

Treating Infertility with Herbs & Nutrition

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Part 1: Introduction

Infertility is a problem that effects about one in every six to ten couples in the United States, with the numbers steadily rising over the last couple of decades. Medically, infertility is defined as a couple's inability to conceive after stopping all forms of contraception for one year. Studies differ on how often the issue is related to the man, the woman, or a combination of both: some say as high as 40% of problems with fertility are associated with the "male factor," leaving the other 60% to be related to issues with the woman's health and / or some combination of them both. There are many factors that can affect a couple's fertility, such as decreased sperm count, diet, pathological issues within the woman's body such as endometriosis or a malpositioned uterus, emotional and psychological factors, stress and overwork, etc. Although the many factors involved in a couple's infertility may be complicated and difficult to diagnose and discern, herbal care and nutritional counseling can be very effective in assisting couples to conceive -- even when there is no specific "cause" for a couple's infertility that can be easily identified as the culprit.

Part 2: Some Possible Causes of Infertility

If a couple has problems conceiving a child after a year of attempting to do so, many natural practitioners and most allopathic medical doctors will recommend testing to look into whether or not there are pathological reasons for conception to be blocked. Western medical science, with its ability to do blood tests for hormone levels and allergy tests, etc., can be very helpful in this regard, but it is not the only avenue for

investigation. Having the woman chart her basal body temperature, cervical mucus, cervix position, and other fertility signs a la Toni Weschler's book *Taking Charge of Your Fertility* can also lead to some very insightful information as to what is happening within the woman's body that is inhibiting conception. Charting fertility signs can help a woman understand if she is having anovulatory cycles (not ovulating), conceiving and then naturally aborting the child, or none of these things. This information can be very helpful to the herbal practitioner in creating individualized formulas and recommendations for the couple (more on that later).

However, UK Herbalist Carol Rogers says that "A greater proportion of infertility occurs in women whose reproductive function is otherwise normal than as a result of any of these abnormalities."ⁱ Many couples who have difficulty becoming pregnant suffer from a combination of sub-clinical conditions. These conditions can't cause infertility on their own but -- in combination -- they can substantially reduce a couple's probability of conceiving. For example, a gluten intolerance alone may not cause infertility, but the the resulting inflammation in the gut can minimize your nutrient absorption and lead to deficiencies in nutrients you need for optimal sperm, egg and hormone production and a healthy pregnancy. Brooklyn acupuncturist and herbalist Karen Vaughan notes that there are a diverse range of causes for infertility, some of which may be 'caught' by medical testing and some which may be more mysterious. "Missing minerals, insulin resistance, lack of essential fats, lack of protein, strong fears of motherhood or pregnancy, low quality menstrual cycles, silent infections like chlamydia or gonorrhea, blocked fallopian tubes, PCOS, aging eggs and sperm, and many other factors affect fertility and the remedies are all different."ⁱⁱ

Some of the most common factors affecting fertility in women are:

- **Retroverted or "Tilted" Uterus:** In most women, the uterus is tipped forward, towards the bladder. However 1-in-5 women has a retroverted or tipped backwards towards the spine. Most fertility doctors no longer consider this a factor in infertility, although some natural practitioners may suggest bodywork such as Mayan Abdominal Massage (rhibozo massage) to ensure optimum fertility and increase the chances that once conception occurs, the woman will not

miscarry.

➤ **Prolapse & Fibroids:** Fibroids are common benign tumors in the uterus, generally associated with hormonal imbalance and an excess of estrogen. A recent study found that Fibroids in general, regardless of location, were associated with a 15% reduction in pregnancy rates, a 30% reduction in live birth rates, and a 67% increase in miscarriage rates when compared with controls without fibroids.ⁱⁱⁱ

➤ **Cervical problems:** The cervix can also be affected adversely and cause sterility. Infection or excess mucus from inflammation can expel the sperm, or polyps may prevent the sperm from entering the uterus.

➤ **Fallopian Tube problems:** Fallopian tube blockages may obstruct the egg from passing down into the vagina. This can be caused by genetic predisposition or because of infection, such as salpingitis (inflammation of the fallopian tubes), endometriosis, and TB. These infections can cause the thickening of the tubes which either narrow or completely block the passages, or they can cause the tubes, uterus and ovaries to become matted together by adhesions, or in the case of endometriosis, by growths of tissue from the uterus.

