

Menopause – The Natural Way

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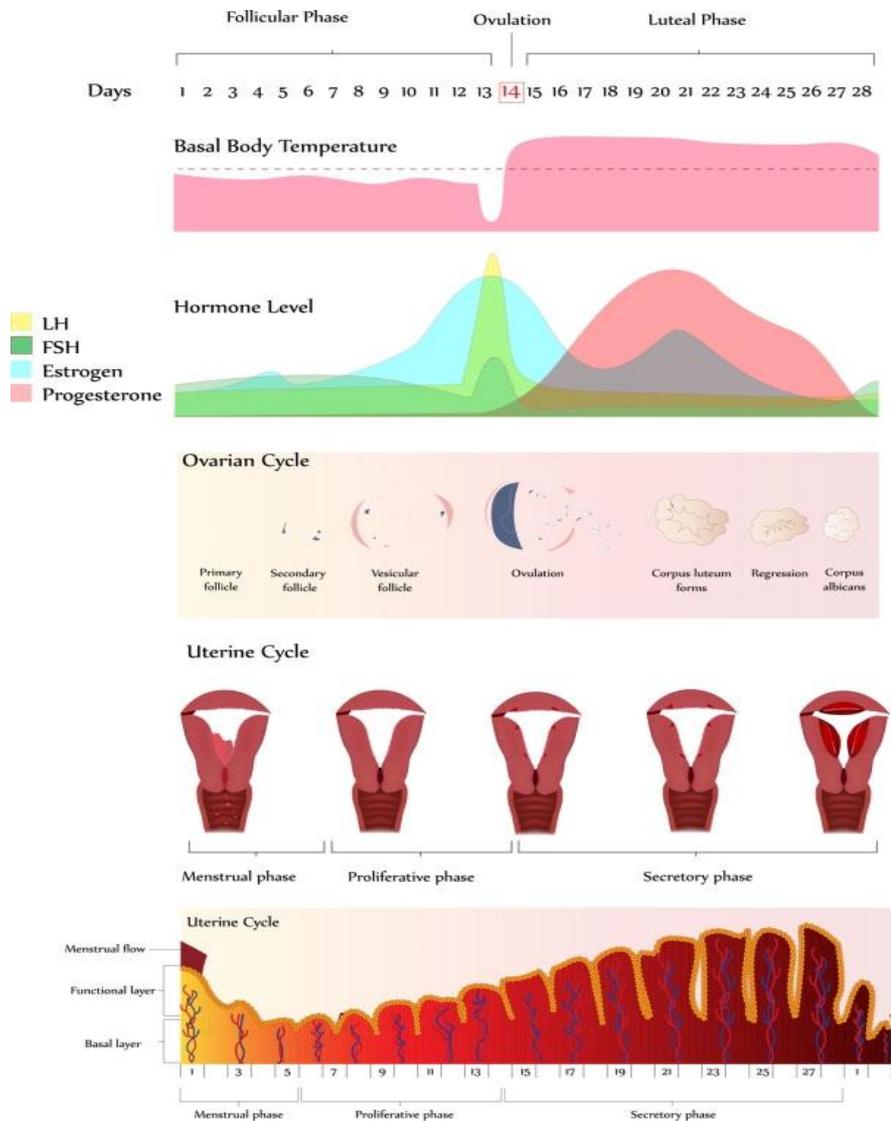
Aims of this Webinar

- Examine what occurs during the menopause and the effects these changes have on a woman's health
- Explore the short term and long term effects of menopause
- Focus on naturopathic nutritional support for menopausal symptoms and women's health post-menopause



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The Menstrual Cycle



Menopausal changes

- From age 35, more anovulatory cycles occur.
- By late 40's, the number of follicles remaining in ovaries is small.
- Follicles become less sensitive to FSH and LH.
- FSH and LH levels increase prior to menopause.
- Progesterone declines first leading to temporary state of oestrogen dominance



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Menopause

Menarche = periods start

Menopause = **periods cease**

Chinese, Indian and North American traditional cultures respect and honour older women for their wisdom.

