



Presents

Oestrogen detoxification for leaner legs and less PMS

Female body composition is a topic of much contention. With every guru having the best solution to cellulite and thunder thighs where does one turn in the sea of confusion? Biology of a female's physique is unique in hormonal makeup as well as biomechanics.

A female's menstrual cycle is highly complex, with peak periods of glucose releasing hormones to others which induce depletion of iron and methylators. The initial days of a woman's period will note an increase of FSH (follicular stimulating hormone), which assists in the development and production of mature eggs from your ovaries. The FSH phase of the menstrual cycle lasts approximately 3 to 5 days after which LH (luteinizing hormone) release will start to increase until its peak at which point approximately 14 days into the menstrual cycle at which point a mature egg will be moved into the fallopian tube. The rise of LH is accompanied by an increase of oestrogen for the purpose of providing nutrients to the womb. Progesterone increase is noted shortly after a rise of oestrogen to further provide nutrients and thickening to the womb in the case of pregnancy. If no fertility is noted the levels of oestrogen and progesterone will decrease and FSH will start to increase once again, restarting the menstrual cycle.

Now how is the menstrual cycle important toward female fat loss? And how do the hormones produced in the menstrual cycle have an impact on a woman body composition?

Oestrogen is a powerful hormone that increases the use and turnover of glucose in our bodies. From heart function to bone density, oestrogen plays a vital and major role toward optimizing our cardiac health. Excessive levels of oestrogen however will cause havoc to other hormone production such as FSH and LH, both of which play a major role toward androgen production. Androgens in a female's body increases muscle proprioception and thyroid activity. Thus androgens increases how we lift

weight and how we burn calories in and outside the gym. With an excess of oestrogen a woman's body will slow down its own production of healthy wanted oestrogen and subsequently increase unwanted levels of carcinogenic E4 and E16 oestrogen metabolites.

E2 oestrogen is extremely powerful toward optimal carbohydrate use. Balanced diet and lifestyle increases production of wanted E2 oestrogen during a woman's menstrual cycle to the outcome of better detoxification and a sense of well being. Increased levels of foreign hormones similar in construct to oestrogen will however lower production of E2 oestrogen resulting in an increased amount of pain and distorted moods during the pre-menstrual period. A diet rich in phytonutrients and co-factors will enable a woman to better control oestrogen production with the result of an improved body composition and psychology.

Liver detoxification in today's world of pollution should be of the highest priority. Improved liver detoxification allows for improved oestrogen profile and metabolite production. Namely, we have primary and secondary pathways of liver detoxification, both of which are controlled and regulated by nutrition and movement. Methylators and anti-oxidants play a major role toward primary liver detoxification. A diet high in b vitamins and anti-oxidants will improve our concentration of resources required for primary liver detoxification. Sources such a dark rich berries, seeds and vegetables go a long a way toward helping a woman's body cope with the demand of hormone metabolism. Phytonutrients also play a major role toward secondary xenobiotic (foreign drugs) specific metabolism. Given the amount of plastics, cosmetics and additives in the modern world, inclusion of phytonutrients may be the saving grace toward a healthier liver and hormone system. Phytonutrients found in broccoli, kale and watercress are extremely powerful in ridding the body of unwanted hormonal imbalance.

A diet free of refined sugar and full of berries, citrus fruit and vegetables will simply help with symptoms of cellulite, water retention and impaired mood. We are a product of chemical influence namely from the food we ingest. Choosing a source of nutrition that will benefit your biology can only serve toward better overall health, happiness and body composition.

Exercise is a great detoxifier especially when the need for detoxification is increased. During heightened levels of oestrogen production, so too is the need for detoxification increased during a woman's menstrual cycle. Periodization of increased volumes of training during oestrogen production peak may serve a purpose of not only better glucose utilization but detoxification too. Woman looking to optimize their physique that include both dense heavy lifting with light volume training would benefit from knowing when to slow things down and also ramp up blood flow.

Burning up a sweat when you're most vulnerable to the effects of oestrogen may also serve a purpose of better fat burning. Oestrogen increases a metabolite called G6PD which aids glucose utilization within the mitochondria for better energy production. Increased levels of G6PD along with increased volume of training will simply burn excessive calories to a greater extent in contrast to periods of low oestrogen production.

A woman's body is similar in construct to a man's, apart from a few exceptions. Mechanically a woman's rib cage sits closer to the hip than a man's due to an increased Q angle from the hip to the knee. Wider hips call for a closer proximity of

the ribs to the pelvis as the base angle is broader to the pinnacle. As woman may have a closure proximity of the rib cage to the pelvis, activity of the obliques may also be increased which could effect activity to the abductors of the hip. Squats are great and so too are deadlifts, however unilateral training will greatly influence the recruitment of the gluteus medius and vastus medialis both of which are generally underdeveloped in woman whom neglect these types of exercises. Training of the female physique should include volumes of unilateral lower body training to aid balance of the Q angle and distance of the lower rib and pelvis. Women also tend to have shorter clavicles than men, which may influence tendency toward greater volumes of internal rotation of the glenohumeral joint. Upper body training in a female's physique should include recruitment of exercise that would train the external rotators of the shoulders and depressors of the scapula to allow for a more open and aesthetically balanced physique.

Exercise and nutrition play vital role toward a woman's optimal wardrobe. Just as clothing and fashion play a role in the female population's value of interest, so too should the food and exercises women participate in be considered. The road to cellulite free and happy physiques comes through application of sensible diet and well structured exercise programming. Plan your curves with well developed thought and intention of both your training and eating habits.