OFFICE OF RESEARCH ON WOMEN'S HEALTH (ORWH)

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PINN POINT ON WOMEN'S HEALTH

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PODCAST 10: Obesity

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PODCAST MARCH 2008

P-R-O-C-E-E-D-I-N-G-S

MALE VOICE: From the National Institutes of Health in Bethesda, Maryland, America's premier medical research agency, this is Pinn Point on Women's Health with Dr. Vivian Pinn, Director of the Office of Research on Women's Health.

Now, here's Dr. Pinn.

DR. PINN: Welcome to this episode of Pinn Point on Women's Health. Each month on this podcast we take a look at the latest developments in the area of women's health and the medical research that affects our lives.

For today's podcast, I am delighted to welcome Dr. Susan Yanovski, who is Codirector of the Office of Obesity Research, Director of Obesity in the Eating Disorders Program in the National Institute of Diabetes and Digestive and Kidney Diseases here at the National Institutes of Health.

But, first, some hot flashes from the world of women's health research, coming

up in 60 seconds when we continue with Pinn Point on Women's Health.

MALE VOICE: Recent studies have shown that diabetes can be prevented, and the results are even greater with my patients over age 60. Losing a small amount of weight by getting some physical activity -- 30 minutes five days a week -- and eating healthier has proven to be effective. Listen to the great results from one of my patients.

FEMALE VOICE: I had to learn how to change my way of eating, because diabetes runs in my family, and I wanted to take control of it before I got it.

MALE VOICE: Having diabetes in your family and being overweight puts you at a higher risk for Type 2 diabetes. These risks increase with age, which is why it is important to take your first step today.

FEMALE VOICE: There was a time I could not go from my basement up to my bedroom, but now I can. And that means a lot

to me.

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MALE VOICE: It's not too late to prevent diabetes. Join my patients who are taking small steps and gaining big rewards. For more information on how to prevent Type 2 diabetes, call 1-800-438-5383. This is message from the U.S. Department of Health and Services and the National Diabetes Human Education Program.

DR. PINN: Welcome back to Pinn Point on Women's Health. As promised, it's time to take a look at some of the hot flashes in the news regarding women's health research. I want to remind you that the month in which we are recording this podcast contains a day that is HIV/AIDS in Women and Girls Day, and celebrating HIV/AIDS in Women and Girls Day provides us an effort to address the issues about women who are living with HIV and AIDS.

You should know that in 2005, women accounted for over a quarter of all new reported AIDS cases. Thirty-six percent of

13- to 19-year-olds diagnosed with HIV infection were female. Currently, almost 25 percent of all people infected with HIV don't know they have it. And if new infections continue at the current rate around the world, women with HIV may soon outnumber men with HIV worldwide.

What can you do? Get tested. healthier, the spread. Live longer and remembering that treatments are available to HIV/AIDS maintain help with their women health. Support and nurture women living with HIV/AIDS, and learn more about how to prevent HIV/AIDS.

There are many government resources that can give you information about HIV/AIDS, both prevention, what we know about treatment, and data. Among them is the CDC, the Centers for Disease Control and Prevention. But I would recommend to you the podcast, one of the ORWH podcasts, just from a couple of months ago with Dr. Victoria Cargill from the Office

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of AIDS Research, where she gives a wonderful discussion about issues related to women with HIV.

In another flash, something that I'm very excited about, and that is the announcement just this day of a new NIH Web site that the National Library of Medicine has developed working with the Office of Research on Women's Health. This is a Web site that is devoted to women's health research.

It is a one-stop resource for both and researchers. Ιt includes consumers consumer information on health topics for based the women upon most recent NIH priorities for women's health and also provides a source of information not about health issues, research issues, but also literature information about women's health.

We are very excited about this, and if you want to get information and go to this Web site, you can go to nih.gov and click on either NLM for the National Library of

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Medicine or ORWH, or Women's Health, and go to the Office of Research on Women's Health Web site, which is in fact orwh.od.nih.gov, G-O-V, and look right on our front page and you will see a way to connect right to this Web site.

