



Preconception Formula

Supplement Facts		
Serving Size: 3 Capsules		
Servings per Container: 30		
	Amount per Serving:	DV%
Vitamin A (as beta carotene)	5,000 IU	100%
Vitamin C (as ascorbic acid)	180 mg	300%
Vitamin E (as d-alpha tocopherol)	60 IU	200%
Vitamin B1 (thiamine HCl)	2.25 mg	150%
Vitamin B2 (riboflavin)	2.55 mg	150%
Vitamin B3 (niacin)	40 mg	200%
Vitamin B5 (pantothenic acid)	20 mg	200%
Vitamin B6 (pyridoxine HCl)	12 mg	600%
Vitamin B12 (as cyanocobalamin)	12 mcg	200%
Vitamin D3 (as cholecalciferol)	4,000 IU	1000%
Boron	500 mcg	†
Chromium	150 mcg	125%
Copper (amino acid chelate)	2 mg	100%
Folate	800 mcg	200%
Iron (amino acid chelate)	27 mg	150%
Iodine (potassium iodide)	150 mcg	100%

Magnesium	400 mg	100%
Manganese	2 mg	100%
Molybdenum	77 mg	100%
Selenium	140 mcg	200%
Zinc (amino acid chelate)	15 mg	100%
Proprietary Blend		
CoQ10 (Ubiquinol)	300 mg	†
Lycopene	15 mg	†
Grape Seed Extract	100 mg	†
S-Acetyl Glutathione	80 mg	†
DHA	250 mg	†
EPA	90 mg	†
GLA (gamma linoleic acid)	25 mg	†
Quercetin	200 mg	†
<p>* Percent Daily Values are based on 2,000 calorie diet. † Daily Value not established.</p> <p>Other Ingredients: Magnesium Stearate, Rice Flour, and Gelatin</p>		

The Scientific Basis:

Generally, 40% of the couples with impaired fertility have a female factor as primary cause. There is increasing evidence that preconceptional nutritional status plays an important role in fertility and long-term health of the offspring and dietary interventions and nutritional supplements may counteract the deleterious effects of oxidative stress on female fertility and oocyte (egg) health.

During normal metabolism, reactive oxygen species (ROS) are generated on an ongoing basis, either by external or internal causes and ROS are critical for many processes in the human body, including certain intracellular signaling pathways. However, when there is an imbalance between oxidants and buffering antioxidants there is oxidative stress. Oxidative stress can negatively impact fertility by directly and indirectly affecting multiple processes in the female reproductive system. ROS, or oxygen radicals, such as hydrogen peroxides, superoxide anions, singlet oxygen and hydroxyl radicals, are the natural byproducts of oxygen metabolism. Oxygen radicals, however, are unstable, toxic molecules that contain one unpaired electron. These unpaired electrons make free radicals highly reactive such that they can react with lipids, amino acids and DNA/RNA in their vicinity. One free radical can spark a chain reaction, instantly causing a cascade of new free radicals. In the normal state, the follicular fluid contains antioxidants which both negate the effects of these ROS and which protect the egg cells from oxidative damage. However, during times of physical or environmental stress, the concentration of ROS can increase markedly, leading to extensive egg DNA damage. It has been suggested that in addition to damaging oocytes within developing follicles, oxidative stress may affect oocyte maturation, fertilization and embryo development and may be involved in the planned cell damage and death (apoptosis) of oocytes associated with the age-related decline in female fertility.

Coenzyme Q10, ubiquinone, present in circulating lipoproteins is a potent antioxidant. At the cellular level it can increase energy production and affect gene expression. Observational studies have suggested that supplementation may improve pregnancy rates in women greater than 35 years of age. A recent clinical study that was not sufficiently powered to achieve statistical meaning, involving Coenzyme Q10 in the IVF setting revealed a higher clinical pregnancy rate in the Coenzyme Q10 group (33%) versus the control group (26.7%). In addition, the rate of aneuploidy (abnormal chromosome copy number in cells) in embryos was higher in the control group (62.8%) relative to the Coenzyme Q10 group (46.5%).

Observational studies have shown oxidative stress markers in high concentrations in the follicular fluid and serum of women with infertility; however, there can be no cause and effect relationship confirmed from such studies. Studies of antioxidants in female infertility have been reviewed in a Cochrane review published in 2013. The quality of evidence was “very low” to “low” due to methodologic problems with the reviewed studies. However, no evidence revealed a difference in adverse outcomes between antioxidant groups and control groups. It must be further noted that treatment with nutritional supplements with or without standard infertility treatments (ovulation induction, IVF) has not been subject to statistically robust prospective, randomized clinical trials.

References

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Disclaimer: None of the above statements have been evaluated by the United States Food and Drug Administration (FDA). These products are not intended to diagnose, treat, cure or prevent any disease. Please consult your health care professional before taking any and all supplements. Individual results may vary.

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All products are made in the USA, with all ingredients from the USA.