

Common Polycystic Ovary Syndrome Weight Loss Super Secret Revealed

How to find and fix this commonly missed PCOS problem and successfully lose that stubborn, unwanted fat more easily.

Polycystic Ovary Syndrome (PCOS) is a very common condition...

Although it has previously been shown to afflict more than 11% of women, it seems to be growing in prevalence; recent research reveals staggering estimates of more than 17% of women of reproductive age are afflicted – this is a frightening figure!

As the name suggests, most women with PCOS develop a number of small 'cysts' in their ovary/ovaries. These cysts usually form along the edge of the ovary/ovaries, known as the 'string of pearls' appearance. There are several tests that can visualise this, but the most commonly used is an ultrasound (placed vaginally or on the lower abdomen).

Polycystic ovaries are an integral part of the diagnosis of PCOS (along with high testosterone levels and/or irregular periods). However, you can have polycystic ovaries and not have Polycystic Ovary Syndrome.

To be diagnosed with PCOS, you need to have 2 or 3 of the following:

- ✓ Polycystic ovaries on ultrasound
- ✓ High testosterone levels
- ✓ Irregular or absent periods

Why am I telling you about PCOS 'cysts' in a thyroid report? These so called cysts are actually immature follicles that can manifest when a thyroid disorder is present, which I will address later in this important report.

Conditions that commonly accompany PCOS and/or may promote its development include...

- Hypothyroidism or thyroid autoimmune dis-ease such as Hashimoto's thyroiditis
- Hormonal imbalance with high levels of androgens (often thought of as 'male hormones')
- High levels of insulin/insulin resistance (a major cause of PCOS)
- Low-grade inflammation (a major cause of PCOS)
- Toxicity

Intertwined hormonal influences in women with PCOS

High insulin levels and insulin resistance are both common causes and aggravators of PCOS. One study showed that insulin levels were significantly higher in a group of women with subclinical hypothyroidism than those not suffering with hypothyroidism. (http://bit.ly/18uIG8A) [Subclinical hypothyroidism is when someone has Thyroid Stimulating Hormone (TSH) levels above 2.5 mlU/l, but appears not to have hypothyroid symptoms].

Increased insulin resistance causes increased 'male hormone' (androgen) production, which can cause PCOS symptoms like weight gain, skin problems, abnormal hair growth, irregular ovulation and depression. Poor thyroid function can also cause the same PCOS types of symptoms as well as tiredness and depression.

Another study showed that patients with subclinical hypothyroidism had higher levels of inflammation, another main cause of PCOS, as measured by 'serum hs-CRP'. Inflammation is more common in both women who are overweight and those with PCOS. Inflammation has been shown to reduce insulin sensitivity and this can make it more difficult to lose weight. (http://bit.ly/18EYPao)

What is the thyroid gland?

The thyroid is a small gland that sits at the base of the neck, just in front of the windpipe, below the voice box and is butterfly shaped - appropriately 'girly'. Thyroid problems affect 5 - 8 times more women than men.

Usually less than an ounce in weight, the thyroid is made up of two lobes, right and left. The functions of the thyroid gland are controlled by the pituitary gland which is, in turn, controlled by the hypothalamus, both located in the brain.

What does the thyroid gland do?

Although small in size, you should not underestimate the importance of this gland. The thyroid is vital for maintaining health and keeping the 'spark' in your life. This tiny gland releases powerful hormones, which help to control and release energy for all metabolic processes.

To cut a long story short, the thyroid gland is the metabolic engine of the body that ubiquitously affects every cell.

The thyroid...

- ✓ Modifies how genes are expressed
- ✓ Regulates the metabolism by regulating the use of glucose and oxygen for the production of heat and energy (important for weight control)
- ✓ Regulates the speed of enzymes
- ✓ Regulates bone mass by affecting calcium metabolism
- ✓ Regulates cholesterol and fat metabolism
- ✓ Is involved in the regulation of reproductive functions

How does this tiny gland handle such a mammoth task?

When it comes to the thyroid, the immense strength of this gland lies in the potent hormones it releases into the blood. The three hormones of the thyroid gland are:

- Thyroxine (T4)
- Tri-iodothyronine (T3)
- Calcitonin

The release of these hormones is regulated by a hormone called Thyroid Stimulating Hormone (TSH), secreted by the pituitary gland located in the brain. The hypothalamus, in turn, regulates the release of TSH from the pituitary by releasing the TSH-releasing hormone (TRH). This communication between the hypothalamus, pituitary gland and thyroid gland is called the Hypothalamic-Pituitary-Thyroid Axis (or HPT).

