Introduction to Thyroid and Menopause

Hello and welcome back to Mastering the Menopause Transition Summit 4.0. Great to be here with you. I'm your host, doctor Sharon Stills, and it's always my honor and my privilege to share these Life-Changing conversations with you.

Some of you may recognize my guest today because he's also a Doctor Talks host of summits. He did the thyroid summit not too long ago. This is doctor and she'll. Gupta.

He's a bestselling author, speaker, research author, and and world expert in Hashimoto's disease. So we are going to talk about a very important topic today because I had a patient the other day whose thyroid levels looked healthy and she had no thyroid complaints, and I was like, oh my God, what kind of unicorn are you?

Because I'm so used to seeing women in perimenopause and menopause having thyroid diagnoses, whether it's just, primary hypothyroid and or secondary or Hashimoto's, that when I see someone who doesn't, it's like shocking because it's such a crisis nowadays.

So this is a very important topic to be having. And we've got someone who has dedicated his practice and his life and is on a mission, to help women with this condition.

So grab a pen, take some notes, and let's learn about thyroid and Hashimoto's disease with Doctor Gupta. So welcome and thanks for taking time out of your busy schedule to be here with us.

Absolutely. Thank you so much for inviting me over here. You are a wealth of knowledge, and this summit is going to be helpful for so many women. You know, who are dealing with a lot of hormonal issues, you know, especially menopause. Right?

It's like, thing, you know, we don't even understand. A lot of women don't understand what is happening with them. And unfortunately, it comes a whole bunch of things associated with it.

You know, other hormones go out of whack, including, you know, thyroid hormones, you know, Hashimoto's disease. Get diagnosed more often. When females hit the menopausal age, you know, their metabolic machinery slows down, their mood goes off.

Like, I can go on and on with, you know, I think all of your speakers are talking on different facets of these things. So I'm hoping that a lot of people are already learning about it.

And the biggest thing is that they're getting information of how to tackle, this issue. So I'm very happy to share information on thyroid and Hashimoto's and how to deal with this, you know, along with menopause is wonderful. Yes.

And so I'm curious because I don't think I've ever asked you how how did thyroid Hashimoto's, is there a personal story or how did that become your area of expertise?

Dr. Gupta's Personal Thyroid Journey

So, actually, I was suffering from my own health struggles of weight gain, you know, brain fog issues and a lot of gut problems. And, nothing was working for me at that point of time.

I was a back at the time, you know, just a regular family medicine dog. So I thought, well, you know, it was just I was overworked or it is something going on with, you know, with my gut, like acid reflux, it's trying to take more and

more medications and nothing was working.

All the testing was even normally when the thyroid labs were normal for me. And so I had no idea what was doing it. Then, you know, I heard about functional medicine.

You know, I started like, you know, incorporating that into my own lifestyle, taking certain supplements, changing my life. And within four months, you know, like things started shifting for me.

I lost more than 20 pounds in my life, you know? You know, my brain fog went away, energy levels were up, gut problems went away. So then I realized, okay, well, that's a big thing, you know, I need to share with other people.

I said, working at the Cleveland Clinic. At that point of time, they had a functional medicine department. They set up, and that was the only academic center.

So my goal was to do research. So that's where actually I realized that my symptoms were all thyroid related symptoms. And attracting these females who had the same symptoms going on.

And again, they were taking thyroid medications. They were trying to get healthy, but still things were not working for them. So I started researching thyroid and Hashimoto's disease kind of developed like a three step process or a protocol.

So we can address those issues for them and got phenomenal results. So that's where, you know, like later on I realized that okay, well, you know, like I had thyroid issues.

And when I look at my labs now I know what is an optimal thyroid labs and what are the quote unquote normal ranges for people. So I think I had a very short span of time where my thyroid was not working optimally, which caused all of those issues and unknowingly, you know, like working on all my underlying issues.

I was able to fix it. I, I just want to point out to the listeners that, you know, think about this for if you have a male partner, right. Because we think of thyroid as a woman's disease.

And if your man is suffering and it could be your husband, your boyfriend, your your child, your coworker, your cousin, your brother, but like, you know, thinking about it could be his thyroid too.

I think that's important. It's not just for women. So let's talk about your three step process. Sounds like a good place to start. Absolutely. So, again, kind of letting people know what is Hashimoto's disease?

