## **Tomatoes for Blood Pressure and Healthy Alcohol** S1, EP 55

Did you know that tomatoes can be beneficial for your blood pressure? That's what we learn in this week's episode of Bedside Matters. Also, we'll explore the connection between being neurotic and aFib, and our caller wants to know if there any healthy alcohol drinks. The answer might surprise you.

**Peter:** [00:00:17] Hello, and welcome to Bedside Matters, the podcast that addresses the medical issues that impact every single one of us every single day. I love saying that because I know people are nodding at home. We'll hopefully give you the answers you're looking for so you can be more informed and, of course, healthier.

I'm Peter Tilden, one of your hosts. Anna Vocino is here with us, as is Dr. David Kipper, which is always good because we're so shy of a medical degree we couldn't answer your questions. So today's show, we've got lots to discuss, as we always do – Anna.

**Anna:** [00:00:47] Lots to discuss. First of all, we just found out tomatoes, eating more tomatoes may help lower blood pressure is, I mean, that seems crazy, but we're going to discuss it. And then the tie between neuroses and atrial fibrillation.

**Peter:** [00:01:02] And then in This Just Happened, Stephen Colbert recently had his appendix burst. And since it recently happened, what does that feel like? Can you tell it's coming? If it happens, how much time do you have until you better be seeing somebody with a scalpel? So, all of those questions will be answered. And in our Hey, What About Me? segment, I think today's question has to do about alcohol and how much or when. We'll find out.

**Anna:** [00:01:28] Tomatoes, speaking of alcohol, does this count the tomatoes in Bloody Marys? Will it help you lower your blood pressure? What's the deal with tomatoes? And is it raw tomatoes, cooked tomatoes? What is this new study?

**Dr. Kipper:** [00:01:38] It's all of the above. And tomatoes, lo and behold, are good for people with high blood pressure. So we know that people that have high blood pressure have a higher mortality and morbidity rate. And there are several causes for high blood pressure, most of them being genetic.

But this is where the tomatoes come in, They come in, it's in relationship to something called oxidative stress. And oxidative stress is something that creates inflammation. The inflammation destroys, to some degree, the interior lining of the blood vessels, and it's that inflammation in the blood vessels that accentuates, leads to high blood pressure. So what do we do about that? Well, we like to treat the inflammation and prevent oxidative stress.

**Anna:** [00:02:30] What is that?

**Dr. Kipper:** [00:02:31] When a cell breaks down and all our cells break down, they liberate these things called free radicals. And these are little compounds that have an extra hydrogen molecule on them and they are inflammatory. They create the inflammation. We've always heard of antioxidants, right? So the antioxidants diminish the amount of

oxidative stress. The antioxidants gobble up, they're scavengers through these free radicals. That's how they work. That's why they're good.

And so these antioxidants are helpful if you have somebody that has inflammatory changes, like in the blood vessels. We have drug treatments for high blood pressure. They're costly. They are filled with side effects. They have to monitor them. And we have alternatives, which are lifestyle. We try to get people to lose weight. And we are also trying to get people to eat better, as we know. And one of the things that falls into the eat-better category are tomatoes. And can you guys guess at all why tomatoes might be good for blood pressure?

Anna: [00:03:45] Lycopene.

**Dr. Kipper:** Tomatoes have lycopene.

Anna: I was right?

**Dr. Kipper:** [00:03:46] You were right on the money.

Anna: [00:03:48] I just said the one smart word that I knew that was associated...

**Peter:** [00:03:50] By the way, let's give some insight and true reveal here, by the way, true transparency. You have a company that makes tomato sauce with the lycopene.

**Anna:** [00:03:57] I own a tomato sauce company. And I just had an idea. I think that Kipper, I'm going to hire Dr. Kipper to be my medical doctor endorsing the Eat Happy Kitchen pasta sauce.

**Peter:** [00:04:08] Picture on the jar.

[laughter]

**Anna:** [00:04:09] Yeah. It's good for you. And then have him do it like a thumbs-up or something, you know, wearing a lab coat. Doc, are you up for that?

**Dr. Kipper:** [00:04:17] I'd rather wear a bib, because I'd get the pasta sauce all over my perfect white coat. And besides, I've never worn a white coat, so why start now for food promotions?

