



NAMI Ask the Expert: Eating for Better for Mental Health

September 10, 2020

Presented by

**Uma Naidoo, MD, Director of Nutritional & Lifestyle Psychiatry at
Massachusetts General Hospital**

Ken Duckworth ([00:00:00](#)):

Hi, my name's Dr. Ken Duckworth and I'm the chief medical officer for the National Alliance on Mental Illness. It's a great privilege to welcome Dr. Uma Naidoo. She's a one of a kind resource in the field. She trained at a Harvard program as a psychiatrist. I actually got to know her a little bit in the program that she was in and she was a terrific psychiatrist. She then created a very interesting career pursuing culinary training and is trained as a professional chef and has nutritional training as well. I think she's the only psychiatrist in America that has taken nutrition as far as you can, keeping her work as a psychiatrist intact. We haven't in the 15 years that I've been running Ask the Expert had a conversation about a nutritional component to mental health and thanks to Dr. Naidoo we actually have the right resource to do so. She wrote a book, which she's going to tell you about and we're looking forward to this discussion.

Feel free to put questions in the chat function and I'll do my best to go through all of them. Uma will be doing the presentation and then we'll do all the questions at the end, we won't be doing question in an ongoing way. In October, Ask the Expert has a monthly transaction that we host at NAMI, Dr. Holly Lisanby, a leader at the National Institute of Mental Health will be reviewing the latest developments in the treatment of schizophrenia and in November, date uncertain, we'll be discussing smoking cessation strategies. November is the great American smoke out month. Uma, thank you for joining, thank you for all the great work you're doing, and I look forward to learning from you today. Take it away.

Uma Naidoo ([00:01:54](#)):

Thank you so much, Ken. I appreciate that kind introduction and I'm actually, again because of this virtual world and bandwidth, I'm going to stop my video that allows to advance my slides and speak to all of you. Thank you all for attending today. I'm really excited to speak to this particular organization, since I really care deeply about mental health advocacy and have spent my career really exploring ways to support mental illness and to work to the best of my ability to understand ways that people can feel better. And that really has informed my cultural background and how I grew up in a large South Asian family full of cooks in the kitchen, where I didn't have to cook until later in life, is the joke I like to tell people, which is actually true. It also informed how I thought about food when I began residency and really understood that psychotropic medications, while effective and very necessary and I will explain more of that as I start to speak more, were also not necessarily the only tool in our toolkit to have in order to feel better.

This really led me to... This is just a little background about where I am, I forgot to put the logo of my culinary school on, but I think if you are in Boston, you know this location.

And again, thank you for joining us today. It's a deep privilege for me to be here to share what I have learned in the field of nutritional psychiatry. If you have not heard this term before, it is because it is a new term to call work that many of us have been doing for some time. I think that it's important to understand nutrition and nutrients as components of the toolkit we need to have in order to feel emotionally well, in order to feel emotionally better, to improve certain symptoms. However, the way in which I practice is as a psychiatrist. I am a nutritional psychiatrist, but I do prescribe medications. I have nothing against medications, in fact, they have been hugely beneficial to the patients that I have treated.

However, what nutrition and nutrients do is they form an adjunctive supportive way for someone to feel better through the use of how eat, because it turns out that the comment that many people might make in passing as a cliché, "We are what we eat," turns out to be true, when one looks at the nutrition science behind it. Many of us in medical school, especially as physicians, don't learn enough about nutrition and yet we're expected to have very important conversations with individuals around how to eat for a low cholesterol, to achieve a low cholesterol, or how to eat for improving our hypertension. Yet there isn't this connection made around nutrition and mental health and I do feel that has been a gap that I hope we can continue to fill by the conversations that we have.

Again, it's not meant to be something that dissuades or ask someone to not take medication. If anything, all of the means that you are using as part of your treatment plan to feel better are very important and any type of change made should still go through your prescribing doctor and your clinical team before even making a dietary change, should you find something interesting about what I share today. So, to start off I'd like to define what nutritional psychiatry is. Nutritional psychiatry essentially offers clinical guidelines, based on nutrition science and evidence-based research for the use of wholefoods and nutrients to improve mental wellbeing. In the time that we're facing right now, many individuals are reaching out or talking to me about the fact that they, prior to the pandemic, were not necessarily suffering from any specific condition.