➤ **Vaginal mucus:** if too viscous can impair fertility

➤ **Polycystic Ovarian Syndrome (PCOS):** PCOS is a very common condition affecting women of reproductive age, affecting 5-10% of premenopausal women. It has a variety of symptoms, including weight gain, anovulatory cycles, irregular menstruation, hyperandrogenism (overproduction of androgens), hirsutism (increased body hair), ovarian cysts, and insulin resistance. A woman may have some but not all of these symptoms – she may be diagnosed with PCOS even if a pelvic exam does not indicate the presence of cysts.

➤ **Endometriosis:** Another very common reproductive condition that may affect fertility; affects approximately 5-10% of all women. Endometriosis involves tissue that forms the lining of the uterus growing in other parts of the pelvis and sometimes even outside the pelvis entirely. Interestingly, Christiana Northrup calls Endometriosis, “the illness of competition.” She traces it to when “a woman’s emotional needs are competing with her functioning in the outside

world. When a woman feels that her innermost emotional needs are in direct conflict with what the world is demanding of her, endometriosis is one of the ways that her body tries to draw her attention to the problem.”^{iv}

- ≈ **Emotional problems:** Where emotional problems cause tension and anxiety, or when just wanting to conceive is producing psychological blockages to conception, herbal remedies may well be helpful. Susan Weed highly recommends *Motherwort (Leonorus)* when emotional issues seem to be blocking conception, especially when nervousness or ambivalence about the transition into motherhood is a main factor.
- ≈ **Debility:** David Hoffman cites lowered energy and general fatigue as a common issue with fertility. “Where illness, malnourishment, fatigue, and conditions such as anaemia, anorexia and kidney problems have lowered vitality and produced a state of debility which has affected fertility, there are many herbs which can help to build up the strength of the generative organs. Bitters, tonics and adaptogens are actions to consider. The specifics will depend upon the individual concerned, but application of the model for remedy selection will usually clarify this. True Unicorn Root (*Aletris farinosa*) is considered beneficial for habitual miscarriage due to chronic weakness. It can be used safely throughout pregnancy. It acts to stimulate the uterus and ovaries and is commonly used for infertility and impotence.”^v
- ≈ **Immune health:** Imbalances in the immune system can inhibit conception. Treating low-grade infection in the genito-urinary system and addressing any autoimmune factors can be an important factor in fertility health. Sometimes a woman’s system builds up antibodies against her partner’s sperm, or the fetus itself. Also, some STD’s – often asymptomatic – can affect fertility. One such STD is a Chlamydia infection. In men, a Chlamydia infection can lead to sperm abnormalities including sperm antibodies. In women, it can lead to scarring, blocked tubes and miscarriage. One study found 60% of asymptomatic male partners of infected females attending a fertility clinic were found to be infected with Chlamydia.
- ≈ **Endocrine System Health:** Disorders within the endocrine system that affect

fertility can include hyper or hypo thyroidism, pituitary dysfunction, and signs of adrenal weakness. The endocrine system plays a huge part in hormonal balance.

∞ **Body weight:** Being underweight or overweight in women can lead to issues with hormones and the ability to conceive. Further, the effects of fad dieting and the resulting labile weight levels disrupts the delicate balance of hormones.

Nutritional deficiency, common in many fad diets, may result in amenorrhea and anovulation. For optimal reproductive health, a woman should ideally have no less than 25% body fat. This becomes especially important after menopause when the fat tissue becomes a major source of estrogen, preventing bone loss and ensuring the skin and mucus membranes stay healthy. On the other hand, obesity can also lead to hormonal imbalances, and obese women more likely to suffer from the effects of excess androgens (PCOS).