So, there are things that have lycopene in them. Tomatoes are the number-one winner in this. You can also find these in apricots, melons, papayas, grapes, peaches, watermelons, cranberries. They're in fruits and vegetables. And these lycopene acts as antioxidants.

So they did these studies and they found that people that were eating, not only the tomatoes, but supplementing with these tomato products had much lower blood pressure. And even people that were on blood pressure medicines, if they were eating tomatoes and supplementing with these, their blood pressure was even lower.

So just make sure if you have high blood pressure and you've done all the other right things, you've lost weight, you're exercising, even if you're taking medications, put some lycopene in your diet and tomatoes are the best source.

**Peter:** [00:05:26] Did we say how many is this, like ten tomatoes a week? Is there some cutoff point or...

**Anna:** Is too much tomato a thing?

**Dr. Kipper:** [00:05:31] No, there was... They study this with different amounts of these tomatoes and supplements, but they all ended up in the same place where the blood pressure readings, specifically the systolic blood pressure, that's the number on top were lowered. And so there's something to this. And we're always looking for healthy alternatives to medications. This is one of them.

**Anna:** [00:05:56] And you do want to eat, because it seems like they would just like extract lycopene and put it into a thing. But then you always want to try to eat the food version wherever possible. Right? Is that more powerful?

**Dr. Kipper:** [00:06:08] I think they're the same. And, Anna, that's a really good question. They found that, even with just supplementation of these lycopenes, they did a good job. And so many people have high blood pressure. And this gives them something to do that isn't a medication

**Peter:** Very cool.

**Anna:** [00:06:25] AFib and neuroticism, neuroses. What's the deal? I mean, it kind of makes sense because isn't AFib when your heart is going off the rhythm and it's fluttering?

**Dr. Kipper:** [00:06:36] Yes. Your atrium, the little chamber on top is spasming because of an electrical malfunction, and that's atrial fibrillation. And when that happens, the blood that has to go from the atrium south into the ventricle and from the ventricle into the rest of the body to the aorta, if you're fibrillating, you're not going to get the same amount of blood flow. So people get all the appropriate symptoms from that, which is dizziness, and they are predisposed to other things if you have atrial fibrillation.

So one of the things that is concerning to us is we're seeing a lot more atrial fibrillation. And the question is, you know, is that just because we're smarter at diagnosing this or is that because there's more of it? But to that point, if we can diagnose atrial fibrillation earlier or we know what are the precipitants of atrial fibrillation, and we can connect those dots to other conditions, we have a chance of minimizing and mitigating the effects of the atrial fibrillation.

So there's always been this interesting association of neurotic behavior. And by that I mean people that have more anxiety than others, anger, depression, stress, work stress, home stress, fear, irritability. These were all neurotic behaviors and we all have these behaviors. But some people take these to a much deeper level.

**Peter:** [00:08:09] I was going to ask you, when you were listing all of them, how many boxes, if we checked boxes, how many would be too many boxes?

Anna: [00:08:18] Right.

**Peter:** [00:08:18] Just for fun. I was kind of checking boxes as you went along. I'd be curious how many boxes I should be worried about.

**Dr. Kipper:** [00:08:24] Well, these, again, these are all very normal emotions and behaviors. The difference is, if you're obsessing over these and they're interfering with your basic life functioning, then you fall into a little deeper category of being neurotic. And so, the association was that people that had atrial fibrillation, a lot of them had, most of them had these behaviors.

So we always assumed it was an association. But there were some studies done that actually proved a cause and effect, that people that had these behaviors for whatever neurochemical reasons, there's some connection of the brain to the electrical system in the heart with these issues. And it's just an interesting study because, again, we're seeing a lot of atrial fibrillation, just as we were seeing a lot of high blood pressure in our last conversation.

And if you have these symptoms to some excess or, you know people that have these symptoms that are interfering with their life, there is that association. And so what we can do to help prevent the tendril atrial fibrillation because of those, is to address these issues. So people that present with neurotic behavior and, again, most of us have these behaviors, but to the point where they are being affected in their life and their functionality, you need to see somebody to address these issues because it is another risk factor for a very dangerous disease.

Peter: [00:10:00] It has to manifest itself somehow, right?

**Dr. Kipper:** [00:10:03] Yes.

**Peter:** [00:10:04] So, get help. By the way, in This Just Happened, Stephen Colbert had to take off from his show because he had emergency appendectomy, appendicitis.