When the levels of thyroid hormones drop, the hypothalamus tells the pituitary gland to produce more TSH. This is why high TSH is a sign of low thyroid function. The opposite occurs when thyroid hormone levels get too high. This system, known as 'negative feedback', is used by most of our body's endocrine glands for ensuring balance or homeostasis.

Thyroid dis-ease and PCOS

Thyroid dysfunction is more common in women with PCOS, both in the form of hypothyroidism and thyroid autoimmune dis-ease. Hypothyroidism can cause weight gain and make it very difficult to lose weight as well.

Does hypothyroidism cause PCOS?

The 'cysts' in poly 'cystic' ovary syndrome are in fact immature follicles. Hypothyroidism causes decreased follicle stimulating hormone (FSH) levels. Low FSH levels cause immature follicles and unreleased eggs. Women with PCOS often have low absolute or relative FSH levels. So, this is a very good question!

According to National Institute of Health research (NIH), "Hypothyroidism can either *initiate, maintain or worsen* the [PCOS] syndrome [emphasis mine]. Correction of hypothyroidism, when present, would therefore form an important aspect of the management of PCOS."

Why should you know more about this gland?

The thyroid is an extremely important gland due not only to its impact on overall health, but also as it affects other hormones, fertility and specifically for this report, weight.

Let's look at some research...

A TSH cut-off value around 2 mIU/I had the best sensitivity and specificity for identifying women with insulin resistance. Women with TSH levels higher than 2 mIU/I had a **higher body mass index (BMI)** and were more insulin-resistant compared to women with TSH levels below 2 mIU/I (http://bit.ly/13IVjTP). This study, conducted specifically on women with PCOS, reveals a significant link between thyroid function and insulin resistance.

PCOS and hypothyroidism have also been linked. According to Evanthia Diamanti-Kandarakis - co-author of *Insulin Resistance and Poly Cystic Ovarian Syndrome: Pathogenesis, Evaluation, and Treatment*, (p325), "decreased (sex hormone binding globule) SHBG and increased free testosterone levels and altered estradiol (an oestrogen) metabolism have been described in hypothyroid patients, whereas PCO (Polycystic Ovaries) has been detected in 36.5% of hypothyroid patients". The authors believe hypothyroidism may enhance 'the PCOS phenotype', meaning an underactive thyroid may change how genes are expressed to resemble a PCOS pattern.

A condition called thyroid autoimmune dis-ease, where one's own body creates rogue antibodies that destroy its own thyroid, leads to thyroid imbalance and is 3 times more common in women with PCOS than those without. It is also the most common autoimmune disorder in women.

Combine PCOS and suboptimal thyroid function and you have challenges in maintaining or reaching your ideal weight. If you're feeling sluggish and slow, your thyroid may be feeling just the same way.

In fact, the only thing speeding up in hypothyroidism is the ageing process.

Telltale signs of hypothyroidism...

- · Unexplained weight gain
- Depression
- Fatigue
- Frequent infections
- · Menstrual problems and infertility
- · Muscle weakness, cramping
- Joint pain and stiffness
- · Facial puffiness and fluid retention
- Cold sensitivity
- · Elevated blood cholesterol
- Dry skin
- Hair loss
- Slowed heartbeat
- Dizziness
- Chronic constipation
- Memory impairment
- · Impaired brain function
- Slowed reflexes
- Throat tenderness

If untreated, hypothyroidism may lead to goiter – an enlargement of the thyroid gland – and worsening of other symptoms.

The mindboggling functions of T3 and T4

Accelerate metabolism: Thyroid hormones have 'calorigenic' action. Meaning, they accelerate oxygen and energy consumption in all active tissues of the body and pump-up the Basal Metabolic Rate (BMR). The higher the BMR, the higher the rate of calories burned. Thyroid hormones regulate the use of glucose, fats and proteins in our body for energy production. Lower levels of thyroid hormones lead to lower energy levels, and so lethargy and sluggishness. Conversely, too much thyroid hormone is also a cause for concern. Abnormally high levels of thyroid hormones will make you jumpy, irritable, and fatigued; you may experience light or absent periods, heart palpitations and increased bowel movements.

Thyroid hormone balance is needed to maintain body weight. Excessive thyroid hormones can lead to abnormal weight loss and muscle mass loss. On the other hand, a deficiency can result in abnormal weight gain. Some studies suggest that an increase in the levels of TSH can cause central obesity that actually mimics the obesity of PCOS. Hence, normalising the function of thyroid hormones is the first step towards achieving effective weight loss.

