic so you're not caught out by unexpected costs.

The HFEA website has more information on costs and funding for fertility treatments.

Are there any risks or side effects?

Egg freezing is a relatively safe procedure, the main risk, although rare, is over-stimulating the ovaries. This condition is known as Ovarian Hyperstimulation Syndrome. It can cause severe bloating, stomach pains and nausea.

The first stage of egg freezing involves injecting yourself with hormones, which can make you feel more emotional and on edge. It's totally normal to have emotional ups and downs because it is a difficult journey to navigate. It may not be easy to identify or address how we feel because they are often tangled in, not only our expectations, but also those of our loved ones. But remember—it's always important to put yourself and your needs first.

What do I do if I don't end up using all my eggs?

You can contact your clinic and withdraw your consent to storing your eggs at any time and your eggs will be disposed of. You may want to consider donating your eggs—either for use in research, training or to be used for someone else's treatment. You will need to discuss this with your clinic, who will be able to provide you with all of the correct information.

SECTION 07 Hertility packages

How Hertility can help

By choosing to freeze your eggs with Hertility, you're not only choosing expert care—you're choosing a team that holds your health and wellbeing at the heart of everything we do.

Meet Our Partner Clinics

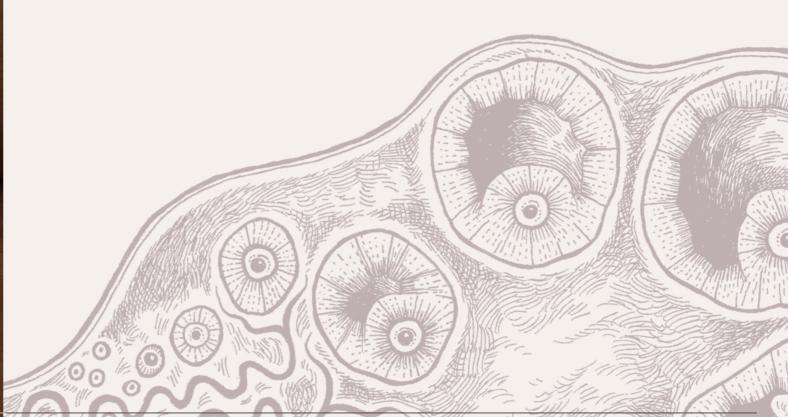
Apricity Clinics are accredited by the HFEA, the UK's fertility regulator, and you'll receive specialist treatment from leading experts and care providers chosen specifically by our team. With clinics in London or Manchester, you can choose your location and will be supported either virtually or in-person, whichever you prefer.











How Hertility can help

Depending on where you're at in your journey, choose from either of our egg-freezing packages, and get up to a 15% discount across all Hertility services.



£379* Scan Only Pre-treatment & Referral Package

If you have already taken a Hertility
Hormone & Fertility test then this is the
package for you. Get your pelvic ultrasound
scan and clinic referral in one, including
a 15% discount across both services.

Pelvic Ultrasound Scan

- ✓ Antral Follicle Count (egg count)
- Reproductive health condition screening
- ✓ In depth doctors follow-up report & scan images

Clinic Referral

✓ Free Specialist Fertility Doctor Consultation



*Note that this does not include the price of an egg freezing cycle. With Apricity, this will be an extra £6,150 paid to the clinic directly. A referral does not commit you to the eggfreezing process. You can take your free consultation with an Apricity specialist and if you decide the process isn't for you, you're not tied into continuing.



£549*

Complete Pre-treatment & Referral Package

This package includes everything you'll need to begin the egg-freezing process—from your initial Hormone Blood Test to a free consultation with our partner clinic, including a 10% discount across all Hertility services.