Aristotle spoke of the change that occurs between the 5th and 6th decade

Before the 20th Century, majority of women did not survive till menopause

Evolutionary theory offers idea of living long enough to raise your last child



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Symptoms

- Early stages or 'perimenopause':
 - Hot flushes / flashes / 'power surges!'
 - Irregular periods
 - Heavy periods – can lead to anaemia
 - Mood swings
 - Fatigue
 - Insomnia
 - Anxiety
 - Depression
 - Palpitations
 - Weight gain
- Long term:
 - Vaginal dryness
 - Vaginal atrophy
 - Changes to hair, skin and nails
 - Low libido
 - Bone health – loss of bone mass
 - Increased risk of cardiovascular disease



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Early Menopause & POF

- **Early menopause** = menopause occurring before the age of 45
- **Premature menopause or Premature Ovarian Failure (POF)** = menopause occurring before age 40
- Can occur naturally – family history
- **Causes:**
 - Total hysterectomy
 - Bilateral oophorectomy
 - Tubal ligation
 - Damage to ovarian blood supply during surgery (e.g. Ovarian cyst removal) can cause ovaries to wither
 - Side effect of chemotherapy or radiation therapy
 - ‘Fragile X Syndrome’ ‘Turner’s Syndrome’
 - Autoimmune disease
 - Tamoxifen – can temporarily stop periods
- Rule out thyroid imbalance, pituitary/hypothalamic tumour, hyperprolactinaemia, PCOS.



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Oestrogen

3 forms:

Oestrone – E1

Oestradiol – E2

Oestriol – E3

Produced by ovaries, fat cells, adrenal glands

- Oestradiol (E2) is the main oestrogen produced in premenopausal women. Can be converted into oestrone.
- Oestrone (E1) main circulating oestrogen in post menopausal women. Produced normally from ovaries and conversion of androstenedione in adipose tissue and the liver.



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Oestrogen

- **2 types of oestrogen receptor**; alpha and beta
- Alpha receptors expressed primarily in womb, heart, kidney and liver
- Beta receptors expressed primarily in ovary, GI tract, bladder, prostate
- **Both are expressed in bones, breast tissue, adrenal glands and thyroid gland.**
- Example; alpha receptors mediate growth promoting effects of oestrogen whilst beta receptors limit longitudinal bone growth in females.



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Systemic effects of hormonal changes

- **Skin;** oestrogen receptors are found in the dermis and epidermis layers of skin.
 - Wrinkles, loss of collagen and hyaluronic acid, skin loses elasticity and moisture retaining capacity, thinner and slower to heal.
- **Hair;** growth slows, thinner, change in texture.
- **Vaginal dryness:**
 - Cells get thinner, less flexible, less lubrication
 - Vagina can shrink
 - Similar changes affect urethra epithelium



Systemic effects of hormonal changes

- **Heart:**

- Oestrogen exerts antioxidant effect, low levels = increased oxidative stress
- Post menopausal women shown to have lower levels of nitric oxide
- Oestrogen influences favourable balance of HDL and LDL cholesterol: this alters during menopause
- Slower metabolism, thyroid problems and central weight gain add to increased CVD risk



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Systemic effects of hormonal changes

- Bones:
 - Oestrogen reduces production and function of osteoclasts via inhibition of PTH (parathyroid hormone) activity and increases osteoclast apoptosis via influence on signalling molecules
 - High FSH stimulates osteoclast formation and inflammatory molecules which increase bone turnover
 - Drop in testosterone affects bone metabolism; testosterone triggers osteoblasts
 - Other risk factors for osteoporosis include early menopause, being underweight, smoking, lack of exercise, excess thyroid medication, family history.



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Systemic effects of hormonal changes

- **Mood swings & anxiety:**

- oestrogen supports blood flow in brain; low levels affect circulation
- Lack of sleep due to hot flushes and other symptoms affect mood balance
- Family and career issues provide additional stress

- **Libido:**

- Can wane with drops in hormone levels and vaginal dryness
- Can surge with freedom from unplanned pregnancy!

