

Your Guide to Preconception Care & Fertility



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Your Guide to Preconception Care and Fertility

Introduction

Part of taking more control over your health involves becoming more educated about the various dietary and lifestyle factors that affect your health. Your practitioner has provided you with this booklet to enhance your understanding of how and why the recommended treatment program will empower you to achieve your goal in health, fertility and pregnancy.

Preconception Care

Preconception care is one of the most loving and responsible choices you and your partner can make together, not only for you and your child's health, but also for future generations. You may visit your healthcare practitioner when preparing to have children for a number of reasons. For example:

- You may want to prepare your bodies for a successful, healthy pregnancy, as well as a problem-free birth and satisfying breast-feeding experience;
- You may want to enhance your chances of maximising your future child's potential – physically, mentally and emotionally;
- You may have tried unsuccessfully to conceive.

Addressing preconception and pregnancy health is the ultimate in preventative medicine. What you do for a few months will have lifelong effects for you and your child.

DO IT TOGETHER

Both partners need to be involved in the preconception care process.

Promoting Fertility

With one couple in six having difficulty conceiving, modern issues affecting fertility need to be addressed. Your practitioner will discuss these with you, in order to achieve your best outcome and course of treatment. Factors that may affect fertility include:

- Stress
- Toxicity
- Radiation
- Immune system status
- Drugs, including caffeine, tobacco and alcohol
- Previous contraceptive history
- Genitourinary infections e.g. Chlamydia and Mycoplasma
- Reproductive conditions such as varicoele, endometriosis and polycystic ovarian disease
- Poor diet and nutrition
- Pollution
- Age

Preconception Nutrition and Lifestyle

Both you and your partner will need to eat a healthy, highly nutritious, whole-food diet to provide your bodies with the building blocks needed to produce healthy eggs and sperm in order to create a healthy baby.

DIET

- Protein and fats are the most important food groups to focus on. It is important to get 3 serves of protein a day. Obtain fats from fish, nuts, seeds and flax seed oil.
- Eat mostly organic foods – especially meats.
- Drink filtered water. Recent studies have shown that tap water may negatively affect female hormone cycles. The chlorinated by-products in water reduce menstrual cycle length, with a corresponding reduction in follicular phase length.
- Avoid sugar, refined carbohydrates and caffeine (2 cups of coffee or 1 can of coke a day can decrease fertility by 50%).^{1,2,3}
- Avoid alcohol and give up smoking.

LIFESTYLE

- Minimise stress. Reducing stress increases your fertility.
- Avoid exposure to toxins – household cleaners, petrol fumes, paints, glues and solvents, chlorine, insecticides, etc.
- Avoid radiation damage - computer screens, x-rays, microwaves and airline flights.
- Address weight issues: If you are underweight this increases your child's susceptibility to disease later in their life and can impair organ development.
- If you are overweight this considerably impacts on fertility. Neural tube and birth defects increase by 30-40% in children of overweight women, and your child is more likely to suffer obesity, cardiovascular disease and diabetes as an adult.^{4,5,6}
- Exercise more than 2 hours a week. This will reduce stress, normalise weight and increase pelvic circulation, thereby providing sperm and eggs with nourishment.

Preconception Timing

Your preconception care should ideally begin at least 4 months prior to the conception attempts. This preparation time is very important as the eggs take 3 months to mature and sperm take almost 4 months to generate. This means that the sperm that is being expelled now has been exposed to all the toxins the male has been exposed to over the past 4 months. Fertilisation with sperm and/or eggs that have had toxic exposure increases the possibility of pregnancy loss and decreases the chances of a healthy baby. Think of it as being in training...are you going to win a triathlon if you don't train? It would be prudent to look at other forms of barrier contraception over this period other than the contraceptive pill.

Getting Started

During your first consultation your practitioner will provide you with details about what type of diet is required for your personal situation - a **Blood Type Diet**, **Insulin Zone System** or **KetoSystem** diet.

Your practitioner may also encourage you to *chart your menstrual cycle temperatures and mucus patterns* to ascertain if and when ovulation occurs and indicates hormonal patterns. Charting will tell you when you are fertile so you can learn when your optimal time to attempt conception is. Page 28 contains a chart for you to copy and use for each cycle.