They were coping well, moving along life, working in their jobs, but the pandemic has caused such uncertainty for people that it has caused people to have stress, anxiety, insomnia, worsening symptoms of mood and for this reason I do think that nutrition becomes a very low hanging fruit on the plant to really be something we can all try to do to make ourselves feel better while we are consulting our doctor or psychiatrist about medication, should that be an option as well. But we can change how we're eating today, we can change that by our next meal, just by having a little bit of information that could better inform us. This was an article that was in the Wall Street Journal a few years ago that really was a spin off to how I ended up writing the book on nutritional psychiatry, called This Is Your Brain on Food. But in an interesting way a journalist who interviewed me for this picked up on this particular statement that I still like to quote today and the reason is that I do find it to be very real and very true and speaks to what nutritional psychiatry is not, because I think when we define anything it's also important to understand what it doesn't mean or what is not true for certain entities.

What nutritional psychiatry is not, it's not about 10 mg of Prozac or Fluoxetine, or 10 blueberries. It really is about the food and nutrients, not replacing medication or other

forms of therapy which are as important, but rather enhancing a way to offer broader options to improve mental wellbeing for any individual. I'd like to just share some of these statistics which are quite concerning regarding some information that the CDC shared earlier this year. One of the things to me that was most concerning as a psychiatrist was that 11% of individuals seriously considered suicide. This is also not only an important juncture to share some of the statistics that preceded and have occurred during COVID that we know of, but also to share the fact that nutritional elements and the use of nutrition is adjunctive in the form of being a tool in your toolkit, should you have an illness such as major depression with suicide ideation, an episode of mania from bipolar disorder, the loss of touch with reality from a major mental illness such as schizophrenia, all who are actively suicidal.

Nutrition can be part of the plan that your doctor helps you with, but it is not the first line of treatment and I wanted to say that using this slide, because if so many people are feeling actively suicidal or seriously considering suicide, I think we should be very clear about the limitations that, like the previous slide said, it's not about the 10 blueberries, it's really about incorporating how you eat healthily as well as getting the acute care that you need at an emergency room or by calling your doctor to get immediate help as well as absorbing really good elements of nutrition that could help you alongside everything else that you're doing.

With this slide I will also share a few different things, such as the fact that the American Psychiatric Association did a survey during March and April, the early parts of COVID, and what they found were that certain things were on the increase in terms of mental wellness or mental illness. Some of the things ensued the fact that people were most worried and fearful about uncertainty and we know that despite coming quite some distance and achieving some goals between March and April and now, that there's still the uncertainty that persists. Which, to me, says that people remain concerned and fearful and worried about what we don't know about the future for ourselves, for our children, and our families and our loved ones. Another thing it showed was that substance abuse was increasing during COVID-19 as well as the fact that there were unfortunate things such as what was created by being in quarantine, things like domestic abuse were also on the rise.

Later during COVID, experts completed a survey which showed that prescriptions for both anti-depressants and anti-anxiety medications had hugely increased and by June of this year, a much used medication and selective serotonin reuptake inhibitor or an SSRI called Zoloft, otherwise called Sertraline, was on shortage. All of this indicated to us that during COVID, that people were struggling more with their mental wellbeing. Effecting more was maybe accessing many more prescriptions from their doctors, but also it pointed out to me why aren't we, or why can't we, in addition to obtaining whatever prescription or other form of treatment that you are getting, why not also employ food in the healthiest way possible by building in some healthy habits that might help you and they could help you as soon as today?

That's just a background on the statistics here, the thing that I would say is with pre-COVID we know that the leading psychiatric disorders in the United States have remained anxiety disorders for some time, although the leading cause of disability worldwide prior to COVID had been depression. Now, I think pointing to why nutrition

and food becomes so important, we know that people living with serious mental illness face an increased risk of having chronic medical conditions and adults living with serious mental illness die on average 25 years earlier than other Americans, largely due to treatable medical conditions and I think that this is relevant in the context of individuals who might be using nutritional strategies as well as taking medications, because it provides a point where we can intervene through dietary means.