Hertility Hormone & Fertility Test

- ✓ Up to 10 reproductive and thyroid hormones tested
- Reproductive health condition screening
- In-depth doctors follow-up report

Pelvic Ultrasound Scan

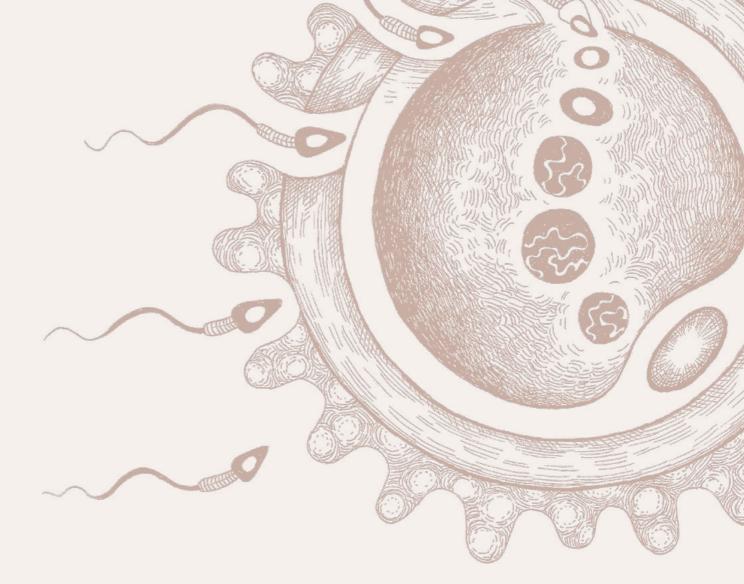
- ✓ Antral Follicle Count (egg count)
- Reproductive health condition screening
- ✓ In depth doctors follow-up report & scan images

Fertility Advisor Call

- Expert guidance on egg freezing process and costs
- ✓ Detailed run through of hormone test and scan results
- ✓ Non-judgemental, compassionate emotional support

Clinic Referral

✓ Free Specialist Fertility Doctor Consultation



"As I approached 35, I knew I wanted to freeze my eggs. I didn't want to feel pressured to have a baby just because of my biology.

But I had no idea if I would be able to—I knew you can only get screened on the NHS if you're trying, so I assumed I would just have to wait until then. That's when I found Hertility. I took a Hertility test which allowed me to see if I had any issues in advance of starting the process. It also meant I didn't have to pay for any extra tests when I started my first egg freezing cycle"



lish

Further resources



Webinar A Guide to Egg Freezing with Dr. Ben



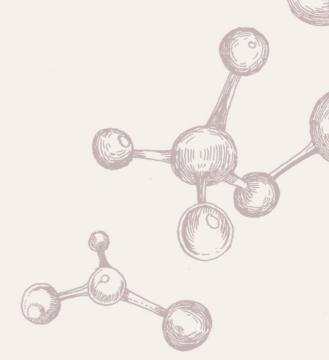
Research News Real-World Outcomes of Egg Freezing



