



Advancing WOMEN'S HEALTH

Center for the Advancement of Women's Health newsletter

DIABETES

Have questions? We've got answers!

What is diabetes?

Diabetes is a condition in which a person's blood sugar is too high. All of us have some sugar in our blood—our body uses it for energy. However, if your blood sugar level gets too high then it is not good for your health.

Most of the food you consume is changed into sugar by your body, and your blood carries that sugar to cells throughout your body. In order to get into the cells, the sugar needs insulin. Your pancreas, an organ near your stomach, releases insulin into your blood and helps the sugar from your food get into your body's cells. If your insulin does not work properly or your body does not make enough insulin, the sugar can't get into the cells. This makes the blood sugar level high because the sugar stays in your blood—this is diabetes.

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UKHealthCare

Diabetes, continued from page 1

What can diabetes do to your body?

If it is not controlled, diabetes can lead to blindness, heart disease, stroke, kidney failure, nerve damage and amputations (having a foot or toe removed). In women, diabetes can affect pregnancy. It can cause problems during pregnancy and increase the chances that the baby will be born with birth defects.

What is pre-diabetes?

Pre-diabetes is a condition in which blood sugar is higher than normal, but it is still not as high as in diabetes. People with pre-diabetes have a higher risk of developing heart disease and type 2 diabetes. The good news is that they can reduce their risk of getting diabetes with exercise and modest weight loss. If you are ever told you have pre-diabetes, you should get your blood sugar level checked again in one to two years.

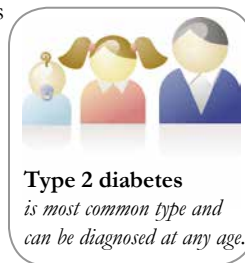
What are the different types of diabetes?

Type 1 diabetes is usually diagnosed in children or young adults, and it is a lifelong condition. With this type of diabetes, your body does not make insulin so you must take it every day. Treatment for this type of diabetes includes taking insulin, taking aspirin daily (for some), exercising regularly, and controlling blood pressure and cholesterol.

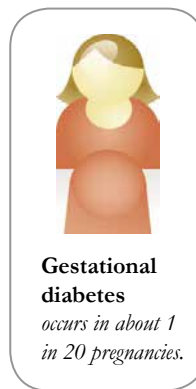


Type 2 diabetes is a condition you can get at any age, even during childhood. This is also the most

common type of diabetes. In this type of diabetes, your body makes insulin but the insulin does not do its job right, so sugar does not get into the body's cells. Treatment includes taking medicine, eating healthfully, taking aspirin daily (for some), and controlling blood pressure and cholesterol.



Gestational diabetes is diabetes that occurs during pregnancy. It occurs in about 1 in 20 pregnancies. When you get pregnant, your body makes hormones that keep insulin from doing its job—so your body creates more insulin. In some women, this is not enough insulin to get all the sugar into cells and they develop gestational diabetes. Gestational diabetes usually goes away once the pregnancy is over, but women who have had gestational diabetes have a greater risk of developing type 2 diabetes later.



What causes diabetes & who gets it?

The exact causes of both type 1 and type 2 diabetes are unknown. Type 1 diabetes often shows up after a person is exposed to a trigger, such as a virus, which can begin an attack on the cells in the pancreas that make insulin. Type 2 diabetes seems to run in families and most people who get it are overweight, but there does not seem to be one single cause. With gestational diabetes, it is difficult for your body to keep up the

production of insulin when you are gaining weight and your hormones are changing. Because of this your body does not get the energy it needs from the food you are eating.

- Approximately 20 million Americans, half of whom are women, have diabetes.
- About 1 in 3 people with diabetes don't know that they have it.
- Minorities are twice as likely as whites to have diabetes.
- Type 1 diabetes is more common in whites than in minorities.
- Men and women are equally as likely to develop Type 1 diabetes.
- Type 2 diabetes is more common in older people and most often occurs in people who are overweight.
- Type 2 diabetes is more common in African Americans, Latinos and American Indians.

Should I be tested for diabetes?

If you are 45 years old or older, you should be tested for diabetes every three years. If you are 45 and overweight, you may want to get tested more often. If you are younger than 45 but you have more than one of the risk factors listed in the "What would make me at risk for developing diabetes?" section, you should get tested now. You can ask your doctor for a fasting blood glucose test or an oral glucose tolerance test. Your doctor can then tell you whether you have normal blood sugar levels, pre-diabetes or diabetes.