Medications help, but sometimes do not fully address symptoms. There was a very interesting study completed by Peter Roy-Byrne in 2015, which essentially showed and his study really looked at treatment refractory anxiety, so if you look specifically for anxiety, the definitions of risk factors and the treatment challenges and one of the things the study showed was while there are several approaches to treating anxiety, only 50% to 60% of people responded to medication or psychotherapy and about a quarter of patients had complete resolution of their symptoms. What I would say about that statistic is that it was based on a study that was completed, it may have evolved or changed by now, but what it pointed to is the fact that we have many amazingly useful interventions in mental health, but they may not fully target symptoms and where that spoke to me is that why not add nutrition as an additional strategy that we can use to combat certain symptoms of certain illnesses in mental illness and then use food and nutrients to really fortify our mental health? Especially with the ongoing uncertainty that we are feeling.

Uma Naidoo ([00:14:20](#)):

No problem. Thanks. When it comes to this slide and really talking about metabolic diseases, which are on the rise, and usually the cycle of components of metabolic diseases and how they get started are this circle of three different components. One of the things to remember is that there are certain side effects of medications that are prescribed, such as psychotropic medication, but also that separate to medications metabolic disease is on the rise in the United States, because and one of the villains in the story is of items that are contained in our food system and food products that we eat, such as high fructose corn syrup and others that actually drive conditions such as insulin resistance. It's just important to understand, excuse me, that metabolic diseases are on the rise in this country. Then it brings up the question of how can we create a sense of purposeful balance of useful treatments that really bring us back to an equilibrium of how we use medications, psychotherapy and other based treatments and then additional strategies, one of them being nutrition?

My approach is really informed by my background, my training, and my understanding, and being fortunate to be educated in this system that I think was very flawed in helping me understand that there were many things that could be used. I think that while I trained in a very traditional and wonderful program, my background also informed me about having an integrated and functional approach. Now, what do I mean by that? Integrated in psychiatry to me, I'm a consult-liaison psychiatrist by training and it is always extremely important to understand the interaction of medical illnesses with the psychiatric care. For me, while we have an outstanding medical system in this country, while it of course has flaws like every country does, having worked and lived overseas as well, I do think that we have some really good components of the healthcare system.

However, it tends to be siloed and highly specialized, and that's where integrations become really important.

It's important for your doctors to be speaking, it's important for a clinical team to be communicating. In terms of functional, I use the example of a patient that I treated to explain that it's also important to understand that there may be a different root cause of an illness. We understand how certain psychiatric illnesses develop, but sometimes there's more to the story. I was referred a patient, a young woman and executive who's doing very well in her career and she was referred to me for the first time for a psychiatric medication. Her gastroenterologist sent over and she walked into my office saying, "Doctor, I really need Zoloft." Those were her exact words. She had read, she'd done some research and she understood that it was one of the treatments we can use for anxiety and for panic. But upon taking a very long history from her and understanding her life, especially in the 18 months prior to her appointment with me, what I uncovered was that she had gone to see her gastroenterologist due to significant discomfort in her gut.

She had gas, bloating, diarrhea, constipation, many different symptoms and he was in the process of a diagnostic evaluation, in the midst of which she also developed new onset anxiety, which she had not experienced at any time in her life before, so she was quite worried about this. However, what had also changed is she had gotten this wonderful promotion at work about 18 months prior. What that led to was not really spending much time in her apartment, traveling for work, being on airplanes, being on a train, commuting and therefore eating more fast food, more restaurant foods, more foods out of her home than she had ever anticipated or done before in her life. She was also eating snacks late at night, because she would arrive at a hotel and all she would have access to was snacks in the bar fridge. We realized that her diet had been significantly changed and, literally, she said to me "I have barely anything left in my fridge at home, because I'm never home to be cooking."