- **Weight gain**

- Metabolism slows as part of ageing process and it becomes harder to lose weight
- Low oestrogen = low leptin production
- Declining testosterone levels result in loss of lean muscle mass which burns calories at a higher rate



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Low libido or lack of sex drive is a common problem, affecting roughly a fifth of all men at some point in their lives and many more women. It is a highly sensitive subject which many clients find difficult to talk about, often only mentioning it as an afterthought if mentioning it at all. The loss of sexual desire can have a far reaching effect in relationships and being able to discuss such issues openly and honestly can be a welcome relief for most people.

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Endocrine system

- **Thyroid imbalance** can produce many symptoms similar to menopause; weight gain, mood swings, dry skin, low libido
 - Underlying thyroid imbalances often accelerate during menopause
- **Adrenal stress** adds to the picture:
 - ‘cortisol steal’ impairs oestrogen production
 - High adrenaline impairs T3 receptors
 - Hot flushes and sweats can be triggered by hypoglycaemia and high levels of stress hormones



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Many of us may be suffering from thyroid issues and not even be aware of it. We can find it difficult to get going in the mornings or think that our weight gain or thinning hair down to our age, but in fact we may have a problem with our thyroid. Those of you who are practitioners may recognise the signs in your clients, but because even the conventional diagnostic tests may not be sensitive enough to diagnose it, your client may need more convincing. This cutting edge webinar, hosted by

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ADRENAL SUPPORT

Always running around, or running on empty?
Learn how to support your adrenals to maintain energy, balance stress levels and avoid ill health

The adrenals can be considered the cornerstone of health and vitality, and yet it has been estimated that 80% of us will experience adrenal fatigue at least once in our lives.¹ For many, recovery can take months or even years, as low adrenal function can sometimes bring other aspects of health toppling down.

Your adrenals are pyramid-shaped glands that sit on top of your kidneys, and release hormones that regulate your stress response. So if you are juggling a hectic work/life/family schedule, for

and vitamins, as well as fuel. If you don't have the resources and energy to provide these, or replenish your stocks afterwards, then you may be playing a dangerous game. There may come



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Ageing & Andropause

- The 'male menopause' is on a longer time scale
- Gradual loss of testosterone leads to:
 - Fatigue
 - Low libido and sexual vigour
 - Thickening of skin
 - Hair loss
 - Changes in posture and bone health
- Ageing affects both sexes!



