

Welcome to the Autumn edition of the Body in Balance Newsletters. I hope you all managed to have a lovely summer and are enjoying the autumn sunshine (!). The topic of this edition is concerned with hormonal imbalances. It's such a huge topic and hormonal imbalance can cause disruption in all areas of the body, male, female, children and the elderly, but in this instance we will be discussing female cycle difficulties and how they can be helped by natural medicines.

*Vitex agnus-castus*

The human body is a fascinating and complex piece of biological machinery, but what makes it even more fascinating is how all of the body's functions are controlled. An intricate combination and balance of hormones control the body's biological rhythms, involving the hypothalamus, pituitary, thyroid, adrenals, ovaries and uterus control our sleep patterns, mood, metabolism, stress levels, fertility and even what type of food we want to eat. It could be said our hormone levels go a long way in influencing our personalities and who we are. Unfortunately, for various reasons, hormone levels and therefore the biological rhythm is often disrupted and difficulties arise. Hormonal imbalances occur in all of us, male and female. However, they tend to be more noticeable and cause more disruption for women, especially between, and including, puberty and menopause. Disruption in the levels of hormones controlling the menstrual cycle can lead to irregular or absence of periods, failure to ovulate, PMS, flushes, sleep disturbance, vaginal dryness and mood swings to name only a few.

It is easy to see how such a complex balance of hormones, the levels of which fluctuate so often throughout the 'normal' 28 day cycle, can become out of synch and it would be such a mind blowing task to have to monitor these levels adequately in order to intervene with nature to correct them. Which is where our fantastic body's ability to heal and restore itself, given the right materials and a little time, will often sort the problem out itself. However, the tricky part is, knowing what the body needs and supplying it in the right doses to create the optimum conditions for such a process to occur. In other words— give the body what it needs, take away what it doesn't and it can usually, fix itself!

So, what are hormones?

Hormones are chemicals made in the body by endocrine glands. They are excreted directly into the bloodstream and travel to particular organs or tissues to influence and affect their structure and function. For example, Progesterone is a steroidal hormone derived from cholesterol. The levels rise in the second phase of the menstrual cycle and fall just before the menstrual period. Its' function among others, is to prepare the uterus to receive the fertilized egg and also prepare the breast tissue for the preparation of milk production. Oestrogen, derived from progesterone is mainly produced in the ovaries. It is not a single substance, but made up from three main oestrogens; oestradiol, oestrone and oestriole. Oestrogens control sexual development and regulate the menstrual cycle. Androgens are found in both males and females, but levels are higher in males. They are responsible for masculine features. When the secretion of androgens is too high in females, abnormalities in the menstrual cycle and fertility can occur, as in polycystic ovarian syndrome.

In order for the menstrual cycle to run smoothly, the levels of many different hormones must rise and fall as they each play their part on the function of the tissues and organs involved in reproduction. When a particular hormone rises or falls it triggers another to be secreted or decreased and so on, to keep the cycle regular.

There are two main phases of the menstrual cycle, the follicular phase which runs from the menstrual period to ovulation. This phase is involved with ripening of the follicle in preparation to release an egg. The luteal phase, or the second phase, where the reproductive tissues are prepared for implantation of the fertilised egg. Both stages last for around 14 days, ovulation occurs approximately on the 14th day of the cycle— that is around 14 days from the first day of the menstrual period. Ovulation can be detected by using hormone sensitive detection kits, available from pharmacies and supermarkets, or simply by monitoring your body temperature with an accurate thermometer. The body temperature rises slightly, by approx 0.5°C, at the point of ovulation and for a few days after. Changes in the viscosity of vaginal mucus also changes and becomes thinner and stringy, similar to egg white at ovulation to prepare for fertilization of the egg. If any of the hormone levels are out of balance it may lead to many of the problems associated with female cycle disorders, a shortening or lengthening of the cycle, a failure to ovulate, or absence of periods.

Progesterone is not only a hormone involved in preparing reproductive organs for pregnancy and birth. It also the hormonal precursor to other steroidal hormones such as oestrogens and testosterone. It is therefore involved in many other metabolic functions of the body including, fat metabolism, maintenance of bone density, mood elevation and is a natural diuretic. A naturally high level of progesterone will keep androgen levels low, as they should be in females. However, when progesterone levels fall too low, androgen levels may rise in proportion. This may explain why some women complain of thinning hair and growth of facial hair when they reach the menopause. Progesterone secretion is dependant on ovulation and is also attributed with keeping abnormally high levels of oestrogen in check. For this reason, it is thought to protect against both benign and cancerous changes in breast tissue. When levels of progesterone naturally fall towards the end of the menstrual cycle, the lining of the uterus, which has become enriched and ready for the fertilized egg under the influence of progesterone, starts to break away and is shed as a menstrual period. Symptoms associated with progesterone deficiency include irritability, mood changes, anxiety, breast tenderness vaginal dryness and premenstrual syndrome.



