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## **Introduction**

pre-Conceive is a new nutritional supplement which aims to improve the fertility of both men and women who are struggling to conceive. pre-Conceive combines 31 nutrients, including many key minerals, vitamins, amino acids and nutraceuticals which previously, have been independently shown to have a beneficial effect on fertility in both men and women. The nutrients included are at concentrations that have been shown to improve key fertility parameters in previous studies. Each serving of pre-Conceive supplies over 17 grams of active nutrition. 20 infertile men and 20 infertile women took part in this clinical study. The average age of both groups was 37.

## **Aim**

To investigate the effect of pre-Conceive on the fertility of both men and women who are having difficulty conceiving naturally. Pillar Healthcare, which was established in 2012, was set-up to design and manufacture a functional and therapeutic nutritional supplement. The growing infertility crisis across the developed world is a cause for concern, especially for those who are affected. At present, there are limited options available for those trying to conceive. Most nutritional products supply partial doses - a percentage of the researched effective dose. Pillar Healthcare wanted to examine if pre-Conceive, combining therapeutic doses of nutrients could improve the key fertility parameters of both men and women.

## **Methodology**

The study itself, had a relatively simple design. pre-Conceive is an over the counter nutritional preparation for those trying to conceive. A key aim of the study was to replicate men and women using the nutritional supplement, pre-Conceive, at home - to give a fair representation of the product being used by real people in real situations. Fertility parameters were measured at the start and the end of the 3 month study. The participants would also consult a nutritional therapist before the study, to promote a healthy lifestyle. A follow-up call half-way through the study was undertaken by the nutritionists. pre-Conceive is a two part product. The first, a nutritional sachet is consumed in the AM and then three fish oil softgels are consumed with the evening meal.

## **Results**

### Lead Researchers Conclusion:

*"pre-Conceive combined with nutritional advice improves the levels of key fertility and nutritional parameters, though a larger study is required to validate if pre-Conceive can improve overall fertility in patients."*

The results of the study are broken down into two components. The first aspect that will be discussed are the male results, with the second aspect being the female results. 20 men were enrolled into the study. Initial feedback on the nutritional supplement showed that the flavour of the nutritional powder in the sachet could have been better, with some men noticing digestive discomfort. Apart from this, no other side-effects were noted. Mood, energy and general health seemed to improve in the men taking the nutritional supplement. Testosterone, FSH, LH, prolactin, TSH, T4, Vit. B12, serum Folate, Vit. D, glutathione peroxidase and superoxide dismutase were measured in the blood of the males. In addition, a DNA fragmentation analysis and semen analysis were performed on the males' sperm. All couples were given advice by a nutritionist, who followed up with their progress 6 weeks after the initial consultation.

Men:

85% of men improved their Progressive Motility	1 in 2 men improved their antioxidant marker Superoxide Dismutase
79% of men improved their Total Motility	82% of men improved the antioxidant marker Glutathione Peroxidase
71% of men improved their Overall Sperm Count	84.6% of men had improved Vitamin D3 levels
81% of men showed improvements in the DNA of their sperm cells	71.4% of men improved their Folate levels
66% of men improve their morphology	79.% of men improved their B12 levels

Female:

Before and after pre-Conceive was taken, levels of Testosterone, FSH, Oestradiol, LH, Prolactin, TSH, Free T3, Free T4, Vit. B12, Serum Folate, AMH, CA125, Vit. D, glutathione peroxidase and superoxide dismutase were measured in the blood of female patients. Again, similar comments were made by the participants. The flavour of the sachet could be improved and again, some digestive discomfort was noted. Loose bowels were noted in ten percent of the participants.

60% of women improved in the antioxidant marker Superoxide Dismutase (Protects follicle and egg quality)	D3: 82% of women improved their Vitamin D3 levels
Glutathione Peroxidase: 60% of women improved the antioxidant marker Glutathione Peroxidase (Improves fertilisation and conception rates)	Folate: 45% of women had improved Folate levels
	B12: 82% of women had improved B12 levels
	71.43% of women had improved AMH levels

Dr. David Smallbone, M.B., Ch.B., L.R.C.P., M.R.C.S., M.F. Hom., F.C.O.H.

"In conclusion, I believe the report favourably shows that providing adequate nutritional materials can and does influence the body systems. It becomes apparent that important systems, such as the endocrine system, can be affected by correct nutrition but it needs time and six months is not an unreasonable amount of time, especially when several years of nutritional abuse lie behind the

problem. Unless the nutritional requirements of the body are specifically catered for, it is highly unlikely that full health can be expected. pre-Conceive consciously provides those specific nutritional needs for full fertility health to be achieved. It may be that, in most cases, very little else is required - except time. It is important that when fertilisation ensues, that the nutritional support is maintained for full potential development of the foetus."

"The Anti-Mullerian Hormone is a general indicator of the state of ovarian reserve in women. It appears that many women in the group were below, or close to, the lower threshold levels. It appears to be very much age related and very difficult to accurately quantify. It appears that 71.43% of women had an improvement in their levels over the period."