How Do Eating Disorders Affect Hormones?

Anorexia Nervosa affects hormones because excessive exercise and weight loss disrupt the functioning of the brain and interfere with hormone production. Starvation results in the body attempting to save energy, by lowering its metabolic rate and stopping the production of certain hormones. This lack of hormones lowers libido (sexual desire) and affects bone density, often leading to osteoporosis (porous bones). Upon weight restoration, normal hormone production is resumed and normal functioning returns. However, bones never fully recover and may be fragile and vulnerable to breaks.

Women and Hormones

Without sufficient hormones, women experience amenorrhoea, the lack of monthly periods. Once a woman has begun menstruation, she is said to have amenorrhoea if she misses three consecutive periods (this does not include missed periods due to the contraceptive pill).

In healthy women, the brain stimulates the ovaries to produce the hormones oestrogen and progesterone. These thicken the womb in preparation for pregnancy and an egg is released (ovulation). When pregnancy does not occur, hormone levels decrease and the lining of the womb (including the egg) is expelled. This process is called menstruation, or a period.

Amenorrhoea occurs when this process is disrupted. Amenorrhoea can be caused by a number of disorders, including Anorexia Nervosa.

While a woman is not menstruating she will have a lowered libido and be infertile. However, it is recommended that sexually active patients with amenorrhoea continue using contraception. Ovulation may recommence unexpectedly, and this makes pregnancy a possibility.

Women who fall pregnant while they are underweight are likely to find that their physical and psychological health are compromised. There can also be complications for the growth of the foetus.

The infertility and lowered libido associated with amenorrhoea and Anorexia Nervosa are reversible. A history of Anorexia Nervosa does not appear to affect the ability to conceive at a later time in life, once there is restoration of weight to a healthy level.

Men and Hormones

Men with lowered hormone production can expect to have a disruption to their normal bodily functioning. Apart from a lowered libido (sexual desire), they can expect a loss of early morning erections and nocturnal emissions (‘wet dreams’).

Weight restoration results in a return to normal functioning, both in terms of sexual desire and physical functioning.

Seeking Help

If you have noticed some of these hormonal effects of your eating disorder, you should consult with a medical practitioner or your GP. It is important for doctors to be able to provide you with an accurate and thorough assessment of any medical effects of your eating disorder, in order to avoid more serious or irreversible changes.

Restoring your body to a healthy weight through regular eating is essential, in order to reverse or minimise the effects of hormone imbalance.