∞ **Adrenal Fatigue:** Herbalist Rosalee De La Foret cites adrenal fatigue as a common issue for couples struggling with conception. "In my practice I often see adrenal fatigue or, in TCM terms, kidney yang deficiency, as an underlying cause of infertility. Kidney yang deficiency is a whole other topic in itself but it is addressed with herbs, lifestyle, and nutritional changes that can help restore balance to these depleted individuals. Adaptogen herbs, nutrient dense foods, healthy sleep habits, regular exercise, and stress management tools are commonly suggested."^{vi}

∞ **Environmental Health:** The health of the environment plays a large role in fertility health. Pesticides, heavy metals, xenoestrogens, and radiation have all been implicated in infertility and with miscarriage. Some researchers speculate that the rate of infertility may be increasing, especially in comparison to rates previously experienced in pre-industrialized society. Much of this concern is attributed to exposure from man-made, industrial chemicals that contaminate the environment, including solvents (e.g. benzene), polyhalogenated aromatic hydrocarbons (PHAHs, e.g. benzo[a]pyrene, PCBs, dioxins), herbicides (e.g. 2,4-D) insecticides (e.g. dibromochloropropane), fungicides (e.g. vinclozolin), metals (e.g. lead, cadmium), and plasticizers (e.g. bisphenol-A). In large part the concern relates to chemicals called xenoestrogens that have an estrogen-like activity, but

these chemicals can have other effects as well, such as increasing or decreasing the secretion of estrogen and androgens, inhibiting hormonal activities generally, or causing direct damage to reproductive tissues. "Humans cannot pollute this planet and their own bodies without consequences, and infertility is one of them. Conditions on the Earth may not favor fertility the way they used to. It's as though the collective species brain were generating a great deal of energy toward making many women and men infertile, due to the stresses of today's families, social environments, and personal addictions, and to the stress of the planet itself."^{vii}

➤ **Stress:** In both men and women, stress can negatively affect sexual performance and fertility. With stress the activity of the hypothalamus is decreased, resulting in diminished GnRH, FSH and LH secretion, and decreased levels of the gonadotropins such as estrogen, progesterone, and testosterone. Statistics suggest that about 5-10 % of infertility is stress related. This problem obviously becomes compounded if drugs and alcohol are used as a coping mechanism.^{viii}

➤ **Age:** Although age does have an impact on fertility in women, Susan Weed and Carol Northrup both caution us not to focus on this aspect of infertility too much, as it is perhaps over-emphasized by infertility doctors and the medical establishment. "Contrary to current opinion, having children in your forties is ordinary and common worldwide," Weed notes. "What is unusual and unique to our time is having a first child in one's forties. Our mothers, mothers, mothers were having their fifth or eighth or tenth child when they were in their forties, not their first. If people tell you it just isn't done, close your eyes and call upon the spirit of your great, great, great, great grandmother, then smile and tell them it seems utterly ordinary to you."

➤ **Sexual Activity / Libido:** A healthy sex life is essential to conception. Many studies have shown that it isn't simply the act of sex itself but also orgasm that is a factor in conception. "Orgasm on the part of the male is necessary for fertilization. The woman's orgasm does increase the possibility of conception. Women who experience orgasm after their partner (up to 40 minutes after his ejaculation) have the very best chance of becoming pregnant."^{ix}

While many of the factors above may affect men as well (such as environmental toxicity, debility, and endocrine health / hormonal balance) some factors that specifically affect male fertility are:

≈ **Sperm count:** The commonest cause in men is no sperm or a low sperm count.

This may be caused by numerous factors including an infection after puberty which was accompanied by a high fever, unrepaired undescended testicles, taking certain drugs, trauma to the testicles, or exposure to large amounts of X-ray. For the most part however, a low sperm count tends to be related to more easily reversible conditions. A long illness or a chronic infection may lower general health, as could poor diet, strenuous physical exercise, lack of exercise, too much smoking and drinking, over-weight, overwork, tension and fatigue. A common reason for a low sperm count is abnormal temperature regulation in the testicles, which function at a temperature slightly lower than the rest of the body.^x

≈ **Low sperm motility:** This makes them unable to travel from the vagina, through the fallopian tubes to fertilize the ovum. This tends to be related to some of the above factors, and may also be due to enlargement of the prostate gland, as well as an imbalance of male hormones in the body. The vessels along which the sperm travel in men could be blocked by an inflammatory or infectious process or by varicosity in the area.^{xi}

Part 3: Diet, Nutrition and Fertility

Many of the causes of infertility are related to diet (PCOS, adrenal fatigue, general toxicity). Luckily, many of the things that couples can do to increase their likelihood of conception are also related to diet and nutrition. In general, conceiving a child is similar to cultivating a garden; feeding ourselves healthy, whole foods high in nutrition and low in sugars and toxins is like feeding the soil that the seeds will be nestled in before emerging into the sunlight.