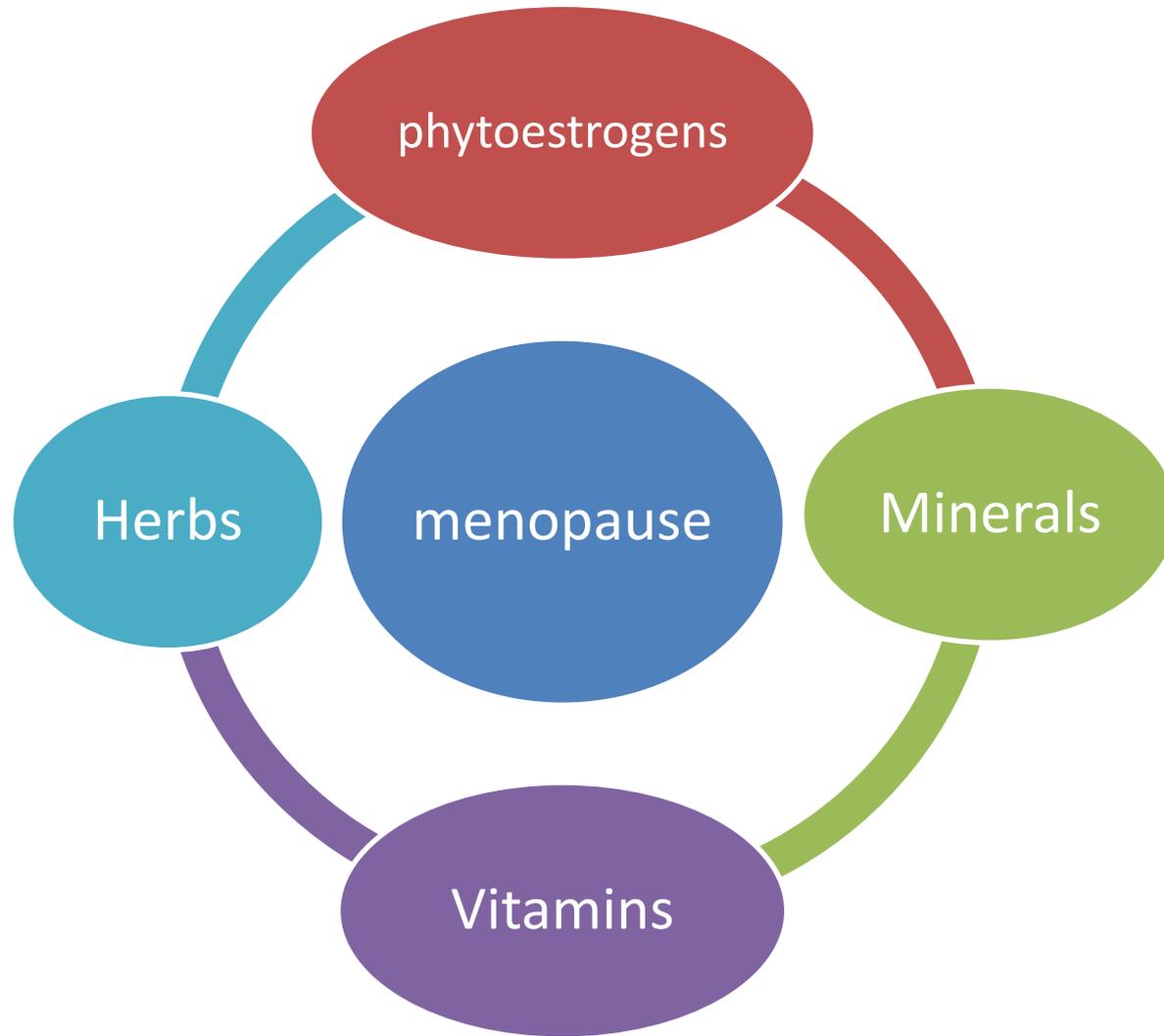
HRT

- 1943: oestrogens extracted from mares urine to form 'Premarin' the first HRT
- Driving factors were preserving youth and beauty; menopause viewed as 'oestrogen deficiency'
- New forms of HRT include progestogens
 - Mixed forms used if womb still present as oestrogen only HRT increases the risk of endometrial cancer.
- **Increased risk of:**
 - **CVD**
 - **Breast cancer**
 - **Ovarian cancer**
 - **Endometrial cancer**
 - **Blood clots**
 - **Stroke**
- For males, testosterone replacement includes risk of prostate cancer



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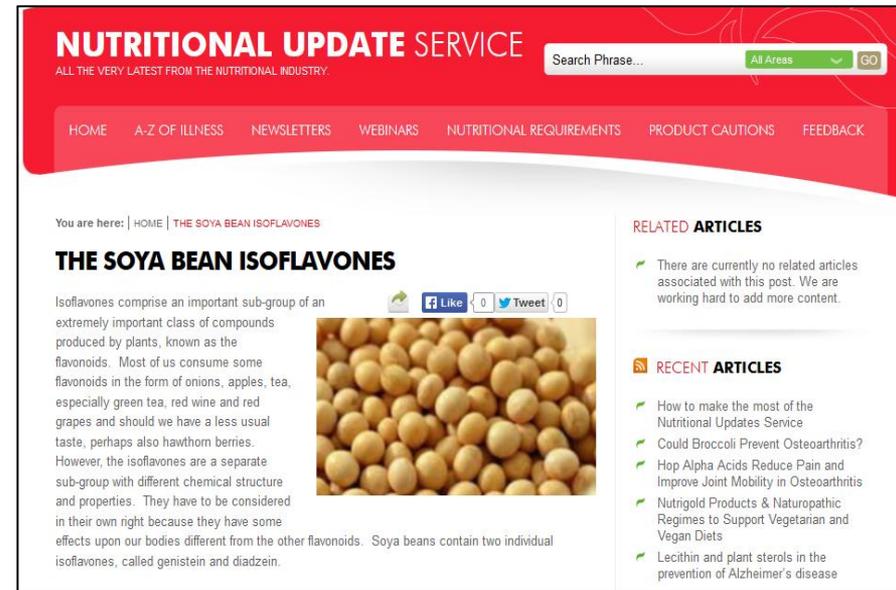
So, what are the alternatives?



