1) What is the link between obesity and infertility?
2) What are your recommendations for women who are trying to lose weight
to increase their chances of getting pregnant? Obviously, you are going
to recommend the X2 weight vest, but please include any other recommendations as well.
3) Does this effect men as well? Meaning does your program target sterility/obesity correlations as well?

1) OBESITY AND INFERTILITY … WHAT'S THE CONNECTION?

The adverse effects of obesity on fertility and pregnancy outcomes are overwhelming and indisputable. Body mass index (BMI) in kg/m^2 is calculated from maternal height and weight data. Morbid obesity is defined as BMI over 40; obesity is defined as BMI over 30. In obese women with excessive adipose tissue, abnormal hypothalamic and pituitary hormone secretions from the brain are common, leading to anovulation (lack of ovulation). Obesity is strongly related to polycystic ovarian syndrome (PCOS) in women. Obese women are also particularly susceptible to diabetes and insulin resistance. Even with fertility drugs or IVF treatments, pregnancy rates are adversely affected by obesity.

Researchers have determined that most women with PCOS have an endocrine imbalance known as "*insulin resistance*" in which the body doesn't handle insulin normally. Insulin is the hormone produced in the pancreas that lowers blood glucose levels. After eating a meal, blood glucose levels rise. The pancreas responds by releasing more insulin into the bloodstream. The insulin helps the liver, muscle and fat store some of the energy as glucose and fat, thus keeping blood glucose levels in a normal range.

Women with insulin resistance may have normal blood glucose levels, but because the cells of their bodies are resistant to insulin, the body over compensates by producing even higher levels of insulin to keep their blood glucose levels normal. The resulting higher insulin levels lead to more fat storage (obesity) and also disrupt proper ovarian hormone production (increased male hormone), thus preventing ovulation. Insulin resistance ultimately can produce all the symptoms of PCOS…anovulation, infertility, obesity, and hirsutism.

When women with PCOS are able to correct the insulin resistance with proper low carb diet, exercise, and/or insulin-sensitizing drugs, such as metformin (Glucophage), normal ovarian function (ovulation and normal female hormone production) often returns. Many studies have demonstrated that in obese women, especially those with PCOS, use of metformin, regular exercise and/or weight loss of 5-10% of body weight can each *independently* lead to resumption of ovulation and spontaneous pregnancies as well as dramatically improve pregnancy rates with all types of fertility treatments.

2) RECOMMENDATIONS FOR WOMEN:

As stated above, the main goal for the obese or PCOS female, is to correct the body's 'insulin resistance'….. use of medications (metformin), regular exercise and/or a low carb diet resulting in a weight loss of 5-10% of body weight can each *independently* help to correct the 'insulin resistance'. This results in resumption of normal hormone levels and ovulation.
The X2 Vest is simply a 'catalyst' to help them burn calories more efficiently…it is especially helpful for the working woman who between her job and fertility treatments, may not have the time or the ability to join a health club…..It certainly has worked for me and my schedule. The X2 Fit & Fertile Program obviously recommends use of the X2 Vest, but also provides meetings in person, teleseminars covering many nutrition/fitness topics, a website (and private chat room) for a 'team' approach…women with the same goals helping each other. Most of the husbands are also overweight …use their own X2 Vests and work together with their spouses. For more info re the program go to www.X2FitandFertile.com

We also stress the significant reduction in pregnancy & perinatal risks accomplished by weight loss. Many studies confirm that morbidly obese women who do conceive have an increased risk of pregnancy complications and adverse perinatal outcomes. These complications include pre-eclampsia, antepartum stillbirth, caesarean section, shoulder dystocia, meconium aspiration, early neonatal death, diabetes mellitus, and birth defects involving the brain, heart and neural tube defects.

The take home message from these studies is that women need to be counseled about the serious dangers associated with obesity and pregnancy complications. Obesity is a chronic but treatable condition. The problem of obesity can be solved, but requires motivation, counseling, and behavior modification.

3) DOES MALE OBESITY PLAY A ROLE IN INFERTILITY?

Several studies have demonstrated a dramatic increase in sperm DNA fragmentation in obese men, leading to a significant reduction in sperm quality. In addition, there may also be an increase in the miscarriage rate for men with high level fragmented DNA damage. Increased sperm DNA fragmentation due to oxidative stress may be due to several factors: men over age 50; possibly cigarette smoke, excessive exposure to heat; obesity and numerous environmental toxins. Some of this sperm DNA fragmentation may be reversed. We often recommend various antioxidants (such as Proxeed or Conception XR) to improve sperm counts, motility and possibly morphology before doing inseminations or in vitro fertilization. Weight loss can improve sperm counts and sperm fertilizing capacity.

My website www.TheInfertilityDoctor.com also has all the newspaper articles I have written on these various topics over the last several years. I try to make the articles simple to read and understand for the general public. Look forward to talking to you on Wed afternoon.