Alcohol, caffeine, tobacco and other intoxicants:

Pregnant women have long been told that alcohol can effect the fetus, but Todd Coldecott says that alcohol in general is unhealthy for anything to with reproduction. "Even moderate consumption, or 1-2 glasses of wine per week can increase prolactin levels and suppress ovulation. The elevation of prolactin also occurs with the usage of antidepressants, analgesics, hallucinogens, and marijuana. Tobacco too poses problems for women, and although no one knows exact link, female smokers generally have decreased estrogen levels, poor cervical mucus, a higher risk of pelvic infection, and an increased incidence of ectopic pregnancy and miscarriage. Additionally, nicotine appears to toxic to sperm, and thus smoking can interfere with fertility. Coffee is another vice, and women who consume one cup of brewed coffee a day are half as likely to conceive. Caffeine is also implicated in cyclic breast pain and fibrocystic breast disease."^{xii}

Coldecott says that men can tolerate more alcohol without effect on fertility, but excessive alcohol conception (which he defines as 2-3 pints of beer per day) can lead to poor sperm motility and depressed libido. In addition, "the ensuing damage to liver function liver also causes estrogen levels to rise and antagonize the activity testosterone. Tobacco also poses certain risks, and about two-thirds of impotent men are smokers. Nicotine inhibits blood flow to the penis, and only 1-2 cigarettes will cause an immediate impairment of circulation."^{xiii} Men who smoke marijuana frequently typically demonstrate lower testosterone levels than average, as well as poor sperm motility. Other drugs, such as cocaine and amphetamine inhibit parasympathetic activity and can result in premature ejaculation.

Gluten, Soy & Wheat

The incidence of gluten intolerance or celiac disease is higher in women experiencing unexplained infertility than among the general population.^{xiv} Gluten intolerance is not only related to unexplained infertility, but also to recurrent miscarriage, and intolerance to gluten, often undiagnosed, contributes to nutrient malabsorption as those suffering from the intolerance do not readily absorb micronutrients like iron, zinc and folic acid which are critical to reproduction. Strict adherence to a gluten-free diet usually resolves symptoms including unexplained infertility and recurrent miscarriage. Gluten is a protein found in various grains including wheat, spelt, barley and rye.

Another common allergen that is damaging to reproductive health is soy. Soy is a potent source of xenoestrogens. Soy isoflavones can create potent, adverse effects on both the male and female reproductive systems – particularly in their early development.^{xv} It's important that women trying to conceive avoid foods that list soy, soy lecithin, soy protein, soy flour, texturized vegetable protein (TVP) – taking special care to avoid soy milks and soy-based meat substitutes.

Refined Sugars & Insulin Intolerance

Vaughan argues that there is a strong connection between insulin resistance and infertility, even when there is no PCOS. Too much insulin in the blood promotes insulin growth factor, which causes cysts and fibroids to grow, and elevated insulin levels can also contribute to abnormalities in the HPA axis, which affects hormone levels. Insulin resistance is caused by eating too many sugars and carbohydrates and not getting enough healthy nutrition – especially Omega 3 fats – to balance it out.

Vaughan recommends that women with reproductive health issues follow a low-glycemic diet that limits consumption of refined sugars, which she says “may improve fertility and pregnancy outcome. Sugar and refined carbohydrate consumption plays a particularly devastating role in polycystic ovarian syndrome. Women with polycystic ovarian syndrome may see improvements in their fertility by increasing protein and restricting or eliminating simple, refined sugars.”^{xvi}

Dietary Supplements

In addition to a rising diet rife with sugars that lead to insulin issues, Vaughan also notes that the reduced mineral nutrition in our foods can be detrimental to fertility. “Between the mid 1970s and mid 1990’s the USDA tested the nutritional content of food and found most minerals declined by a third due to soil depletion. Magnesium is one of the most important, but zinc, boron and a number of trace minerals are also significant. I suggest at least 500mg of magnesium plus a multi-mineral or trace concentrate supplement.”^{xvii} In addition to magnesium supplementation, Vaughan recommends that couples working with fertility and conception should also consider taking fish sufficient to provide 1000mg of DHA, Vitamin D (5000-10,000 iu per day), and a prenatal vitamin

with folic acid in it. Vitamin D has been shown to reduce pregnancy complications such as premature deliver and preeclampsia, and may also reduce the risk of Autism and Type 1 Diabetes in newborns.