It is new as of the time we are doing this particular podcast. I recommend and hope you will go to it, that you will find it useful whether you're researcher, an advocate, a woman, or a man looking for information about women's just health, and please feel free to get to us with suggestions or other comments.

Well, we'll have more updates in the next podcast, and coming up next, I will be right back with Dr. Susan Yanovski for a discussion about obesity in women. We'll be back in a sec with Pinn Point on Women's Health.

(Brief pause.)

DR. PINN: Welcome back to Pinn Point on Women's Health. Our guest today is

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1	Dr. Susan Yanovski, Codirector, The Office of
2	Obesity Research, and Director, Obesity and
3	Eating Disorders Program, in the National
4	Institute of Diabetes and Digestive and Kidney
5	Diseases at the National Institutes of Health.
6	Dr. Yanovski is a world authority
7	on obesity and has been extremely helpful to
8	the Office of Research on Women's Health over
9	the years as we have attempted to do what we
10	can to address the issues related to obesity.
11	So welcome, Dr. Yanovski.
12	DR. YANOVSKI: Thanks. It's a
13	pleasure to be here.
14	DR. PINN: Well, we want to talk
15	about women's health, and we want to talk
16	about obesity. We hear so much about obesity.
17	Set the stage for us. Tell us why this is an
18	important topic that we should be discussing
19	and learning about in relationship to women's
20	health.
21	DR. YANOVSKI: Well, obesity is
22	really a major health problem in the U.S.

Right now, more than a third of men and women are considered obese. That's a body mass index of 30 or more. And 17 percent of children are considered obese. So it's a really major health problem.

Some of the diseases affected by obesity include heart disease, Type 2 diabetes, nonalcoholic fatty liver disease, and certain kinds of cancer. In women, for example, both breast cancer and uterine cancer are associated with obesity.

DR. PINN: Well, we'll come back to some of those specific conditions that are related to obesity. But I think just to set the stage, when I was growing up, before I became what I hope is a scientist, I can recall that most people who were, shall we say, large in size or had too much adipose tissue accumulated, blamed it on thyroid trouble, whether it was diagnosed or not.

What are the major causes of obesity? And what should our listeners be

aware of?

DR. YANOVSKI: Well, we know now that obesity really has a strong genetic component. That is, if you have a family history of obesity, you are more likely to be at risk for obesity. We've learned a lot about the basic science behind obesity and some of the hormones and chemicals that tend to contribute to obesity, and there have always been people who have been overweight.

What has changed in the past 30 years is the number of people who have become overweight. Now, we don't think our genes have had a major change in the past 30 years. What has happened is that our environment has changed dramatically, such that it's a lot easier to eat high-calorie foods and large portions, and we tend to exercise less with all of the labor-saving devices. And we tend to be more sedentary. We spend more time in front of our screens and the TV.

Now, what we think is happening is

that there is an interaction between people who are genetically susceptible to obesity and our obesity-promoting environment, so that more of us today are obese.

DR. PINN: What would you say has been the most exciting bit of information related to obesity that we have learned from research in recent years that would be important for women to know?

DR. YANOVSKI: Well, I think that right now we are very excited about learning more about the impact of the intrauterine effects environment, and the that your prenatal health may have later on your child. And we are looking into this very carefully at NIDDK. We've had some initiatives and workshops where we are trying to study what impact, for example, does gestational diabetes or pregnancy-induced diabetes have on baby?

There is some evidence, both from animal studies and also from human studies,

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that if the mom is overweight going into pregnancy, or if the mom has diabetes, then her child is more likely to later develop diabetes or to become overweight.

This is a very exciting finding, because it really gives a point of intervention, where if we can help people to come into their pregnancy at a healthy weight and gain a healthy amount of weight during their pregnancy, we may then be able to break the vicious cycle that we are seeing with increasing numbers of kids becoming obese.

DR. PINN: I think that's terribly fascinating -- the fact that the intrauterine environment may well affect how you or I might -- how our health will be affected by the intrauterine environment, including whether or not we may be obese, knowing that may be one of many factors, but an important one.

