

women's health

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UMHS Women's Health Program—A National Center of Excellence in Women's Health

AUTOIMMUNE DISEASE

A Range of Discriminating Illnesses

Autoimmune disease is discriminating. Of the more than 80 autoimmune diseases that affect different parts of the human body, about 75% of them are found in women. For instance, women are 10 times more likely than men to have lupus.

The Body Turns on Itself

When a woman has an autoimmune disease, the immune system mistakenly turns the body against itself. Autoimmune diseases range from mild to disabling, and some are even potentially life-threatening. These diseases can involve diseases of the nervous, gastrointestinal, and endocrine systems, as well as the skin and other connective tissues, eyes, blood, and blood vessels.

The inequity between men and women is only one of the mysteries about autoimmune disease. Autoimmune diseases seem to run in families. However, they may show up as different illnesses in different family members. For instance, a mother may have diabetes, her daughter may have lupus, and the grandmother may have rheumatoid arthritis. Scientists are studying how autoimmune diseases cluster in families and even in individuals.

Hormones Play a Role

Hormones are also a factor in autoimmune disease. Some diseases occur most frequently during childbearing years, and other autoimmune diseases occur most frequently after menopause.

Some rheumatic diseases such as rheumatoid arthritis tend to improve during pregnancy and then flare after the baby is born. Other diseases, such as systemic lupus, have a tendency to flare during pregnancy. W. Joseph McCune, M.D., Professor, Department of Internal Medicine, Associate Chief for Clinical Programs, Division of Rheumatology, says, "In pregnant women with rheumatoid arthritis, there is probably a change in the mother that helps the mother's immune system tolerate the baby because the baby has genes from the father, and its tissues are partially 'foreign' to the mother."

The encouraging news for people who suffer from autoimmune diseases is that the University of Michigan has one of the strongest rheumatology divisions in the country. The U-M Health System's Division of Rheumatology has a large and diverse faculty, strong clinical interests in all of the major rheumatic diseases, a large research base investigating the kind of immune problems that lead to the development of a rheumatic or autoimmune disease, and expanding clinical research efforts including the prevention of heart disease in women with lupus—women with lupus are 50 times more likely to have cardiovascular disease.

For more information about autoimmune diseases, contact the University of Michigan Women's Health Resource Center at (734) 936-8886.



Fibromyalgia & Exercise

? What Are Examples of Autoimmune Disease?

Autoimmune disease can manifest itself as numerous different illnesses. Here are some examples.

- **Alopecia Areata:** The body's immune system attacks the hair cells and creates bald spots on the head, face, and body.
- **Crohn's Disease and Ulcerative Colitis:** The body's immune system causes bleeding and inflammation in the intestines.
- **Graves' Disease and Hashimoto's Thyroiditis:** The body's immune system attacks the thyroid gland (this gland controls how the body uses energy). These diseases can make women lose or gain weight, sweat more, become more sensitive to changes in temperature, as well as change a woman's menstrual flow.
- **Guillain-Barré Syndrome:** The body's immune system attacks the nervous system, causing tingling, weakness, and sometimes paralysis in the arms and legs.

In very serious cases, it can affect breathing, heart rate, and blood pressure.

- **Insulin-Dependent Diabetes Mellitus (Type 1 or "Juvenile Diabetes"):** The body's immune system attacks the insulin-making cells in the pancreas (a body organ) and destroys them. Without enough insulin, the body cannot control how much sugar is in the blood.
- **Lupus:** The body's immune system attacks the joints, skin, kidneys, heart, lungs, blood vessels, and brain. Sometimes it is very hard to determine if a person has lupus. Common signs are a bright rash of the face, pain in the joints, unexplained fever, chest pain when breathing in, and unusual hair loss.
- **Multiple Sclerosis:** The body's immune system attacks the central nervous system

There is encouraging news for the millions of Americans who have fibromyalgia and other chronic pain conditions and worry that increasing their level of activity will make their pain worse. New research from the University of Michigan Health System and the Uniformed University of Health Sciences in Bethesda, Maryland, shows that people with fibromyalgia can be more active than they realize without increased pain.

Fibromyalgia means pain in fibrous and muscular tissues. It is a chronic condition that includes pain, stiffness, and usually fatigue. It occurs more commonly in women, but unlike autoimmune diseases it does not seem to be due to problems in the immune system.

More Activity Doesn't Equal More Pain

The study was the first of its kind to include 24-hour activity monitoring and analysis rather than relying on patients to self-report their activity levels. That difference is important. "When you ask people with fibromyalgia about their level of function in terms of activity levels, they'll report a lower function than almost any other group," says Dan Clauw, M.D.,

Director of the U-M Chronic Pain and Fatigue Research Center and professor of rheumatology at the U-M Medical School and senior author of the study. "The surprising thing we found was that their average level of activity was about the same as someone who didn't have fibromyalgia."

"We've probably been thinking about fibromyalgia incorrectly," says Clauw. "This group was impaired, but they weren't impaired in the way they thought they would be. This is good news for fibromyalgia patients. Exercise and activity are essential to the well-being of people with fibromyalgia. Our research shows that higher activity is not, in fact, leading people to increased pain, and it could be used to show patients that they can be active."

Recruiting for More Studies

Clauw and his team at the U-M Chronic Pain and Fatigue Research Center are pursuing more studies of activity, exercise, and pain among people with all kinds of chronic pain conditions. They have started a registry for people (with and without those conditions) who are willing to take part in the studies.