Step 1: PREPARATION AND DETOXIFICATION

The first step in preconception health care is an **Integrated Detoxification** program (7-8 weeks) as the sperm and eggs need to develop in a toxin-free environment. No matter how careful you are, no matter how pure your food and water intake is, it is almost impossible to avoid toxins of some sort. Some of the most toxic substances come from within us e.g. from the incomplete breakdown of foods and/or from our normal cellular chemical processes.

Your gastrointestinal tract interfaces with the outside environment daily – especially each time you drink and eat. You shower every day and you wash your hair regularly to clean away the residue from your outside environment, but when was the last time you cleaned the residue from your insides?

Your practitioner may also recommend investigative tests. Having these done early can save you a great deal of time later on, as they can help you address health issues right away. These may include:

- Zinc Taste Test to determine your body's zinc status.
- A Urinary Indican Test which indicates bowel toxicity and unhealthy bacterial overgrowth.
- A Hair Mineral Analysis to check nutrient insufficiencies and the presence of toxic metals that may damage your sperm and eggs.
- A Bioimpedance Analysis to determine your body composition.

Step 2: PRECONCEPTION CARE NUTRITIONAL RECOMMENDATIONS

Both partners need a strong nutritional base to work from. Studies have shown that the majority of Australians don't receive their Recommended Daily Intake (RDI) for many nutrients. Set up in 1941, RDIs are the minimum levels of nutrients recommended to prevent diseases from *gross* nutritional deficiencies. Much of the research since then has shown that in order for our bodies to function at an optimal level we require a much higher nutrient intake. Not only is it important to consider what we take in, we must also consider factors that increase the excretion of nutrients. The following factors require a much higher nutrient intake to compensate for increased losses and/or functional requirements.

- History of contraceptive pill use
- Medications
- Exercise
- Poor immune function
- Stress
- Working long hours
- Chemical exposure
- Past pregnancy
- Poor diet
- Poor digestion
- Disease or family disease history
- Intake of alcohol, sugar, coffee, soft drinks, refined foods and bakery products.

Early Nutrient Recommendations to Remain on for the Course of Treatment

FOR BOTH PARTNERS

1. Liquid Zinc

_____ ml, twice daily.

Zinc is the most important nutrient for preconception and breastfeeding and is the most important mineral for male reproductive health. It is essential for healthy sperm count and quality, as well as being vital for immune function.

2. Comprehensive Nutritional Support

1 tablet, twice daily.

Comprehensive micronutrient support for the reproductive system assists in the management of hormonal regulation and optimal fertility. This product also contains folic acid necessary for reducing the risk of neural tube defects such as spina bifida.

3. High Potency Marine Lipids

_____ capsules, three times daily.

Essential fatty acids correct hormonal balance and are necessary for fully functioning ovaries and testes. Males need more than females.

□ **4. For Women – High Potency Magnesium, Chromium and Selenium**

2 teaspoons, twice daily.

A formula that contains therapeutic amounts of magnesium, B vitamins, folic acid and important antioxidants such as selenium will help reduce stress, fatigue and anxiety. It can help with sleep and correct nerve and muscle function. Calcium helps produce fertile cervical mucus. Magnesium and calcium are needed in oestrogen level regulation. The ingredients help maintain blood sugar control, which is vital in obtaining correct hormonal balance. Magnesium and vitamin B6 may reduce the risk of morning sickness. A deficiency in selenium has been linked to Cot Death, Down Syndrome and Asthma.

□ **5. For Men – Free Radical Management**

____ tablets, three times daily.

Sperm need to be protected against free radical-induced lipid peroxidation, which may lead to DNA damage and reduced activity. Vitamins such as mixed carotenoids and tocopherols, minerals such as selenium, zinc and copper, and phytonutrients from St. Mary's thistle, grape seed, rosemary and green tea help provide antioxidant protection against free radicals.