What kind of interventions are being studied, or have been shown, to perhaps be helpful in situations dealing with

gestational diabetes? And maybe -- we both use those terms. Maybe explain what gestational diabetes is.

DR. YANOVSKI: Sure. Gestational diabetes is a special kind of diabetes that develops during pregnancy. Doctors usually find it out by doing a glucose tolerance test where many women who have been pregnant know the doctor gives them a sugary drink and then measures their blood sugar. And it can be controlled sometimes with diet, but you may need insulin during your pregnancy.

The important thing about it is not only might it affect your baby, but it also means that you are at high risk later for developing diabetes. So one of the things we want to do is have women come into pregnancy at a healthy weight, because if you are not overweight, you are less likely to develop diabetes.

Another really important area is women need to gain some weight, of course,

during pregnancy. We don't want to have women gain too little weight, because that can have a negative impact on the baby. But for many years, the emphasis was really on making sure the woman gained enough weight, and that then might have some impact both on the baby's health and also how much weight you tend to retain after you've become pregnant.

Right the Institute of now, Medicine is actually putting together a panel it time look at this, to say, is actually revise how much weight we are telling women to gain? So that we can have the optimum effect on the baby, but also on the mom and on the mom's health.

We also have at NIDDK -- the National Diabetes Education Program has some information on gestational diabetes and on appropriate weight gain during pregnancy. And we are also doing studies, both animal studies and then there are some studies -- right now there aren't many intervention studies going

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on, but we have had a couple that are starting to look at how to help women during pregnancy eat healthfully and have a nutritious diet and exercise and gain an appropriate amount of weight to protect their babies.

DR. PINN: I recall not too long ago some very exciting news coming out of NIDDK, your institute, related to obesity and diabetes. Could you tell us about that?

DR. YANOVSKI: Absolutely. This is really truly а landmark study and important, and that is that diabetes can be --Type 2 diabetes can often be delayed or through lifestyle prevented change. The Diabetes Prevention Program was very important study where they took men and women, all different races and ethnicities and ages, who were at high risk for developing Type 2 diabetes.

Many of them were women who had had gestational diabetes, because, as I told you, if you've had gestational diabetes, you are

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more at risk for developing Type 2 diabetes later. Others were people who just had a slightly elevated blood sugar, what we now call pre-diabetes.

And these individuals were t.hen assigned to either a lifestyle intervention, where they try to lose just about percent of their body weight through eating a low-fat diet getting and some physical activity, or to a medication called Metformin, or to their usual types of care. And the best results were found in those who had the lifestyle intervention. Their risk of developing Type 2 diabetes decreased by more than a half.

DR. PINN: My.

DR. YANOVSKI: And even though they didn't lose what we'd consider all that much weight, okay, they lost about seven percent of their body weight, and it even started creeping back up over time, as it often does when you lose weight, it still -- four years

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1 later -- had an impact on their health, 2 much so that they had to stop the study early because the results were so important. 3 Well, 4 DR. PINN: that's fascinating. For listeners who don't know 5 6 much about clinical research, usually you fund a study, and it goes for a period of years. 7 And if the study is stopped early, it means 8 results have been found. And in this study, 9 10 the results were good results or results that 11 represented hope. Just think about what Dr. Yanovski 12 13 has said, that rather than testing for and finding that you might pop another pill or two 14 15 help prevent diabetes, that actually 16 behavioral changes could help prevent development of diabetes. 17 behavioral The changes 18 were 19 again, reiterate that. I think it's SO important. 20 The behavioral DR. YANOVSKI: 21

changes were lifestyle interventions, eating a

lower fat diet that had a modest reduction in calories, about 500 calories less a day, and exercising. And most of the exercise was lifestyle exercise, like walking 30 minutes a day.

So, you know, these are the kinds of things that people really can incorporate their lifestyle. into Ιt was nothing dramatic. It wasn't a very restrictive diet. It was behavioral changes and lifestyle. And, in fact, there is a small steps/big rewards and people can go to the National Diabetes Education Program and find out about how they can make these changes in their lives and help prevent diabetes.

DR. PINN: Well, I want to go for some of the bad things about obesity, and then let's end up with a positive note of some of the good things we have learned about obesity.

