

EP 51: Menstrual Health, Diabetes, Cholesterol, and Weight Loss!

Dr. Kipper shares some revolutionary treatments for diabetes and cholesterol. Plus he gives Anna and Peter a quiz about menstrual health, and answers a caller's question about the latest weight loss drug. Here's a hint: it could be the best one yet.

Peter: [00:00:28] Hey, everybody. Welcome to Bedside Matters, the podcast that happens to address the medical issues that impact every single one of us every single day. So what we do here is hopefully give you the answers you're looking for so you can be more, not only informed, but, hey, healthier too. I'm one of your hosts, Peter Tilden. I'm joined by Anna Vocino.

Anna: Hi.

Peter: And Dr. David Kipper. Hi, David.

Dr. Kipper: [00:00:55] Hi, Peter. Hi, Anna. Hi, Lorre.

Anna: [00:00:57] Hello.

Peter: [00:00:58] We're ready to be educated about our health. And we've got some stuff that's happening, that's relevant to what's going on in society today.

Anna: [00:01:05] First of all, we're starting with a quiz. Dr. Kipper is going to quiz us about menstrual cycles. It's "Period Jeopardy." Item two, we are discussing, first of all, just kind of a primer, an overview on diabetes and can it be reversible? I'm really looking forward to talking about that.

Peter: [00:01:23] Cholesterol, we're all worried about cholesterol. And we've heard on this podcast, we've learned a lot about cholesterol, as far as the nonsense we've been told all this information about good cholesterol, bad cholesterol. We got a new breakthrough This Just Happened, which is cool. And then we got a call about everybody's taking this weight loss medication. Everybody in Hollywood, you turn on TV, everybody is thinner and nobody's admitting it.

Anna: [00:01:45] Right? They're all saying they're on hormones, like you're not on hormones.

Peter: [00:01:48] So, we'll talk about that, too, because that's a segment called Hey, What About Me? where a caller has a question. So, here we go.

Anna: [00:01:54] Okay. "Period Jeopardy." I know we can't play the music because, apparently, people own rights to it. But, Dr. Kipper, you've got some questions for us.

Dr. Kipper: [00:02:02] To put this into some context, this week in my office, this is a very common thing that I see. I've always actually found this interesting, that a female patient came in, was having some menstrual spotting and bleeding and was concerned, you know, is this cancer? And she came in with her husband and this provoked a conversation about what we do know about the menstrual period, especially men. I mean, we're idiots when it comes to this. And, unfortunately, a lot of women don't understand exactly how this

works. It might be interesting to ask some simple questions. I'm going to throw it up to the three of you.

Peter: [00:02:47] I just have to admit, before we get into this, I'm a bit of an expert about the Menstrual Period, which, by the way, most people know happened from the early 1600s through about 1657, the Menstrual Period in America.

Anna: The minstrel period?

Peter: Yeah. Oh, that was the minstrel period?

Anna: [00:03:02] The minstrel period. Very entertaining time.

Peter: [00:03:03] Oh, I misunderstood. Okay.

Dr. Kipper: [00:03:04] By the way, Peter, that was a long minstrel period.

Peter: [00:03:07] There were, you know, there was a lot of touring shows that needed minstrels.

[laughter]

Anna: [00:03:11] It was a great time to be a minstrel.

Dr. Kipper: [00:03:13] So, I'm going to throw out some questions and please respond as you wish. The first question is, where did this 28-day metric come from? What is it about 28 days that makes this a cycle?

Anna: [00:03:31] The phases of the moon. A moon phase is 28 days.

Dr. Kipper: [00:03:35] Lorre, do you want to perhaps give a right answer to this?

Lorre: [00:03:39] Oh, damn it. I don't know.

Peter: [00:03:42] Twenty-eight days. There has to be some rhythm to something that was going on there that's not necessarily related to the body.

Dr. Kipper: [00:03:48] You're all so very close and yet so very far. So, Peter, your concept of the cycling, the 28 days is actually right, because what happens is there are two hormones – estrogen and progesterone – that regulate these cycles. And there is a buildup over 28 days of estrogen and a falling down over 28 days of progesterone. And at some point in the middle, at day 14, the ovary releases an egg. When the egg is released, the estrogen start to accumulate. And what they do is that they build up the nest, the uterine lining, in case an egg is fertilized and that fertilized egg will then land on a nest that is supported by this extra estrogen and tissue.