Thyroid hormones play an astounding role in maintaining the hormonal balance in women. T3 stimulates the production of Sex Hormone Binding Globulin (SHBG), which is important for clearing circulating male hormones, like testosterone, from the blood. Many women with PCOS have low levels of SHBG and high levels of free testosterone.

What is reverse T3 (rT3)?

When T4 is converted to the active T3 it loses one specific iodine molecule. If the iodine molecule T4 loses is the wrong one, it is still T3. But there is a hitch – this form of T3 is inactive, called reverse T3. If reverse T3 is not tested, you can test 'within normal limits' for thyroid hormones and still suffer from hypothyroidism.

Active T3 is the worker that 'gets the job done'. Reverse T3, on the other hand, is similar to a lazy, inactive sibling. For a hormone such as T3 to work, there is a 'lock and key' action. The hormone is the

key, and a receptor is the lock. The key needs to fit into a matching lock and turn it in the right direction. Both T3 and rT3 can attach to the same receptors on a cell (the same 'locks'). Essentially, inactive rT3 can fit the lock, but not open it. This block the doorway (the 'receptor') and stop the worker, T3, from entering and getting the job done. This means that your thyroid hormones have a reduced function.

Dr. Wilson, an American Medical Doctor who specializes in nutritional balancing science and works as a nutritional consultant, suggests that increased conversion of T4 to rT3, instead of the active T3 (Wilson's Syndrome), can occur due to significant physical and mental stress, calorie restriction or fasting, toxicity from prolonged and significant alcohol intake, heavy metals like mercury, lead and increased inflammation due to conditions like obesity.

T3 rules!

Tri-iodothyronine (T3) is 3 - 8 times more potent than T4-thyronine. Its actions are much more rapid than T4. Although the thyroid makes four-fifths more T4 than T3, T3 has a far stronger effect on the body. The thyroid makes eighty percent T4 and just twenty percent T3. Most of the T3 needed is produced by converting T4 to T3. T4 has four iodine molecules while T3 has three. Some of the T3 is made by the thyroid, but most is converted from T4 in the body. This conversion happens mainly in the liver and kidneys but, due to the importance of T3, conversion can occur in virtually every cell.

Cleaving the fourth iodine molecule on T4 converts it into the more powerful T3 hormone; eighty percent of T3 required by the body is produced by this mechanism. T4 is important, however, and serves as a storehouse for the supply of T3, as and when required.

Subclinical hypothyroidism: The current reference range used medically to indicate an under-performing thyroid is not what best evidence suggests. In Australia, the 'ideal range' for TSH is listed as between 0.5-4IU/L. Research shows a more accurate range would be between 1 to 2-2.5IU/L. If you fall above 2.5IU/L, you are more

likely to develop clinical hypothyroidism (as measured at above 4IU/L) in the future, and you may already be suffering from hypothyroid symptoms. I believe we should be seeing levels of TSH above 2–2.5IU/L as evidence of suboptimal thyroid status. Two to three percent of women suffer from this condition and the risk increases with age.

Are all these tests really that necessary?

TSH and T4 levels may fall 'within normal limits' on a standard medical blood test. Based on past advice, you may be convinced that the thyroid is in good health. However, you may still be suffering from hypothyroidism; I see this in clinical practice.

Remember, T4 is not the most active thyroid hormone. It needs to lose one iodine molecule to become T3. Normally, this conversion is orchestrated by certain enzymes (5 deiodinase) along with dietary factors like tyrosine, iodine, selenium, zinc and Omega-3. If conversion is suboptimal, you will be a 'poor converter', with normal T4 yet deficient active T3. With the active thyroid hormone below normal levels, you are likely to suffer from subclinical hypothyroidism even with normal TSH and T4.

Crash diets that starve you of calories may be one reason behind decreased active T3 production. Such diets assault not just the thyroid, but almost every cell of the body. These diets create stress in your body, and push you further away from reaching your ideal weight.

Thyroid Autoimmune dis-ease (TAI)

Combine PCOS and suboptimal thyroid function and you have challenges in maintaining or reaching your ideal weight. If you're feeling sluggish and slow, your thyroid may be feeling just the same way.

In fact, the only thing speeding up in hypothyroidism is the ageing process.

Our immune system makes antibodies to destroy invaders, which is

very important for our survival. Whether due to a food intolerance, toxin overload, or reasons we do not yet fully understand, a body may make antibodies against its own cells – known as autoantibodies.

Having thyroid autoantibodies means having antibodies that destroy our very own thyroid gland. A condition called thyroid autoimmune dis-ease leads to thyroid imbalance, and it's three times more common in women with PCOS than those without. It is also the most common autoimmune disorder in women.