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LETTER FROM THE DIRECTOR



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I hope you all enjoy this issue of the Kentucky Women's Health Registry newsletter! **Mary Johnson, Ashley McCorkle** and all of our staff work so hard to generate articles on topics that will be informative for you. In this issue, **Cady Blackey**, a medical student at UK, has put together a terrific summary of what you need to know about diabetes and pre-diabetes. We also are delighted to bring you information about "self-regulation"—read more to understand what that means! **Lise Solberg-Nes**, a graduate student in the Department of Psychology is doing some truly innovative work with the Registry trying to understand how "self-regulation" may be changed in women with chronic pain. Lise is one of many researchers working with the Registry on important research questions that will benefit the health and wellness of Kentucky's women.

Along with Lise, a number of investigators across Kentucky are working with the Registry to help women get involved in research. You can see the list of some of our studies on page 7 of this newsletter. One of the important functions of the Registry is to give those of you who wish to contribute to research on conditions of interest to you the opportunity to participate. We at the Registry work hard to review studies to be sure they are important for women's health. If your survey indicates that you may be a good candidate for one of these studies, you may hear from us. But remember—hearing about a study does not obligate you to participate! Also, if you see a study in the newsletter that interests you and you want to hear more, please contact us!

Last, I want to thank some of our wonderful Registry supporters. One of our earliest, and still strongest, supporters was **Joyce King Jennings**. The Governor's Office of Wellness and Physical Activity was established in 2006 specifically to promote the Governor's "Get Healthy Kentucky" program. Joyce was appointed director of the division of Promotion & Awareness in December 2006, moving from her position of director of Women's Physical and Mental Health where she had worked since May 2004. Joyce brings a wealth of experience to her position in the area of promotion having been vice president of Louisville Downs Harness Race Track for 10 years until it was sold to Churchill Downs in 1990 and also working closely with the American Lung Association (ALA) for the past 14 years hosting the Derby Eve Gala benefiting the ALA. With a passion for people, Joyce brings a personal touch to the office and strives to reach people where they are most comfortable—in their hometowns. Through various outreach programs Joyce will work to make sure people have the tools they need to make healthy decisions, hopefully in a way that is conducive to their particular lifestyle. Joyce lives in Louisville and is a UK graduate.

I also want to recognize and thank **Donna Shoemaker**. Donna is the Food, Nutrition, and Health chairwoman of the Homemakers Association state board. The Homemakers Association is a part of county extension with several Homemakers clubs in each county of the state. The clubs meet monthly and always include a lesson, ranging from cooking and decorating to finance and leadership. The Homemakers Association is currently celebrating its 75th year as an organization and it is the largest volunteer organization in the Commonwealth. Many of the clubs provide college scholarships for both traditional and non-traditional students in their community. Donna has been a member of Homemakers for 30 years. She has been married for 28 years and is a proud mom of two. As a chairwoman, she has put health educational programs together, promoted the Go Red for woman campaign and has been instrumental in raising money for the ovarian cancer screening program in Kentucky. The Homemakers have been wonderful supporters of the Registry and we look forward to continuing to recognize the leaders that help us to increase participation in the Registry!

Please contact us if you have any questions, comments or advice. You can reach Ashley McCorkle at 859-323-5709 or 1-800-929-2320 or by e-mail at ammcco6@email.uky.edu and Mary Johnson at 859-323-1377 or by e-mail at majohng@uky.edu. We would be happy to provide your group with materials or come to your event!

Diabetes, *continued from page 2*

Risks for developing diabetes:

- Age: being older than 45
- Overweight or obesity
- Family history: having a mother, father, brother or sister with diabetes
- Race/ethnicity: your family background is African American, American Indian/Alaskan native, Hispanic American/Latino, Asian American/Pacific Islander and/or Native Hawaiian.
- Having a baby with a birth weight greater than 9 pounds
- Having gestational diabetes
- High blood pressure: 140/90 mm or greater—if either number is unusually high, you have high blood pressure
- High cholesterol: total cholesterol over 240 mg/dL
- Inactivity: exercising fewer than three times a week
- Abnormal results in a previous diabetes test
- Having other health conditions that are linked to insulin
- Having a history of heart disease and/or stroke

Signs of diabetes:

- Being very thirsty
- Urinating often
- Feeling very hungry
- Feeling very tired
- Losing weight without trying
- Having sores that are slow to heal
- Having dry, itchy skin
- Losing feeling in or having tingling feeling in hands or feet
- Having blurry vision
- Having more infections than usual

If you have one or more of these symptoms, you should see your doctor and tell him or her about your symptoms.

How do I take care of myself if I have diabetes?

