

# Gonads – Reproductive Organs – Natural Endocrine Health

Although the gonads are part of the endocrine system, their primary purpose is to produce gametes (semen and eggs).

The woman's ovaries are located on both sides of the uterus below the opening of the fallopian tubes. They are oval or almond-shaped. The ovaries produce estrogen and progesterone. These two hormones affect many of the female characteristics and reproductive functions.

The male's testes are egg-shaped organs that hang in a pouch of skin called the scrotum outside the male body. The testes produce testosterone, which affects many of the male characteristics and sperm production.

Women synthesize most of their estrogen in their ovaries and other reproductive tissues. Since men lack this female anatomy, they need to produce estrogen through a process involving an enzyme called aromatase that transforms testosterone into estradiol.

In women, testosterone is produced in various locations. One-quarter of the hormone is produced in the ovaries, a quarter is produced in the adrenal glands, and one-half is produced in the peripheral tissues from the various precursors produced in the ovaries and adrenal glands.

This is an excerpt from the ridiculously long article, *Holistic Guide to Healing the Endocrine System and Balancing Our Hormones* I believe that it's easier to heal the body when you understand how the body works, but understanding the endocrine system is big a task. It's a long article, but I think it's worth it and I hope you'll check it out.

## Testes

The testes secrete testosterone, which is necessary for proper physical development in boys. Testosterone maintains libido,

muscle strength, and bone density. Disorders result from a lack of testosterone production. Here are the common causes:

- Defects in the pituitary, hypothalamus, thyroid, and adrenals can affect testosterone production.
- Medications can affect testosterone production.
- Testes-based conditions, such as severe injury, radiation, or chemotherapy can all deplete testosterone levels.

Besides the case of an injury, if the testicles aren't working there's almost always a problem within the endocrine system.

## **Raise Your Testosterone Naturally**

- HITT (High-intensity interval training)
- Weightlifting
- Moderate intermittent fasting
- Don't smoke
- Detoxify the endocrine system (if need be)
- Eliminate refined foods, especially sugar
- Eat healthy fats
- Get enough vitamin D and zinc
- Handle stress well
- Sleep well
- Avoid soy and alcohol
- Eat nuts
- Limit or eliminate coffee

## **Ovaries**

The ovaries are a pair of ova-producing organs (that is, they produce egg cells) that maintain the health of the female reproductive system. The ovaries, like their male counterpart, the testes, are known as gonads. This simply means they are the primary reproductive organs.

In addition to their role in producing ova, the ovaries also have the distinction of being an endocrine gland because they

secrete hormones—primarily estrogen and progesterone—that are vital to normal reproductive development and fertility.

Estrogen (estradiol, specifically) plays a vital role in breast development, fat distribution, and the development of the reproductive organs.

## **Diseases and Disorders of the Ovaries**

Diseases associated with the ovaries include ovarian cysts, ovarian cancer, menstrual cycle disorders, polycystic ovarian syndrome, and osteoporosis.

Menopause is a rapid loss of estrogen production at a certain age, typically around 50; better health can delay it.

The ovaries play an immensely important role in the female reproductive system, and in the endocrine system as a whole. The hormones they secrete ensure the proper development of the female body and promote healthy fertility.

## **Natural Remedies for Polycystic Ovarian Syndrome**

**Avoid AGEs:** Women with ovarian cysts have higher levels of advanced glycation end products (AGEs) in their blood. These are cancer-causing compounds formed when glucose binds with proteins, typically caused by high-heat cooking methods with meat and sugars.

### **Get Enough Nutrition**

Obviously, eat well, but also make sure you're getting enough vitamin D, calcium, vitamin E, essential fatty acids, chromium, and magnesium.

### **Avoid Wheat**

Just try it for two weeks. Today's wheat is wreaking havoc on our bodies, and many women dealing with ovarian cysts have issues with gluten. Eliminate refined sugars as well, detoxify the gut, and take care of the endocrine system.

## Supplemental

- Increasing progesterone in the body, which decreases estrogen, can help as well. You can do this with a progesterone cream applied to the skin, but the following herbal remedies are a better choice than ingesting or absorbing a hormone.
- **Maca root** (*Lepidium meyenii*) helps the body produce progesterone, balances the hormones, and helps balance the endocrine system as a whole.
- **Black Cohosh** root (*Actaea racemosa*): helps regulate the menstrual cycle, and is really good at relieving ovarian pain.
- **Dong Quai root** (*Angelica sinensis*) is a Chinese herb known to aid hormonal balance and, specifically, congestive fertility issues. Dong Quai also supports healthy circulation to the reproductive organs and promotes healthy menstruation cycles. Dong quai should not be consumed by women with fibroids or blood-clotting problems.
- **Milk thistle seed** (*Silybum marianum*) supports hormonal balance through liver support.
- **Tribulus** (*Tribulus terrestris*) has been shown to normalize ovulation when used prior to ovulation.
- **Vitex, AKA chaste tree berry, chasteberry** (*Vitex agnus-castus*) aids in regulating hormonal balance, promotes ovulation, and improves menstrual cycle regularity.
- **Wild yam root** (*Dioscorea villosa*) promotes a healthy menstrual cycle and hormonal balance and reduces ovarian pain.

