

Nutrition and Fertility: What's the Connection?

Susie Langley MS, RD March 23, 2006 10:00-11:00 AM

To Your Health: Prevention, Wellness & Nutrition Intervention Across the life Span
AODA Conference, Alexander Hotel, Dublin, Ireland.

Definitions:

IVF	In Vitro Fertilization
IUI	Intra Uterine Insemination
FSH	Follicle Stimulating Hormone
LH	Leutinizing Hormone
GnRH	Gonadotropin Releasing Hormone
SHBG	Sex Hormone Binding Globulin is a protein that binds with sex hormones testosterone and estrogen. Also called steroid binding globulin, because testosterone and estrogen are produced from cholesterol and are thus considered to be steroid hormones. These hormones are inactive when when bound to SHBG, but are available for use when needed. Low levels of SHBG are related to increased availability of testosterone and estrogen in the body.
Amenorrhea	Absense of menstrual cycle
Anovulatory	Menstrual cycles in which ovulation does not occur
Embryo	The developing organism from conception through 8 weeks.
Fetus	The developing organism from 8 weeks after conception to the moment of birth.

Menstrual cycle: an approximate 4 week interval in which hormones direct a build-up of blood and nutrient stores within the walls of the uterus and ovum maturation and release. If the ovum is fertilized by the sperm, the stored blood and nutrients are used to support the growth of the fertilized ovum. If fertilization does not occur, they are released from the uterine wall over a period of 3 to 7 days. The period of blood flow is called the menses, or the menstrual period.

Insulin Resistance: a condition in which cells “resist” the action of insulin in facilitating the passage of glucose into cells.

Polycystic Ovary Syndrome (PCOS): a condition in women characterized by insulin resistance, high blood insulin and testosterone levels, obesity menstrual dysfunction, amenorrhea, infertility, hirsutism (excess body hair), and acne. PCOS carries a higher risk for Type II Diabetes and heart disease.

Glycemic Index (G.I.): a measure of the extent to which blood glucose levels are raised by a specific amount of carbohydrate-containing food compared to the same amount of glucose or white bread.

Resource: Nutrition Through the Life Cycle. 2005
SL 3-16-06