This change in her nutrition had really impacted her gut over time and with her being willing and her gastroenterologist in agreement with this plan, we worked slowly and steadily on her diet. It turned out that she was able to function without a medication initially and did okay, but as we started to heal what I assessed to be her gut disruption or gut dysbiosis, which I will explain more, we really helped her to heal that condition and relieve herself of some of the symptoms of anxiety as well as some of the gut or gastrointestinal symptoms that she was experiencing. That what I mean in the example of really a functional approach where you try to find the root cause of what might have brought on a symptom. I'll just go on to say that a holistic model of care is really looking at the whole person, the mind-body approach, also including how lifestyle might impact your mental wellbeing, the use of mindfulness in medication.

A great example of this is the Benson Henry Institute at Mass General, led and formed by Dr. Benson many years ago and we actually found that it was one of the most used resources during COVID, meaning that people are turning to extra ways to feel emotionally stable and emotionally healthy. I also think that mindful eating, being a physician and remembering my days of training, eating on the run, barely sitting down for a proper meal when I was on call, I've really learned that mindful eating is a very important component of nutrition, how we absorb our food, how we enjoy our food, and

actually the benefits on our health. Also using things like relaxation techniques as well as mind-body medicine. A simple breathing technique that you learn can be super helpful for a symptom like anxiety. And then adjunctive therapies that people may be interested in, in trying alongside their medication and other forms of treatment, including nutritional strategies, exercise and movement.

If someone is severely depressed and cannot get out of bed and may need a medication initially, I will speak to them about ways that they can move. It might be as simple as "Can you walk to the local coffee shop to get yourself a cup of coffee?", "Can you walk the dog?", "Can you go out to buy the newspaper?" So that you're getting out of the house, you're starting to move, you're starting to really get yourself out of that really severe depth of depression, along with the other treatments that your doctor prescribes for you. Hydration is extremely important in the sense that dehydration can present with anxiety and I think it's something just to keep in mind. Then of course, something that I know many of you are familiar with what I'm speaking about on the slide, but also good sleep hygiene in terms of how that affects our health.

Many of you are thinking of the slide I just presented and the different components and saying to yourselves, "Well, I'm not really sure what she means. None of this seems very scientific to me." Let me just say, very respectfully and very humbly, that there's actual evidence behind the different components that I shared on the prior slide. One of these, and it has the reference there if you wish to look it up, looked at a breathing technique which helped to control heart rate and positively impact the cardiorespiratory system, but it also showed an improvement in anxiety and depression. Simple things like whether it's a breathing technique or the use of yoga or exercise in the way that exercise can improve mental wellbeing, it's also something that can be super helpful to individuals. Now, why does food matter to brain health? It matters on multiple different levels. It turns out that in many ways the cliché, "We are what we eat", turns out to be true and I will try to help unpack that for you by describing various elements in the physiology and understanding that we have behind it.

The gut-brain connection ends up being a very ongoing area of current research that is extremely important. The way that I feel it is important in mental health is that these organs are so far and yet they are so near. I say that because there is an anatomical, physiologic and biochemical connection between the gut and the brain, so much so that the gut is sometimes called the second brain. It's called the second brain, because in our gut microbiome there are at least 39 trillion bugs that reside there, in fact some articles in research will argue that we are more bacteria or bugs than we are human. I won't get into that argument today, but what I will say is that there are tons of different microbes or bugs that live in our guts. The reason that the gut is called the second brain, is because it also has some element of impact through our food, through nutrients, through the mechanisms, through the chemicals, through the neuro chemicals that can potentially also have an impact on the brain. Now, anatomically the gut and brain are connected by the 10th vagus nerve, which connects the brain stem to the actual gut.

The second thing that I think is helpful for people to understand is that the gut contains more than 90% of the body's serotonin receptors, serotonin being the happiness hormone, serotonin being what we target with SSRI medications and so it therefore is

another way for people to understand that the gut and what we eat since it is digested, certainly digestion begins in the mouth, but the digestion that occurs in the gut also then impacts certain ways in which chemicals get transmitted or the effects of such chemicals get transmitted back and forth between the gut and the brain. I like to call the vagus nerve a two-way superhighway, so for those of you who live in Boston, think of it being a super fast Mass Pike and a way that communicates different messages between the gut and between the brain.