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Phytoestrogens

- Act as SERM's: Selective Oestrogen Receptor Modulators
- Bind to oestrogen receptors to provide much weaker forms of oestrogen
- Agonist / antagonist actions according to receptor site
- **3 main classes**
 - Isoflavones
 - Coumestans
 - Lignans
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THE SOYA BEAN ISOFLAVONES

Isolavones comprise an important sub-group of an extremely important class of compounds produced by plants, known as the flavonoids. Most of us consume some flavonoids in the form of onions, apples, tea, especially green tea, red wine and red grapes and should we have a less usual taste, perhaps also hawthorn berries. However, the isoflavones are a separate sub-group with different chemical structure and properties. They have to be considered in their own right because they have some effects upon our bodies different from the other flavonoids. Soya beans contain two individual isoflavones, called genistein and diadzein.

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- Lecithin and plant sterols in the prevention of Alzheimer's disease



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Phytoestrogens

- **Isoflavones** = 4 types: genistein, daidzein, biochanin A, formononetin
- Primary soya isoflavones = **genistein** and **daidzein**
- Genistein proven inhibit bone resorption by osteoclasts whilst stimulating osteoblast activity



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Phytoestrogens

- Incorporate traditional fermented soya foods from organic whole soya beans; tempeh, tofu, and tamari.
- Avoid raw and processed soya foods such as textured soya protein
- Isoflavones also found in chickpeas, lentils, red clover, kidney & aduki beans
- **Lignans**; **golden flaxseeds** are rich source
- **Coumestans**; alfalfa and mung sprouts
- Isoflavones shown to reduce total and LDL cholesterol and triglycerides



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Probiotic bacteria

- Healthy bacterial balance required to metabolize daidzein into equol which exerts weak oestrogenic action
- Probiotic bacteria required to maintain bacterial balance within vaginal tract
- **Menopausal women with low lactobacilli found to have greater incidence of vaginal atrophy**
- Early stages of menopause can involve temporary oestrogen dominance: healthy gut bacteria support detoxification and elimination of oestrogens, reducing enterohepatic recirculation



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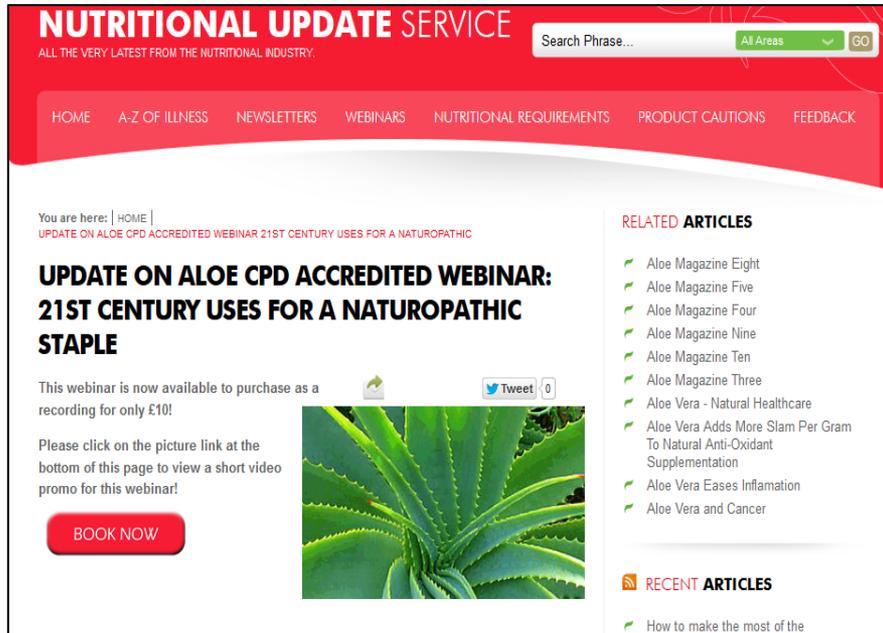
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- Traditional Ayurvedic remedy for hot flushes; cooling herb
- Enhances the growth and proliferation of beneficial gut bacteria
- Anti-inflammatory
- Healing to membranes
- Supports liver detoxification
- Enhances nutrient absorption of both fat and water soluble nutrients