Susan Weed also notes the importance of Vitamin E in addressing infertility issues, especially when working with women over 40. "Vitamin E is an especially critical nutrient for fertility after forty and freedom from birth defects. Freshly-ground wheat flour, cold-pressed oils, and nut butters are all good sources of vitamin E, as are stinging nettle infusion and most cooked seaweed, such as kelp. The man's vitamin E level has as much, if not more, bearing on freedom from birth defects as does the woman's vitamin E level.□" She also recommends boosting nutrition overall by drinking herbal infusions infused overnight. "Women who drink 2-4 cups of stinging nettle infusion daily and eat cooked leafy greens as well as lettuce salads are getting the abundant folic acid, calcium, magnesium, and other minerals needed to create a healthy baby. (Tinctures, pills, and teas contain little or none of these important nutrients.)"^{xviii}

The Pre-Conception Diet

Many herbalists, naturopaths, and other health practitioners recommend that couples working with fertility issues also consider going on a pre-conception diet for 6 months to a year before attempting to conceive, especially if the couple has miscarried in the past or if there are specific pathological reasons interfering with establishing a pregnancy (such endometriosis, fibroids, annovulatory cycles, etc).

Most pre-conception diets have similar tenants to the Traditional Nutrition regime created by Weston Price in the 1900s. Some common attributes include:

- ≈ **Raw, grassfed dairy foods** (milk, cheese, yogurt, kefir, butter, ghee, etc.) and/OR seafood (fish and shellfish). Fat, including butterfat, is an important source of fat soluble vitamins – the very nutrients that are vital to the reproductive process. Skim and part-skim dairy products lack butterfat and the life-giving nutrients it contains. A recent study of over 18,000 women found that skim and low-fat dairy products may actually increase the risk of anovulatory infertility, while full-fat dairy products actually *decrease* the risk of infertility. Women who eat at least one portion of high-fat dairy food per day have more productive ovulation, by

27% than women who eat low-fat dairy. Women who eat 2 servings or more of low fat dairy have 85% more ovulation-related infertility. It's important that all dairy comes from organic, pasture-raised cows. In addition to reducing a woman's exposure to excess chemicals and hormones, "the fat from pasture-raised cows contain has as much as five times the CLA (a fatty acid which is a potent anti-cancer agent, muscle builder, and immunity booster) as fat from grain-fed cows. The Omega 3 essential fatty acids are found in similar proportions to deep sea fish. Grass-fed milk contains rumenic acid (a CLA), DHA, vaccenic acid, branched chain fatty acids, butyric acid, lecithin, cysteine-rich whey proteins, calcium, iodine and vitamin D all of which have value from reducing cancer to increasing fertility."^{xix}

- ≈ **Healthy Fats:** One of the best things a woman can do with her diet to help her increase her ability to conceive is make sure she is getting enough healthy fats. "Fat is the substance of the phospholipid bilayer that surrounds cells, including eggs, and lets nutrients and sperm through the membrane. Fat in the form of cholesterol makes up the building blocks of hormones needed to trigger ovulation and implantation."^{xx} Good healthy fats are butter, lard, coconut oil, olive oil, the fat in nuts and seeds (and nut butters), and other animal fats. Avocados are another good food to get good fats. Avocados and nuts provide a lot of Vitamin E, which is vital to conception.
- ≈ It's important to **avoid trans fats**, however, which impair fertility. Scientists from the Harvard University School of Public Health advise women wanting to get pregnant to avoid *all* trans fats, as they may increase the risk of infertility by up to 70%.
- ≈ **Organ meats:** from organic, grassfed animals one or two times a week (liver, liver pates, heart, kidney, etc). Couples can try mixing ground organ meats into ground beef for spaghetti, etc., if they aren't used to them.
- ≈ **Animal protein:** It's important that this includes both the meat and the fats. Fish and shellfish are also good (oysters, clams, crab, lobster) as they supply iodine - an iodine deficiency can cause infertility. Eggs, especially egg yolks, can also be very helpful.

