

Over the past couple of months I have been discussing issues related to men's health. These articles are able to be viewed on our website www.selfhealclinic.co.nz. The problem of erectile dysfunction is becoming an issue for increasing numbers of men, and it is this topic I'd like to spend some time on over the next 2 months.

Current medical research indicates that in approximately 80% of men the problem of erectile dysfunction is due to: 1) physical causes such as side effects from medication, particularly blood pressure and antidepressant medications; atherosclerosis; hypertension; hormonal disorders; the use of alcohol; recreational drugs; metabolic diseases and diabetes; structural genital problems; abdominal, pelvic or genital surgery; smoking, and 2) psychological issues such as depression, stress, performance anxiety and marital problems. When you look at this list, it is possible to simplify it down to five things: nutrient depletion, digestion and liver dysfunction, the effects of emotional and physical stress, circulatory and cardiovascular issues, and hormone/endocrine imbalance. The last two are often a result of the first three.

The key hormone for normal sex function and drive in men is testosterone. There are a number of things which can affect the activity and levels of this hormone including stress, nutritional depletion, sluggish thyroid function, liver dysfunction, protein deficiency and constipation.

Testosterone does not work in isolation. When dealing with hormones it is never wise to guess at what is happening; the picture can vary hugely from person to person depending on the contributing factors. To gauge what the hormone balance is in the body we use saliva hormone testing rather than blood testing in the clinic. This is because blood testing measures only 20-30% of the potentially bio-available hormone pool; the part that is not bound to blood proteins. Saliva testing on the other hand, measures 100% unbound and active hormone which has gone into the tissues. We can test not only the sex hormones, but the stress hormones, sleep hormones and DHEA as well where appropriate.

When we look at testosterone levels in men, we also look at the estrogen levels. This may sound odd, but there is a very good reason for it. In both men and women, a shortage of zinc will cause testosterone to be readily converted to estrogen – specifically the strongest of the estrogens, estradiol or E2. If the person also has constipation or sluggish clearance of hormones through the liver, they have a much higher likelihood of becoming estrogen dominant. In a male, a sure sign of this is “man boobs” and weight gain around the hips and lower abdomen. In both men and women the sex drive and function will suffer where estrogen is dominant and testosterone is comparatively low. Other things which contribute to estrogen dominance in men are the over-consumption of non-fermented soy products such as soy milk and excessive beer consumption because both hops and soy are highly estrogenic. There is a very good reason why the inability to get an erection after a few pints is called “Brewer's droop”!

The bio-availability of sex hormones will affect their ability to take effect in the body. This is determined by how much of the hormone is bound to proteins in the blood and this in turn is affected by various factors including high estrogen levels.

Stress can affect the sex hormone levels as well. This is because the body has two key pathways it can opt to use hormonally. Put very simply, it will preferentially choose to produce either stress (adrenal) hormones or sex hormones depending on the demands being placed on it. If stressors are not removed after a period of time (pain, poor sleep,

poor diet, dehydration, allergy, poor blood sugar control, emotional stress etc...) the body will preferentially produce cortisol and other stress hormones at the expense of the sex hormones. This is why there is such a strong link between stress, poor health and a lack of libido. Elevated cortisol will also interfere with the body's ability to use other hormones in a normal way including thyroid hormone and insulin, and this contributes to fatigue and metabolic disease which are also factors in erectile dysfunction.

Having adequate protein in the diet is essential for hormone (and neurotransmitter) production. It is also vital for the maintenance of healthy blood cells, digestion, muscle tissue and liver function. I am constantly amazed by the number of people we get in the clinic who have protein-poor, carbohydrate-rich diets and relatively little vegetable intake. In a nut shell, if you don't supply your body with the building blocks for hormone creation (amino acids from protein, and cholesterol) you will struggle to maintain good hormone balance. (I will cover cholesterol in another article shortly). Protein is critical for digestion and correct function of the detoxification pathways in the liver because the enzymes and transporters used are all protein structures. Adequate protein equates to at least a palm-size portion of chicken, fish, lean meat, eggs or $\frac{3}{4}$ cup of unsweetened yoghurt three times a day, and should be balanced by double the amount of vegetables. Athletes, labourers, people who "work out" regularly and pregnant women will have a higher requirement for protein, and vegetarians will need to ensure they are using excellent food combining practice to gain enough protein.

When they have been used, all hormones are broken down and recycled or cleared via the liver function, the kidneys and the bowel. Issues with poor liver function and constipation will result in hormones being backlogged or recycled again. This is a major contributor to hormonal imbalances. If you try to correct a hormonal imbalance without attending to the digestive and eliminative functions first, you may get an improvement but it will be short lived or will go backwards when the products being used are withdrawn. This applies to both HRT and natural hormone-balancing products.

While we are on the subject of liver function I'd like to mention smoking and alcohol. Both of these affect the ability of the liver to carry out its job efficiently. This means clearance of hormones and wastes will be affected. Smoking and alcohol both deplete the body of vital nutrients required to turn food into energy, to build cholesterol into bile and enable it to be carried from the body, to ensure that the liver is able to do all of its jobs effectively and to ensure healthy heart function and blood vessel structure. If you drink more alcohol than the equivalent of 2-3 standard glasses of wine per week or if you smoke, I'd strongly suggest changing this.

There are all sorts of natural products sold to help erectile dysfunction and lack of sex drive. These will have varying degrees of success depending on the underlying reason for the dysfunction. My personal feeling is that it is better to understand the reason things have gone pear-shaped before spending money on supplements. As an example, someone with estrogen dominance is unlikely to benefit from herbs which increase testosterone levels until the zinc depletion, liver function or constipation has been attended to.

Next month I will cover how circulation, heart disease and nitrous oxide affect erectile function. **If you have any queries regarding the information in this article or would like to address some health issues of your own, we encourage you to call us on 06 304 8177. The dispensary is open 9.30am – 4pm Tuesday, Thursday, Friday and 10.30am – 4pm Saturday.**