How to Improve Egg Quality

by Iva Keene MRMed. ND. - Qualified Naturopathic Physician - Friday, September 24, 2010


As we get older, the quality of our eggs tends to decline due to increased oxidative stress which is damaging to our cells including our eggs. And because of this, many women wonder whether it is possible to improve egg quality after 40 and increase their chances of getting pregnant despite their age.

Some also wonder whether poor egg quality can be corrected only by medical intervention or if it can be managed naturally, through lifestyle and diet changes.

Causes of a diminished ovarian reserve

Is age the only cause of poor egg quality or are there other factors contributing to poor egg quality and a diminished ovarian reserve? The answer is yes! Apart from age, oxidative damage can be the result of the following:

- **Toxin exposure from food and drink.** Having poor diet and lifestyle choices (like smoking or eating too much sugar) can make your eggs age faster.
- **Exposure to toxins in the environment.** Toxins in your environment and in consumer products (like phthalates, for instance) can negatively impact your egg quality.
- **Psychological stress.** According to one study, psychological stress may affect female reproduction at the ovary, follicle and oocyte (egg) level. An increase in stress hormone (cortisol) production reduces estrogen (estradiol) production and results in deterioration in oocyte quality.
- **Illness.** Medical conditions like PCOS (polycystic ovarian syndrome) and endometriosis can also predispose women to poorer egg quality.
- **Lack of antioxidants in our diet**

Although any one of these factors can cause oxidative stress and reduce ovarian reserve, it’s due to a combination of factors for most women.

What does poor egg quality really mean?

Poor egg quality means that the egg may not divide properly or it may be missing a chromosome. Either way, if conception with a poor quality egg takes place the likelihood of miscarriage, malformations and congenital defects would be higher. This is also one of the reasons why babies born to older women are more prone to Down Syndrome than babies born to younger women.

However, as I explain to my clients, the age-related decline has more to do with the accumulation of toxins over the years (which result in greater oxidative stress and damage at the cellular level) than actual chronological age. And this is a good thing, as we can effectively address it with dietary and lifestyle changes and supplementation.
Poor egg quality symptoms

Although there are no outward or obvious signs of poor egg quality in women, there are signals indicating you might have poor egg quality:

- changes in your menstrual cycle (your cycle is getting shorter)
- you're having trouble getting pregnant
- you got pregnant before but it ended in early miscarriages
- your mum experienced menopause early and your sister is having difficulty trying to conceive

If you think you're suffering from poor egg quality, your doctor (or fertility experts) may ask to have these tests done to monitor your egg quality:

- **AMH (anti-Mullerian hormone) blood test** to check if you still have a pool of growing follicles that can mature into eggs. However, AMH is not a marker of egg quality but a marker of egg quantity. You can have a low ovarian reserve and still have some good quality eggs.
- **Antral follicle count** is an ultrasound done to count antral follicles to monitor your viable egg reserve.
- **Day 2 or 3 FSH** is a blood test done to check whether you have high FSH (follicle stimulating hormone) levels which would indicate poorer egg quality.

So what can you do to improve egg quality?

Most Reproductive Endocrinologists will tell you that there is nothing you can do to improve egg quality and sperm quality. Yet countless research over the last three decades tells a very different story.

**How to increase egg quality: Take Melatonin**

At the latest World Congress of Fertility and Sterility in Germany, scientists presented new research which found that you can improve egg quality by taking 3mg of melatonin. Melatonin reduced oxidative chemicals in the follicular fluid which bathes the egg and is designed to nourish it. If the fluid contains free radicals they will damage the follicle making it less viable for pregnancy.

Melatonin is a natural and very potent antioxidant hormone. We secrete melatonin at night when the pineal gland gets a signal that it’s dark outside. When you lay down, your body starts secreting melatonin to send you to sleep, which is why we get sleepy if we stay lying down for too long.

**What can interfere with melatonin production in your body?**

As we age, we have a natural tendency to produce less melatonin. Certain medications such as beta blockers can also interfere with melatonin production. Also, if you go to bed at midnight or later, you are missing out on the benefits of your natural melatonin secretion which peaks at 9 pm. You should be aiming to go to bed between 9 and 10 pm to get the most of your natural melatonin. Coffee after 1 pm and alcohol in the afternoon and evening will also interfere with your melatonin secretion.
Other benefits of melatonin

Melatonin also improves estrogren sensitivity at receptor sites on the ovaries and the endometrium (the womb) and can be of great help to menopausal women. This would also benefit women with PCOS to help them with ovulation and proper egg maturation.

How to improve egg quality: 6 other things you can do

1. Take supplements to improve egg quality. Melatonin is not the only nutrient which can help improve egg quality. Vitamin E is also found in the follicular fluid and plays an important role in nourishing the egg. Zinc and iron are indispensable. Zinc is necessary for cellular division and iron provides energy when the egg starts rapidly dividing after conception. You can also take CoQ10 (ubiquinone or ubiquinol) to improve egg health at the mitochondrial level.

2. Reduce stress. Physiological stress increases cortisol (stress hormone) levels in the body, which, in turn, decreases estrogen and causes hormonal imbalance. Since chronic stress and hormone imbalance in your body can affect ovulation and egg quality, it is best to take stress-reducing measures like relaxation, low-impact exercise and doing things you love (like hanging out with family/friends or doing a hobby).

3. Maintain a healthy weight. Experts suggest women maintain a normal (healthy) weight since being underweight or overweight can decrease their chances of conception. Light to moderate exercise is also encouraged to help maintain a healthy weight for better egg quality and fertility improvement.

4. Make healthy lifestyle choices. Apart from maintaining a healthy weight, making better lifestyle choices like avoiding alcohol, caffeine and smoking can help improve egg quality. Smoking negatively influences egg quality, alcohol exposes women to reproductive defects and according to a study, a lower number of eggs is associated with higher caffeine intake.

5. Eat a healthy diet. It is important to nourish your body with whole foods to improve female egg quality (like fruits, nuts, vegetables and filtered water) that are packed with vitamins and minerals essential in developing healthy eggs. Avoid processed, salty, sugary foods and foods with gluten. For more information on what to and what not to eat for fertility, please see our blog on Fertility Diet – The Smart Way to Get Pregnant.

6. Consult a natural fertility expert to help you out. If you are wondering how to improve egg quality after 40 or how to increase egg quality in general, seek the help of natural fertility experts to ease you into herbal and complementary treatments (like acupuncture, for instance) that can increase egg quality.

Takeaway

Poor egg quality can make it difficult for you to conceive. The symptoms of poor egg quality may not be obvious, but there may be physical signals that may indicate poor egg quality like a shorter menstrual cycle and difficulty getting pregnant. However, these signs aren't enough to determine poor egg health, so your doctor may order a couple of tests to monitor your egg quality.
Poor egg quality is usually a result of genetics, poor diet and lifestyle choices. If you think you have poor egg quality, and in case you're wondering how to improve egg quality to increase your diminished ovarian reserve, the above tips may help you improve your egg health naturally.

What are your thoughts? Is poor egg quality a concern for you? Are you taking proactive steps to improve your egg quality? I would love to hear from you!

References

[1] https://m.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Gynecologic-Practice/Female-Age-Related-Fertility-Decline


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