Because a lot of women already know about hypothyroidism, which is a low thyroid. But some of them might not have heard of Hashimoto's disease. So Hashimoto's is an autoimmune condition where your body's producing antibodies against your thyroid gland, and they start this slow process of destroying your thyroid gland.

And ultimately it leads to hypothyroidism, or what we call is low thyroid issues. Right? So what we I what when I researched what I identified was that there are root causes.

You know, why suddenly one day, you know, like our body starts attacking our own body or causes this low thyroid issues. If you go to a conventional doctor, they will have no answer.

Why did it happen? So that was my first place. I wanted to look at all the root causes. So my first step is identifying the root causes for a particular person.

Because until you know all the root causes and you address them, things are not going to get better. So there are six root causes basically identified, which plays a major, major role in thyroid disorders.

What Hashimoto's Is and Its Root Causes

So the first one is food sensitivity. So everybody knows that you know we have more and more people are getting sensitive to foods like gluten dairy, soy, corn.

So more and more research is coming out telling us that these foods can definitely cause leaky gut issues. They cause, you know, issues with damaging your gut, which ultimately causes, you know, autoimmune diseases or hormonal imbalances.

So food sensitivity is a very important, factor which is causing, you know, thyroid disorders. The second one is nutritional deficiencies. Now, thyroid needs specific nutrients like specific minerals that are the body is low into like selenium, like zinc, like B vitamins, like D vitamins including magnesium.

All of these are needed by your thyroid gland to produce thyroid hormone. And research says when we are low in these minerals, then it triggers again.

An autoimmune response causes Hashimoto's disease. Plus it can also lead to hypothyroidism. Now here's a big problem. People think that eating a very healthy diet, which they are.

But the problem is that our food itself is deficient in to these specific minerals. So there was a recent study done which compared the nutrient density was specifically selenium, magnesium from 1980s to 2000.

And they saw that the nutrient density of these minerals is much lower in our food today as compared to 1980s. So that is a game that even our food, our agriculture, our our soil is low in these vitamins and minerals.

That's the reason they get unnoticed, you know, as a deficiency, because when you go to your regular doctor, nobody takes for these vitamins and minerals.

So you never know whether you're learning low that. So that's the second reason. The third reason is stress okay. So whether it is emotional stress, physical stress, hormonal stress, all of these stressors kind of causes or triggers or Hashimoto's disease, this is where menopause is very important to.

And that's where a lot of females do get diagnosed with disorder. After they hit their menopause, after they hit their menopause, or even in perimenopause, because that hormonal shift is a stressor for the body and again, triggers autoimmunity, causing Hashimoto's disease.

The next root cause is chronic infections, which can be parasites in the gut, like there is a parasite called blastocysts, which research shows that has been, you know, linked to thyroid disorders.

So that can be the case. We know about Sibo, which is overgrowth of bad bacteria in the gut. We know about Candida in the gut, which can cause it. Chronic Epstein-Barr virus reactivation can cause it.

So all of these different kinds of viruses, parasites, you know, which is living in our body, you know, can cause or lead to thyroid disorders. And the last one is toxins.

You know, whether it is heavy metals like lead or mercury, we know which can cause these issues. Mold, toxins, especially the mycotoxins. You know, again, we get exposed to a lot of those can cause it.

And plus the environmental toxins the glycol says, you know, whether it is, you know, the plastics, the BPA that we have, a whole bunch of other toxins are present in our environment, goes directly to our thyroid or thyroid is like a sponge, you know, when the toxins even small amounts when a body get exposed to the directly goes to a thyroid and gets deposited over there, over the course of time, they become toxic.

And that's where they start damaging a thyroid gland. And we know that each and every day we are producing new chemical products. So we are pouring more and more toxins into our environment.

And unfortunately, we all get exposed to these toxins in a very small amount. But eventually they reach the toxic

levels and damages our thyroid gland.

So these are all six major root causes when combined together, lead to the breakage, you know, of our immune process and ultimately causes thyroid disorders.

So we got food sensitivities, nutrient deficiencies, stress, infections, toxins. What's the did I miss one. Oh these are the five ones. Didn't say six years and six okay so yeah okay.

And I do have a question I'm curious like what your, thought process is on when you're looking at bloodwork and you're looking at TPO antibodies or thyroid globulin.