Peter: [00:04:42] Just know I was going to say all of that, but I didn't want to show off.

[laughter]

Dr. Kipper: [00:04:45] If the egg is not fertilized and the estrogen then has built this nest, then the nest starts to break down. And that's started, that can start anywhere around day

20. And then after 28 days, that nest then comes out. That's the bleeding. So that's what this 28-day cycle then is.

Peter: [00:05:07] Do any people present differently, David, even though that's the general consensus, do any women's bodies present at 35 days, where their cycle is very different?

Dr. Kipper: [00:05:16] Again, a smart question, and the answer is yes. Not everybody is exactly 28 days. Not everybody has 28 days throughout their lifespan. So there are times when stress or other issues might interrupt that normal cycling. But, generally, women are pretty normal and regular, if you will, and predictable. The reason that's important is that women that have symptoms of PMS, that's another question I have coming up. But if you know that you have a predictable 28-day cycle, you know that around day 25, day 26, you're headed for some symptoms. So does your husband.

[laughter]

Dr. Kipper: And so you might be able to predict what's coming and then sort of mitigate that.

Anna: [00:06:02] It would be good if the husband didn't say, "Are you about to have your period?" Like, just don't say it. We all know it, but don't say it. You're inviting a conversation.

Dr. Kipper: [00:06:13] That's very good advice. It's not going to stick, but it's very good advice. We men have a very short memory on this stuff. So given that, what are the average number? What's your guess on the average number of eggs a woman will release over her lifetime? It's a math problem.

Anna: [00:06:31] What's 40×12 , right?

Dr. Kipper: [00:06:35] Yes.

Anna: [00:06:37] 520 eggs.

Dr. Kipper: [00:06:40] Very good guess. Very good guess. You're wrong. But it's a good guess.

Peter: [00:06:44] I'm guessing. Give me a second: Five goes into 6. I have no idea. But here we go.

Anna: [00:06:48] 480, I should have said. Apparently, I don't know math.

Peter: 526.

Dr. Kipper: [00:06:51] We got a 480, we've got a 526 – Lorre?

Lorre: 500, by Price is Right rules -- \$1.

Dr. Kipper: [00:06:59] Anna, you get the prize. It's 450, is the average. And again, that's a simple math problem.

Peter: [00:07:06] Not for us.

Dr. Kipper: [00:07:08] Not that simple. What is interesting is that there is a blood test. It's called an AMH blood test, Anti-Mullerian Hormone. And that hormone actually will guesstimate how many eggs are left in the basket. And this is why this – and you can do this at home, by the way, there's a home blood test that you can get. So let's say you're trying to figure out, you're in your late 30s and you're wondering, or you're in your early 40s, and you're wondering, am I still going to be able to conceive? You do this test and you see, "Okay, I got 30 eggs left in the basket. I can still conceive." So it's a very... And also this test can be done in utero. You can find out before the little girl is born what the likelihood is of her having the ability.

Anna: [00:08:00] What? Wow!

Dr. Kipper: [00:08:01] Yeah, isn't that crazy?

Peter: [00:08:03] Wait a minute. What about the surprise ones where, "I was 57 years old. Way past my childbearing years, and I had a baby"?

Anna: The menopause babies, yeah.

Peter: How does that figure into this?

Dr. Kipper: [00:08:12] They had more than the 450. They might have come in at your number.

Peter: [00:08:17] But would this test have shown that?

Dr. Kipper: [00:08:19] Yes.

Peter: [00:08:20] Oh, so people who are surprised, that they get pregnant later in life, if they did this test, they would know that they could get pregnant later.

Anna: [00:08:27] Still had some eggs.

Dr. Kipper: [00:08:28] Yes, this is, I think, sort of amazing. So speaking of when the egg basket is empty, which is what menopause is, what is the average age for women that will enter menopause?

Anna: [00:08:45] 52.

Dr. Kipper: [00:08:46] Spot-on. No need for more guessing. What is PMS? Let me ask that question. How do you define PMS in a very simple way?

Anna: [00:08:55] Oh, you mean like the actual symptoms of PMS?

Dr. Kipper: [00:08:57] Yes.

Anna: [00:08:58] Irritableness. Your boobs hurt. Bloating.

Lorre: Depression.

Dr. Kipper: Yes.