Vitamins & Minerals

- **Bone building nutrients**

- **Calcium citrate**; look at dietary sources as high supplementation not always necessary
- **Magnesium citrate**; also for energy production, & hormone balance
- **Zinc citrate**; some research shows interaction with phytoestrogens in inhibiting osteoclast activity
- **Vitamin D**; deficiency common in UK
- **Vitamin K**; also for blood clotting, maintenance of mucous membranes
- **Boron, manganese, folic acid, copper**



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Vitamins & Minerals

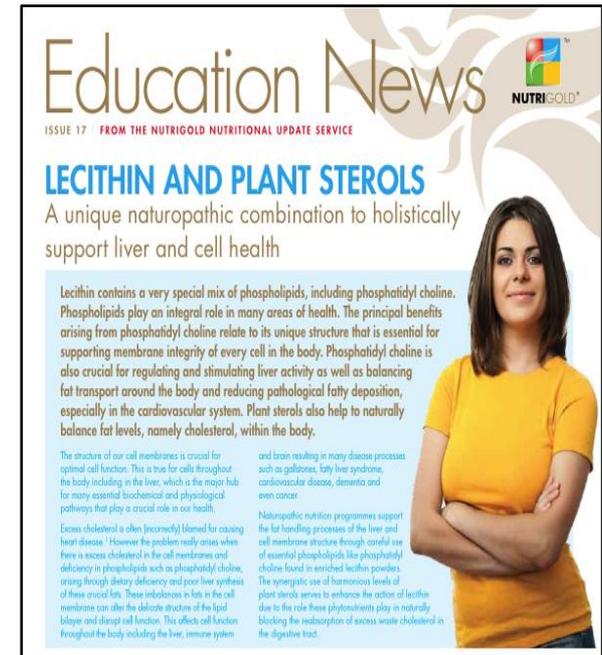
- **Chromium**; support insulin function
- **Vit C & Vit E**;
 - Powerful antioxidant activity to combat increase in oxidative stress brought on by lower oestrogen levels
 - Vit C needed for maintenance of bone matrix
 - Vit E protective to fats and cholesterol
 - Vit E shown to reduce hot flushes
 - Supportive to adrenal function



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Cholesterol balance & liver function

- **Lecithin powder** (>25% phosphatidyl choline is required)
- Phosphatidyl choline stimulates liver function, aiding detoxification and bile production
- Plant sterols proven to lower cholesterol and triglycerides
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Education News 
ISSUE 17 FROM THE NUTRIGOLD NUTRITIONAL UPDATE SERVICE

LECITHIN AND PLANT STEROLS

A unique naturopathic combination to holistically support liver and cell health

Lecithin contains a very special mix of phospholipids, including phosphatidyl choline. Phospholipids play an integral role in many areas of health. The principal benefits arising from phosphatidyl choline relate to its unique structure that is essential for supporting membrane integrity of every cell in the body. Phosphatidyl choline is also crucial for regulating and stimulating liver activity as well as balancing fat transport around the body and reducing pathological fatty deposition, especially in the cardiovascular system. Plant sterols also help to naturally balance fat levels, namely cholesterol, within the body.

