FERTILITY AND VITAMIN C

This is a review article on the role of vitamin C and fertility. Vitamin C has been associated for a long time with fertility. Vitamin C may benefit fertility in its ability to promote collagen synthesis, its role in hormone production and its ability protect cells from free radicals. Vitamin C accumulates in both tissues of the ovary and testes. Tissue content of vitamin C varies but the highest concentrations occur in the pituitary, adrenal and in gonads. As in males vitamin C has been suggested as a regulator of female fertility. Vitamin C supplementation enhances the ovulation-inducing effects of clomiphene by an apparently local ovarian effect. Large quantities of vitamin C are utilized during human conception and are necessary to maintain the integrity of fetal membranes. Dietary supplementation during pregnancy may reduce the frequency of birth defects and a daily supplement of at least 500 mg of vitamin C starting as early in pregnancy as possible has been suggested for pregnant mothers. None of these proposals have been translated into clinical practice. The available human data suggests that a re-examination of the clinical potential of vitamin C would be appropriate and timely. 21764 [rep] "Ascorbic Acid and Fertility", Luck, Martin R., et al, Biology of Reproduction, 1995;52:262-266. (Address: Martin R. Luck, Department of Physiology and Environmental Science, University of Nottingham, Sutton Bonington Campus Loughborough, Leicestershire LE12 5RD, United Kingdom FAX (0115) 9516302).

This is an excellent overview on a very timely topic. A consistent theme in the reproductive literature is that oxidant stress on the egg and sperm cause damage and impair fertility. Because there is such a poor success rate from the incredibly expensive fertility workups one would think more attention would be paid to the antioxidants particularly vitamin C, selenium and glutathione in enhancing fertility. Stopping smoking and alcohol are mandatory for both sexes in attempting conception.