Anna: I always thought it was if you had too much progesterone, it was making you cranky and make your boobs hurt and make you retain water.

Dr. Kipper: [00:09:11] Everyone's comment was correct. There is this huge hormonal shift, as we talked about. Estrogen builds up. Progesterone builds down. And so these rapid hormonal changes create the mood issues and the mood swings. And as the uterus is trying to eliminate the nest, the blood, it has to contract. And when a smooth muscle contracts, that's painful. When you have a kidney stone, that's smooth muscle contracting in the ureters.

Anna: [00:09:43] I didn't know it was the same type of smooth muscle contraction.

Dr. Kipper: [00:09:46] These pains are very similar. When you have a gallstone that you're trying to eliminate, that's smooth muscle. That hurts. So the pain comes from the smooth muscle contraction of the uterus. And the mood shifts come from these changes in hormones.

Peter: [00:10:00] Can I ask you a question about that? So you have a mood shift and you have an attitude shift. Can that last indefinitely or forever? Just like PMS in some women lasts a period, but then some experience it and it never, never goes away where they have huge bout for a long, long extended period. Can that happen with PMS even with the hormonal change it affects mood for a long time?

Dr. Kipper: [00:10:23] Yes, because there are people that have an intrinsic or underlying depressive disorder, so those depressions...

Peter: Triggers it?

Dr. Kipper: ...actually get accentuated during the menstrual cycle. And if there are situational issues going on around the time of a woman's period that has an underlying depression, it's time for their husband to pack up and get out of there.

Anna: [00:10:47] You know what I always used to tell my husband, too, I was like, he would be like, "You get mean." And I was like, "I'm not mean. I'm actually just verbalizing the things that when I have more estrogen in my system during that phase of the cycle, I won't verbalize it because the estrogen makes me nicer."

Peter: [00:11:03] You know what my wife says to me to make me feel better, she says, "This is the real me. I just work hard to cover it up the rest of the time."

Anna: [00:11:09] That's a better way of saying it.

Peter: [00:11:11] Just shifting to postpartum depression after you give birth, are there treatments for that? Because I keep reading about people who really have a hard time with that.

Anna: [00:11:18] I think I had that and was never diagnosed with it.

Peter: [00:11:20] Really, for a long time?

Anna: Yeah.

Dr. Kipper: [00:11:22] Now, postpartum depression has some genetic underpinnings. There is treatment now for postpartum depression. Basically, it's an antidepressant that we give people immediately and it knocks it out. It's amazing. This is new. It promotes serotonin and it's given early and it works relatively quickly because, remember, serotonin medicines generally don't work right away, they take a while. But this one does and this one is magnificent, in turning these things around.

Peter: [00:11:54] Just used for that, David? Or, is that a depressive medicine?

Dr. Kipper: [00:11:55] No, just used for that because, when you think about what happens in a postpartum depression, the bonding between mother and child is affected. It affects both of them, meaning that the mother is not capable of and not interested, and the child without that kind of maternal nurturing has long-term effects. This problem is a much more serious issue.

Anna: [00:12:21] You know what, it's funny you say this. I'm going to get a little personal here, but maybe somebody out there can relate. And this might help somebody. After I was born in 1973, my mother went into the hospital for postpartum depression for two years, almost two and a half years.

Dr. Kipper: Whoa!

Anna: And I floated around a bit. Hence, I became a comic. So those long-term repercussions are real. [laughter]

Peter: [00:12:40] Two years, she was in for treatment?

Anna: [00:12:42] Yes. And if only we had that drug. What they did, she did electroshock and lithium. That's what they did back then.

Peter: [00:12:50] So, wait, so you only know this stuff anecdotally. So who took care of you?

Anna: [00:12:53] I floated around with family members because my dad left. It was an interesting time. And so when I had my daughter, I wanted to make sure that I wasn't having the same thing. But now that you talk about serotonin issues and that and learning on this show that serotonin happens in the gut. Well, later in life, at 58, she's diagnosed with celiac. I'm diagnosed with celiac. And it makes me wonder about the whole serotonin thing. I don't know.

Peter: [00:13:16] Can I ask you question about your mom? So when she came out of the hospital, she then got you back and raised you immediately after that? And she was okay?

Anna: [00:13:27] She was not okay. But, yes, she raised me. She struggled.

Peter: Got it.

Dr. Kipper: [00:13:29] Are you close, or are you close now?

