

INFO SHEET

Cross-sex hormones



What are cross-sex hormones?

For girls and young women, "cross-sex hormones" (CSH) means testosterone ("T"). The aim is to produce the secondary sex characteristics of men and boys. Within a few months on testosterone, the voice deepens, facial and body hair appear, and there is a gradual increase in muscle volume and the size of the clitoris as well as an increase in libido.

For boys, CSH means estrogen ("E"). It is taken to produce the secondary sex characteristics of girls and women: in particular, enlarging chest tissue to resemble breasts. There is also a certain redistribution of fat -- for instance to the hips.

Potential harms

East German female athletes given testosterone in the 1980s to enhance performance suffered numerous harmful effects. Today. many health risks have tentatively been linked to CSH. Expert clinicians have cited potential risks such as negative impact on bone growth, cardiovascular health and fertility, and the risk of hypertension and polycythemia. Testosterone in females may be linked to a higher risk of diseases including endometrial and cervical cancer, while estrogen in males may be linked to a higher risk of blood clots and testicular cancer.

Sexual function

Boys who have taken puberty blockers around age 12 followed by estrogen are unlikely ever to achieve orgasm. A lack of sexual function can cause many negative reactions, from depression to frustration and anger. In girls on testosterone, a hyper-sensitive clitoris or body shame may lead to sexual dysfunction.

Microdosing

It has become fashionable in some circles, especially in the United States, for young women (such as those identifying as "non-binary") to take small doses of testosterone, known as "microdosing". This produces more gradual changes than the standard dose and the health risks have not been studied as thoroughly.

Concern around the effects of cross-sex-hormones mean that prescribing regulations are under review in the UK and internationally.

Currently, cross-sex hormones (CSH) can be prescribed by the NHS England providers to youth at "around 16 years of age".

Private providers are exempt from rules applied by NHS England and can prescribe cross-sex hormones to younger children.

Almost all children prescribed puberty blockers go on to take cross-sex hormones. Puberty blockers are drugs which send a signal to the pituitary gland to shut down the production of hormones that trigger the physical and mental developmental processes of puberty.

All information on this page is based on official guidance and current law.