Antibodies do you think that any antibody activity means Hashimoto's? Or are you okay if it's below the regular lab range or do you want it to be zero?

What's. I know there's some different schools of thought on that. And I'm curious what you think. Yeah. So again, you know, we don't have a complete research study defining what that is, but at least the research has defined them into mild, moderate and severe.

So any TPO antibodies less than 100 is considered to be mild disease. Between 100 to 500 is considered to be moderate, and more than 500 is considered to be severe.

The reason you want to categorize it that because what they saw was that when the antibodies goes beyond 500, the damage which is happening to the thyroid gland is ten times more than when the people in the milder side of the disease.

So definitely, if anybody who has antibodies more than 500, they should, you know, work on reducing them less than 100. Now, in terms of what we call as remission or in the normal stages, you know, like I want the antibodies to be at least less than 50, you know, if they're if they can push them lesser than that, that is great for a person who already have a diagnosis.

The first goal will be to bring those antibodies to less than 50. So that way the damage is happening at a very, very low rate. So generally the thyroid is safeguarded.

And is there a difference between the peroxidase and the thyroid globulin antibodies. So we don't see a much difference. But the only difference which I want to kind of warn people a little bit in that way, is that when there is very high levels of thyroid globulin, antibodies, those people over the course of long term basis are more predisposed for thyroid cancer.

Unfortunately. So that's said, if you have thyroid global antibodies are very high side, I will say at least once a year or every couple of years, doing a thyroid ultrasound would be a good choice to make sure that you know you're not developing any thyroid cancers.

Otherwise, in terms of symptoms, you know, like there is not much of a difference in terms of whether you have TPO or tiro globulin. Both, unfortunately, comes with the same set of symptoms.

And what is your view. Because then there's also divided camps on iodine in the use of Hashimoto's. Absolutely. And again, you know, this is a most controversial topic that, you know, we can talk about Hashimoto's.

So I generally go with the research studies, okay. What the research studies are out there. So research studies are very clear in terms of when you have very low amount of iodine in the body that will cause Hashimoto's disease and very high amount of iodine will also cause Hashimoto's disease.

So that's what you know, the research says. So now the question the question is that whether a person should take iodine supplementation, whether they should not take an iodine supplementation.

So it all depends on how much iodine is being consumed by a person. So if a person is consuming a lot of seafood, sea vegetables and things, then those are already high iodine foods.

We don't need extra iodine in those people, but there are other people who don't eat sea vegetables, seafood. The only source of iodine is maybe a salt.

Then those people can take a low dose iodine supplementation. Now obviously there is a protocol out there which uses high doses of iodine to help with thyroid disorders.

In fact, like, you know, I would like to share the story of our client. So she was a health coach herself. She got diagnosed with Hashimoto's disease.

She was already working on the diet. She was working out. And she heard of this high iodine protocol like, you know, going on high doses of blugolds iodine.

She started doing that within a few months. Her antibody levels, which were only 2 or 300, went up to 1600 and nothing else change. And she was like, you know, I thought this was helpful for me.

She started working with me. And then at that point of time, we stopped all kind of iodine with her, started on different kinds of protocol of addressing all of the root causes.

Within four months, the antibody levels from 1600 went down to 800. So that that's where I have seen several cases where high dose of iodine actually harms a person's body.

Then doing good. But again, you know, as you said, there are different camps of thought. I can just share my opinions. And so of the root causes, are there ones that you find are more beneficial to tackle first that move the needle, or do you find it's different in everyone or just like, what would you say to the ladies listening if they're like, I have Hashimoto's, how do I know where to start?

I think I'm a big proponent of starting with lifestyle changes, okay, because those are foundation of any health. Unless you are doing those lifestyle changes, working on like detoxification, working on like infections and things doesn't make sense.

So that's where the diet comes the first propagate of things. So you know like things which are harming your thyroid stay away from them. Things or food which are healing for thyroid.

Start introducing those. So that would be the first step of doing it. So definitely we know that, you know, processed food, you know, processed foods that you might be eating.

You know, those McDonald's Burger Kings and things definitely stay away from those because they're trans fat. Processed food is not good for your body.

And then the second stage comes where, you know, like if you can give up gluten, dairy, maybe some processed soy and then, alcohol and sugars, those would be good places to start with because those will be good or healthy in general for you, even, you know, for your thyroid as well as for your menopause and other things, too.