You can live a healthy, full life even with diabetes if you take care of yourself properly. All you have to do is follow your doctor's instructions and eat right. Below are things you need to do to keep control of your diabetes:

- Follow your meal plan. Eat often, especially whole grain foods, fruits and vegetables.
- Exercise. Try to be active for at least 30 minutes on most days.
- Test your blood sugar. Keep track of your blood sugar levels and talk with your doctor about ways to keep your blood sugar level where it should be. Many women report that their blood sugar level fluctuates around their period. You might also notice this if you are going through menopause.
- Take your diabetes medicine. Be sure to take it exactly as your doctor tells you.

You can talk with your doctor about other ways to keep your diabetes under control. Taking care of your diabetes can keep you from developing serious problems in your eyes, kidneys, nerves, gums, teeth and blood vessels.

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Self-regulation: Why is it so difficult?

Is there a cure?

There is no cure for diabetes at this time, but there is much research being done on both type 1 and type 2 diabetes to find cures. Many different methods for curing diabetes are being tried, and progress is being made.

How can I keep myself from getting diabetes?

The best way to prevent yourself from getting diabetes is to make lifestyle changes. Maintain a healthy weight by eating healthfully and exercising regularly. Calculate your Body Mass Index (BMI) to see whether you are overweight. If you are, start making changes in the way you eat and how frequently you exercise. You can always ask your physician for advice on where to start!



Do you ever think about losing weight, without getting around to actually doing it? How about going to the gym? Saving money? Do you eat too much, or have that extra drink when you know you shouldn't?

Why is it so hard to quit smoking? And why do we spend money shopping when we know we should be saving?

Self-regulation is our capacity to control and guide or otherwise alter our reactions and behavior. It's our ability to inhibit impulses, make decisions, set goals, persist at difficult tasks, and to control emotions. Self-regulatory strength is the ability to avoid eating that candy bar when you are on a diet, to avoid showing your irritation with your boss or losing your temper with your kids, or to make yourself go for that walk even though you really don't feel like it.

As you can imagine, a certain amount of self-control or self-regulatory strength is needed to successfully navigate through life. Despite the importance of self-regulatory resources, however, research indicates that the ability to self-regulate varies, and self-regulatory strength appears to be a limited resource that can be fatigued, just like a muscle. So, when you have spent the entire day trying to temper your irritation with your boss or your co-workers, you may have less self-regulatory strength available to resist that candy bar or to actually go for that walk.

What does it mean? Well, research suggests that we are not aware of this draining of our ability to self-regulate. Use of our self-regulatory "muscle" is not evident to us, and we avoid that walk or grab that candy bar without realizing why we cannot resist.

Self-regulatory fatigue might explain why people sometimes run into difficulties when they are trying to adapt to the many demands in their daily lives—demands such as stress, fatigue and illness. When self-regulatory resources are fatigued, a chronically ill person may not be able to engage in important treatment interventions, an overweight individual may struggle to adhere to diet and exercise regimens, and an alcoholic may fail in attempts to avoid taking a drink.

Researchers, including a team here at UK, are now working to identify physiological markers for self-regulation, hoping to contribute to a better understanding of self-regulatory effort and to enhance understanding of how people can avoid, or best deal with, self-regulatory fatigue.





Interesting facts from the Registry

- 1 Most women in the Registry are taking care of themselves by having their regular checkups: 73 percent have had a regular checkup within the last year, and 16 percent have had a checkup within the last two years.
- 2 68 percent of women in the Registry report having trouble sleeping.
- 3 48 percent of Registry participants have some kind of allergy. Of those with allergies, one-fourth have asthma.
- 4 Only 6 percent of the women in the Registry have reported some form of chronic pain. Of these women, the most common painful spots are the back (81 percent), the head (80 percent), and the neck (67 percent).
- 5 Although many people who have diabetes are undiagnosed, in the Registry only 7 percent of women have reported some form of diabetes. (See the diabetes article in this issue for more information.)

Take the Challenge!

Enroll 3 friends



The CHALLENGE: In order to achieve our goal of enrolling 2,500 women each year into the Registry, we would like to ask each of you to help us enroll three of your friends, family or co-workers. In order for the Registry to get an accurate account of the state of women's health in Kentucky, we need women of all ages, all states of health, smokers and nonsmokers, sick and well, young and old from all across the Commonwealth to be a part of your Kentucky Women's Health Registry. All you do is simply complete a 20-minute survey once a year.

Visit the Web site:

www.kywomensregistry.com
 or call **1-800-929-2320**
 for more information.

Don't forget to renew your own survey each year!