Anna: [00:13:32] No, she passed away nine years ago.

Peter: [00:13:35] I wonder, you know something? Because my mom had a lot of issues and was at doctors all the time and depression, didn't come out of the room 'til noon any day. I don't know the story of when I was born, how I was, how she handled that. Nobody talks about that stuff. But it's really interesting. And you're talking previous years, they didn't have the techniques and the ability or the sensitivity to do this. Wow.

Dr. Kipper: [00:13:57] And, Peter, to your point, people still don't talk about this. There's a tremendous sort of guilt to this that happens, not just with the mom, but with the family and because...

Peter: [00:14:10] They're supposed to be parenting and they're not.

Anna: [00:14:11] And I was going to say, when you said earlier, you know, ask your mom how her menopause was, because generally it's genetic, like how you're going to handle it. And I would say since she's been gone for nine years, you know, and back then too you would never talk about it. I feel like we're barely talking about menopause now. And it's very important, which is why we're doing it, and why we're talking about it, because my mom certainly wouldn't have told me anything. Women didn't talk about it. You know, so if you have a mom in the physical with you, I'd talk about it with her and ask her about it.

Dr. Kipper: [00:14:41] I remember, as I have two brothers, and I remember when we were little kids, I once turned my older brother and I said, "Mike, on the calendar that we have for our family, what does period mean?" And we were, I was 6.

Anna: That's amazing.

Dr. Kipper: And he didn't know. I didn't know. And I mean...

Anna: [00:15:02] She warned you, though. She was trying to warn you.

Peter: [00:15:05] And because of that, both of David's brothers and David became doctors.

[laughter]

Dr. Kipper: [00:15:09] Just to find that out.

Anna: [00:15:12] That's a long walk to find that out.

Peter: [00:15:15] Amazing.

Dr. Kipper: [00:15:16] So, I'm going to ask a couple other questions because I know we need to move along. But, one of the questions that came up in this family and this week in the office was about options for birth control. This was a family that didn't want more children and were birth control pills the best way to go? And there was a family history of breast cancer in this family. So...

Anna: [00:15:38] Good question.

Dr. Kipper: [00:15:39] Oral hormones were probably not safe. So there are a couple other things, and I won't use this as a quiz, but I'll quickly run through this. There's a hormonal IUD. It's called Mirena. And Mirena is, you can leave this IUD in for five years. It releases

hormones that keep you from getting pregnant. It actually releases progesterone. And progesterone, as we talked about, is one of those two hormones. And what progesterone does in this is to thicken the cervical mucus and form a little barrier over the cervix so that the sperm can't get in to find the egg. So that's how that works.

There's a birth control shot. There are menstrual cups where you actually put a little cup that goes over the cervix and that will catch some of the blood and prevent actually the sperm from getting in. So there are other forms of birth control. If you are like this family that visited with me this week that are safe and are non-hormonal in that regard.

So I'm going back to some questions now and we're almost done with this. Can you get pregnant during your period?

Anna: [00:17:04] Yes.

Dr. Kipper: [00:17:05] Bingo. Yes.

Anna: [00:17:07] I've done that. I have a 24-year-old to prove it.

Dr. Kipper: [00:17:08] Do you know why that happens or how that happens?

Peter: [00:17:15] Because the sperm was so strong it said, "Ha, ha. You can't stop me. I'm going. I'm going in."

Anna: [00:17:22] Yeah. The sperm's, like, "Hey, I'm a good-looking sperm. Get out of here. Get down here, egg."

Peter: It's like a Schwarzenegger sperm.

Anna: "Come down that fallopian tube and let's do this. We're making a baby."

Dr. Kipper: [00:17:30] So that's half of the answer that the sperm lives for. How many days does the sperm live in there?

Peter: [00:17:36] Ten days. But if you call that living.

Dr. Kipper: [00:17:38] It's five days. I mean, maybe yours are ten days.

Peter: [00:17:43] I'm just going by me.

Anna: [00:17:44] Peter, you got me on that one.

Dr. Kipper: [00:17:46] If a woman's ovulatory cycle is unpredictable and they're ovulating early, and the sperm is there at the right time. So, yes, you can get pregnant during your period.

And the last question I'm going to ask, which I think is sort of interesting, women think they lose a lot of blood during their periods, most women do. So if you were to quantitate this in tablespoons, I ask each of you, how many tablespoons do you think women lose on average?

