

Make Me Care About...

Make Me Care About...Garbanzo Beans

Podcast episode four transcript

Jen Hatmaker: I don't know about you, but for me, probably as recently as the last five or six years, I feel like I'm hearing everywhere, everybody talking about a healthy gut, and actually for good reason. Because turns out a healthy gut means there's more good bacteria than bad bacteria and the bad stuff doesn't overtake the good stuff. That's kind of the bottom line. And what we're learning more and more is that a healthy gut doesn't just lead to better overall physical health, but also mental health. It reduces inflammation and it basically makes sure that our bodies are getting the nutrients that they need. And so today I'm going to talk all about this with my guest. Okay, Vanessa, you have one sentence to make me care about garbanzo beans.

Vanessa Ridaura: Well, garbanzo beans are just one example of how we can use food to really improve gut health and tackle malnutrition.

Jen Hatmaker: All right. Well, I don't typically think of garbanzo beans as a solution of malnutrition, so I would definitely like to hear more.

Vanessa Ridaura: Yes. So garbanzo beans, and other functional foods, have a set of sugars that are uniquely used by beneficial bacteria in your gut. They can provide benefit to the recipients through improving their gut health. For example, improving their immune system, improving their gut permeability, and that can help fight pathogens so bad bugs can't come in.

Jen Hatmaker: You guys, this is Make Me Care About, I'm Jen Hatmaker, and with me is Vanessa Ridaura, senior program officer in microbiome products at the Bill and Melinda Gates Foundation. And today Vanessa is helping us care about garbanzo beans. Hi Vanessa.

Vanessa Ridaura: Hi Jen.

Jen Hatmaker: So from a super simple normal person consumer standpoint, if I start eating functional foods, like garbanzo beans, today, do you think I'll notice a change in my health?

Vanessa Ridaura: Some say you would. I think that definitely if you start being really thoughtful about the variety of foods that you have, you'll feel better. You'll see your immune system improve, you'll see you'll get less infections and you will really start feeling a lot better.

Jen Hatmaker: Are there a lot of other foods that also fall into this category? And to that end, what food do gut bacteria like to eat?

Vanessa Ridaura: Yes, there are many functional foods, and I think about them in two big categories. The ones that bacteria don't necessarily need to eat and they're functional like polyphenols that are natural products that are in fruits and vegetables and they can immediately impact gut health, and then legumes, fruits and vegetables that have these complex carbohydrates that are the foods that bacteria in your gut like to eat. We cannot break those complex

carbohydrates down and we really rely on our partners in the gut to do that. And as they do it, they just replicate and produce other bioactive compounds that can help improve our gut health.

Jen Hatmaker: It seems like just even here where I'm at in the United States, gut health is a thing I'm hearing. And so can you talk about what are the negative effects of poor gut health? What's the problem here if we do not have our eye on healthy gut?

Vanessa Ridaura: I think people don't realize that if you don't have a healthy gut, it doesn't only affect your gut, it doesn't only affect the nutrients that you take and how your body uses them. But it really affects your immune system, for example. So if you have what we call the leaky gut, so a gut where you can have pathogens moving into your circulation or metabolites moving into your circulation, now you're going to be inflamed, so you're going to have systemic inflammation that's going to have negative effects on your health overall. The gut also has a direct link of communication with your brain. And so not having a healthy gut could also be a source of anxiety, for example. And you don't even realize it, that having good bacteria, healthy bacteria, healthy gut can also help you have a healthy mind and a healthy body.

Jen Hatmaker: Okay, so what happens if people say they don't like garbanzo beans because either maybe it's not a part of their diet or maybe they're even allergic to garbanzo beans. What then?

Vanessa Ridaura: There are many other opportunities to use other foods, for example, you can use other types of beans or you can use plantains. Part of this complimentary food that we're using finding to use for undernourished kids has cream plantains, as one of the big components of it, and that is also another type of functional food that is impacting in feeding that bacteria in your gut.

Jen Hatmaker: From a production standpoint, from a supply standpoint, how important is it for one of these food groups like garbanzo beans, as we're talking about today, to be native to the region and part of that regional diet in addressing infant malnutrition?

Vanessa Ridaura: Jen, you hit the nail right in the head. It's really important for the food to be produced locally because it would be really hard in terms of accessibility, implementation, and compliance to bring the food from other continents. But beyond the manufacturing piece, I think that food has many emotions tied to it. And in many cultures, food plays an important role in how individuals teach their children about their traditions. I was, for example, just in Senegal and some of our collaborators were telling me me about the role of food in their marriage during their wedding and how they introduced their tribe to their new husband and wife by introducing their food. So when we are thinking about the design of the complimentary food at the foundation, we think about not only having foods that have the functional properties that we talked about, that is accessible and easy to get to, but also that is tasty and part of the tradition for the population we're targeting. And this is going to ensure acceptance and really reduce the barrier for compliance.