So tell us, I know that you have mentioned obesity as something of concern for babies who are born or mothers who may have

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gestational diabetes. And we have talked
about diabetes in women, reproductive age. We
haven't really talked about it in older age.

Could you just give us a little
demographic information about women, maybe
across the life span, and how we compare in
the U.S. perhaps to other countries around the

DR. YANOVSKI: Well, we've had a head start. I'm afraid that other countries are starting to catch up to us in terms of the prevalence of obesity.

Right now, about a third of men and women in the U.S. -- adults are obese, which is over 72 million people.

DR. PINN: That's a lot of obese people.

DR. YANOVSKI: That's a lot of obese people. The good news is that -- we've been showing this dramatic increase for years -- it is starting to flatten out. So maybe some of the messages are starting to get

world?

across, and some of the changes that we're seeing in terms of healthful foods being more available are starting to take root. So we're flattening out, but we are sure not there yet.

Particularly among women, an important demographic is that racial and ethnic minority women are at particularly high risk for obesity. For example, African-American women and Hispanic women who between the ages of 40 to 60, more than half of them are obese. That's a BMI of 30 or And just to give your listeners some idea, that would be a woman who was 5'5" and weighed 180 pounds or more.

Severe obesity, which is being -- a BMI of 40 or more, which is about 100 pounds overweight, 15 percent of African-American women age 40 to 60 are severely obese.

DR. PINN: Oh my.

DR. YANOVSKI: And along with that comes all of the health consequences of particularly diabetes and heart disease.

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DR. PINN: You were mentioning early on in this discussion about some of the diseases that seem to be affected by, or may well be related I should say, to obesity. Could you talk a little bit more about those and some of the reasons why obesity may be related to some of these diseases and conditions?

DR. YANOVSKI: Sure. The one that we often think of -- well, I'm from the Diabetes Institute, so Type 2 diabetes is one that starts -- even when you're starting to get into the lower ranges of overweight into obesity, that is really highly significantly related to obesity.

People with obesity, or what they call metabolic syndrome, with a large waist, tend to be very susceptible to Type 2 diabetes. And that may also change with race or ethnicity. For example, Asians at a lower BMI, a BMI that might not even be considered in the obese range, may be at higher risk for

diseases such as diabetes, because they tend to have more fat around the midsection.

And so, you know, there are racial and ethnic differences in people's risk for obesity, and that's why it's so important that you don't just look at the number on the scale. You don't even just look at BMI. But you talk with your doctor, who can look at your family history, who can look at your blood pressure, who can look at the fats in your blood, and your blood sugar, and to really determine for you what your risk is, and how maybe intensive treatment ought to be to try and get your weight down.

DR. PINN: Well, what is some of the good news about obesity? Well, I guess not good news that we're seeing an increase in obesity.

DR. YANOVSKI: No.

DR. PINN: You said it's leveling off. But what is a positive message that you can give related to what we're doing and

learning about obesity?

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DR. YANOVSKI: Well, I think that one of the things we talked about, the fact that we know now that even modest weight loss can really have a dramatic impact on your health.

Another is Т think that getting a little bit easier to eat healthful foods than it was. We were talking earlier today about the fact that, for women particular, you know, they -- women have so many demands on them. They are often raising kids, responsible for meal preparation for the family, maybe taking care of elderly parents, maybe working outside the home, and it becoming a little bit easier now to find healthful foods that are also convenient.

I think that that -- that's a good news story. I think that people are becoming, again, more aware in schools of the real risks of childhood obesity and starting to look at ways to just make the school environment more

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So I think that there is becoming more of an understanding at all levels of our society of what a big problem obesity is, and I think there is a will out there to try to do whatever we can to help people to eat better and to exercise more.

DR. PINN: Is there any new research going on that we can look forward to, maybe learning some new things about obesity that our listeners should hear about?

DR. YANOVSKI: Well, there's research going on at every level, from very basic science looking at the genetics obesity and why people some are susceptible, research about what types of foods that one can eat that might be more healthful and help people control their body weight.