**Anna:** [00:10:13] I didn't even know this. That's so scary.

**Peter:** [00:10:16] Yeah. He was rushed to the hospital, emergency surgery. And growing up, I always, you wonder, is this the pain that I should call about?

**Anna:** [00:10:23] Have you guys ever had an appendectomy?

**Peter:** [00:10:25] I never have.

Anna: [00:10:26] Me, neither.

**Dr. Kipper:** [00:10:27] No. I've done two of them, but I haven't had one.

**Peter:** [00:10:30] So, for people wondering, they heard that story. But you wonder, how do you present? What does it feel like? How bad is the pain on this side?

**Anna:** [00:10:39] How do you know?

**Peter:** [00:10:40] How quick do they have to respond? All of that stuff. And can you miss it? Is it possible to go, "I just waited for it to pass"? So, there you go.

**Dr. Kipper:** [00:10:47] Stomachaches are pretty common. So most people get a stomachache and they sit on it or they try to go backwards and figure out what they ate. But this is a very different kind of stomachache and it usually presents with nausea. So

people first can get some nausea, they get abdominal cramping, and that cramping can be sort of generalized. But then pretty soon it starts to localize into where the appendix is.

I think we've talked about this before on the show, to find your appendix, draw an imaginary line between your bellybutton and the top of your right hip and in the middle of that line and underneath is your appendix. So at some point, those pains start to localize. The problem is, is that you can get a chronic appendicitis, you can have a low grade. And I think this is what happened to him, which I think is why this is even more interesting. Someone who has an acute abdominal crisis, they're going to go to the emergency room and the doctors are going to figure this out.

But I think the point of this story for me, anyhow, is that people can get chronic appendicitis and you can get these symptoms, they can come and go and they can be dormant for a while, and then they'll come back and pretty soon you're sort of wondering until ultimately the appendix burst. And that's what happened to him. His appendix just broke open.

And the appendix, which is part of the bowel, when it breaks open, there are a lot of bad bacteria, gram-negative bacteria that circulate through the system, can create sepsis and potentially death. So the point here is that if you are getting these recurrent abdominal pains and they may be localized into the right lower quadrant and you have an associated nausea, go in and get it checked. Even if you recover from that and the next day feel better, make sure someone's taken a look at you because, again, these can be life-threatening.

**Peter:** [00:12:45] How long can that go on from the onset? Can these last days?

**Dr. Kipper:** [00:12:50] They can go on for a few months. And, again, more commonly they don't, but they can. And we're seeing more and more of this. They actually started using antibiotics for these situations and they've run these studies about what's better, using antibiotics to quiet the infection or to go ahead and take them out. Turns out that the surgery is probably your best option because ultimately they're going to come back and create a problem.

**Anna:** [00:13:17] Better out than in, you know, when I've heard the crazy stories where somebody didn't even realize it was inflamed or whatever, but then they got into an accident or something happened with their body jostling and it burst the appendix. And that sounds very frightening.

**Dr. Kipper:** [00:13:30] It is very frightening. And if you ever see somebody that's had a burst appendix, it's like they're delivering a baby without any anesthesia. It's just the worst.

**Anna:** [00:13:40] No thanks.

**Dr. Kipper:** [00:13:40] Because the bowel is smooth muscle. And when smooth muscle spasms, which it does with this, it's the worst pain, it's what a kidney stone is like, it's what giving birth is like, a gallstone. Do you guys know what the appendix is for? You know what the function of the appendix is?

**Peter:** [00:13:56] Is it vestigial? It's no longer needed?

**Dr. Kipper:** [00:13:58] It is vestigial. It will ultimately, not in our lifetime, but eventually, like the little toe, it's going to go away.

**Anna:** [00:14:05] Well, it was something having to do with the liver, right? Because isn't it off the liver?

**Dr. Kipper:** [00:14:11] Well, it actually stores good bacteria.

**Anna:** [00:14:15] Oh.

**Dr. Kipper:** [00:14:16] And that also then translates...

Anna: [00:14:18] It seems like we need good bacteria.

**Dr. Kipper:** [00:14:19] Well, we do. And it translates into helping out the immune system. It helps make immunoglobulin, which is immunoglobulin A and it helps with B lymphocytes, also the memory ones. So it does have an immune function and it does store these good bacteria that help your microbiome. But as Peter pointed out, it's vestigial. So in an evolutionary sense, it's going away. But until it does!