Long term, this causes a deficiency of thyroid hormones and creates a hypothyroid state.

Many researchers have linked TAI to food allergies. A significant number of people with TAI have gluten intolerance. Urticarial rash (an allergic skin condition) is also common in people with TAI.

Why harp over antibodies?

TAI is more a common finding in women with PCOS.

Hypothyroidism and Weight Gain in Women with PCOS

According to the American Thyroid Association, weight gain in people with hypothyroidism often amounts to only an additional 5-10 pounds. However, I believe women who also have PCOS stand a significantly greater chance of gaining additional weight.

The link between thyroid issues and insulin resistance, as discussed earlier, is critical. Higher levels of insulin resistance cause, and are caused by, being overweight and obesity. Whether hypothyroidism (clinical or subclinical) causes insulin resistance or the reverse is true, women with PCOS very often suffer from both. This is a dangerous combination when it comes to gaining extra, unwanted pounds and struggling to lose this excess weight.

Both PCOS and hypothyroidism may also cause depression. Depression can be devastating, and may significantly adversely affect motivation, leaving women feeling powerless in the face of increasing

weight. In its clinical guidelines on overweight and obesity, the NIH affirms "that patient motivation is a prerequisite for weight loss."

Both PCOS and hypothyroidism can result in fatigue, making it more difficult to exercise and increasing the chance a woman will reach for sugary food or drink to boost their energy levels. This, of course, adds to insulin resistance and calories, both contributing to weight gain.

PCOS also increases sweating, which can make women already struggling with extra weight and obesity more self-conscious. This can lessen the likelihood of getting the exercise needed to lose unwanted fat and keep it off – I like to think of sweat as proof that I am making progress. Remember, it's easier to feel successful because it's easier to sweat!

So what can you do?

Super Secrets for Weight Loss

Correctly addressing hypothyroidism can put an end to unexpected weight gain and encourage weight loss in women with both hypothyroidism and PCOS. Restoring healthy thyroid function most certainly removes an important weight loss barrier.

I highly recommend natural therapies whenever possible and addressing the underlying cause of the problem.

Take care of your thyroid gland

1. Get yourself tested

The first step in thyroid care is to get your thyroid function tested. The battery of blood tests needed include – TSH, T4, T3, rT3 (reverse T3) and thyroid antibodies. Functional pathology centres specialise in this kind of testing; your health care professional can refer you.

2. Stock up on iodine

lodine is critical to the health of the thyroid; the thyroid is the body's main store of iodine.

Guidelines issued by WHO and UNICEF recommend the following daily intake of iodine to maintain optimal balance:

0-7 years: 90µg (micrograms or millionths of a gram)

7-12 years: 120µg

Older than 12 years/adult males and females: 150µg

Pregnant and lactating women: 250µg

An Australian study concluded that pregnant women and lactating mothers in states such as NSW, Victoria, Tasmania and South Australia are likely to be iodine deficient. Also, an estimated 31.5% of school-age children worldwide are iodine deficient — this is an alarming statistic.

The way we farm, and the unfair pressure placed on farmers to produce food cheaply, has impacted our lands and created substandard soil from which only substandard food may be reaped. The devastation of farm soils, deforestation, subpar food plans, and exposure to toxins such as bromine, fluoride and chlorine, which successfully compete with iodine for its receptor sites and 'toss it out of the game', all contribute to iodine deficiency. Would it not be beneficial and simple to pay farmers to tend the soil and replace lost nutrients, rather than to later have the exorbitant costs associated with a needlessly suffering population?

Getting iodine the right way!

Here is a simple test of common sense — if lack of iodine is responsible for the suboptimal function of the thyroid, do you think it is better to take a toxic drug adding synthetic thyroid hormone or simply increase dietary iodine intake?

Some of the best natural sources of iodine are:

Seaweed like dulse and kelp (pure and high quality) along with sea foods like sushi, oysters, scallops, kelp and fish paste are rich in

iodine, along with foods such as radishes, onions, cocoa powder and watercress. If you're feeling adventurous, try sea vegetables!

Natural sea salt also contains iodine (not refined salt with the addition of iodine).