Oestrogens are responsible for the curvaceous female shape and help to maintain the skin, blood vessels and bones strength. Ovarian oestrogen reaches a peak just before ovulation and the levels stay high until just before the menstrual period starts. Hormones bind to tissues containing their own particular receptor sites. In the case of oestrogen, the receptor sites recognise and accept oestrogens allowing them to exert an affect on the tissues. However, there are some substances in the environment that have similar structures to the body's own oestrogen. Phyto-oestrogens are oestrogen-like substances that are produced in plants. The action of plants that have mild to moderate oestrogenic properties can vary. In herbal medicine they are used to treat both conditions where there is a deficiency or an excess of oestrogen. A drop in oestrogen, can lead to mood swings, night sweats and hot flushes as in menopausal symptoms. Phyto-oestrogens can bind to the receptors producing an mild oestrogenic effect and thereby, reducing the symptoms. In cases of oestrogen excess, as in heavy periods, prolonged periods, a tendency to endometriosis, fibroids and premenstrual tension, phyto-oestrogens compete with and thereby lessen the stronger effects of the body's own oestrogen. Xeno-oestrogens are oestrogen-like substances that are potentially harmful and are present in the environment. They are derived from pesticides and plastics that have found their way into the water supply and food chain. The health implications are not exactly clear, but there is strong evidence to suggest that the ingestion of xeno-oestrogens are responsible for some instances of male infertility, increases in breast cancer and pose a risk to infant health. It would appear that in research, these substances do not demonstrate a risk on there own, but combinations of these chemicals are potentially significant health risks.

What can you do to help maintain healthy hormone levels?

Diet and exercise have shown to have positive effects on many problems experienced with hormonal imbalances. This will be explored further in Part 2.

In herbal medicine, *Anemone pulsatilla*, Pasque flower is often used to treat a person with feelings of weepiness and emotional ups and downs as well as helping with painful periods. *Viburnum opulus*, or Crampbark, as it's name suggests, is an antispasmodic herb, which has shown to be a wonderful aid to the treatment of the cramp-like pains associated with painful periods. *Vitex-agnus castus* is much talked about a herb. It has shown in research to have a balancing effect on hormonal irregularities, particularly those symptoms that are the result of oestrogen/progesterone imbalance. It has shown to be effective in the treatment of polycystic ovarian syndrome, menopause problems, irregular periods and even in some cases of infertility due to hormonal imbalance. The success of Vitex is, however, dose dependent and specific in each condition and a herbalist will be able to advise the correct dose and method of use for your particular circumstances.

Listed below are a few herbs that have proven to have beneficial effects on conditions related to the female reproductive cycle. There are many more herbs that a herbalist may choose to treat the subtle differences experienced by each person in each situation. Many will work in combination to create a significant synergistic effect.



Anemone pulsatilla
Pasque Flower

Blue Cohosh-Relaxing and toning effect on the uterus, traditionally used to treat painful periods, particularly in adolescence. However, it is not suitable for everyone. Your herbalist will advise you.

Liquorice- Found to reduce androgens and increase progesterone and oestrogen ratios, especially in combination with peony.

Helonias-An endangered species therefore used sparingly in herbal medicine, to treat infertility, painful ovaries and menopausal symptoms.

Peony-Reduces androgen and testosterone levels, therefore reduces the development of masculine characteristics in females with androgen excess.



Viburnum opulus
Crampbark

Wild Yam- Useful in conditions where there is progesterone deficiency, as in menopausal related complaints. Particularly good for aches and pains, irritability, mood swings and vaginal dryness.

Problems associated with menopause can effect people in many different ways. As discussed in previous newsletters, people have constitutional differences which give rise to different symptoms for different people experiencing the same problem or condition. Therefore it would not be right to say that Sage, for example, will help everybody who experiences hot flushes, or Black Cohosh will treat everyone's menopausal symptoms.

A herbalist who has qualified to the level accepted by NIMH, will have a vast knowledge on the herbs and the dosage that is best to treat a person presenting with a particular problem and will ask many questions in order to make sure that they make up the best herbal medicine prescription for each individual person.

If you are experiencing menstrual cycle difficulties and would like advice on your particular problem, it is useful if you keep a diary of your symptoms throughout the month to bring along with you to the consultation. Details such as the first day of your period, how long it lasts for, how heavy the bleeding is on each day, colour of the menstrual flow, cramping pains, bloating, breast tenderness/lumpiness, cravings, mood changes, energy levels, mucus and/or discharge, skin changes and any other details that you think are significant should be noted.

Janet Hall MNIMH Member of the National Institute of Medical Herbalists. Consultations available at

Body In Balance, 6 Miller Road, Ayr, KA7 2LU. 07967 102722 / 01292 618942 or by email at janet@willowherbs.co.uk

Cost for initial consultation will be £35 (1 hour), or approximately £55 including medicines

Follow-up consultations will be £20 (1/2 hour), or approximately £38 including medicines.

Please make sure you contact a registered Medical Herbalist before taking any Herbal Preparations.

Questions or Comments? Contact Janet on 07967102722 or email at janet@willowherbs.co.uk

www.willowherbs.co.uk