Peter: [00:18:20] Twenty-six. I just wanted to make it seem like I knew.

Anna: [00:18:22] Two.

Dr. Kipper: [00:18:23] Two to 26. Lorre?

Lorre: Five?

Dr. Kipper: [00:18:29] But. So, Anna, once again, you're closest. It's between... Actually, you and Lorre got this right. It's between 3 and 6 tablespoons, so it's not... Women think they're losing a tremendous amount of blood, but they're really not.

Anna: [00:18:43] Four tablespoons is a quarter of a cup. That seems substantial.

Peter: [00:18:46] Quit showing off with your conversion stuff.

Anna: [00:18:48] Well, I know it's only if I'm cooking that I know these things.

Peter: [00:18:52] All right.

Dr. Kipper: [00:18:53] So, another question is, is period sex good or bad for you?

Anna: [00:19:01] I would say, it's great for you.

Dr. Kipper: [00:19:03] Why do you think it's good?

Anna: Oxytocin.

Dr. Kipper: Well, a couple of things do happen. It reduces pain on your period. And so the oxytocin that comes from the sex does help reduce pain. Anna, you're exactly... you know your menstrual issues.

Anna: Sadly.

Dr. Kipper: And there's a little more lubrication that happens during sex. So that actually makes women feel better during this process. But what's the bad news in this? What are the negatives for having sex during your period?

Anna: [00:19:39] Babies can happen if you don't use protection.

Dr. Kipper: [00:19:41] If you don't want babies, yes. So during this period of time, there is a change in the microbiome in the vagina. And that change in the microbiome sets the stage for more pathogens coming in. So there are more STDs during sex on a period.

Anna: [00:20:04] Gentlemen, if you're listening now, you can turn it back on. Just kidding. I hope you listened to that whole thing. That was important.

This is a subject matter that affects all of us. Type 2 diabetes, Type 1 diabetes. Can diabetes be reversible? I know we're focusing on Type 2, but I figure you're probably going to give us a little primer here and tell us the difference. What's going on with diabetes?

Dr. Kipper: [00:20:25] This week, I did have two families who came in dealing with diabetes, and the amount of misinformation or lack of information out there is always a

little overwhelming to me because these things are, you know, the articles on diabetes and the media on diabetes, it's everywhere now, especially with these drugs that are out now to control the Type 2 diabetes. So there are two types of diabetes.

Very quickly, Type 1 diabetes, you run out of insulin. Usually, it's in your teenage years and you then have to go on insulin shots because you no longer have insulin. So we're really talking more about Type 2 diabetes. The insulin itself becomes resistant. It's not working as well. You may be making enough of it, but your body isn't responding to it.

Anna: [00:21:12] What, the cells don't want the insulin? Like why is that?

Dr. Kipper: [00:21:15] Well, insulin resistance is a function of the insulin that's being produced is not being adequately used by the body. Why does that happen? It happens because almost always because people have extra adipose tissue. They've gained weight. Adipose tissue is a magnet to the sugar. The insulin can't capture it enough to take it from the circulation and put it into the muscle cells and into the liver for storing. So your insulin is there, it's just not able to do its job.

So that's insulin resistance. And that's actually the basis of not only these treatments with these new semaglutide medicines, but it's also the basis of what's going on with these neurodegenerative diseases like Parkinson's and Alzheimer's. So that's what happens. You cannot cure at this point Type 2 diabetes. We can mitigate it. We can control it. What's the simplest way to control Type 2 diabetes? Let's throw that question at you.

Anna: [00:22:19] Don't ingest excess sugar.

Dr. Kipper: [00:22:22] Weight loss. It's the simplest one, because if you reduce the amount of adipose tissue, you're going to make the insulin that's being produced by the pancreas more efficient. So the more fat cells you have, the less insulin is going to be available.

Peter: [00:22:37] But, David, what about people who are thin, who have Type 2 diabetes?

Anna: [00:22:40] Oh, yeah. My husband's uncle was so thin and he had Type 2. But he did eat a tremendous amount of sugar in baked goods and cookies and he loved that stuff, so I was like, okay. But he didn't present like somebody who gained weight, you know?