3. More nutrients for better thyroid hormone function

- Proteins, especially those coming from cold-water fish and lean animal proteins
- Omega-3 fats, such as those from high quality fish oil
- Fruits and vegetables rich in antioxidants like Vitamins A and C
- Vitamin E from Swiss chard, mustard greens, sunflower seeds and almonds, etc.
- Zinc from oysters, crabs, organic/grass-fed lean beef, sesame seeds and pumpkin seeds
- Selenium from fish like cod, halibut, snapper and shrimp and vegetarian sources like oats, sunflower seeds and brown rice, etc.
- Tyrosine, an amino acid from chicken, turkey, fish, almonds, avocado, lima beans, pumpkin and sesame seeds
- Magnesium from nuts, oranges, a little dark chocolate and passion fruit

Boost your essential nutrient intake from foods in their most natural forms. Organically grown food is better – it's more nutritious and less toxic. Supplement with high quality supplements, where needed.

4. Water your thyroid

Water is yet another critical factor when it comes to thyroid health. Normal, drinking tap water is often fortified with fluoride and chlorine. Both of these chemicals are 'halogens', belonging to the same family of elements as iodine, which compete with iodine in the body and can disrupt thyroid function.

Drinking at least 8 cups of pure, filtered water daily is essential for optimum thyroid function.

5. Supplements to help your thyroid to thrive

We often need supplemental help to boost thyroid function. Soils lack important nutrients, we ingest detrimental anti-nutrients like bromine, and modern day stress and inflammation mean the nutrients, even when received, are being diverted from the thyroid for use in other areas of our health.

Important supplements include those containing zinc, iodine, selenium, magnesium and Omega-3 fats. Where possible, choose a high quality, practitioner only brand for best results.

6. Manage your stress levels well

Too much stress is harmful to your body, your mind and your thyroid gland. Identifying stressors and implementing ways to avoid or cope with stress is important. Regular relaxation strategies are a great way to tackle stress, such as meditation and Yoga. To discover more about stress, visit www.ConquerYourPCOSCourse.com (you'll find two course modules which focus on addressing stress).

6. Need some extra help?

Thyroxine, as often prescribed to women with PCOS, contains only T4. As you discovered earlier in this report, T4 is important but it's not the thyroid hormone that does all the important work – this is the responsibility of T3.

T4 needs to get into the cell and be converted to T3. If the cell wall is not healthy, T4 – T3 conversion can be compromised. This is one of the reasons why Omega-3 fats are so critical – they help form the bricks of the cell wall. Once inside the cell, there also needs to be nutrients available for successful conversion. This is where the nutrients we've just discussed, such as iodine, selenium and zinc, come into play.

But sometimes, receiving these nutrients still does not seem to be enough. This may be due to other reasons, like poor gut health compromising the break down and absorption of nutrient; it is well worth addressing these if this is a problem.

There is a product I have found useful, available on the web, containing both T4 and T3. It is an animal product, so if you are vegetarian, I appreciate this may be an issue for you. As a natural product, unlike synthetic thyroid medications, it works better. It's called Armour Thyroid, and you can purchase it by clicking here.

To Sum Up...

When you address hypothyroidism correctly, and improve thyroid function, it will (usually) be very effective in helping you lose unwanted fat and keep it off.

Aside from the direct hormonal effects, this will help you to:

- Establish and maintain a regular exercise program, as this becomes easier once the body's natural energy balance is reestablished.
- Restore a positive attitude, as the lifting of hypothyroid-related depression, fewer aches and pains and crisper brain function all contribute to a more positive attitude. These benefits are great companions on the journey to a slimmer, healthier, more vibrant you.
- Experience the relief that comes with knowing that these problems are being addressed. This can provide the extra motivation women need to get back to healthy habits.

From PCOS to perfect health, with love,

Dr. Rebecca Harwin

Dr. Rebecca Harwin
'The PCOS expert'
www.SuccessfulPCOSWeightLoss.com

- **P.S.** To discover how to naturally and successfully improve insulin sensitivity, see my special report, *Resistant Hormone Causes Weight Gain & Stops Women with PCOS from Shedding Unwanted Pounds* (included with this course).
- **P.P.S.** To discover how to naturally and significantly improve your fertility, get your free special report, 'How To Have Healthy Babies, Even With Polycystic Ovary Syndrome' head to www.FromPCOSToPregnancy.com
- **P.P.S.** If you are tired of struggling with PCOS and would love to discover the full, comprehensive 12 Week 'Conquer Your PCOS Action Plan', head to www.ConquerYourPCOSCourse.com now. This course is full of proven strategies and simple steps to help you go from PCOS to perfect health, permanently!

To stay in touch with Dr. Rebecca, visit -

<u>www.Facebook.com/ConquerYourPCOS</u> for daily updates, insights, recipes and a wonderful support group

http://Twitter.com/ConquerPCOS for PCOS tweets

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