

ENDOMETRIOSIS RESOURCE GUIDE: GENE EXPRESSION (2024 Edition)

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To address endometriosis more effectively, we first need to understand what causes it. And it turns out it's not so simple.

The Biology of Endometriosis

Endometriosis is a complex disease, which means that there is no single cause and no single answer. It is well known that endometriosis is very much linked to hormones, especially estrogen and progesterone. Gene expression research is providing many clues about other biological systems that contribute to endometriosis. These include inflammation and oxidative stress, processing of toxins – including chemicals called endocrine disruptors, blood vessels, and even repair of our DNA.

While this can seem overwhelming, it's also opening up new opportunities for better diagnostics, earlier detection, and more effective treatments by addressing the root causes.

Gene Expression

Genes are sections of your DNA that carry the code for proteins that run everything that goes on in your body. On top of this, epigenetics is another layer that turns these genes on and off – like a light switch. Together, they support the proper functioning of our

biology by ensuring that we are making the right proteins at the right time.

While endometriosis has a clear inherited genetic component, it is equally influenced by the environment. This means that the choices you make, along with the experiences and exposures you have in your lifetime, can impact how your genes and body function.

While you can't change your genes, you CAN influence how they get expressed and thus affect your health – and potentially the health of future generations.

In this Endometriosis Resource Guide, you'll learn simple strategies to optimize your body's own biology. It's a powerful tool to help you regain some control back from a disease that all too often feels like it's controlling you.



Simple Strategies to Transform Your Stress

Stress is everywhere, but what is it really? In a nutshell, stress is any influence on your physical, mental, emotional, or energetic systems that creates an imbalance.



A small amount of stress is actually healthy. Think about when you experience sore muscles in the early stages of a new exercise routine. The stress on your physical body gives a signal for the tissues to become stronger or more flexible. Your body adapts and gets back into balance, better and healthier than it was before.

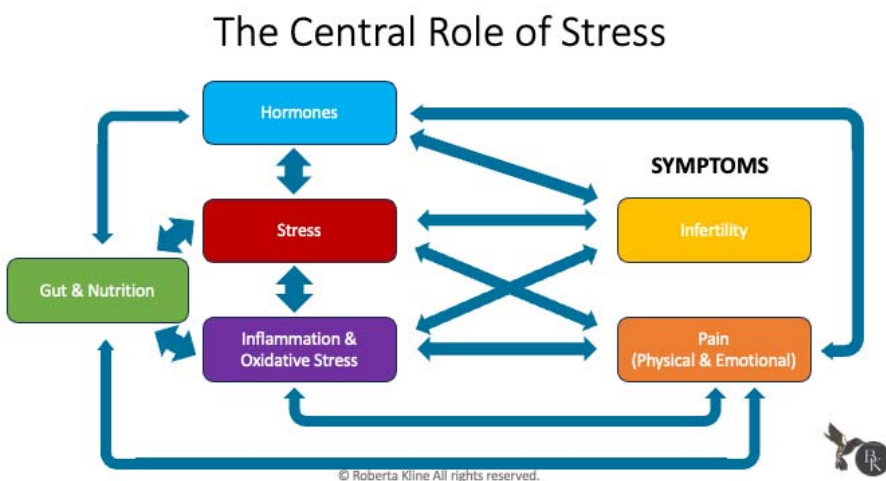
But feeling stressed over a long period of time is different. It depletes your body so that you don't function at your best. You can't think as well, your decision-making is off, your relationships suffer, and you feel too tired to do what you love.

Whether it's a nutrient deficiency, exposure to toxins, overexercising, difficulties in relationships, insufficient sunlight, sleep deprivation, hormonal imbalances ... ANY imbalance in the system creates stress. Stress then creates downstream imbalances in every system linked to health – including inflammation and oxidative stress.

Stress and Endometriosis

In this graphic, you can see how stress is linked to every aspect of endometriosis. It is a central component that influences both your biology and symptoms. Because of this, it is a key part of any strategy to address your disease.

Your Personal Stress Blueprint



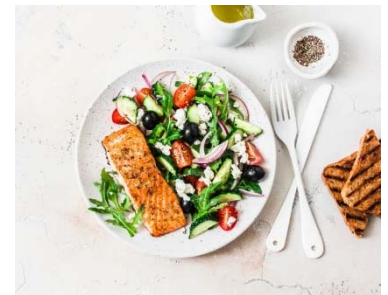
What bothers me isn't what bothers you. Why is that? We are each unique in how we respond to stress. Uncovering your personal keys can transform how you approach stress - and your life. Here are some simple strategies you can implement today. Each strategy can influence stress through gene expression and energetic balance. Together, they are much more powerful.

Your Guide to Healthy Gene Expression

Here are some simple strategies you can do to support and balance all of these biological systems, including stress, through healthy gene expression.

Eat Healthy Food

Food talks to our genes and provides critical support for biochemistry. The Mediterranean



diet is the healthiest overall way to get what your body needs. Include more of the good stuff:

- Vitamins and minerals
- Phytonutrients
- Fiber
- Healthy fats and proteins

Minimize or eliminate the bad stuff:

- Processed foods
- Refined sugar
- Alcohol

Move Your Body

Movement is more than exercise for weight or appearance. It's part of a body-wide communication system, so aim for at least 60 minutes daily. Vary it and make it fun! Ideas include:

- Run, walk, hike
- Workout at gym
- Gardening
- Play
- Bike
- Swim
- Dance

Get a Good Night's Sleep

Sleep is an active state of repair and regeneration, and is linked to every biological system through circadian rhythm.



This means it's not just about how much you sleep, but also when you sleep.

- Aim for 6-8 hours a night between 9 pm and 7 am.
- Avoid night shifts and frequent travel across multiple time zones.
- Address issues that interfere with sleep including snoring, sleep apnea, and restless legs.



Minimize Toxins

Toxins directly and indirectly damage DNA and alter biological processes.

Minimize your exposure to endocrine disruptors and other toxins found in many places including:

- Pesticides
- Home cleaning products
- Personal care products
- Air and water pollution
- Plastics
- Smoking

Manage your Stress

Stress is a response to internal and external events, including thoughts, beliefs, and trauma.

While you cannot avoid stress, there are many strategies for managing it so it doesn't have a big impact. Here are some common ones; find what works for you. It's good to practice several approaches so you always have the right tool at the right time:

- Meditation
- Energy work
- Connection & Hugs
- Joy
- Massage
- Creative outlets
- Nature, Pets

Love yourself. Create your best life!