- ∞ **Vegetables & Leafy Greens:** fresh or lightly cooked vegetables (serve with plenty of butter, homemade dips, or olive oil and vinegar dressings over your salads) are a good source of nutrition, vitamins, minerals, anti-oxidants, and healthy carbohydrates. Leafy greens provide folate (also in chicken, fish, fruit, nuts, and lentils) - which helps prevent birth defects.
- ∞ **Fermented foods:** sauerkraut, pickles, kimchi, and kombucha, anything lacto-fermented.
- ∞ **Bone broths:** Bone broths bring lots and lots of minerals to the diet, and also cleanse the body and help digestion.

Part 4: Treating Infertility with Herbs & Nutrition

When working with a couple affected by infertility, one of the most important (and perhaps counter-intuitive) suggestions that we can offer as herbalists is to stop trying to conceive, at least, for a certain period of time. Couples should spend 4-6 months trying to tonify the body and avoid conception. During this time, the woman should monitor her ovulatory cycle in this time a la the fertility awareness method. Both partners should also take up the pre-conception diet and test and supplement for nutritional deficiencies, especially magnesium, vitamin D, vitamin C, vitamin E, Selenium, Zinc, B vitamins – especially for vegetarian women.

Rogers recommends a three-step process of treating infertility with herbs:

1. Use hormonal normalizers prescribed until cycle is regular: chaste berry, wild yam, false unicorn root.
2. Next, nourishing herbal tinctures or teas are taken for several months: alfalfa, nettles, red clover, raspberry leaf, peony root, rehmannia, schizandra, dong quai. Red clover and red raspberry are high in calcium and magnesium, two minerals especially good for conception.
3. Finally use uterine tonics for 2 months or until conception.: false unicorn root, squaw vine, true unicorn, blue cohosh, golden seal.
4. For men: reduce use of toxic pollutants, decrease stress. Increase Vitamin A, E, Zinc, and Manganese (up to 50 mg of zinc daily, found in large amounts in sperm,

testicles and prostate). Herbal tonics of panax ginseng, schizandra, he shou wu, saw palmetto and some of the nourishing herbs for women work as well.^{xxi}

De Foret recommends that couples see the failure to conceive as “a symptom of an underlying cause. Couples seeking holistic treatment need to understand that while the end-result may be conception followed by birth, the big picture goal is to create a healthy balance in the entire body.” Her model utilizes bi-phasic formulation that matches different herbs to coincide with where the woman is in her cycle and what support is most helpful at that time. The idea is that in the first two weeks of the menstrual cycle (follicular phase) a woman is building estrogen hormones in her body. The last two weeks progesterone is building (luteal phase). “Using a bi-phasic formulation you can then support the woman’s natural cycle. One formula is created for the follicular phase of the cycle and one formula is given for the luteal phase of the cycle. Other considerations may also be present in this formula including liver health, immune support, adrenal support, etc.”^{xxii}

Vaughan takes herbal formulation by stages one step further, advising that herbalists use the information from charting to develop the herbal recommendations and formulation for the woman. She advises to check and see if the follicular phase is too short (leading to shorter cycles overall), if the luteal phases is too long, or if the spike in temperature that indicates ovulation is not high enough to actually release an egg, etc, and use these assessments to choose herbs that target that part of the cycle to support. As an acupuncturist trained in TCM, she advises using “yin tonifying herbs for the follicular phase and yang tonifying herbs for the luteal phase, with certain herbs specific to ovulation used at that time.”

...A woman goes through more than two different hormonal processes during her menstrual cycle. In the first phase she ripens the egg and builds the endometrium in her womb, which depends upon Kidney Yin and Blood. In the second, Liver Qi and Blood movement govern ovulation. In the third phase Kidney Yang and Spleen Qi regulate the luteal stage or hold the pregnancy if it occurs. In Phase 4, when PMS is most prevalent, Liver Qi helps the premenstrual transformation. And Phase 5 is menstruation, covered by Blood and a little Qi to keep it moving.

It is not necessary to come up with five formulas unless the cycle is

seriously disturbed. If only one part of the cycle is not functioning well, you can target it. This is not only done by, say giving vitex which increases progesterone during the luteal phase. Instead I might use magnesium and zinc throughout the cycle as these help the body form progesterone itself. Or I might add a little warming cinnamon and maca to the Yin phase of the formula in order to give the yin enough oomph to transform to yang at ovulation.^{xxiii}

Vaghan's Herbs for the Follicular Stage (yin): goji berries, slippery elm, peony root, black sesame seeds, seaweeds, shatavari, Dong Quai.