Another thing I would say about the gut that is particularly important during the pandemic is the gut is also the seat of a very large component of our immune system and this is another way in which food and what we eat becomes hugely important, because embracing a healthier lifestyle through how you're eating also becomes a really important way for us to understand how we can impact our immunity in a positive way and have a more robust sense of our physical health as we go through what we're enduring during this pandemic. I point to this study specifically to also share the fact that these vagal pathways for the microbiome brain-gut axis have been reviewed, have been studied and have shown that neuro chemically and electrically gut bacteria send electrical and chemical signals to the brain and that there is this two-way or bi-directional flow. I think that this study did a nice job of explaining that.

Now I will share with you that one of the reasons I made a detour to go to culinary school was that Julia Child was my food hero as a junior resident in training and studying for the multiple board exams one has to go through early on in training. One of the things I will share as well was that I couldn't afford cable television, I had public television. Public television had a show called The French Chef with Julia Child. Even though I started cooking later in life, around that time I was really inspired by her, the fact that she was so cheery around food, she made it fun, she was deeply invested in the academics behind food, meaning that her cookbooks, if you've ever read one of them, they're like a textbook. She's very detail oriented, but also had fun with it. The reason I bring up this slide is that it brings us to the important point in this discussion, according to Julia Child. She had many, many funny things that she said, but this one was, "The only time to eat diet food is while you're waiting for the steak to cook."

Now I throw this in for a little bit of a spin of humor, but in reality, there are a couple of things I want to share about the slide. One of them is the fact that I really don't like the word "diet" and I don't like the word "diet", because psychologically speaking if I say that to my patients, they feel they have to give something up. I really talk to them about healthy eating plans, nutritional work, nutrients and talk about a number of foods that they can add into their diets than take away. In my book, the way that the book was divided is into chapters which start with the description of the gut-brain axis so that people understand the science behind it. What I did is looked at about 700 medical and scientific references, then included about 550 in the book to show that there is certainly a growing evidence base behind the things that I'm talking about and so that you can look at reference at the end of the book to see, to study, if you wish to look into it further. But I also did this, because my patients were coming in very confused about the word "diet".

They would say, "I don't know whether I should eat high fat, low fat, I should give up carbs, I should follow this diet. I don't know why I should be eating blueberries. What

should I do with an avocado? I'm told it's healthy, but what on earth do I do with it?" And I think that many of these questions also led me not only to pursue the work in nutritional psychiatry, but to really start to want to help people unpack the information so that they could use it in a way that was healthy for them. The other point I will make about this slide is that there are many paths to wellness and to better health and to better mental health. I am diet agnostic, and what do I mean by that? In order to help patients who come in with different levels of mental illness, maybe mild, maybe moderate, maybe severe, I have to be in a position to meet that person where they are at. So, whether the person comes in and says, "Doctor, I eat a carnivore diet." Or "Doctor, I eat a vegan diet." Or "I'm paleo." Whatever it is that they're eating, I've got to find a way to help them through their mental health.

I tend to not be one of the doctors who says you have to only eat this, and you have to only eat that, and you can't eat something. I talk about healthy whole foods, I talk about the conditions, such as anxiety where there have been studies linked to eating gluten and it's also the source of the gluten that's important. So, if you're having significant anxiety, you may want to consider cutting back on the source of gluten that you're eating. Maybe its store-bought bread or something else, but it's worth considering, because of what the research has told us. But in general, I try to offer people broad based healthy eating plans, which I call the pillars of my plan in mental health for using nutritional psychiatry. That was the other point I wanted to make regarding this slide.

The next thing I will say is that embracing an understanding of how to think about your food plate and how you're eating are very simply shared on the slide, which I happen to like. It's something you can easily download on the internet. If you're a clinician listening to this call, you can share it with a client. It's directly quoted from the Harvard T.H. School of Public Health and since they are quoted on the slide there, they are quite happy to have people share and use it. Why I like it is it clearly depicts what we should think about having on our plate, but also it includes things like staying active, it includes hydration and it includes the use of healthy fats which I happen to like and it gives people guidelines. The other reason I'd like people to look at this slide is to think about how to divide up the food groups of what they should be eating.

