

THINGS YOU MUST KNOW BEFORE GETTING PREGNANT

At Boston IVF, we have two goals for your treatment. The first goal is to help you achieve a pregnancy. The second goal is that the pregnancy is uncomplicated and results in the delivery of a healthy baby. To this end, there are certain things that you can do to help achieve this goal, which are discussed below.

Smoking

The detrimental effects of smoking on general health are well established (e.g., heart disease, cancer, and chronic lung disease). Smoking also impacts on reproductive health, as well. Women who smoke during pregnancy are at increased risk for premature labor, decreased fetal growth and other complications. In addition, studies have demonstrated that men and women who smoke have a decreased chance of achieving a pregnancy either naturally or following infertility treatment. Therefore, if you smoke, we feel strongly that for general and reproductive health concerns, you must stop. If you are unable to stop on your own then you should contact your primary care physician to get enrolled in a smoking cessation program.

Alcohol

Alcohol should be completely avoided during pregnancy because it increases the chance of the birth defects. In addition, alcohol can interfere with the establishment of pregnancy. A previous study concluded that any amount of alcohol ingested by the woman decreased the chance of pregnancy and increased the chance of a miscarriage. Therefore, we recommend that if a woman is attempting pregnancy she should completely avoid alcohol or limit intake to the first week of the menstrual cycle. There is no detriment of mild to moderate alcohol intake on male fertility.

Caffeine Intake

Several studies have concluded that caffeine intake by the woman decreases the chance of establishing a pregnancy and increases the chance of a miscarriage. Caffeine is present in coffee, tea, some soft drinks and chocolate. It is our recommendation that you should avoid caffeine altogether or limit intake to one caffeinated beverage per day. There

is no detrimental effect of caffeine on male fertility.

Recreational Drug Use

The use of recreational drugs is contraindicated while attempting to conceive and during pregnancy. Some drugs, such as marijuana, may decrease sperm production. Drug use by the woman during pregnancy, such as cocaine and heroine, may lead to severe withdrawal reactions in the baby after it is born. Further, the use of intravenous drugs increases the risk of acquiring an HIV and hepatitis infection.

Medication use

All non-fertility medications that have been prescribed should be discussed with a Boston IVF physician. It is also important that you contact the physician who originally prescribed these medications to make sure he/she is aware that you are attempting pregnancy. You should avoid taking aspirin and aspirin-like compounds (e.g., Advil[®], Aleve[®], Ibuprofen[®] and Motrin[®]) around the time of ovulation, since these medications can interfere with ovulation. Tylenol[®] is a suitable alternative. Herbal remedies should be completely avoided since their effect on fertility and pregnancy are unknown.

Vitamin Supplementation

Neural tube defects are abnormal developments of the spine and skull. One type of neural tube defect is spina bifida. Several studies have confirmed that folic acid supplementation started before conception will reduce the occurrence of neural tube defects in infants by almost half. It is now recommended that all women who are attempting pregnancy ingest at least 0.400 mg of folic acid per day for this protection. Folic acid supplementation can be achieved by taking an over-the-counter multivitamin or a prenatal vitamin on a daily basis.

There is published data that has confirmed that excessive intake of vitamin A increases the chance of birth defects. Prenatal vitamins and over-the-counter multivitamins contain 5000 IU of vitamin

A, which is a safe dose. However, daily intake should not exceed 10,000 IU.

Nutrition

Our general health is influenced by what we eat, how much we eat and how much energy we expend with activity and exercise. In addition, our nutritional state can impact on reproductive health, as well, and can influence the establishment and maintenance of a pregnancy. As a general recommendation, women should be encouraged to maintain a balanced diet of fruits, vegetables, breads, meats and dairy products. Foods with high content of fats and oils should be used at a minimum. During pregnancy ingestion of some fish, which contain higher amounts of mercury, can affect the development of the nervous system of a fetus. Before and after pregnancy is established a woman should avoid eating these fish- shark, swordfish, king mackerel, tilefish and canned tuna fish. In addition, the ingestion of all other fish should be limited to 12 oz. per week.

Body Weight

A major concern about increased weight is the higher chance of complications during pregnancy including diabetes, high blood pressure and clot formation. Women who are overweight tend to have larger babies, more difficult deliveries and a higher chance of requiring a cesarean section. Further, a cesarean section that is performed on a woman who is overweight is associated with a higher incidence of anesthetic and surgical complications that could jeopardize the health of the mother and baby.

The body mass index (BMI) is a standard to determine whether a person's weight is appropriate for their height. It is a calculation that takes into account the weight and height [weight (kg)/ height (m²)]. An easy way to calculate the BMI is as follows: multiply the weight in pounds by 704 then divide by height (in inches) squared.

Example: A woman is 5' (60") tall and weighs 207 lbs; her BMI would be calculated as follows:

$$207 \times 704 / 60^2 = \underline{40.5}$$

An optimal BMI is 20-24. All women with a BMI of >30 should be encouraged to lose weight. For women who have a BMI >40 it is recommended to lose weight prior to attempting pregnancy or undergoing infertility treatment.

Exercise

The benefits of exercise on general health and mental well being are established. Further, exercise during pregnancy has also been shown to be beneficial. If you are already in an exercise program, we would encourage you to continue. However, the medications used to stimulate the ovaries as part of your treatment can cause temporary ovarian cysts to form. Therefore, we would advise you to avoid exercise activities that result in a lot of vertical movement (i.e., running, step aerobics). Exercise activities such as swimming, bicycle riding, walking and using the treadmill or step exercise are acceptable.

Routine Gynecologic Care

During your infertility treatment, it is important for you to continue your routine care with your gynecologist or primary care physician. This should include a yearly blood pressure check, physical examination, pelvic examination and Pap smear. A baseline mammogram is recommended for every woman at age 40 and every 1-2 years thereafter.