Ovulation Herbs: goji berries, peony root, damiana, bluperum

Luteal Stage Herbs (yang): Cinnamon, ginger, vitex

Premenstrual Herbs: Cilantro, licorice, Xiao yao san

Menstruation Herbs: Topical frankincense, turmeric, San qi.

Vitex agnus castus (Chaste Tree Berry): Vitex is a progesterone agonist which can help to minimize the risk of miscarriage. In addition, it can also stimulate ovulation. It works specifically by enhancing pituitary function, thus improving ovarian function. Research carried out in the University of Gottingen in Sweden, found that although it does not contain the hormone progesterone, it affects the pituitary gland in such a way that it corrects and regulates the secretion of progesterone from the ovaries. Vitex also corrects any hormone deficiency of either estrogen or progesterone.

Chamaelirium luteum (False Unicorn Root) also has the effect of correcting hormonal imbalances. In Britain, the most frequent use of this remedy is for female infertility, as well as impotence on the part of the man. Herbalists have been known to warn people of the potency of this plant should they not want to conceive! It is an effective tonic to the uterus and ovaries, and is useful to redress almost any imbalance in either male or female reproductive systems. It helps to prevent miscarriage, uterine hemorrhage and over-relaxed conditions of the uterus, even to the extent of prolapse.

Angelica sinensis (Dong Quai):

Avena sativa (Milky Oats): moistening, nutritive tonic

Urtica dioica (Nettles): high mineral content, restores general health

Trifolium pratense (Red Clover): A strong overnight infusion of red clover, or red clover mixed with nettles and oatstraw has pushed many women over the brink from infertility to fertility. This seems to work best when a little extra nourishment is needed in an otherwise healthy woman. "Red clover is the single best remedy for women over forty who want to conceive but can't -- even if there are medical reasons for not

conceiving such blocked tubes, diabetes, ovarian cysts, internal scarring, endometriosis. There are many heart-warming success stories I could share about red clover! But suffice to say, drinking 2-4 cups of the infusion of the dried blossoms (neither tincture nor tea nor pills will work for this application) seems to do wonders for fertility, no matter what your age." -- Susan Weed

Leonorus cardiaca (Motherwort): Calmative, especially for issues around motherhood.

Symphytum uplandica (Comfrey): Again from Susan Weed, "the single most important herb for pregnant women over forty is comfrey. The leaves of the mature plant contain an abundance of constituents beneficial to mother and babe, including generous amounts of minerals, allantoin, proteins, and many vitamins. The minerals in comfrey help insure healthy nervous system growth; the fetus's developing brain uses the proteins. And the allantoin helps the mother's tissues become stretchy and elastic. □ □ Aging can lead to increases stiffness and brittleness in bones and muscles, making pregnancy more arduous and painful, labor slower and more difficult, and injury more likely during birth. The hormones of pregnancy, which help soften and relax the pelvic tissues, may not be produced in adequate amounts. Comfrey comes to the rescue! Comfrey creates flexible and strong tissues throughout the body especially mucus surfaces (including intestines, uterus, bladder and vagina) the bones, the ligaments and tendons, and the skin. □ □ Regular use of the leaf infusion, at least a quart a week, promotes a safe delivery by: strengthening uterine muscles and preparing them to work easily and well; strengthening perineal tissues so they become resistant to tearing; strengthening uterine ligaments so the uterus does not prolapse; strengthening the bladder and increasing resistance to bacterial infection; strengthening the vagina and helping to promote an environment hostile to infection; providing easily assimilated minerals to prevent eclampsia and other complications; helping the bones of the pelvis flex and open during birth; increasing iron in the blood and thus forestalling post-partum hemorrhage.

Adaptogens to assist the HPA-axis function:

Female: Cordyceps, licorice, rhodiola, shatavari

Male: American ginseng, ashwagandha, asian ginseng, cordyceps, he shou wu, lucium, rhodiola, rhaponticum, and shilajit.

Asian ginseng – promotes estrogen

Astragals – sperm motility

He shou wu – sperm count and motility

Schisandra: increases pelvic circulation, tones repro

Ashwagandha – stabilizes HPA axis, reduces adrenaline & cortisol, helps with thyroid.

More helpful herbs from Carol Rogers: **True Unicorn Root, Squaw Vine, Blue & Black Cohosh, Wild yam, Red Raspberry, Alfalfa**

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