Yonr Monthly Update

Dear Colleague

Welcome to the December 2010 newsletter from Pure Bio Ltd.

Office Hours over the Christmas Period:

Please note that the office will be open at the following times during the Christmas and New Year period:

09.00 - 12.00

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normal office hours

normal office hours

CLOSED

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CLOSED

Friday 24th December 2010 Monday 27th December 2010 Tuesday 28th December 2010 Wednesday 29th December 2010 Thursday 30th December 2010 Friday 31st December 2010 Monday 3rd January 2011

Normal office hours will resume on **Tuesday 4th January 2011**.

Orders will, as usual, be sent out using first class business mail, but please allow *at least* 3 extra working days for deliveries to reach their destination during this period.

All of the staff at Pure Bio would like to take this opportunity of thanking you for your much valued custom over this year of continued economic challenges; and to extend to you and your families and staff the very warmest wishes for a happy and peaceful Christmas season.

Don't forget that orders can be placed on our website on <u>www.purebio.co.uk</u> at any time during the Christmas period.

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We always welcome feedback and suggestions.<u>http://www.purecaps.com/healthnotes.asp?ContentID=1192004 - top#top</u>

The chosen topic for this month is:

Infertility

Protocol Summary

Ranking	Nutritional Supplements	Botanical Medicine
Primary	Zinc (in men)	
Secondary	Vitamin C Men: I-Carnitine Selenium Vitamin B12	Propolis Vitex Men: Panax Ginseng Maca
Other	Arginine Multivitamins Iron Vitamin E Men: Acetyl-I-Carnitine CoQ10	

Primary – Reliable and relatively consistent scientific data showing a substantial health benefit.

Secondary – Contradictory, insufficient, or preliminary studies suggesting a health benefit or minimal health benefit.

Other – An herb is primarily supported by traditional use, or the herb or supplement has little scientific support and/or minimal health benefit.

Definition

A couple is regarded as infertile if they have been unable to conceive a child after 12 months of regular sexual intercourse without birth control.

- > Primary infertility means they have never had a child.
- Secondary infertility means that the infertile person has had one or more children in the past, but a medical problem is impairing fertility.

Many people may be infertile during their reproductive years. They may be unaware of this because they are not seeking to create a pregnancy. On any one occasion, the chance of pregnancy is just one percent.

Causes

About 35 percent of all cases of infertility arise from problems in the man's reproductive system and may be due to:

- > Under-developed testes
- Swollen veins in the scrotum.
- Undescended testes
- > Infections, such as gonorrhea or tuberculosis
- > Exposure to metals such as leads, or chemicals such as pesticides.
- Certain medications
- > Injury to the testicles
- Chronic prostate infections

About 35 percent arise from abnormalities in the woman's reproductive system and may be due to:

- Pelvic inflammatory disease
- Polycystic ovary syndrome
- > Endometriosis
- > STDs
- Hormone imbalances

About 20 percent of the time, the man and woman both have fertility problems

In 10 percent of cases, no cause can be found

Age often increases the risk of infertility.

Other easily treated illnesses or lifestyle habits that may contribute to infertility are:

- > Heavy use of alcohol, tobacco or drugs.
- > Starvation diets or anorexia in the woman.
- Tight underwear or pants in the man, which raises the temperature around the testicles and reduces sperm count.
- Stress. In a woman, this may cause her periods to be irregular. In a man, stress may reduce his sperm count.

Lifestyle Modification

The more women smoke, the less likely they are to conceive. In fact, women whose mothers smoked during *their* pregnancy are less likely to conceive compared with those whose mothers were non-smokers.

Even moderate drinking of alcoholic beverages by women is linked to an increased risk of infertility in some research. In a preliminary study, there was a greater than 50% reduction in the probability of conception in a menstrual cycle during which participants consumed alcohol. Caffeine appeared to enhance alcohol's negative effect in this study. Women who abstained from alcohol and consumed less than one cup of coffee per day were more than twice as likely to conceive (26.9 pregnancies per 100 menstrual cycles) compared with those who consumed any amount of

alcohol and more than one cup of coffee per day (10.5 pregnancies per 100 menstrual cycles). Based on this preliminary evidence, women who wish to improve their chances of conception should avoid alcohol and caffeine.

Excessive drinking in men can also reduce fertility rates. In a study of men with poor sperm quality, excessive alcohol consumption was associated with a decrease in the percentage of normal sperm. In a study of Danish greenhouse workers, an unexpectedly high sperm count was found among organic farmers, who grew their products without the use pesticides or chemical fertilizers. The sperm count was more than twice as high in these men as in a control group of blue-collar workers. Although these findings are not definitive, they suggest that consuming organically grown foods may enhance fertility.

Being excessively overweight or underweight may also contribute to infertility in females.

Some conventional medications can interfere with fertility.

Dietary Modification

Making changes to the diet is key to improving overall health and therefore the chances of conceiving. A diet that is rich in anti-oxidants, vitamins and minerals should be followed, concentrating on foods that are as natural as possible. Foods rich in vitamins E and C and beta carotenes are recommended as it helps to maintain a proper ovulatory cycle in women and improves sperm count and motility in men. Zinc is also helpful for men as it improves the health of sperm and also increases the sperm count.

Consumption of fish contaminated with polychlorinated biphenyls (PCBs) may reduce the ability of women to conceive. In one study, women who ate more than one fish meal per month of fish caught in Lake Ontario (known to be contaminated with PCBs) had reduced fecundity compared to women who ate less contaminated fish.