**Peter:** [00:14:50] Yes, by the way, take care of your vestigial organs. Can you tell when it bursts, David? Can a person who's having a burst, is it something that's, "Oh, uh-oh!"

**Dr. Kipper:** [00:15:00] Yes. And you know this right before it bursts. Because again, what happens is the appendix itself, which comes off of the small intestine, gets plugged up and everything that's in it just can't get out. And so it just gets bigger and bigger, like a balloon and then boom. But as it's getting bigger, it's smooth muscle and it's spasming. And so you're in a lot of pain. So most people get this out. But his didn't, Colbert's actually burst.

[music]

**Peter:** [00:16:48] In our Hey What about Me? segment that we do every week, we let you ask a question. This caller wants to know about alcohols, and I'll let them ask the question:

**Caller:** Hey, Dr. Kipper, I try to stay healthy, but I like to drink once in a while. Are there any alcohols that are more healthy than others?

**Dr. Kipper:** [00:17:03] So, to our caller's question, which is an interesting question, because there are differences in the alcohol. Some are more healthy than others. Some are better tolerated, some are more prone to giving hangovers. And I thought it might be fun to have one of our little quizzes, ask you guys a few questions about alcohol.

**Anna:** [00:17:24] Great.

**Dr. Kipper:** [00:17:25] What is the least harmful alcohol?

**Anna:** [00:17:28] As far as lowest alcohol percentage?

**Dr. Kipper:** [00:17:31] Well, it turns out that whiskey is actually the least harmful alcohol to your general health.

**Anna:** [00:17:37] Well, tell that to everyone's grandfather. He was right.

**Dr. Kipper:** [00:17:41] And anything you put in with tonic is healthy because the tonics contain quinine, and quinine actually has some medicinal qualities.

Peter: [00:17:52] Malaria. You don't get malaria if you're drinking quinine, right?

Dr. Kipper: [00:17:55] Exactly right.

Anna: [00:17:56] I need to rethink my bar.

Dr. Kipper: [00:17:58] Exactly, right.

Peter: [00:18:00] You should have sections, with malaria drinks and...

**Anna:** [00:18:04] Drinks to prevent malaria. Drinks to prevent yellow fever.

[laughter]

**Dr. Kipper:** [00:18:06] You get a choice. You get a vodka tonic or a vaccine for the malaria. Brandy, full of antioxidants.

**Anna:** [00:18:13] And brandy is fermented. What is brandy?

**Peter:** [00:18:17] Brandy is a liquor produced by distilling wine?

**Anna:** [00:18:19] Yeah. So, Brandy is a distilled wine. So it's distilled grapes. So it's taking away the sugar content.

**Dr. Kipper:** [00:18:27] Okay. Lowest calorie drinks of alcohol. What do you think?

Anna: [00:18:33] Vodka soda is lowest carb.

**Peter:** [00:18:36] Jagermeister. It's the only one I know.

**Dr. Kipper:** [00:18:37] Anna, you are spot-on today.

**Anna:** [00:18:4] I'm on fire today.

**Dr. Kipper:** [00:18:41] Vodka soda has is like the second lowest caloric alcoholic beverage. The first one is a white wine spritzer...

Anna: [00:18:50] Yes.

**Dr. Kipper:** [00:18:51] ...75 calories. Vodka, soda, 82 calories. Prosecco, hundred calories. And my personal favorite, a vodka martini. Any guesses?

Anna: [00:19:06] 120 calories.

**Dr. Kipper:** [00:19:07] On the button.

**Peter:** [00:19:08] The category we found for you is liquor.

## [laughter]

**Anna:** [00:19:14] Wow,120 calories in a martini. Is it because you're putting more vodka in a martini to fill up the glass and less and of like you're diluting the divide with soda.

**Dr. Kipper:** [00:19:24] It's a pure alcohol. So pure alcohol has less sugar and therefore less calories. So which is healthier red wine or white wine?

**Peter:** [00:19:33] White wine.

**Anna:** [00:19:34] White wine has fewer calories, but I feel like red wine has the resveratrol.

**Dr. Kipper:** [00:19:38] Well, you're both sort of right. So the skins of the grape are fermented in the processing of the red wines, along with the actual grape and the juice of the grape. And you're right, the skins have some antioxidants. They have resveratrol and they also have guercetin.

