Hormones are natural substances produced in the body. They help to relay messages between cells and organs and affect many bodily functions. Everyone has what are considered "male" and "female" sex hormones.

female sex hormones: The two main female sex hormones are estrogen and progesterone. Although testosterone is considered a male hormone, females also produce and need a small amount of this, too.

Estrogen: Estrogen is the major female hormone. The lion's share comes from the ovaries, but small amounts are produced in the adrenal glands and fat cells. During pregnancy, the placenta also makes estrogen.

Estrogen plays a big role in reproductive and sexual development, including:

1- Puberty 2- menstruation 3- pregnancy 4-menopause

Estrogen also affects the:

1- brain 2- cardiovascular system 3- hair 4- musculoskeletal system 5- skin
6- urinary tract

Progesterone

The ovaries produce the female sex hormone progesterone after ovulation. During pregnancy, the placenta also produces some.

The role of progesterone is to:

1. prepare the lining of the uterus for a fertilized egg
2. support pregnancy
3. suppress estrogen production after ovulation

Testosterone: Small amounts of testosterone come from the adrenal glands and ovaries. This hormone plays a role in several body functions, including:

1- sexual desire 2- regulation of the menstrual cyclebone and muscle strength

Puberty: Everyone is different, but most females enter puberty between the ages of 8 and 13. And it all happens because of hormones.

The luteinizing hormone (LH) and follicle-stimulating hormone (FSH) are produced in the pituitary gland. Production increases at puberty, which in turn stimulates the sex hormones — especially estrogen.

This increase in female sex hormones results in:

1. the development of breasts
2. the growth of pubic and armpit hair
3. an overall growth spurt
4. an increase in body fat, especially in the hips and thighs

5. the maturation of the ovaries, uterus, and vagina
6. the start of the menstrual cycle

male sex hormobn

Testosterone is a hormone that your gonads (sex organs) mainly produce. More specifically, the testicles in people assigned male at birth (AMAB) and the ovaries in people assigned female at birth (AFAB) produce testosterone.

Your adrenal glands also produce the hormone dehydroepiandrosterone (DHEA), which your body transforms into testosterone and estrogen.

Testosterone is the main androgen, meaning it stimulates the development of male characteristics. Levels of testosterone are naturally much higher in people AMAB than in people AFAB.

In men, testosterone is thought to regulate a number of functions alongside sperm production. These include:

1-sex drive 2-bone mass 3-fat distribution 4- muscle size and strength
5- red blood cell production

Without adequate amounts of testosterone, men become infertile. This is because testosterone assists the development of mature sperm.

Despite being a male sex hormone, testosterone also contributes to sex drive, bone density, and muscle strength in women. However, an excess of testosterone can also cause women to experience male pattern baldness and infertility.

The brain and pituitary gland control testosterone levels. Once produced, the hormone moves through the blood to carry out its various important functions.

When a man has low testosterone, or hypogonadism, he may experience:

1. reduced sex drive
2. erectile dysfunction
3. low sperm count
4. enlarged or swollen breast tissue

Over time, these symptoms may develop in the following ways:

1-loss of body hair 2-loss of muscle bulk 3-loss of strength 4-increased body fat

In women, however, high testosterone levels can lead to male pattern baldness, a deep voice, and menstrual irregularities, as well as:

1. growth and swelling of the clitoris
2. changes in body shape
3. reduction in breast size
4. oily skin
5. acne
6. facial hair growth around the body, lips, and chin