Exercise and activity are essential to the well-being of people with fibromyalgia.

For more information about the registry and the studies, visit www.med.umich.edu/painresearch or call (866) 288-0046.

For more information about fibromyalgia, contact the University of Michigan Women's Health Resource Center at (734) 936-8886.

and keeps the nerves from telling the body to do things like walk, talk, or write.

- **Rheumatoid Arthritis:** The body's immune system attacks tissues around the joints. This disease makes the tissues swell, and can cause pain and stiffness. It also can hurt the heart, lungs, and eyes.
- **Scleroderma:** The body's immune system makes scar tissue in the skin, internal organs, and small blood vessels. Symptoms vary, but can include dry eyes and dry mouth, pain in the fingers and toes, and muscle soreness.
- **Sjögren's Syndrome:** The body's immune system keeps it from making tears and saliva, causing dry eyes and dry mouth.

Books

Reading List

Living Well with Autoimmune Disease: What Your Doctor Doesn't Tell You... That You Need to Know, by Mary J. Shomon

Women and Autoimmune Disease: The Mysterious Ways Your Body Betrays Itself, by Robert G. Lahita, M.D., Ph.D., with Ina Yalof

The Autoimmune Connection, by Rita Baron-Faust and Jill P. Buyon, M.D.

Thriving with Your Autoimmune Disorder: A Woman's Mind-Body Guide, by Simone Ravicz, Ph.D., M.B.A.

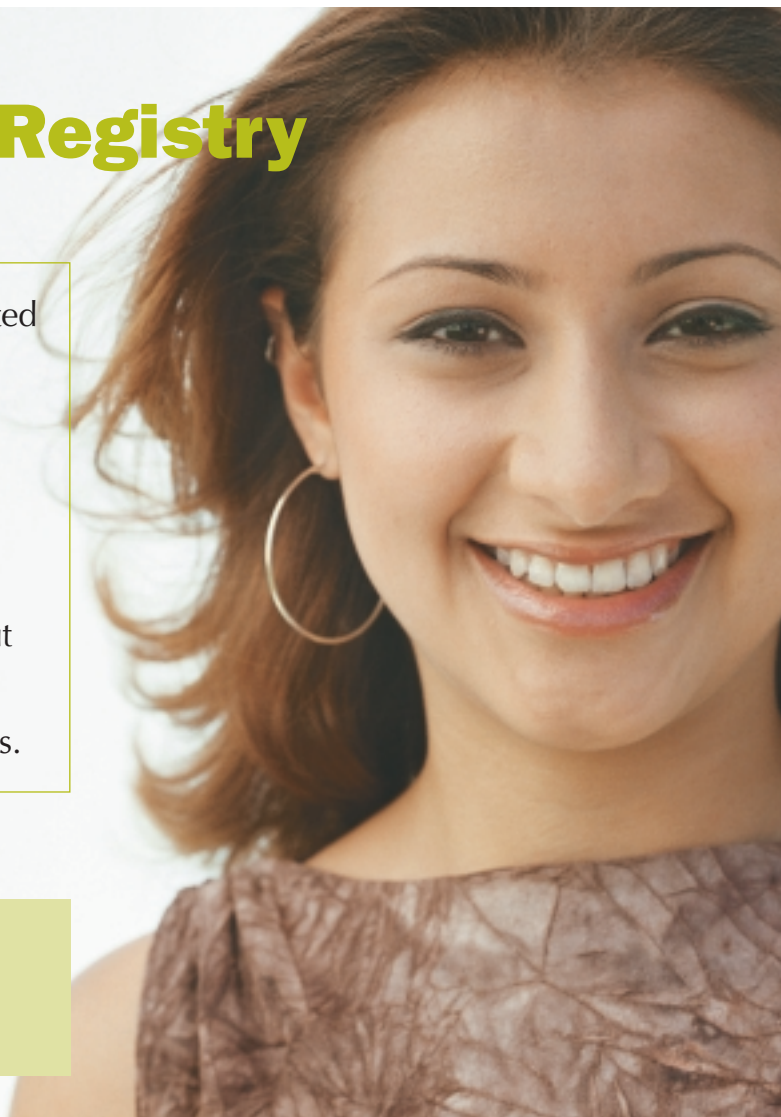
The Fibromyalgia Relief Handbook, by Chet Cunningham

Join the Women's Health Registry

This unique initiative links women interested in participating in health research with UMHS women's health investigators.

For many years, women were not considered to be eligible candidates for research. As a result, many questions about women's health remain unanswered. The Registry is helping to build the answers.

To register, call toll-free,
(877) 220-0694, or go to
www.womenshealthregistry.org.



For More Information: Information about women's health issues is available on-line. Please visit the U-M website at www.med.umich.edu/1libr/1libr.htm or the Women's Health Program website at www.med.umich.edu/whp.

To Receive Future Issues: To be placed on the *Women's Health* mailing list, or for more information on the Women's Health Program, call the Women's Health Resource Center at (734) 936-8886. If you no longer wish to receive *Women's Health*, please E-mail womenshealth@glcomm.com and ask to have your name removed from the mailing list.

Mission: To provide the highest-quality health care to women through coordinated service, collaborative research, extensive education, and outreach.

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