Nutritional Supplement Treatment Options

<u>Vitamin C</u> – 750 mg daily. In some women, infertility is due to a luteal phase defect. In this condition, the uterine lining does not develop and mature properly, presumably because of a deficiency of the hormone progesterone. In a study of infertile women with luteal phase defect, supplementation with 750 mg of vitamin C per day for up to six months resulted in a pregnancy rate of 25%, compared with a rate of 11% in an untreated control group.

<u>Arginine</u> - supplementation with the L-arginine (16 grams per day), has been shown to improve fertilization rates in women with a previous history of failed attempts at *in vitro* (test tube) fertilization.

Research has also shown that several months of L-arginine supplementation increases sperm count, quality, and fertility. For infertile men with sperm counts

greater than 10 million per milliliter, the recommended dosage of I-Arginine is up to 4 grams per day for several months.

<u>Iron</u> - In preliminary research, even a subtle deficiency of iron has been tentatively linked to infertility. *Blood tests should be undertaken to establish the possible presence of iron deficiency anaemia.*

<u>Multivitamin-mineral</u> - A number of double-blind trials have found that taking a multivitamin-mineral supplement increases female fertility.

<u>Vitamin E</u> – 200 i.u. daily. It is known that vitamin E deficiency in animals leads to infertility. In a preliminary human trial, infertile couples given vitamin E (200 IU per day for the female and 100 IU per day for the male) showed a significant increase in fertility. In another preliminary study, men with low fertilization rates in previous attempts at *in vitro* fertilization were given 200 IU of vitamin E per day for three months. After one month of supplementation, fertilization rates increased significantly, and the amount of oxidative stress on sperm cells decreased.

Zinc - 60 mg (plus 2 mg of copper, to prevent depletion) daily. Zinc deficiency leads to reduced numbers of sperm and impotence in men. Infertile men have been reported to have lower levels of zinc in their semen, than do men with normal fertility. Similarly, men with normal sperm density tend to have higher amounts of zinc in their semen, than do men with low sperm counts. A few studies have shown that oral zinc supplementation improves both sperm count, motility, and the physical characteristics of sperm in some groups of infertile men. In a controlled trial, 100 men with low sperm motility received either 57 mg of zinc BID or a placebo. After three months, there was significant improvement in sperm quality, sperm count, sperm motility, and fertilizing capacity of the sperm. *Long-term zinc supplementation may require 1–2 mg of copper per day to prevent copper deficiency.*

<u>I-Carnitine</u> - 3 grams daily. L-carnitine appears to be necessary for normal functioning of sperm cells. In preliminary studies, supplementing with 3–4 grams per day for four months helped to normalize sperm motility in men with low sperm quality. One preliminary trial also found that <u>acetyl-l-carnitine (</u>4 grams per day) may also prove useful for treatment of male infertility caused by low quantities of immobile sperm.

<u>Selenium</u> - 100 mcg daily. In a double-blind study of infertile men with reduced sperm motility, supplementation with selenium (100 mcg per day for three months) significantly increased sperm motility, but had no effect on sperm count. Eleven percent of 46 men receiving selenium achieved paternity, compared with none of 18 men receiving a placebo.

Vitamin B12 - 1,500 mcg daily. Vitamin B12 injections have been shown to increase sperm counts for men with low numbers of sperm. These results have been duplicated in double-blind research. In one study, a group of infertile men were given oral vitamin B12 supplements (1,500 mcg per day of methylcobalamin) for 2 to 13 months. Approximately 60% of those taking the supplement experienced improved sperm counts.

<u>CoEnzymeQ10</u> - While its exact role in the formation of sperm is unknown, there is evidence that as little as 10 mg per day (over a two-week period) will increase sperm count and motility. In one study, men with low sperm counts were given CoQ10 (60 mg per day for about three months), after which a significant improvement was noted in *in-vitro* fertilization rates.

Botanical Treatment Options

Propolis – 500 mg BID. In a preliminary study of women with infertility and mild endometriosis, supplementation with propolis was associated with a pregnancy rate of 60%, compared with a rate of 20% in the placebo group (a statistically significant difference).

<u>Vitex (Agnus castus)-</u> 40 drops of a liquid extract with water or 35 to 40 mg of encapsulated powder daily. Vitex is used particularly in cases with established luteal phase defect (shortened second half of the menstrual cycle) and high levels of the hormone, prolactin. In one trial, 48 women (ages 23 to 39) who were diagnosed with infertility took vitex once daily for three months. Seven women became pregnant during the trial, and 25 women experienced normalized progesterone levels—which may increase the chances for pregnancy. In another double-blind trial, significantly more infertile women became pregnant after taking a product whose main ingredient is vitex (the other ingredients were homeopathic preparations) than did those who took a placebo. *Vitex should be discontinued once a woman becomes pregnant.*

<u>Panax Ginseng</u> - *4 grams daily.* One preliminary study found that 4 grams of Panax ginseng per day for three months led to an improvement in sperm count and sperm motility.

<u>Maca</u> - *1,500 to 3,000 mg daily.* A small clinical trial found that healthy men who took dried <u>maca</u> powder had increased sperm counts and enhanced sperm motility.

Homeopathy

Consultation with an experienced homeopath is required for infertility issues.

There are specific remedies for potential issues such as anxiety and stress, a low sex drive, irregular ovulation, recurrent miscarriages, and male impotence. Homeopathy is very safe to the body and if a person falls pregnant, it can also be used to support the pregnancy right through to birth and after.

For further information, contact:

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