Clinical Trials

Clinical research studies are scientific investigations in which people participate as volunteers to test drugs, devices or medical procedures. Controlled, scientific studies are necessary to help answer specific health questions and to develop safe and effective therapies.

Please review our clinical trials and consider taking part in any clinical trial that relates to you. You could help yourself and thousands of others!

RIM Study

The RIM study (Rituximab in Myositis) is a study for those with adult and juvenile dermatomyositis (DM) and adult polymyositis (PM). The purpose of this research study is to evaluate the effectiveness of the study drug, Rituximab, in people diagnosed with dermatomyositis, a disease that causes muscle weakness and is associated with a rash, or polymyositis, a disease that causes muscle weakness without a rash. This study will be done at approximately 37 centers across North America and Europe, including the University of Kentucky. For further information about the RIM trial go to: www.edc.gsph.pitt.edu/rimstudy. You may also contact study coordinator Jenny Fuller at 859-323-3805 or by e-mail at jfull2@email.uky.edu. In addition, you may call UK Health Connection toll free at **1-800-333-8874**.

The coordinator in charge of the following studies is Mary Johnson. For more information, call Mary at 859-323-1377 or toll-free at **1-800-929-2320**.

SCOT Study

SCOT is a clinical research study designed for people with severe forms of scleroderma. SCOT stands for Scleroderma: Cyclophosphamide Or

Transplantation. The SCOT study will compare the potential benefits of stem cell transplant and high-dose monthly cyclophosphamide (Cytoxan) in the treatment of scleroderma. More information about the SCOT trial can be found at: www.sclerodermatrial.org.

Smoking Cessation Study

Dr. Catherine Martin of the University of Kentucky is enrolling female cigarette smokers from the Registry who are between 18 and 55 years of age. This study looks at whether an FDA-approved medication called modafinil could aid in smoking cessation. Of particular interest is whether modafinil decreases appetite and weight gain when women are trying to stop smoking.

Periodontal Disease Study

Dr. Dolph Dawson of the UK College of Dentistry is conducting a study to determine whether a daily supplement of fish oil (n-3 polyunsaturated fatty acid or PUFA) has any effect on the inflammation found in gum disease. Fish oil has been shown to reduce inflammation in other studies. At this time, Dr. Dawson is enrolling women from the Registry who have 20 or more teeth and have or suspect they have gum disease (periodontal disease).

Fibromyalgia Syndrome and Tempromandibular Disorder Study

Dr. Lise Solberg-Nes at the University of Kentucky is conducting a clinical research study to examine the impact of mental effort and personality on experience of chronic pain. The study is enrolling women ages 18-55 who have been diagnosed with fibromyalgia or tempromandibular disorder but who do not currently use prescription medication other than contraception or antidepressants.

Sleep Quality and Sleep Disturbance in Women with Fibromyalgia Syndrome

Suzette Sewell of UK's College of Nursing is conducting a study of women with fibromyalgia. Qualified subjects will complete self-administered questionnaires and a sleep diary and wear a device worn like a watch that measures arm movements for a period of 7-10 days to help assess sleep quality and sleep disturbances.

Women's Stress and Aging Study

Dr. Tamara Newton of the University of Louisville is conducting a study of women who are postmenopausal and have been divorced or separated for at least one year. This study will compare the effect of divorce and separation on women's physical and mental health.

Daily Life Study

Dr. Suzanne Segerstrom of the UK Department of Psychology/Behavioral Sciences is looking at how women's daily lives may impact their mental and physical health. At this time Dr. Segerstrom is enrolling women from the Registry who are employed full time and are between the ages of 18 and 65.

For any of the above studies, you can also call UK Health Connection toll free at **1-800-333-8874**.

Thank you!

We want to take this opportunity to thank some of our supporters:

Joyce Jennings and the Cabinet for Health & Family Services as well as the Governor's Office of Wellness and Physical Activity and all of the Kentucky Public Health offices.

Donna Shoemaker and the Kentucky Extension Homemakers Association and Debbie Murray of the Kentucky County Extension Offices.

We'll do the talking

Representatives from the Center for the Advancement of Women's Health are available to speak to groups at health fairs, health-related events and other local events. If you would like someone to speak with your group, please call 1-800-929-2320.

Did you know?

The Kentucky Health Registry is a longitudinal survey. That means the survey captures a moving picture of the things that influence our lives. Because of repeated observation at the individual level, the Registry has more power than a study that collects one snapshot of women. For all of you in the Registry, you represent thousands of other women in Kentucky who are very similar to you. You can be proud to be a part of such a unique project! Thanks from all of us!



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