

Your Morning “Cup of Joe” Could Be Doing More Than Starting Your Day - Frankly Speaking EP 54

Transcript Details

This is a transcript of an episode from the podcast series “Frankly Speaking” accessible at Pri-Med.com. Additional media formats for this podcast are available by visiting <http://www.pri-med.com/online-education/Podcast/coffee-frankly-speaking-ep-54>

Dr. Frank Domino:

Alice is 60 and she's here for her hypertension follow-up. Her blood pressure's under excellent control, but her BMI is just over 30. She has no other co-morbidities and has a few questions. She hears so much on the news. One day, it's, "Don't eat bacon." The next day, it says, "Eat bacon, grill your food or not, alcohol's good for you, alcohol's bad for you." Recently, she heard that coffee was beneficial and she asked you to explain. Joining me today is Jill Terrien, Associate Professor at the University of Massachusetts Medical School Graduate School of Nursing, and Director of the Nurse Practitioner Program at the University of Massachusetts Medical School. Welcome to the show, Jill.

Jill Terrien:

Thank you, Frank.

Dr. Frank Domino:

Wow, coffee. I have to have my few cups every morning. I know most of us do. Can you tell us a little bit about the issues around coffee being in the news lately, especially about its health benefits?

Jill Terrien:

Absolutely, Frank. I came upon this study. I happen to be an avid coffee drinker myself and I

thought it was very, very interesting. What this was, was a really... It was called an umbrella study, and what that meant, is that they looked at meta-analyses of both observational and interventional studies, that looked at the associations of coffee consumption in any health outcome, in any adult population in any country, in all settings. It was a very, very broad net that they cast. They excluded people that had genetic polymorphism, the people that only need a little bit of coffee that might really rev them up, they can't drink coffee after 4:00, to the people that could drink multitudes of coffee a day and not ever have an effect from it. So those people, anything about that was excluded from the actual review. What they found is that, when they looked at the observational research, they came out with like 60-plus unique health outcomes and 17 meta-analyses that looked to interventional research. What does it all mean? What they found is that coffee consumption was more of a benefit than a harm. They looked at a range of health outcomes and they looked at amounts of coffee people drank, that could be high versus low, none versus any amount, and also people that had one extra cup a day, which is really interesting.

Dr. Frank Domino:

Okay, so it sounds like this huge study looked at the influence of coffee on a variety of health outcomes, and they just excluded those that were slow to metabolize it and had adverse effects from it. What do those studies find?

Jill Terrien:

They found that, when you look at it overall, that in all cause mortality, if you drank three to four cups of coffee a day on average, that you reduced your all cause mortality. And it could be related to, also, cardiovascular mortality was decreased, cardiovascular disease was decreased, and that high versus low consumption also could have a risk of lowering cancer.

Dr. Frank Domino:

Wow, it sounds like this study gave very positive findings to getting folks to consider three to four cups a day. Realizing that some of this is observational, what do you think? Is that something you're gonna recommend to patients?

Jill Terrien:

Well, here's what I feel, and again, being a nurse for many, many years, that was my intro into coffee. I was a night nurse, and I didn't ever have coffee, and there I was, in my early 20s, working 11:00 to 7:00, and I thought I'd give it a try. And so I like coffee, and I'm happy that I fit in the three to four cup range. That seems to be me. But on the other hand, I don't know if I'd have somebody begin drinking it, just to see if it would benefit them. I don't think there's enough information about that. And what they propose at the end of this umbrella study, is that they do do interventional research, but that it's more controlled, because coffee itself can come in many different forms.

Dr. Frank Domino:

I was just gonna ask you about that. I think of coffee, as my parents percolating it on the stove, me buying my beans and grinding them right before I drink it, and now, there's the ubiquitous automatic cup-based coffees. What is coffee? And what about it, or what's in it that makes the difference? Is it just the caffeine?

Jill Terrien:

It's not just the caffeine. And I'll actually talk about decaffeinated products in a second, or decaffeinated coffee in a minute. But coffee is a really complex mix of bio-active compounds. And then coffee... It starts with the coffee bean itself, the type of bean. Most coffee is Arabica, but there's also other forms, such as robusta, and many more after that. Then what is the grinding process and the brewing process? Like you talk about your parents, I remember the percolator on the stove, I remember the electric pot, I remember all kinds of ways, there's French presses. And this study, in particular, did not comment on that, but one thing I was piqued is, how big is a cup of coffee? 'Cause if I'm going to my coffee shop and ordering an extra large, how many cups is that actually?

Dr. Frank Domino:

Sure.

Jill Terrien:

There is no standard universal coffee cup size that we know of. How did they look at cups and measure cups in this study, is that they actually... The data was collected in a lot of different ways, 'cause it was a multitude of studies. Sometimes they had people self-report, "How much do you drink in a week?" And then they average it out per day. Sometime they ask them to document daily consumption. As you can see, there were a multitude of ways they collected the data, to come down with the three to four cups a day being a benefit. One other thing I wanna say about the coffee bean, and coffee in general, is that it is made up of many bio-active compounds, particularly antioxidants, and that's where they think that most of the benefits does come from.

Dr. Frank Domino:

Okay, so now you mentioned decaf. Tell us a little bit about decaf.

Jill Terrien:

Well, what they found in these studies, as they looked at them, is that they had some similar outcomes, whether that was decaffeinated coffee or caffeinated coffee. Decaffeinated coffee beans have some of the same bio-active compounds, but they just don't have the caffeine or they have very little.

Dr. Frank Domino:

Okay. I've heard about the data on the reduction in all cause mortality and cardiovascular outcomes, and I remember reading about coffee consumption and protective effects on the liver. What about the harmful effects of coffee? What did this study find?

Jill Terrien:

As you know, they included all people, all populations, also pregnant women. One of the things they found is a possible harm in pregnancy to drinking coffee. Caffeine actually doubles its half-life when women are pregnant, so the fetus is exposed to it longer, and they think that that may be a harm, a potential harm. However, they did not talk specifically about neural tube defects or

anything like that.

Dr. Frank Domino:

So it was mostly the risk for a low birth weight and pre-term labor. But as far as this study shows, there wasn't any adverse effects on the pregnancy, with regards to structural abnormalities or genetic abnormalities.

Jill Terrien:

Right.

Dr. Frank Domino:

Very good. Well, thanks, Jill, this is terrific. I like my coffee in the morning and it sounds like Alice is pretty curious too. What should we tell her?

Jill Terrien:

I'm gonna tell Alice, "It is sometimes frustrating to hear all the information of the positives and negatives, especially of some of the things you really enjoy in life." I would wanna know, "How much coffee does Alice drink?" And if it's three to four cups a day, I'd say she's right in the ballpark of the benefit of coffee.

Dr. Frank Domino:

Great. Thanks so much.

Jill Terrien:

Thank you, Frank.

Dr. Frank Domino:

Practice pointer: Three to four cups of coffee a day, be it decaf or regular, correlates with lower risks of heart disease and all cause mortality. Join us next time, when we discuss the role of sleep and its influence over the development of metabolic syndrome.