Research News Fertility Preservation Outcome Study in Cancer Patients



Webinar "Should I freeze my eggs?" Webinar with Dr Lorraine Kassaven



SECTION 08

Resources & references

Written by



Zoya Ali BSc (hons), MSc Senior Scientific Research Associate



Dr Helen O'Neill BSc (hons), MSc, PhD CEO, Founder, Hertility Health



Dr Natalie Getreu BSc (hons), MSc, PhD COO, Co-Founder Hertility Health



Dr Tharni Vasavan BSc (hons), MSc, PhD Head of Scientific Product Research



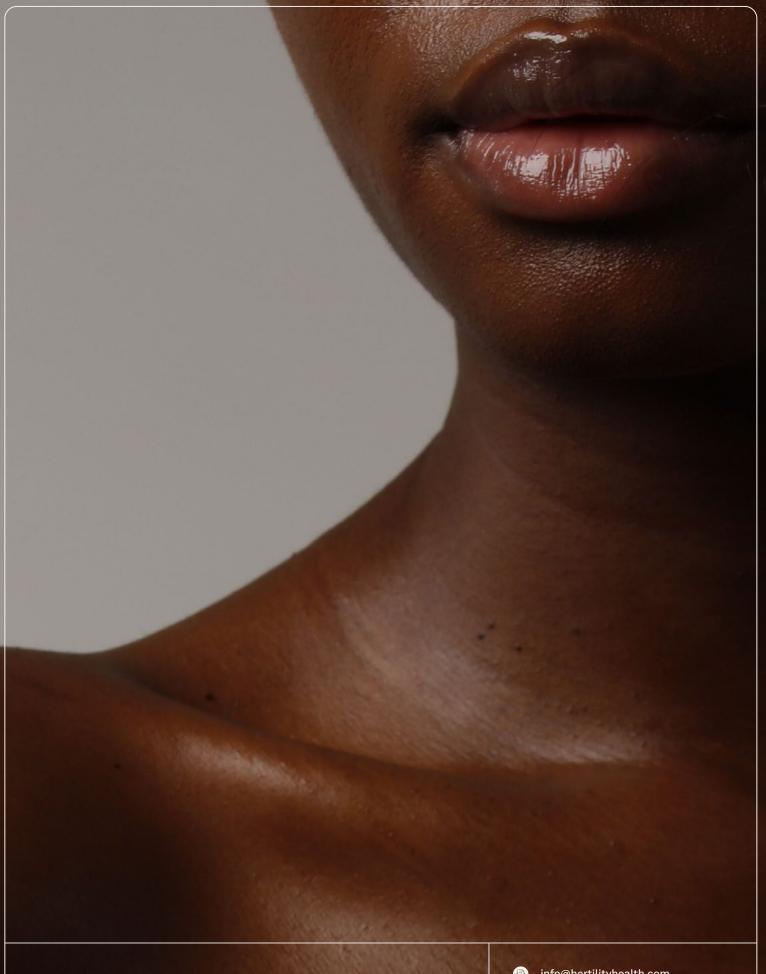
Dr Benjamin Jones MBChB BSc (Hons) MRCOG PhD Obstetrician, Gynaecologist and Fertility specialist

References

- Owen A, Sparzak PB. Age Related Fertility Decline. [Updated 2022 Dec 12]. In: StatPearls [Internet]. Treasure Island (FL): https://www.ncbi.nlm.nih. gov/books/NBK576440/
- https://www.hfea.gov.uk/treatments/ fertility-preservation/egg-freezing/
- 3. https://fertilitynetworkuk.org/accesssupport/nhs-funding/funding-faqs/
- 4. Kasaven, L.S., Jones, B.P., Heath, C. et al. Reproductive outcomes from ten years of elective oocyte cryopreservation. Arch Gynecol Obstet 306, 1753–1760 (2022). https://doi.org/10.1007/s00404-022-06711-0
- 5. Gale, J., Clancy, A.A. and Claman, P., 2020. Elective egg freezing for agerelated fertility decline. CMAJ, 192(6), pp.E142-E142. https://www.cmaj.ca/content/192/6/E142.long
- Varlas, V.N., Bors, R.G., Albu, D., Penes, O.N., Nasui, B.A., Mehedintu, C. and Pop, A.L., 2021. Social freezing: Pressing pause on fertility. International Journal of Environmental Research and Public Health, 18(15), p.8088. https://www.ncbi.nlm.nih.gov/ pmc/articles/PMC8345795/

- 7. Petropanagos, A., Cattapan, A., Baylis, F. and Leader, A., 2015. Social egg freezing: risk, benefits and other considerations. Cmaj, 187(9), pp.666-669. ncbi.nlm.nih.gov/pmc/articles/PMC4467930/
- 8. A comparison of fertility preservation outcomes in patients who froze oocytes, embryos, or ovarian tissue for medically indicated circumstances: a systematic review and meta-analysis, Bríd Ní Dhonnabháin, et al. Fertility and Sterility, Volume 117, Issue 6, 1266 1276
- https://www.reproductivefacts. org/globalassets/rf/news-andpublications/bookletsfact-sheets/ english-fact-sheets-and-infobooklets/Age_and_Fertility.pdf





hertility

info@hertilityhealth.com

www.linkedin.com/company/hertility/

www.hertilityhealth.com

@hertility_health

www.facebook.com/hertilityhealth/