And then start incorporating thyroid healing foods out of those foods. You know, the first thing will be all these colorful, non-starchy vegetables, because those non-starchy vegetables will give you all the minerals and vitamins that your body needs.

The greens will give you your iron. The greens will give you your B vitamins. The greens will give you your Vitamin K's. If you are eating like Brazil nuts, that will give you your selenium.

You know, for your zinc, all that, you know, things like legumes, lentils, seafoods, your meats will give you your zinc. So those are the good food. So good quality protein along with non-starchy vegetables is very, very important

to support your thyroid gland.

Antibodies, Iodine, and Testing

And then some good fats, you know, and like, you know, again, we have, you know, banished fat as completely bad for our body. You know, our body needs some good fats.

So again, if you're gonna include some fatty fishes, those are great. Some olive oil, you know, is great for your body. Some avocados, nuts and seeds like almonds, walnuts.

Those are again good things that again, we have good research that they are good for your body and supports your body in multiple ways. So I think that's a great foundation.

Great place to start for people at least changing the diet over there and then working on the stress management team. And next thing you know, we all are stressed out, right?

There is no person out there, you know, you know who's not stressed out. Whether it is, you know, your personal reasons, work, little reasons. You know, the geopolitical situations.

Everything is affects their body. So develop a de-stressing routine. You know, if you can do meditations, great. You know, if you can develop a hobby that is wonderful, go out when the nature, you know, have those nature walks, you know, again, those are all profound ways of working on your stress so that you can keep your adrenals in good shape.

Yes, yes, yes and yes. Right. You can never go wrong with eating healthy and de-stressing. I always say like, if you're alive, there's going to be stress.

It's not about avoiding the stress or getting rid of the stress. It's learning how to dance with the stress and be in relationship with the stress. So let's talk about like the connection thyroid, menopause what you see.

How do you know the difference? Why? Why did I start out by saying I was surprised, you know, that someone had a normal thyroid function and no symptoms when they were in menopause.

And you know, what is your experience? Yeah. So thyroid. So, all the hormones are like the part of the same symphony, you know, like they're all interconnected.

So when one hormone or one part of our body is not working great affects the other part. So similar way thyroid hormone and estrogen are connected with each other basically.

So even in pyruvate follicles we have estrogen receptors present. So the estrogen binds to those receptors in the thyroid follicles and keep them in healthy shape okay.

You know, for the growth and secretion of the thyroid hormones and things. Similarly, thyroid and estrogen are also corrected that when thyroid hormones are in good shape in our body, our estrogen can work better in our body.

And they're also connected via liver, because liver is where a majority of our hormones get process, including estrogen and thyroid hormone. And unfortunately, liver congestion is a very major issue which happens in menopause Ontario disorders.

So these hormones do not get processed properly. So that's the connection between thyroid and estrogen, you know, which you know happens all over your life.

Now suddenly when you enter perimenopause or menopause age that estrogen goes away. So the thyroid doesn't know how to function properly. And you know the interconnectedness gets affected.

So that's the reason we see a higher chances of having thyroid disorders or Hashimoto's disease when you finally enter perimenopause and menopause. Now here's the problem.

The symptoms of both menopause and thyroid disorders are very similar. You know, you will feel tiredness, you will be feeling fatigue, you will have brain fog issues.

Your brain will not be working properly. You will have mood changes. You will feel anxious, stressed out, depressed. These are all signs of symptoms plus difficulty in losing weight.

You know you will be gaining weight and it will very difficult for a lot of females to lose weight because again, both of these, you know, issues will cause that problem.

The symptoms are very interlinked. You know, once you hit menopause and thyroid disorders, first of all, diagnosis, as I said, the diagnosis you have to get a complete thyroid panel done.

So not only a TSH is not enough. You need to get free T3, free T4, plus the two thyroid antibodies, which is the TPO, as well as a tidal globulin. So make sure you're getting the complete thyroid panel done.

Now a lot of females there T3, T4 will be normal, but their antibodies might be high. And if they go to the conventional doctor, they'll say nothing to be done.

Just wait. Come back in six months. Know these antibodies being present in your body is telling that your thyroid is under attack. So start working on rebalancing your thyroid and reducing inflammation in the body so you can get better.