Dr. Kipper: [00:22:57] So that speaks to the point of insulin resistance from a different source. It's not just the adipose tissue. It's that the insulin that's being produced, for whatever reason, that mechanism is not working well and the cells are not responsive for some reason. So, yes, there's also that reason. That's more difficult to control. You know, that's just something intrinsic in the way your body's working. When it comes from being overweight, that's a much easier mechanism to control. So we're not able to cure Type 2 diabetes.

I think in the future we are going to be able to cure both because I think stem cells are going to be the answer for that. They've been working on this. They're actually looking at microbiome transplants, by the way, to see if by adjusting someone's microbiome because the insulin levels are developed and determined in the microbiome. So if you take a microbiome from somebody that has no diabetes, put that into somebody that has diabetes, you might see some changes. And we've actually seen some of this. So that's another potential mechanism.

Peter: [00:24:10] How do you do the transplant? Because we talked about fecal cells that you put in, if you have an infection that can't be cured and you're putting the healthy fecal cells in somebody's microbiome, how do you transplant an entire microbiome?

Dr. Kipper: [00:24:23] Well, you can transplant the cecum. The cecum is where all this takes place. So, again, those questions have to be worked out. But there is a potential mechanism now going forward, not in the next few years, but as we get better and better with these microbiomes and also gene editing is going to come into this at some point. But we're far away from gene editing because we don't know all the negatives, but we know that there are some potential positives.

[music]

Peter: [00:26:09] In this week's This Just Happened, and this relates to diet, I guess, and also diabetes. There's been a cholesterol treatment breakthrough. David, what's the breakthrough?

Dr. Kipper: [00:26:20] The breakthrough is a discovery that we're not just dealing with the bad LDL cholesterol as a mechanism for coronary disease. We do know that cardiovascular disease is dependent upon these high lipid levels. And, forever, we've been chasing down the bad cholesterol, the LDL cholesterol. And we've been able to control that. But we're still not doing a great job.

What we have found recently in the last couple of years, we've identified another bad cholesterol. We talked about this a little bit on a couple shows ago about how there is a lipoprotein (a) and the lipoprotein (a) is a cousin of LDL. It's a different form. And it's also made in the liver. And it also is atherogenic. It makes bad lipids. But what we didn't know was how significant it was. We didn't know really where it came from.

What we've learned that this is primarily a genetic issue. So that diet and weight loss and exercise and all these lifestyle maneuvers that we use to bring our cholesterol numbers down and our weight down have no effect on this because this is genetically predetermined. So now what do we do? Well, what we now do is we figured out some medication and treatments for this that we can, first, we identify the lipo (a) levels in the body. We can do this very easily and we can determine whether, just like LDL, you have a low risk, you have a moderate risk. Oh, boy, you have a lot of this stuff, so you have a high risk.

It also affects the aortic valve. So this buildup of this particular lipid has a negative effect on one of the important valves in the heart, not just the coronary artery. And this is huge. I mean, 1.5 billion people in the world have this. So you can be tested by your doctor. It's a question to always ask your doctor now, "Can you test me for my lipo (a), not just my LDLs?" And what we have available now are some treatments. So one treatment, and they all basically do the same thing. They all work on the liver to make the lipo (a) production minimized or eliminated.

And the product that's on the market now that's sort of gaining a lot of interest is something called Lipodiscerin. And Lipodiscerin is safe. It's effective. It is part of this RNA technology that we are using that that we take these RNAs that make proteins that can counteract the protein synthesis of the lipo (a) in the liver. So that's sort of where this comes from. And then I'm going to get to another one that's analogous. They work within two weeks and

they could stop the production of the lipo (a) for up to a year. And they're about 95% effective. So if you test positive in your doctor's office for lipo (a), there is treatment for this. And the treatment is, unlike the statins, which you have to stay on forever pretty much. And they're not 95% effective. It's a much lower effectiveness. It's a good effectiveness, but it's not like this and it doesn't work in two weeks. So this is really amazing information.

They're now doing gene editing to do the same thing to eliminate these lipo (a)s from the liver. And, again, we run into this problem with gene editing. And the gene editing studies have been unbelievable. But, with gene editing, we don't know the long-term effects. If we're knocking out the lipo (a)s with gene editing, what else are we knocking out? We don't know yet. We're just starting to look at this.

So this CRISPR technology that we've talked about before, which, and if you think about what this is, you have a gene, you have DNA, which is that double stranded stuff that codes for a protein, you take an eraser like you would to your assignment in school and you just erase something. That's what we're doing. We're erasing a gene. And where this is going to take us in other ways, we don't know.

