What Can I Do to Protect My Fertility?

By Travis W. McCoy, M.D.

Approximately 12% of women in the United States have had difficulty conceiving. The causes are vast and in approximately 10% of couples, the causative factor is not clearly found despite a thorough evaluation. How much of infertility issues are in control of the patient? What can a couple do to ensure themselves the best possible outcome? Below is a brief summary of important modifiable lifestyle factors that can be altered to ensure a couple's best chance to retain/maintain their fertility.

Maintain a healthy weight.

By just taking a look around, it is obvious that residents of Kentuckiana have problems with weight. As of 2008, Kentucky led the nation with 67% of the population being overweight, and 28% of the population classified as obese.

> Obesity is known to be a significant risk for both infertility and poor pregnancy outcomes, with increases seen in anovulation, poor sperm function, early miscarriage, stillbirth. gestational diabetes, pre-eclampsia, cesarean delivery rate, and other delivery complications. Though weight loss is not easy for anyone, even a modest loss of 10% body weight has been found to have significant improvement in some of

the above outcomes. Exercise, independent of weight loss, can also provide better overall health as well as improved reproductive outcomes. For those persons who are very obese (>100 pounds above ideal weight), long-term success of maintaining weight loss is very low. These patients should consider surgical (bariatric) intervention. Though there are significant risks associated with bariatric surgery, current minimally invasive methods have improved outcomes significantly, and this type of procedure has been found to be the only significantly successful method of maintaining long term weight loss for the morbidly obese. This leads to significant improvement in long-term health. Patients who have undergone bariatric surgery should plan on delaying conception for at least 12 months and possibly longer based upon the recommendations of her physicians.

Limit exposure to substances that may contribute to infertility.

Smoking can have a significant impact on fertility, being associated with impaired ovulation, tubal function, miscarriage, as well as adverse pregnancy outcomes such as low birth weight infants, and sudden infant death syndrome (SIDS). Marijuana use can have severe toxic effects on sperm, and likely has other similar associations within the female as tobacco smoking. Steroid use, either prescribed or recreational use, has severe effects on the male reproductive system that limit sperm production. Alcohol is known to have dose related toxic effects on a pregnancy and is related to reduced conception rates even at low to modest intake levels before conception. Caffeine has been weakly linked to a decreased conception rate; however the direct causal relationship has not been clearly established. Certain medications can also affect conception as well as be toxic in pregnancy. A thorough discussion with an obstetrician is encouraged for anyone regularly taking medications.

Limit stressors.

Stress is often in the eye of the beholder. The stress that we commonly refer to, emotional stress, can affect us all at some point. Stress can also lead to physical effects in the body as well. Infertility has been linked to stress primarily through pathways that interfere with the body's natural hormones that induce ovulation. It can possibly affect other aspects as well such as the ability of an embryo to implant in the uterus or the male production of normal sperm. Many techniques of stress reduction are available such as meditation, yoga, hypnosis, massage, acupuncture, or just a vacation. No one method has been shown to be superior to another. Any technique that reduces perceived stress is likely to be effective in minimizing these effects on the body.

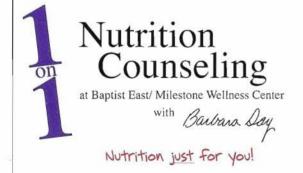
Stress can be physical as well, such as in those persons who exercise vigorously, have physically demanding work, or may have inadequate calorie intake from aggressive dieting. This can interfere with normal body functions just as any of the above can. Often just cutting back on this behavior can show significant improvement in outcome.

Maintain proper nutrition.

We all know that we should eat healthy and take our vitamins. This is just as true for adults as for children. The diets of most adults provide them with all of the necessary essentials needed for daily living. However, in planning for pregnancy, it is a good idea to build up the body's stores ahead of time. Folic acid is the most important nutrient needed prior to conception. Adequate body stores of folic acid assist in the proper early development of the brain and spinal column in the early embryo. This occurs prior to many women realizing that they may be pregnant, thus the need for adequate folic acid before conceiving. The recommended daily dosage is 400 mcg (micrograms), which is commonly found in most prenatal vitamins. However, many prenatal vitamins have recently increased their dosage to 800 mcg or more to ensure proper body stores. There is no harm in taking more than the recommended amount. Women who have or have had a child with spina bifida (a spinal cord development problem) are recommended to take 4 milligrams (4,000 micrograms) per day. Women with specific diets devoid of certain foods, such as a strict vegetarian or vegan diet should also take a daily vitamin and may want to discuss other dietary needs during pregnancy with a nutritionist.

In conclusion, the protection of a couple's fertility includes having an awareness of their current position in their reproductive lives, future conception plans, as well as an appreciation of the health and lifestyle issues that may impact their fertility.

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