The structure of our cell membranes is crucial for optimal cell function. This is true for cells throughout the body including in the liver, which is the major hub for many essential biochemical and physiological pathways that play a crucial role in our health.

Excess cholesterol is often (incorrectly) blamed for causing heart disease. However the problem really arises when there is excess cholesterol in the cell membranes and deficiency in phospholipids such as phosphatidyl choline, arising through dietary deficiency and poor liver synthesis of these crucial fats. These imbalances in fats in the cell membrane can alter the delicate structure of the lipid bilayer and disrupt cell function. This affects cell function throughout the body including the liver, immune system

and brain resulting in many disease processes such as gallstones, fatty liver syndrome, cardiovascular disease, dementia and even cancer.

Naturopathic nutrition programmes support the fat handling processes of the liver and cell membrane structure through careful use of essential phospholipids like phosphatidyl choline found in enriched lecithin powders. The synergistic use of harmonious levels of plant sterols serves to enhance the action of lecithin due to the role these phytochemicals play in naturally blocking the reabsorption of excess waste cholesterol in the digestive tract.



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Specific nutrients

- **Co-Q10:**
 - Antioxidant: particularly for cholesterol, levels are affected by statin medications
 - Regulates osteoclast and osteoblast differentiation
 - Energy production
- **Kelp:** nourishing for the thyroid gland and thyroid hormone production
- **Nettle:** source of iron, plant sterols, silica, potassium, quercetin and magnesium
- **Horsetail:** rich in silica, good for bone health and strengthening urinary tract
- **Sage:** traditional herb for regulating body temperature and sweating