But there are some good therapies now for lipo (a). It's going to change the landscape because now if you can reduce the LDLs with the statins, if you can almost eliminate lipo (a)s with these treatments, and I think it was two weeks ago we talked about Colchicine, that we're using now for the inflammation in these coronary arteries that's part of this puzzle. Now we've got a trifecta of minimizing coronary disease. So for those youngsters out there that may or may not be listening to this podcast, there's great hope out there. And especially for these people with a lipo (a) problem that have this genetic issue. And no matter how skinny they get, no matter how much sleep they get, no matter how much exercise they get, that's not going to help this problem. But now we have something.

Peter: [00:31:39] That's a great This Just Happened. And relating to all of this, we have a great question in our Hey, What About Me? segment that has to do with weight, weight loss and the new drugs that are out there.

Caller: [00:31:51] Hi, Dr. Kipper. I know there's a lot of talk about diabetes drugs that help with weight loss, like Ozempic. But now I hear there's an even better one. Is that true? Thanks.

Dr. Kipper: [00:32:01] The answer to this is there is a better one. It's called Zepbound: Z-e-p-b-o-u-n-d. Zepbound. It's an injectable. It's the newest entrant into this race of the Ozempics, the Rybelsus, the Wegovys and the Mounjaros. What these four drugs do, they work on what's called the GLP-1 agonists, and those are glucagon like peptide agonists. They increase the insulin response. They help the body break down sugar and fat by slowing down the gastric emptying. Remember, the stomach stays open longer, which promotes some hormone release in the brain called leptin, which tells you to leave the table, you're full. And it also minimizes the secretion of glucagon. And glucagon is a storage product for sugar that the liver has in case we need a big burst of energy. The glucagon is released, sugar gets released, and we have more energy.

The reason Zepbound is better than these four is that it contains something called tirzepatide, and tirzepatide is now added to the GLP-1s and it is a GIP product, that stands for gastric inhibitory polypeptide. And what that does, specifically, it works on the brain to make the brain feel that we don't need to eat. It's very much in the leptin group, but it augments the leptin release in the brain to say, "Okay, we're full." So now you add the GIP

to the GLP-1 and you have this super semaglutide, which is called Zepbound. And it is amazing in the results in that the average weight loss on this product was about 52 pounds over 16 months. And it's safe.

Anna: [00:34:04] I was going to say, are there side effects? Is it going to be hard to get like the other ones? Is it going to be a shortage?

Dr. Kipper: [00:34:09] It's going to be a shortage because it's as expensive as the other ones. It's going to be about \$1,000 a month. And the difference is, is the insurance companies are just now getting used to paying for Ozempic and now we're begging them to pay for these other ones, Mounjaro being the better of those four. And now you've got something that's coming around that's even better. It's a very big problem now. And the reason this is an important problem is, that if you think about this, weight loss has such impact on all chronic illness.

Never mind just heart disease and diabetes, it affects everything, because the more weight you carry, the more inflammation you have in your organs, the more inflammation you have, the more likely you are to get cells that are going to change, convert to cancer cells. And all the chronic illnesses that people have, whether they're autoimmune, whether they're cardiovascular, these illnesses are worsened by inflammation. So these drugs have an amazing effect well beyond weight loss.

Peter: [00:35:21] Well, David, I've got to ask you, though, so what's this new drug that beats the other drugs, they've been trying to get a weight loss drug that does this for, I mean, a long time, long, long time in laboratories that creates satiation. It seems like they keep coming up with new and better and they realize the amount of money you can make by creating that drug.

Is in two weeks there going to be a drug that beats this drug? And then in three weeks, a drug that beats that drug? Have they opened the floodgates to figuring out something they never figured out before accidentally from a diabetes drug or whatever that happens to be doing this? And now they go, oh, now we understand what inhibits and what hits that part of the brain. The floodgates have opened. Now we just keep upping the ante and making a better drug, a better drug, a better drug.

Dr. Kipper: [00:36:06] The answer is, yes, Peter, I think that this technology and this research is going to keep going. I think where we're going to see the differences initially is in how we deliver these products. So right now, all of these, except for the Rybelsus, are delivered as injectables. Not everybody wants to do an injectable. And so they're now looking to make these all into oral products. So that's going to change that landscape a little bit. What really needs to change is not how we are fine-tuning these, but how we are reimbursing people for these medicines.