Jen Hatmaker: Vanessa, are functional foods like garbanzo beans enough by themselves to solve undernourishment in infants and children?

Vanessa Ridaura: That's an excellent question, Jen. And I think that we think about it as having a base food that has enough calories and macro and micronutrients to really nourish the baby that

we're trying to improve itself, but also adding these functional foods on top of it, like garbanzo beans that are going to have other properties. So they can be anti-inflammatory, they can be an antioxidant and they can improve gut barrier function, and that can help a baby, on top of providing the nutrients that they need, the calories that they need, to feel better and improve. One thing that we've found really interesting with some of our grantees is that they've compared calorie replete foods, so babies that receive enough calories for health, and those calorie replete foods together with these functional foods, and what we see is that even if there are not more calories in the foods, with functional foods babies do better. They gain more weight, they improve faster, meaning that calories are not enough. Really feeding baby and feeding our gut microbiome is important.

Jen Hatmaker: Let me pause for just a moment and say this is Make Me Care About. I'm Jen Hatmaker, and we're going to be back in just a minute. And if you know me at all, you know that I will be asking Vanessa what her favorite garbanzo bean recipe is. So stay tuned for that.

This is Make Me Care About, I'm Jen Hatmaker and with me is Vanessa Ridaura, senior program officer in microbiome products at the Bill and Melinda Gates Foundation. And today, Vanessa's telling us all about garbanzo beans. What benefits to garbanzo beans, or the study of these foods, are there for people who, maybe they're not undernourished infants? Can these lessons be applied?

Vanessa Ridaura: Yes, I think even on my day-to-day eating, I apply these lessons. Gut health is very important and linked to a very different variety of indications. Everything from cancer to depression, and really eating and maintaining your gut health is going to be key to continue to have a healthy life. And so for you, Jen, in the morning when you're deciding, or for me this morning, I'm deciding between the croissant or the fruits, the best thing to do is really think about what's going to feed those beneficial bacterias on top of providing the nutrients that I need for day-to-day to keep my gut healthy and make sure that I am not only fighting other diseases, but even improving my immune system and making sure that if a flu wave comes around what you eat, actually, it's going to make sure that your immune system is ready to fight that.

Jen Hatmaker: So on a personal level, what would you say is the most interesting part of studying the microbiome? And also what is the most challenging?

Vanessa Ridaura: The most interesting part is, and I think it's also the most challenging part, the fact that the microbiome, specifically the gut microbiome, plays a role in so many different aspects of human health. And if you think about how we evolved, we evolved together with these bacteria. And the bacteria in our gut are in our skin, in our nose, and in our mouth. And this makes it really hard because there are so many different bacteria. It's not just a single bacteria or two, it's just hundreds of different bacteria that are different from different populations in the world.

So really pinpointing which are the peak layers that we need to boost, which are those probiotics that you should take after having a huge dose of antibiotics. And I think that we're still really learning about the potential of the microbiome, who those key players are and how we can manipulate it in order to improve health under different circumstances. But I think that what is maybe disappointing to some is that it's not a magic bullet. I think that we've known that eating a variety of foods, fruits and vegetables, are good for you. So it's not new information, but I think

that the context of what those foods are doing is new information and could help you really make those decisions, day-to-day.

Jen Hatmaker: So I wonder if, since this is your area of study and you spend a lot of time thinking about garbanzo beans, what's your personal favorite, either garbanzo bean or any functional food recipe?

Vanessa Ridaura: I will say two. I really do love hummus and-

Jen Hatmaker: Oh, same.

Vanessa Ridaura: Really love it. And I'm from Venezuela, and I think that one of the things that had to go in every meal growing up was plantains. And plantains were just like every single meal. And green plantains, which are a huge functional food that we use in our current diets, are just a staple in Venezuela as well, and they're delicious.

Jen Hatmaker: Delicious. And I have also fried plantains and dip them into hummus. And so, let's just combine all the good things into one appetizer and everyone is happy at the party. I know I am, for sure.

All right, you guys, to learn more about Vanessa's work, please check out the show notes. Here's what I'm walking away with today. First of all, now I know the term functional food. So I got that one in my hip pocket, and I just am super intrigued with the idea of something so simple, so nourishing, but also grown locally. So it's hitting sustainability, it's hitting economic development, and it's hitting nutrition. This is an incredible solution. If you liked this episode, follow the show to hear more things to care about, because we got a whole bunch of them lined up for you guys. Also, we'd be grateful if you could share this episode with a friend.

Make Me Care About is produced by Jesse Baker and Eric Nuzum of Magnificent Noise. Our production staff includes Sabrina Farhi, Hiwote Getaneh, Julia Natt and Kristen Mueller. Our executive producer is Eric Nuzum, and I'm the host Jen Hatmaker.