

## Stress Management and PCOS

Understanding and managing stress is a crucial component of your plan to control PCOS and improve your fertility.(1)

Stress is any stimulation to the body that challenges its sense of balance and triggers a significant set of biological responses. These responses include a release of stress hormones, an increase in blood sugar, tightening of muscles, shallowness of breath, rising blood pressure, and rapid heart rate.

Even though stress is most readily observed in our emotions and behaviors, the stress response is mostly an internal biochemical process. A stress response is like stepping on the gas pedal while your car is in neutral...the engine revs way up. As soon as you take your foot off the pedal, the engine slows down. But if you keep your foot pressed on the gas pedal all the time, the engine stays revved up way too high, resulting in engine damage. So it is with chronic stress and your body: cell and organ damage are the inevitable result.

Modern life frequently presents unrelenting stressful situations over which we may have little control. These chronic stressors may include work pressures, long-term relationship problems, loneliness, abuse, and persistent worry.

Continual or frequent stress reactions eventually cause your body to become exhausted and no longer able to adequately respond to stress. You want to avoid this end point because it represents a very serious threat to your health.

### Consequences of Stress for PCOS

The consequences of uncontrolled chronic stress are profound and far-reaching. Here are a few comments about stress consequences for women with PCOS or fertility issues:

**Psychological Effects.** A continual state of stress depresses serotonin, which increases anxiety, increases appetite, and is a trigger for depression.

Stress also diminishes quality of life by robbing you of your sense of pleasure, security, accomplishment and empowerment. Alienation from enjoyment and a sense of well-being interrupts your ability to truly thrive.

**Weight Gain.** Stress-induced cortisol, insulin resistance and numerous other factors predispose you to gain weight, especially around the middle. Abdominal fat gain is a predictor of diabetes and cardiovascular problems.

**Stress Hormone and Belly Fat.** Women with central obesity (belly fat), whether obese or not, produce more of the stress hormone cortisol under repeated stress than women without belly fat.(2) This is one example of the many vicious cycles

caused by chronic stress. Elevated levels of the stress hormone cortisol contribute to belly fat, and increased belly fat increases the responsiveness of cortisol to stress.

**Stress Stimulates Eating.** High cortisol reactivity in response to stress may lead to eating after stress. One study showed that women with a high level of cortisol reactivity consumed more calories on the stressful day compared to those without high cortisol levels.(3) They also ate significantly more sweet food (refined carbohydrates).

**Eating Disorders.** Anorexia and bulimia are very complex eating disorders. Both conditions are associated with stressful emotional issues. If you think that you suffer from anorexia or bulimia, seek professional help right away. These conditions are quite serious. You deserve so much more than to be victimized by an eating disorder. Nothing on this earth is more important than your health and nothing is worth its ruin.

**Sexual Function.** Stress tends to diminish your sexual desire and responsiveness.

**Fertility and Reproductive Hormones** Some women who don't menstruate have higher cortisol levels than menstruating women.(4) Cortisol (a stress hormone) also interferes with progesterone. Since cortisol and progesterone compete for common receptors in the cells, cortisol impairs progesterone activity, setting the stage for estrogen dominance and subsequent menstrual cycle irregularities. Progesterone insufficiency and estrogen dominance are characteristics of PCOS women and contribute to infertility.

The cumulative effects of long-term, "real life" stress on reproductive capacity aren't well known. However, a study recently published by the University of Michigan sheds some light on this issue.(5) Twenty four Guatemalan women were assessed for one year. The researchers discovered that increased cortisol from stress disturbed the timing of reproductive hormones during the menstrual cycle. One of the disturbances caused by high cortisol was diminished production of progesterone after ovulation, thus making it more difficult for the egg to implant into the uterus.

**Effects on Pregnancy.** Stress during pregnancy has been linked to a higher risk for miscarriage, premature births and lower birth weights.(6)(7) High stress in expectant mothers can influence the baby's brain and nervous system and how they react to stress.(8) Stress has a constricting effect on arteries that can interfere with normal blood flow to the placenta.

Stress also produces an inflammatory state that appears to reduce success with in-vitro fertilization (IVF).(9)

**Ovarian Cysts.** Stress may contribute to ovarian cysts. Experiments on rats showed that stress created ovarian cysts.(10)

## **PCOS and Infertility Is a Stressor**

Polycystic ovarian syndrome is itself a major stressor. Most women have some version of "female perfection" that influences their self-perceptions. Most want to see themselves as healthy, attractive, fertile and "juicy". But women with PCOS report feeling abnormal, even freakish.(11) Excess hair growth, hair loss, overweight, acne, absent periods and infertility all diminish self esteem.

You may feel betrayed by your body and become stressed over feeling stigmatized and robbed of your womanhood.

But the truth is you're not a failure or freak. You are a vibrant and lovely expression of humanity and you can do much to correct PCOS with your understanding and commitment. Befriending your body, whether it meets your expectations or not, is the first step toward being successful because when you love who you are, you understand your worth and value. You become friends with yourself and can more easily lay your judgments aside. And that single embrace will relieve you of an enormous amount of stress and free up energy to persevere and succeed.

## **Stress Management**

Control of stress is a life-long process that contributes to better health and a greater ability to succeed with your own agenda. A good philosophy for reducing stress is Reinhold Niebuhr's elegant passage: "Grant me the serenity to accept the things I cannot change, the courage to change the things I can, and the wisdom to know the difference."

## **Stress Management Methods to Help PCOS**

Stress reductions methods might include:

- Healthy Lifestyle
- Cognitive-Behavioral Techniques
- Identify Sources of Stress
- Question the Sources of Stress
- Restructure Priorities
- Discuss Feelings
- Keep Perspective and Look for the Positive
- Use Humor
- Reduce Job Stress
- Establish or Strengthen a Support Network
- Relaxation Techniques
- Deep-Breathing Exercises
- Muscle Relaxation.
- Meditation
- Biofeedback
- Massage Therapy
- Recite Poetry

*The Natural Diet Solution for PCOS and Infertility* ebook contains a detailed discussion of the role of stress in PCOS and infertility, as well as a lengthy listing of

stress management techniques. Refer to this ebook to learn more about this important but overlooked topic