The Effect of Stress on Fertility

There is no doubt that stress adversely affects fertility. Not only does stress increase your body's requirements for the nutrients necessary for fertility, it also affects many of the hormonal systems required for healthy eggs and sperm, ovulation, conception and foetal growth. Stress alters oestrogen, progesterone and testosterone production, it imbalances blood sugar balance which in turn adversely affect your sex hormones. Stress can also alter thyroid function which may affect a woman's ability to conceive and maintain a full term pregnancy. Immune function is altered by stress which may also affect fertility. The consequences of stress may be even more far reaching as it can impair detoxification, digestive function and circulation, which may also alter your fertility state.

MANAGING STRESS AND ANXIETY

Herbal Support for Hyper HPA and Stress

_____ tablets, three times daily.

Stop taking once pregnant.

This is a specific herbal supplement for the promotion of a healthy stress response in men and women. It can help reduce mental stress and improve physical tolerance by maintaining normal physiological function. A combination of these herbs may be beneficial in the management of anxiety, insomnia and tension. An optimistic state of mind may help enhance fertility.

Or

Herbal Nervous System Support

_____ tablets, three times daily.

A blend of potent neurotonic herbs from Ayurvedic herbal medicine, integrated with the nutritional benefits of glutamine and tyrosine. The synergy of the herbs supports the nervous system and is especially useful in stressful conditions and as an ongoing herbal/nutritive/adaptogen for the nervous system.

THE IMPORTANCE OF ADRENAL HEALTH

Your adrenal glands, which sit on top of your kidneys, help you to cope with stress, produce adequate testosterone and oestrogen and maintain energy to cope with daily living. When these become fatigued sperm counts may drop and libido may decrease.

Herbal and Nutritional Support for Adrenal Health

_____ tablets, three times daily.

A variety of ginsengs - Chinese, Siberian and Indian - assist in the management of normal adrenal health in men and women. Tyrosine may help in the management of the symptoms of stress and promote healthy thyroid function, necessary for the release of eggs and conception.

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Step 3: OPTIMISING FERTILITY STATUS IN WOMEN

Your practitioner may prescribe the following supplements in addition to the ones recommended previously.

FOR WOMEN AGED MID-THIRTIES TO MID-FORTIES

As we age our cell components start to break down. By reducing this breakdown we effectively reduce the age of our eggs.

Lipoic acid: Enhanced Bioavailability, Solvent Free

1 capsule, twice daily.

Lipoic acid is a strong antioxidant that reduces free radical damage to eggs and sperm as a result of ageing, toxins and radiation.

Enhanced Bioavailability Coenzyme Q10

1 capsule, once daily.

As women age so do their eggs. Supplementing with coenzyme Q10 may help re-energise ageing tissues.

IF PRE-EXISTING MENSTRUAL DISTURBANCES

A woman's menstrual period can be likened to a report card at the end of every month. If her body is in a state of health her periods should be a regular 29 ¼ day cycle, with no PMT and no period pain. Periods should come and go with her hardly noticing. Even though pain and mood swings are "normal" they are not healthy. Many symptoms of PMT are due to an inadequate level of progesterone, blood sugar irregularities, inflammation and poor thyroid function caused by stress, inadequate nutrient intake and toxins. As mentioned earlier in this booklet these are the same factors that impact fertility.

For the cycle to be fertile, ovulation needs to occur before day 18 to ensure fertilisation of an egg that is not aged, and there needs to be greater than 12 days from ovulation to the period which facilitates the implantation of a fertilised egg.

PREMENSTRUAL DISTURBANCES INCLUDE

1. Luteal Phase Defect:

A luteal phase defect essentially results in inadequate progesterone levels which prevents implantation. Signs of a luteal phase defect include a cycle where there is less than 12 days from ovulation to period, PMT symptoms such as breast tenderness and mood swings, a charted temperature that is slow to rise or starts to drop after about 4 days.

PMS Support

2 tablets, twice daily.

Selected nutrients such as magnesium and vitamin B6, and specialised herbal concentrates e.g. Chastetree, may assist in the regulation of female sex hormones, increasing progesterone and reducing prolactin. Additional support for premenstrual hormonal aggravations may be provided by herbs such as Passion Flower, Cramp Bark and Red Sage, which may assist in the relief of premenstrual symptoms such as irritability, breast tenderness, cramps and headaches.

Nutritional Support For Stress

_____ tablets _____ times daily.

Vitamin B6 is needed for progesterone production and the lowering of prolactin levels, which competes with progesterone.