There has been research on bariatric surgery, which is a treatment for people who have severe obesity that recently

was actually shown to prolong lives of people who have been at high risk for obesity.

So we're not there yet. But I think that we have research looking at policy changes and research in communities. So I think that it's a multipronged approach. It's going to take everybody working together at all levels, but I think that research is going to help us understand better why people become obese and to really personalize the treatment, so that we can ultimately do what we want to, which is prevent people from becoming obese in the first place.

DR. PINN: In other words, another aspect of personalized medicine --

DR. YANOVSKI: Another aspect.

DR. PINN: -- for the future.

DR. YANOVSKI: Absolutely.

DR. PINN: We've been talking about obesity. I didn't ask you to actually define what obesity is. And as we've gone through this discussion, maybe we should just stop,

before we end it, and have you define, what is being obese?

DR. YANOVSKI: Sure. Obesity is really just an excess of body fat, an excess of adipose tissue. What we do is we often define "overweight" and "obesity" through the body mass index, which is just a measure of your weight divided by your height.

And we call someone overweight when their body mass index is 25 or more, which is a -- someone who would be 5'5", a woman, let's say, who weighed 150 pounds or more. And, as I mentioned, obesity -- if that same woman weighed 180 pounds.

We also have the whole area of childhood obesity, where the definitions are different because they are based on the child's age and sex, and so that confuses the issue a little bit more. But basically, if you're obese, it means that you're overfat.

DR. PINN: You do a lot of public speaking on obesity, and I know that so many

people come to you to ask about obesity, including members of my staff, and even I do, because we know that you are probably one of -- not probably, you are one of this country's authorities on obesity.

So I want to just sort of have an open mike moment for you. What are some of the things that maybe I didn't raise with you that you would want to have our listeners know about obesity and obesity research?

DR. YANOVSKI: Sure. Well, think, first of all, again, it is exciting time in obesity research. We are learning so much. The more we learn, the more complicated we it is really can see to understand how the body regulates energy. That being said, I don't think we're going to need to know all of the answers to be able to have an impact and make a difference.

Ultimately, it comes down to energy in and energy out. It's not always easy. I tell people it's not fair. You know, we would

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all love to have it be very -- very easy to be able to take a pill and not have to worry about what we eat or how much activity, how much energy we expend.

the health benefits But are tremendous, and if you can eat a healthful diet, and if you can be physically active, it's going to have more impact than just in terms of your body fat. It's going to make you healthier. It will help your mental health. It will help your cardiovascular So there are lots of reasons, other health. than preventing obesity, to eat a healthful diet and to be physically active.

DR. PINN: And how do we help our listeners know what is a healthy diet? You've mentioned some aspects, but how -- what would you suggest they use as resources to learn --

DR. YANOVSKI: Sure.

DR. PINN: -- about what a healthy diet is and what they should know about helping themselves in terms of preventing or

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getting rid of their obese state?

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DR. YANOVSKI: Sure. Well, there are so many resources, both on the Internet and also in terms of printed materials from the NIH and elsewhere. Of course, there is pyramid.gov that will tell you about the USDA pyramid. There's materials -- we have a Network, Control Information Weight perhaps we can give people that information. I know you can get there through the NIDDK Web site -- that has a variety of materials on healthful eating, physical activity, weight control that is really fact-based.

In addition, there is also now for out there who are interested parents helping their kids -- We Can is a new effort. It's spearheaded by NHLBI, but the Child Health Institute and NIDDK participate -- that is out there to help parents come up with the tools they need to help keep their kids at a healthy weight.

And we didn't talk a lot today

about childhood obesity, but this is an area we really have to address or face the consequences years down the road.

DR. PINN: Well, before we conclude, let me, then, ask you to focus a little bit on childhood obesity. I know that there are so many stories in the media focusing on obese children.

DR. YANOVSKI: Yes.

DR. PINN: We see on some of the talk shows, the sensational talk shows, mothers with their kids who eat all day and who are twice, if not more, the weight they What can we look forward to in should be. terms of helping such children? And what is the prognosis for living and life for children with this type of obesity? What should our mothers, our mothers-to-be, be aware of?