Quercetin is an interesting thing. I'll just comment on that. Quercetin is a compound that inhibits the breakdown of the acetyl aldehyde. So alcohol is broken down into acetyl aldehyde and then that has to get broken down. If it doesn't get broken down, that goes on to cause hangovers. So quercetin, which is in the skin, actually inhibits the breakdown of that enzyme and builds up acetyl aldehyde. So, quercetin can actually cause migraines. And that's in the red wine. And in the white wine, the white wine also has antioxidants in it, but they don't use the skins.

**Anna:** [00:20:41] No, they take the skins off real fast. And rose is pink because they put the skins on for like a minute and then they take the skins off. Fun fact.

**Dr. Kipper:** [00:20:50] Very good. You know your alcohol.

Anna: [00:20:52] Well, I live in wine country now, so I've been around folks making it, but I didn't know all this science and all these things. But, you know, the Italians swear by grappa. They say that it will, you'll never get a hangover if you end the night with a shot of grappa. And grappa is basically all the residue, the skins, all the leftover, and it's rocket fuel. It tastes terrible. Now, I don't think that's true because I've definitely been hung over after having grappa. But by their argument and your argument, there would be more. You get more antioxidants in grappa because it's all the skins.

**Dr. Kipper:** [00:21:28] Yes.

**Anna:** [00:21:29] But in practice, it doesn't feel great. Shall we recap?

**Peter:** [00:21:33] Sure.

**Anna:** [00:21:34] Today we talked about tomatoes and how eating them will lower blood pressure.

**Dr. Kipper:** [00:21:40] So, if you have high blood pressure and so many people do consider eating some tomatoes, tomato products and some of the other fruits and vegetables, which will help lower your blood pressure. Also, they will augment the good effects of the medications that you might be taking.

**Anna:** [00:21:57] Then we talked about neuroses and atrial fibrillation and treating one to help the other.

**Dr. Kipper:** [00:22:03] So if you or any of your friends that are close to you are neurotic, have them checked out for atrial fibrillation, know that it's a risk factor.

**Peter:** [00:22:13] In This Just Happened, we talked about bursting appendix, which happens every day of the week somewhere. It's like, it's 5 o'clock somewhere, somebody's appendix is bursting right now. What do you need to know? David?

**Dr. Kipper:** [00:22:24] If your appendix bursts, you'll know what to do because you'll be in that much discomfort. But know that appendicitis can be chronic and that you could have these symptoms on a lower level for months before things really go bad. So if you are having nausea, abdominal pain, episodes of this without understanding or your doctors understanding what this is, have your appendix checked out before it bursts.

**Peter:** [00:22:51] That's frightening. And then our caller wanted to know about healthy alcohols, which are the healthiest alcohols.

**Dr. Kipper:** [00:22:56] So, there are healthy alcohols. Some have antioxidants in them. And that's really the difference in what's healthy. Some have less calories. We talked about vodka that has less calories. So, there are healthier versions of alcohol. They're not all created equal.

**Anna:** [00:23:13] By the way, if you guys have a question for Dr. Kipper, you can head on over to BedsideMatters.org, and put your question in there and it might just get answered on the air. Plus, we have socials: @BedsideMattersPodcast on Instagram, @BedsideMattersPod on Twitter. Follow us.

**Peter:** [00:23:26] You know brain chemistry? We talk about it all the time because it's so important as far as our behavior and why we are the person that we are and why we procrastinate and why we drink too much. It's all in Override, Dr. Kipper's book. Make sure to check it out. You will be blown away, and don't procrastinate.

**Anna:** [00:23:44] Yeah, if you procrastinate reading it, you'll be like, "Oh my God, I should have read this forever ago."

**Peter:** [00:23:48] Exactly. Now, I know why I procrastinate. And, Anna? She's Miss Tomato Sauce.

**Anna:** [00:23:54] Tomato, tomahto -- both of them.

**Peter:** [00:23:56] And now healthier than ever, recipes, sauces, spices at her website: AnnaVocino.com. Thank you, producer Lorre, and thank you for listening to Bedside Matters 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 tomato.

**Announcer:** [00:24:15] 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.