

Male Health

Do Men Value Their Health?

The ancient Greek physician Hippocrates once said, 'A wise man ought to realise that his health is his most valuable possession.' It is believed that Hippocrates lived until the age of 80, which is impressive considering he was born nearly 2500 years ago. But do men really value their health above all else?

The facts about men's health are rather sobering; the average man lives a shorter life than the average woman and for fifteen years of that life he can expect to be seriously or chronically ill. Men are also known to leave health problems for too long before seeking help, which only serves to confound this problem.

Even the government now accepts that action must be taken to improve men's health. Former public health minister Yvette Cooper MP said that: "one of the starkest health inequalities when it comes to life expectancy is that between men and women. The question for all of us who care about ill health among men is what we can do to make a difference."

The three major issues are:

Cardiovascular Health

Prostate Health

Fertility & Sexual Performance

1. Male Cardiovascular Health

28% of men still smoke, 27% of men drink alcohol at a level that could be harmful to their health and 41% of all male deaths under the age of 75 (almost 60,000 a year in the UK) are caused by circulatory diseases, the largest single cause of death. Of these deaths, over two thirds (some 41,000) are due to coronary heart disease. Each year, over 130,000 men of all ages die from circulatory diseases. Cardiovascular health is a serious issue, but why is it more prevalent in men than women?

Testosterone – friend or foe?

The role of testosterone levels as a risk factor for cardiovascular disease has long been debated. Historically, higher testosterone levels in men have been thought to contribute to the gender discrepancies seen in cardiovascular disease risk. Emerging data indicates that, in fact, low testosterone may be associated with an adverse lipid profile, an increased risk of metabolic syndrome and cardiovascular disease in men. Whilst on the other side of the debate, anabolic steroid use in the 'supraphysiological' ranges (between a hundred and a thousand fold greater than the normal physiological range) is closely linked to heart disease and an increased risk of heart attack. On the one hand, low testosterone levels seem to be the culprit, whilst on the other, it is high testosterone levels which seem to be causing the problems. Unfortunately, at the moment there isn't a definitive answer - it is widely accepted that more research is needed before we can really understand the role of testosterone in cardiovascular disease and properly understand why cardiovascular disease is more prevalent in men than women.

Lifestyle Risks

Smoking
Obesity (especially central)
Stress
Alcohol
Salt intake
Diet low in key nutrients such as B vitamins,
folate, fish oil, antioxidants
Physical inactivity
Poor blood sugar balance
Taking steps to modify the risk factors associated
with cardiovascular disease is an essential part of
any treatment strategy.
Modifiable Analytical Markers
High cholesterol (especially high LDL
cholesterol and low HDL cholesterol)
High lipoprotein (a)
High blood pressure
High homocysteine
High C-reactive protein
High fibrinogen
High triglycerides

Fortunately, cardiovascular disease is one of the major health issues that does have many risk factors which are modifiable. Research shows that there are numerous analytical markers for cardiovascular health which, when modified, reduces disease risk significantly.

The role of folate

The main functions of folate (folic acid) are for methylation and DNA synthesis. Several mechanisms act together to regulate the folate metabolic pathways to ensure that both functions of folate are fulfilled properly.

B vitamin

deficiencies and genetic polymorphisms (mutations that cause predispositions to certain physiological imbalances) have multiple effects on folate metabolism. Impairment of the methylation cycle, for example, leads to high homocysteine, which is related to a higher risk for coronary heart disease. Homocysteine may promote atherosclerosis by damaging the inner lining of arteries and promoting blood clots. Methylation disturbances also result in reduced methylation of DNA and other molecules, which further contribute to the pathogenesis of cardiovascular disease.

The role of L-arginine

L-arginine is an amino acid which has antiatherogenic properties (i.e. prevents the formation of atheromatous plaques). L-arginine acts as a precursor to nitric oxide (NO) which plays a major role in the possible antiatherogenic activity of L-arginine. NO inhibits mononuclear cell adhesion, platelet aggregation, proliferation of vascular smooth muscle and promotion of endothelium-dependent dilation. L-arginine has been found to inhibit the oxidation of low-density lipoproteins (LDL) to oxidized LDL (oxLDL). The oxidation of LDL to oxLDL is believed

to be a pivotal early step in atherogenesis. Larginine may also scavenge free radicals and inhibit lipid peroxidation.

So What Goes Wrong?

Benign Prostatic Hyperplasia (BPH) is a noncancerous enlargement of the prostate and causes problems with urination including pain, increased frequency, dribbling and an increased risk of bladder infections. This condition affects up to 50% of men over the age of 50.

2. Prostate Health

The prostate is a gland located beneath the bladder in males and surrounds the urethra (the duct where urine and semen pass). Its function is to secrete a milky, white alkaline fluid into the prostatic urethra which makes up to 33% of the volume of semen.