DR. YANOVSKI: Yes. I think that
-- that one of the first things is to make
sure that your pediatrician or family
physician or other health care provider is

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looking at your child's BMI, and they should be tracking that. And, again, there are some interventions that we know are good for kids that may help to prevent obesity.

For example, decreasing screen time. There is no reason for kids to have a TV in their room today. And the American Academy of Pediatrics recommends that kids have less than two hours a day of screen time. Decreasing sugar-sweetened drinks. Again, these are things that aren't going to hurt a child, can only help.

Certainly, while there is some controversy about it, breast-feeding has a number of health benefits, irrespective of whether we find out that it, you know, is necessarily going to prevent obesity. We know that breast-fed children tend to have a lower prevalence of obesity.

So there are actually some recommendations out there for both kids and for parents, and for doctors advising parents

that may really help to prevent childhood obesity.

DR. PINN: Well, I want to thank Dr. Yanovski for providing us with information about how research is helping us to understand obesity, how obesity can affect our health, the interaction between obesity and diabetes, fact that there and the are some new interventions that really aren't so new, but that we're newly learning and reemphasizing through science, to help us deal with, and hopefully prevent and lessen the impact of obesity on our society.

So I want to thank Dr. Yanovski, and tell you coming up next a final thought for the month when Pinn Point on Women's Health continues.

FEMALE VOICE: Attention shoppers, if anyone is missing a rather plump set of love handles, please come to the Customer Service counter and claim them. The ample love handles were lost in the produce

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department where their former owner had purchased fruits and veggies to munch on during the big game.

Thank you, and have a good day.

MALE VOICE: Small step number 81, snack on fruits and veggies. It's just one of the many small steps you can take to get healthy. Learn more at www.smallstep.gov.

FEMALE VOICE: A public service announcement brought to you by the U.S. Department of Health and Human Services and the Ag Council.

DR. PINN: And now, a few final thoughts. You've heard about obesity. We know it's a problem. It's probably far more of a problem, as you've heard from Dr. Yanovski, than any of us really realize.

And the exciting thing is that we are learning that in order to prevent some of the bad effects, ill effects of obesity on our health, sometimes even just a modest loss of weight can make a difference and make us

healthier, can prevent diabetes, perhaps can have an impact on many of the other conditions that are affected by being obese, and that is exciting.

Research is continuing to help us learn more about the prevention of diabetes, what kinds of interventions help. But just think, with all of the research, what we are confirming is really what all of us should pretty much know, and that is healthy living can make a difference.

We have heard that in so many of the topics we have discussed in our podcast. A little bit, or maybe a lot of exercise, watching what we eat, what we take in, and being aware, getting information so that you know about conditions that can affect your health.

And as you've heard from Dr.

Yanovski, there is good information. If you
want information about diabetes, about
obesity, and about so many other things that

affect your health, all you have to do is go to the NIH Web site, which is nih.gov, G-O-V, and then when you get the Web site you can type in "search" and you can put in "obesity" and it will take you to the NIDDK Web site and let you know what materials are available, or put in "diabetes" or put in "cancer," or put in whatever you are concerned about, and you will be able to get information that is free to you from the National Institutes of Health about research and about what we've learned.

Well, that concludes today's podcast. I want to thank, again, Dr. Yanovski for joining us, and I really want to thank you for listening to this episode of Pinn Point on Women's Health.

In just a moment, the announcer will tell you where to send your comments and your suggestions for future episodes.

I am Dr. Vivian Pinn, Director of the Office of Research on Women's Health at the National Institutes of Health, in

Bethesda, Maryland.

Thank you for listening.

MALE VOICE: You can e-mail your suggestions concerning comments and this podcast to Marshall Love at lovem@od.nih.gov. Pinn Point on Women's Health comes from the Office of Research on Women's Health and is a production of the NIH Radio News Service, News Media Branch, Office of Communications and Public Liaison, at the Office of the Director, National Institutes of Health, Bethesda, Maryland, an agency of the U.S. Department of Health and Human Services.

(Whereupon, the podcast ended.)

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