So that way this is an interconnectedness between the menopause and the tidal disorders. Symptoms are overlapping. So the work that you have to do is that you have to work on both the things you know, working on your menopause and thyroid simultaneously so you can feel better.

Yes. Yes. So I was just thinking you said you have a three step process.

Diet and Lifestyle Foundations

We talked about the first step which is identifying the root causes. I'm like oh we should go back and do the second and third step. So what is the second step.

So the second test was actually rejuvenation of the thyroid gland. This is where the diet that we spoke about is it plays a very critical role that we want to kind of use this diet so that we can support the thyroid gland, stop the damage, and then obviously also start rejuvenating the thyroid gland by using thyroid supporting foods.

Now in this process, we also want to use certain supplements which supports the thyroid gland. The number one supplement over here is selenium. So selenium plays a very critical role in what we call as the iodine is this enzymes.

These are the enzymes which are responsible for producing thyroid hormones as well as also reducing inflammation or oxidative stress in the thyroid gland.

So when the selenium is low, that causes increased Hashimoto's disease and we start supplementing with selenium, the thyroid antibodies good gets better.

Plus your body can utilize thyroid hormone better. Now selenium is also a very potent antioxidant. So in menopause we see that the inflammation levels increases.

So that way by reducing inflammation in menopausal body selenium helps you know like menopausal women as well as a thyroid gland. So that's great for selenium is the first supplement that they should add over here.

The second one is zinc just before we go. Because can you just talk about like because I know a lot of us, especially in America, we think, oh, a little is good, more is better.

But can you talk about how you don't want to overdo it on your selenium and what you recommend? That's correct. Absolutely. So again, what is the typical dosage?

The typical dosage should be between 100 micrograms to 200 micrograms of selenium. That's what the research says is a safe dosage and a good dosage to work with.

And as you said, completely a lot of females or a lot of people will just think that, okay, well, more is good. So they will start overdosing on selenium.

And selenium is unfortunately one of those minerals where you can get toxic. So definitely we don't want to overdo it. So I will definitely not go beyond 200 micrograms of selenium on the regular basis. If you're using it.

Great. Okay. Thank you. You heard it here. The second supplement is zinc. Yes. Second is zinc. Again zinc. Everybody thinks it is ready to your immunity.

But in thyroid, zinc plays a very important role in conversion of your T4 to T3. Now what is T4? T4 is an inactive thyroid hormone which your thyroid produces, which needs to be converted majorly to T3, which is the active form to your body can utilize it.

And zinc plays a very significant role in this conversion. Now, a lot of people, when they have thyroid disorders, they are taking levothyroxine, which is only T4, and unfortunately that doesn't get converted to T3.

So zinc being in that role of improving that conversion is really great. So again you know zinc is good supplement to do. But again don't overdo zinc.

Most of the time 30mg of zinc is a good dosage for it because if you do very 30mg three zero because if you do high doses, unfortunately zinc high doses will cause copper like, copper levels to go low.

So again, you know, we want copper in our body too. So when people are taking 60 or 100mg of zinc for a long term basis, that can cause deficiency of copper.

So again, stick with 30mg. That's a good milligram dosage. The third one is magnesium. Magnesium is one of those wonder minerals which like everybody should be taking, doesn't matter what age you are in because it takes part in more than 300 enzymatic processes in our body and our thyroid.

It plays a very significant role in thyroid hormone production, as well as conversion from T4 to T3. So that's where magnesium is. Great. This is one of those minerals which you cannot get toxic into.

Okay. So even if you take high doses of magnesium, generally dosages between 400 to 600mg is a good dosage to be in. But, you know, if you want to take a little bit high doses, that is okay.

But this dosage is generally good enough for the magnesium piece of it.

Supplements for Thyroid Support

So these are the my top three minerals that I will say that people who have a thyroid disorder and obviously menopausal age or not, they can take it, which will definitely support their thyroid health.

And then iodine is on the side. Depending on your iodine consumption you can take it or not take it. You know, depending on how much iodine is there in your diet, do you have a favorite form of magnesium that you like to recommend for thyroid issues?

Yeah. So magnesium glycan. It is my favorite one because it gets absorbed really good. And plus you know it is very soothing for the body doesn't cause any gut irritation.

So Jenny if you take it at bedtime it will going to improve your sleep, you know, improves your adrenals and again gets absorbed readily in your body.