The Use of Saw Palmetto in BPH

Saw palmetto has been shown to decrease urinary problems associated with BPH. It is thought that saw palmetto works by inhibiting the production of DHT, the hormone which may enhance tissue growth of the prostate. Beta sitosterol is the active agent of the saw palmetto plant berry and is known to reduce cholesterol, enhance T cell activity and to be symptomatically helpful in treating BPH, along with other plant phytosterols such as stigmasterol and campesterol. Beta sitosterol has been shown to have 5-alpha-reductase-inhibitory activity in vitro, and may therefore help to reduce DHT. A randomized, double-blind trial in patients with BPH showed a significant improvement in lower tract urinary symptoms in beta sitosterol recipients as compared with placebo recipients (Berges RR, Windeler J, Trampisch HJ, et al).

What causes BPH?

Hormones can play a significant role in this condition. Testosterone is the principal male hormone and is synthesised from cholesterol or acetyl coenzyme A in the testes. As a man ages, testosterone conversion to dihydrotestosterone (DHT - a very potent male hormone) is increased, which may enhance tissue growth of the prostate. DHT is known to increase in the prostate cells mainly due to decreased rate of removal of DHT and increased uptake of testosterone by the prostate.

The hormone prolactin is known to increase testosterone uptake and increase DHT synthesis; (beer and stress may increase prolactin levels).

Increased oestrogen levels may also be responsible for prostatic hyperplasia and enlargement; testosterone is converted into oestradiol, via the enzyme aromatase, in fat tissue and the liver.

Nutrient deficiencies (especially zinc and essential fatty acids).

High cholesterol – cholesterol breakdown products have been shown to enhance prostate hypertrophy.

3. Male Fertility & Sexual Function

Many men are affected by sexual problems. Recent research suggests that almost 1/3 of men of all ages say they climax too early and nearly 1/5 of men in their 50's experience problems achieving or maintaining an erection. Erectile dysfunction is one of the most commonly suffered but least treated complaints among men over 40. Lack of sexual desire is another common complaint in today's society, and reports show that it's not just older men who suffer from a lowered libido; this common complaint is now affecting more and more of the younger generation. Statistics do vary, but it would seem that around 30% of men are sub-fertile and at least 2% of men are totally infertile. Evidence suggests that male fertility is decreasing markedly as a result of modern living.

So What Goes Wrong?

Stress is a major factor for consideration. The hormones involved in stress, such as dehydroepiandrosterone (DHEA), are closely related to sex hormones such as testosterone, i.e. they are both steroid hormones made from a cholesterol precursor. When the body is under stress, it produces the required stress hormones, but unfortunately this happens at the expense of sex hormone production. This is fine when it happens sporadically and is how we have evolved to deal with stress – but obviously becomes a problem when stress levels are high and constant. Constantly high levels of stress have a direct and negative impact on the production of sex hormones, particularly on testosterone.

The Testosterone Connection

Testosterone is one of a family of hormones called androgens, and is essential for healthy sexual function; deficiency is implicated in numerous male sexual health problems such as erectile dysfunction, lowered libido and infertility. Normal testosterone levels maintain energy levels, healthy mood, fertility and sexual desire.

Abundant clinical literature shows that testosterone levels directly and indirectly influence the fundamental components of male sexual function, including genital development, sex drive, ejaculation, penile sensitivity and erectile function (Sternbach 1998, Velazquez 1998, Burris, Banks et al 1992). Male potency and libido are interdependent factors, and evidence suggests that there is a consistent, graded relationship between testosterone levels and sexual interest, particularly in men with sub-optimal amounts. A review of recent studies on testosterone therapy notes that testosterone boosts, in a dose-response fashion, both erectile function and sexual libido (Tenover 1998).

How is testosterone produced?

Testosterone is synthesised from cholesterol, with androstenedione, androstenediol, dehydroepiandrosterone (DHEA), progesterone and pregnenolone acting as some of its precursors. The testes produce testosterone regulated by a complex chain of signals that begins in the brain. This chain is called the hypothalamic-pituitary-gonadal axis. The hypothalamus secretes gonadotropin-releasing hormone (GnRH) to the pituitary gland, which triggers the secretion of luteinising hormone (LH) from the pituitary gland. Luteinising hormone (LH) stimulates the Leydig cells in the testes to produce testosterone. Luteinising Hormone acts as a kind of trigger for testosterone production and is an extremely important factor in this chain of events. A low level of LH will impede this conversion and may contribute to sexual problems related to low testosterone levels.

If you are having any of these male health issues, there is an answer. Taking a Clinical Kinesiology Diagnostic test will reveal what exactly is upsetting your system in the way of toxicity etc. Once detected, a specific antidote can be prescribed, and nutritional supplementation implemented to regain normal health and function. For further details please contact Linda on +442866328200, or email me on info@lindaburke.co.uk