Peter: [00:36:42] Wouldn't you think it's as soon as they become more available and produced en masse, the price will go down hopefully?

Dr. Kipper: [00:36:49] Now, this is a big discussion with Medicare, because Medicare, you know, think about who's on Medicare, people that are over 65. Where do you see most degenerative illness and most chronic illness? People over 65. So who benefits the most? So these conversations are going on between the drug companies, the government and the general public. It would be so nice if we could muster the same kind of dialog and

social media campaign that we do with other things politically with this issue. This would be a really interesting way for us to approach this problem.

Peter: [00:37:32] Well, shouldn't the cost... I mean, they rip us off as far as epinephrine, which costs a dollar and has been around 100 years and injectables a fortune for an EpiPen. Isn't this because it was discovered, incidentally, it already existed in other treatments? They didn't spend a billion to develop this stuff. They don't have to get their cost back. Wasn't this already produced, these drugs, series of drugs, already existed for something else, so the immense charge shouldn't be there for the development, I'm guessing.

Dr. Kipper: [00:38:01] And to your point, Peter, these drugs, these new semaglutides didn't come out of the air. They came out of a progression. Remember, we had Trulicity, we had things before this that were precursors to this, where they were getting smarter and then they got a little smarter. And so, absolutely right.

Peter: [00:38:20] Well, you know, it'll be interesting to see if the price, if and when with lobbying, etc., these prices drop. All right. Let's do a recap. A lot of stuff we covered.

Anna: [00:38:29] We did cover a lot today. We had "Period Jeopardy."

Dr. Kipper: [00:38:32] So don't be afraid to ask your doctor to explain some of these nuances. It's always an uncomfortable conversation when you talk about women's health issues with men and with women. Not everybody really understands how this works. So talk to your doctor if you have any questions.

Anna: [00:38:52] And then we discussed diabetes. Is it reversible? Is it curable?

Dr. Kipper: [00:38:57] Not reversible at this point. But I think there's hope in the future. Type 1 diabetes, you run out of insulin, so you're going to be dependent on it until we come up with those formulas. And Type 2, at this point, not reversible, and mitigate this best with weight loss.

Peter: [00:39:16] You talked about in the This Just Happened segment, the cholesterol treatment breakthrough that just happened, which is important.

Dr. Kipper: [00:39:22] We have a treatment now that's here for lipo (a) problems. Ask your doctor to check you for it and ask your doctor what's available now to treat it.

Peter: [00:39:31] And in the Hey, What About Me? our caller wanted to know about yet another weight loss drug that just hit the market. Does it work better?

Dr. Kipper: [00:39:39] Zepbound, it's the newest addition, and it does work a little better. It's safe. The weight loss statistics are better than any of the others. It may not be available because of its cost, but it's going to be on the shelves.

Anna: [00:39:54] If you have a question for Dr. Kipper, why don't you head on over to [BedsideMatters.org](https://www.BedsideMatters.org) and enter your question? He might just answer it on the air. Plus, we have socials, [@BedsideMattersPod](https://twitter.com/BedsideMattersPod) on Twitter/X/whatever you want to call it, and [@BedsideMattersPodcast](https://www.instagram.com/BedsideMattersPodcast) on Instagram. Follow us, and like us and we'll follow you back.

Peter: [00:40:14] There you go. And, by the way, I want to thank everybody who participated in the show. Dr. Kipper, the book Override. It's so important to know about brain chemistry and how it impacts everything you do, every decision you make, procrastination. It's fascinating. Fascinating book. Check it out.

Anna's website offers recipes, sauces, spices, her cookbooks, all about gluten-free, grain-free, low-carb eating. Go to AnnaVocino.com. Producer Lorre doesn't have a website. If she did, it would be fascinating. She's a great artist and a wonderful producer.

And you, of course, I want to thank you for listening to Bedside Matters because, if you're sick and tired of being sick and tired, we're here to help. We offer new episodes every Monday, so follow us, like us, and have a terrific week.

Announcer: [00:40:59] The information on Bedside Matters should not be understood or construed as medical or health advice. The information on Bedside Matters is not a substitute for medical or health advice from a professional who is aware of the facts and circumstances of your individual situation. Thank you for listening. If you enjoyed the show, please share it with your friends. We'll see you next time.