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2. Excess Oestrogen:

An excess of Oestrogen will give you many of the symptoms described in Luteal Phase Defect. You may also have difficulty losing weight and suffer from weepiness. Your cycle may be either longer or shorter than it should be in the pre-ovulation phase. Your periods may be heavy and you may experience spotting and clots.

Healthy Hormone Balance

2 capsules, twice daily.

Stop 1 month prior to conception attempt.

Provides many factors essential for healthy oestrogen detoxification, thereby reducing the effect of an excess on your body.

And/Or

Indole-3-Carbinol

2 capsules, twice daily.

Stop 1 month prior to conception attempt.

Indole-3-carbinol is a naturally occurring compound found in cruciferous vegetables such as broccoli, brussel sprouts and cabbage. Rosemary extract specifically promotes the breakdown of oestrogen to a beneficial metabolite, helping to maintain a healthy oestrogen ratio and improve female health.

3. Insufficient Oestrogen:

Insufficient oestrogen may present as light periods, insufficient cervical mucus and your cycle may be longer than optimal in the pre-ovulatory phase. You may even have amenorrhoea.

Herbal Glandular Balance

2 tablets, twice daily.

During days 5-14 of your cycle.

Tribulus taken on these days will increase oestrogen and shorten a long follicular phase so ovulation occurs closer to day 14. If you are not cycling, taking Tribulus daily may help induce ovulation.

Rehmannia 6

2 teaspoons, three times daily.

This Traditional Chinese Medicine has been used for 2000 years to increase oestrogen levels and tonify organs.

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Your practitioner will evaluate you for other possible factors that may influence your fertility status.

- Thyroid function.
- Pelvic infection.
- Anaemia.
- Sperm antibodies.
- Cervical mucus quality and quantity.

Step 4: OPTIMISING FERTILITY STATUS IN MEN

Men often get overlooked in the preconception stages. Research in recent times has clearly shown that men have more than just a small part in the formation of their children. Men produce around 2000 - 4000 sperm per second! This very busy job requires adequate nutritional levels and an absence of chemicals to ensure that he can continue this function to the best of his ability. Because sperm are so tiny, they are very easily damaged by oxidants, chemicals and radiation. Sperm become exposed to these toxins over the ensuing 116 days while they are “ripening”, so it is very important that men protect and nourish their sperm during this time. The most important nutrients men need for this have already been suggested – zinc, protein, antioxidants and essential fatty acids.

The quality of the sperm is more important than the quantity. The father’s sperm is more likely to affect conception and the baby’s health. This is why testing for heavy metal levels and completing a full detoxification program, which includes stopping smoking and alcohol intake, is so important.

Injury should also be avoided from heat and pressure in the testicular region. This may come from wetsuits, tight fitting work clothes, a sedentary lifestyle or excessive exercise. Even if the testes heat up as little as 2°C the sperm can be adversely affected.

LOW SPERM COUNT

This is commonly due to stress and adrenal fatigue. These factors can cause testosterone levels to drop and reduce sperm production. Every sperm is sacred and even though it only takes 1 sperm to finally complete the 24 hour journey, it can't be done without the support of at least 40,000 other sperm.

Herbal and Nutritional Support for Adrenal Health

2 tablets, three times daily.

In the short-term, stress can result in little or no sperm being added to the ejaculate. In the long-term, stress affects hormonal levels which decrease sperm production. Herbs such as Panax Ginseng regulate the effects of stress and may help to increase sperm production.

Herbal Glandular Balance

2 tablets, twice daily.

Traditional Ayurvedic herbs can promote the health of the male reproductive system. They may assist in increasing testosterone levels in men and improve sperm count. Low testosterone is seen as a causative factor in the development of low sperm count. The adaptogenic effects of the herbs can help offset the effects of stress, another major contributor to fertility difficulties.

Maca

2 tablets, twice daily.

Maca has a long traditional use by the native Peruvians to alleviate impotence and improve male fertility and sexual function. In combination with Ayurvedic reproductive tonic herbs this formula may exert a normalising effect on the hypothalamic-pituitary-gonadal axis, improving reproductive function.