So support your thyroid gland. If you are constipated, then magnesium citrate might be an option that you can try just so that you can improve your constipation, which again you know is a common symptom in thyroid patients.

So that's the only second best scenario. If you have constipation. If you don't, then magnesium in it is my favorite form right? Okay. So we have a I feel like I'm with Professor Gupta like I master class going on here.

So we have few minutes left. What is the third step? I want to make sure we don't leave them hanging and we get to. Yeah. The third step is, absolutely.

So the third step is removing the toxicities, you know, which includes working on your stress, working on infections and working on removing the toxins from your system.

So that's the third step. Now again these are bigger steps. So I don't want people to think about okay I'm need to start a detox protocol tomorrow itself.

No detox protocol is pretty complex. You need to do it completely right so you don't harm your body. A lot of people have done those DIY detox like, you know, boxes on their own and had made things worse for them.

What I'm talking about is that working and looking at your environment and clearing up things which are causing the toxins to increase in your body, what that means is that, well, try to buy organic if you can, you know. Yes.

You know, for everybody to buy completely organic produce might not be possible. But as much as you can try to look into that, there is something called dirty dozens, you know, go to this website ewg.org.

They kind of, you know, has a good resources of telling you what are the dirty dozen foods this year, which have the highest amount of pesticides, you know, into them.

Try to at least buy them organic, try to look at your environment, reduce the amount of, you know, cleaning products you're using. Try to use more greener products that way.

For females specifically, you know, you know, when you're using those skin care products, they are laden with toxins. So again, try to use cleaner products which have less amounts of toxins, less use of plastics, you know, around your containers, you know, in your bottles and things.

So this is what I mean by detoxification, at least cleaning up your environment so that at least you know, your, you know, you get less exposed to toxins.

And then after that, you know, some body movement is great because that body movement will help you to sweat, move your lymphatic flow that will again help you to detoxify your body.

If you have access to a infrared sauna or a regular sauna, that might not be a bad idea to start using them because again, that will help you do detoxification.

We already spoke about stress. You know, like how, you know, working on de-stressing routine is so important for infections. Again, depending on what infections is there, that is the case.

Detox, Infections, and Final Advice

But at least start working on your gut immunity. You know, start including fermented foods so that you can get

those probiotics. Even getting a probiotic supplement is not a bad idea, so that you know you can do it for a few months so you can get all that good bacteria to support your gut immunity.

Because 70% of our immunity in our body is in our gut. So if you support your gut immunity, your overall immunity also gets better. And you can keep those chronic infections at bay.

So these are the at least few things that people can start doing it before they move on to advanced protocols of detoxification or working on anti-parasitic or anti infectious protocols.

Fantastic. So any last words. And also where can the ladies learn more about you. Absolutely. So the last words are like you know you you might be suffering a lot.

You might have been told you cannot do much of Hashimoto's disease or thyroid disorders, but is absolutely wrong. There is hope for you out there to get better.

You just need to find those root causes, work on those. Even small things like start making changes to your lifestyle choices like your diet, stress, or big things.

So start small and slowly and slowly. Keep incorporating more things and there is hope for you to get better in terms of where you can find me. You know, my YouTube channel is great at this point of time.

I share regular videos over there. The handle of YouTube channel is, Anshul Gupta, MD. So we post regular videos. We do regular lives over there, so people can follow me over there.

Again, social media handles and Gupta MD or Instagram, people can do that. I have a great website of Anshul Gupta, md.com. Again, you know, like keep on sharing new blogs.

If you want to read those, you know, you can get more information on how to fix your thyroid. Awesome. You go check you out on YouTube. Well thank you.

This was, amazing. So go follow him. Go and then call you Professor Gupta. From now on. For lifting up. So thank you so much for all your wisdom and for sharing on such a huge, important topic.

Just, you know, it's like menopause, thyroid pause. They are hand in hand and something we need to be educated about. And what I've found after 23 years of practice, like the thyroid, is the most commonly misdiagnosed.

Misunderstood, where women are just left to suffer unnecessarily. So all right. I told you you needed to take notes, so if you didn't, you'll have to listen again and take take your notes, because there was a lot of a lot of things in there.

And I'm glad we got to the three steps and go follow him and we'll be back with another talk. So thank you all for being here, and we'll be back.