## Naturally Alleviate Menopause Symptoms

Menopause can be both a blessing and a curse. The right diet can usually alleviate symptoms, but the bad news for some women is that when health is restored fully, menopause may be delayed. It may be a choice between hot flashes or periods, but know that PMS symptoms dissipate as well with better

health, and so does heavy menstrual bleeding.

- **Black Cohosh** (*Actaea racemosa*, *Cimicifuga racemosa*) has received considerable scientific attention for its effects on hot flashes and other menopausal symptoms.
- **Red Clover** (*Trifolium pratense*) has been reported to help women with hot flashes. Studies report few side effects and no serious health problems with use.
- **Dong Quai** (*Angelica sinensis*) has been used in Traditional Chinese Medicine to treat gynecologic conditions for centuries. Dong quai has blood thinning properties, and should not be consumed by anyone with fibroids or blood-clotting problems.
- **Evening primrose** oil or black currant oil provide gamma-linolenic acid (GLA), an essential fatty acid that can influence prostaglandin synthesis and help moderate menopausal symptoms.
- **Ginseng** (*Panax ginseng* or *Panax quinquefolius*) has been shown in research to alleviate some menopausal symptoms, but it has not been found to be helpful for hot flashes.
- **Omega 3s with DHA and EPA, B vitamins, vitamin D, Vitamin E, Magnesium, and exercise** have all been shown to alleviate hot flashes as well.

## **Natural Remedies for PMS**

Most women deal with headaches, mood swings, bloating, and other hormonal problems that threaten their relationships, work life, and well-being every month due to PMS.

It's not a curse. It's not something women have to live with. Difficult monthly cycles are a sign of poor health. The healthiest women barely notice their cycle, do not feel as though emotions run away with them every month, are exceptionally regular, they do not cramp, and they spot, as opposed to a heavy bleed. Along with a healthy diet, make sure you have the basics covered, including B vitamins (get a complex with extra B6), healthy fats (with DHA and EPA)

vitamin D, Vitamin E, Magnesium and exercise, along with lots of fresh, raw, organic produce every day (more vegetables than fruit). And as always, avoid stimulants, soy and refined processed foods.

PMS is also a symptom of an unhealthy gut with too much Candida. Cutting out sugar and other foods that feed yeast, and high-quality probiotics taken regularly also work wonders for many women with difficult PMS.

Also for cramps, cranberry lemonade with stevia, and Mountain Rose Herb's pregnancy tea works amazingly well. This is also great for detoxifying the liver and kidneys, and alleviating morning sickness.

- **Chasteberry fruit extract** (*Vitex Agnus-astus*) can help balance the hormones released by the pituitary gland that control your overall hormone function. Studies of over 5,000 women have found it effective. Take 100 mg twice a day of a 10:1 extract.
- **Wild yam** (*Dioscorea villosa*) and cramp bark (*Viburnum opulus*) can help regulate cycles and relieve cramps.
- **Dandelion root** can help with liver detoxification and also works as a diuretic.
- **Flax seeds** contain lignans that balance hormone metabolism and block some negative effects of too much estrogen. The fiber in flax seeds helps too.
- **Black Cohosh** (*Actaea racemosa*, *Cimicifuga racemosa*) has received considerable scientific attention for its effects on hot flashes and other menopausal symptoms.
- **Red Clover** (*Trifolium pratense*) has isoflavones that improve estrogen detoxification.
- **Dong Quai** (*Angelica sinensis*) is an antispasmodic herb that eases cramps and other symptoms of PMS. It dilates blood vessels to increase flow and helps replenish blood after the period has ended.

Some swear by **progesterone creams** to calm raging PMS. As

previously mentioned, increasing progesterone reduces the problems associated with estrogen. Extreme care should be taken with this or similar hormone therapies.

Diet is, as always, paramount. Check out *Detox Cheap and Easy Without Fasting – Recipes Included*. And again, this is an excerpt from the ridiculously long article, *Holistic Guide to Healing the Endocrine System and Balancing Our Hormones*.

### **Related Reading:**

- *Holistic Guide to Healing the Endocrine System and Balancing Our Hormones*
- *Candida, Gut Flora, Allergies, and Disease*
- *Gluten, Candida, Leaky Gut Syndrome, and Autoimmune Diseases*
- *Hypothyroidism – Natural Remedies, Causes, and How To Heal the Thyroid*
- *How To Detoxify and Heal From Vaccinations – For Adults and Children*