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POOR SPERM MORPHOLOGY

Morphology is the form of the sperm. Sperm are made of three parts. The head carries the genetic material that makes up your future child. The neck joins the tail mid-piece to the head – this mid-piece provides much of the energy for the sperm's motility. The tail performs the swimming motion. Poor morphology is predominantly due to toxic and oxidant damage. The most common changes are that the sperm has either 2 heads or 2 tails.

□ Free Radical Management

2 tablets, three times daily.

Sperm need to be protected against free radical-induced lipid peroxidation, which may lead to DNA damage and reduced activity. Vitamins such as mixed carotenoids and tocopherols, minerals such as selenium, zinc and copper, and phytonutrients from St. Mary's thistle, grape seed, rosemary and green tea provide such antioxidant protection against free radicals which damage sperm.

□ Enhanced Bioavailability Coenzyme Q10

____ capsules, three times daily.

Coenzyme Q10 is concentrated in the sperm mitochondria and has been found to increase sperm counts and motility, probably due to its effect on ATP production. It is also an antioxidant and may help protect spermatozoa against free radical damage.

pH Adjusted Vitamin C Metabolites and Hesperidin

1/3 teaspoon, three times daily.

Vitamin C is essential to normal sperm motility and to avoid 'clumping' of sperm. Vitamin C may be particularly beneficial in males exposed to toxins (such as tobacco smoke) as it reduces free radical damage. It has also been shown to reduce the risk of DNA aberration in sperm, which may reduce morphological defects.

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POOR SPERM MOTILITY

Motility is the sperm's ability to swim forward rapidly. Poor motility commonly has the same causative factors as poor morphology. The sperm may swim too slowly, around in circles or not swim at all.

Mitochondrial Energy Maintenance

2 serves, three times daily.

Carnitine increases cellular energy production and has been shown to contribute directly to sperm motility and sperm levels.

Enhanced Bioavailability Coenzyme Q10

_____ capsules, three times daily.

Coenzyme Q10 is concentrated in the sperm mitochondria and has been found to increase sperm count and motility, probably due to its effect on ATP production. It is also an antioxidant and may help protect spermatozoa against free radical damage.

pH Adjusted Vitamin C Metabolites and Hesperidin

1/3 teaspoon, three times daily.

Vitamin C is essential to normal sperm motility and to avoid 'clumping' of sperm.

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Your practitioner will evaluate you for other possible factors that may influence your fertility status, such as:

- Sperm agglutination.
- Prostate infection.
- Prostate fluid insufficiency.

Congratulations!!

**What wonderful steps you
have taken.**

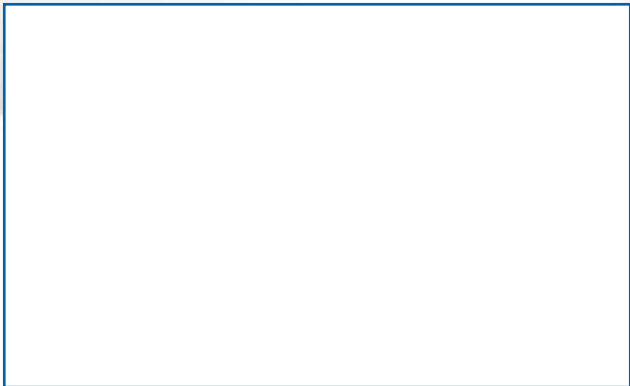
Your practitioner can give you a booklet on pregnancy to further continue empowering you and to assist you in giving your child the best possible start in life. If you haven't already received it, ask your practitioner today.

Ovulation Cycle Chart

Date																		
Day (week)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Day (cycle)																		
Temperature	37.3																	
	37.2																	
	37.1																	
	37.0																	
	36.9																	
	36.8																	
	36.7																	
	36.6																	
	36.5																	
	36.4																	
	36.3																	
	36.2																	
	36.1																	
36.0																		
Conditions Affecting Temperature																		
Mucus Changes	Texture																	
	Amount																	
	External Sensation																	
Pain (period or mid-cycle)																		
Emotional State/PMT																		
Sexual Desire																		
Intercourse																		
Bleeding																		

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A division of
Health World Limited
8/663 Kingsford Smith Drive,
Eagle Farm,
Queensland, Australia 4009

www.metagenics.com.au