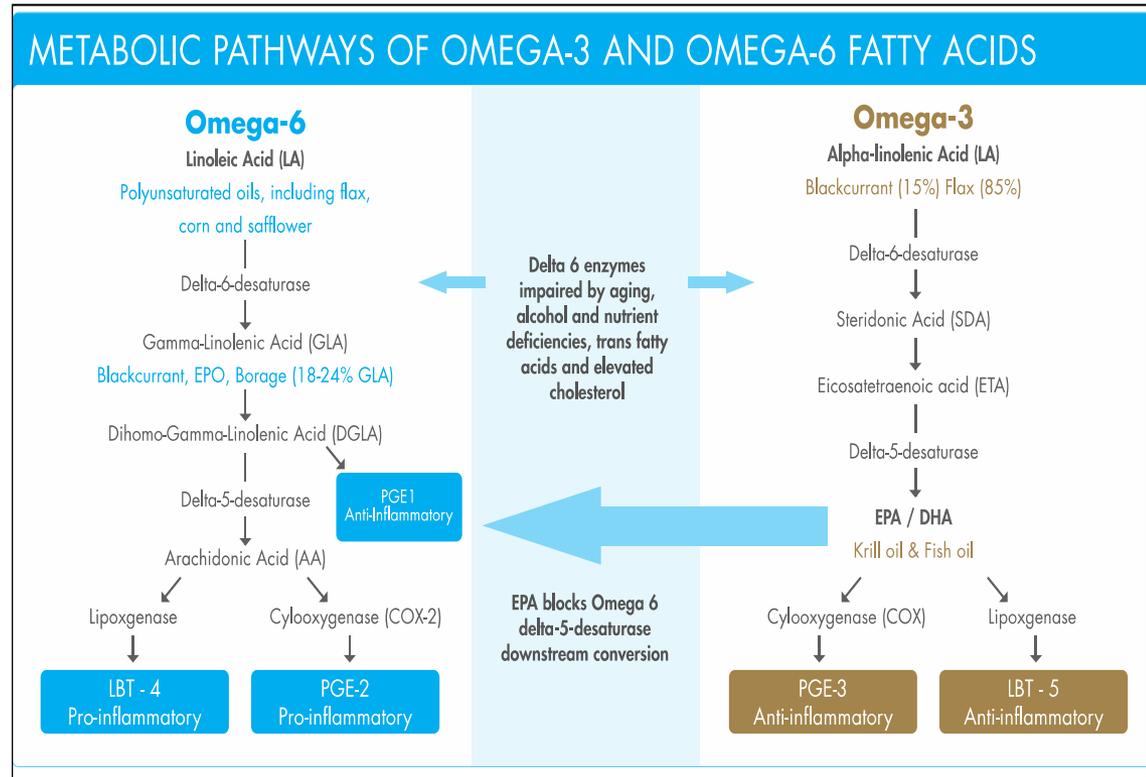


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Essential Fats

Omega 3 & Omega 6:

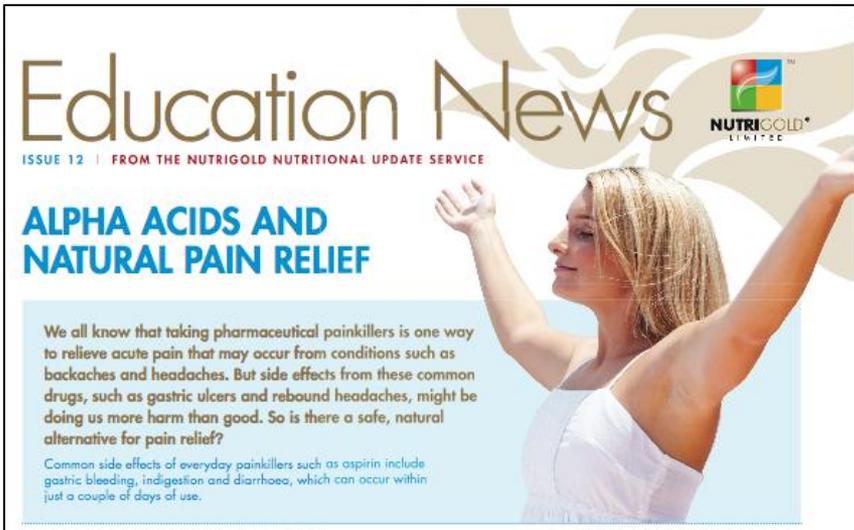
- balance of prostaglandin production
- irregular, longer or more painful periods can lead to a surge in pro-inflammatory prostaglandins
- Beneficial for CVD, risk of stroke and reducing inflammation
- Om3 helpful for mood balance & memory
- Evening Primrose and Flax suitable for vegetarians: use higher ratio of flax to EPO to balance Om3 levels and focus on co-factors necessary for conversion
- Krill offers high bioavailability and absorption



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Pain management

free Newsletter at www.updates.nutrigold.co.uk/newsletters



- **Early menopausal symptoms can include painful periods due to temporary oestrogen dominance**
- **Hop alpha acids:**
 - Ideal alternative to standard painkillers as no gastric side effects
 - Selectively block COX-2 enzyme only
 - Matches ibuprofen for pain relief
 - Effective pain management



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Summary

- Menopause is a natural transitional phase in a woman's life – *not a disease of oestrogen deficiency!*
- The hormonal changes provoke short term and long term changes to a woman's health
- Natural support is available for each stage and it's presenting symptoms and also for long term bone and cardiovascular support



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Nutrient Checklist

- Probiotic bacteria: digestion, phytoestrogen utilisation, vaginal & urinary tract wellbeing
- Phytoestrogens for hot flushes, skin and bone changes
- Vitamins & Minerals for bone health, energy and antioxidant protection
- Herbs for hot flushes, bone health & metabolism
- Lecithin, plant sterols & COQ10 for cholesterol balance and liver health
- Essential fats & hop alpha acids for mood, memory, inflammation and pain relief



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- Bowel Flora

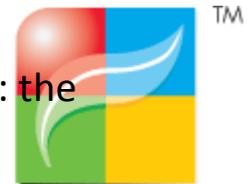
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