Why do I say that? Because it turns out that the studies have shown that in the United States, if we go back 50 or 60 years, the size of our dinner plate used to be nine inches in diameter. The average dinner plate now is about 12 inches and what that says to me from a nutrition perspective is we're eating on bigger plates and no one wants to look at an empty plate, so we fill our plates with more food. Over time the plates have gotten to be larger and larger and therefore we are consuming a different volume of food. When people look at the slide of the healthy eating plate, what it helps them understand is these are the components you should be looking at. Unless you have an allergy or can't eat one of those food groups or a food intolerance or food sensitivity, of course you would be discussing that with your doctor, but this gives people a guideline of what they should be eating and look at the large component that vegetables play. Why is that? They're low calorie, they're healthier for us, fruit and vegetables contain fiber and fiber is not obtained from seafood or animal proteins.

Fiber is obtained from vegetables, fruit, beans, nuts, seeds, legumes, lentils, and healthy whole grains. Fiber becomes important not just to your digestion or for things

such as constipation or from the gastrointestinal aspect. Fiber is actually a food that feeds the good bacteria in your gut, or the good microbes, because like I said earlier, they're not just bacteria. There are other types of microbes. But by feeding them you are nurturing them, and fiber fortifies them, then they are working for you. They are working both towards your better mental health and your better physical health. That's another reason to embrace vegetables. This slide really is to share that another pillar of what I speak about with patients is love the color, love the rainbow of colorful vegetables and fruit. The colors in these different fruits and vegetables are really about embracing the science behind them. So, they're healthy? Yes, we know that or yes, we've been told that. If you're not convinced, I would just say carrots have carotenoids and there are sulturophanes in certain cruciferous vegetables, like cabbage, like cauliflower, brussels sprouts, and broccoli.

All of these contain different ingredients that are very strong on polyphenols and their antioxidant effect for our bodies are extremely important. I'll explain that a little bit later when I talk about anti-inflammatory foods but try to think of one the pillars being eat the color. I challenge the people that I work with to have as many colors of food, but from fruit and vegetables in their diet in a given day or on a given week. I like to gamify things, I like to make it fun for my patients, so I will share with them how many colors or how many different types of vegetables did you put in your salad or your soup or your stir fry and that is a way to include more of those. Some people are concerned about fruit and the sugars from fruit. I will address that by saying from a nutrition standpoint I recommend lower glycemic fruit, but all fruit are healthy. Unless again you have an allergy or for example, grapefruit is on its own healthy, but it does interact with the liver enzyme system with certain medications, so grapefruit is definitely something to be checking on if you take medications, whether they're psychotropic psychiatric medications or whether they're for cholesterol. You do need to be checking with your doctor about that.

But in general, including fruit and vegetables in your diet is a good idea. About fruit, I would spread out when you eat your fruit, so don't eat it all at once in a day and that is because of how fructose, the sugar in fruit is metabolized. The second thing I would say is to eat good healthy portions during the day and stick to things like, if you have struggles with your weight or have problems with insulin resistance or some problems with your blood sugar levels, maybe stick to lower glycemic foods like blueberries, raspberries, strawberries which are rich in anti-oxidants and slightly lower on the glycemic scale. But in general, embrace fruit, eat them in portions throughout the day and also eat tons of vegetables, because those are low calorie. And we're talking about these kinds of vegetables, you can see that and I would share that I'm not now necessarily referencing higher glycemic vegetables such as potatoes, which tend to have a lot of starch in them, tend to have a higher level of carbohydrates, higher glycemic levels.

We're really talking about your beans, your greens, your colorful vegetables, peppers, all of these that have great color and bring back good nutrients to your body and, most importantly, to your gut and by maintaining the balance in your gut, it's really going to work towards your healthier mental wellbeing. Also, another pillar of what I share is the use of pre and probiotic foods. This can be very confusing for the people that I work with and so I break it down in the following ways. Prebiotic foods are foods that feed the

microbes in your gut, so it often could be sources of fiber, but it could be other foods. Think of the allium family, think of garlic, leeks, onions and several other vegetables which I used in my book, which are prebiotics and those are good to include in your everyday diet. Remember that you might actually be covering that if you're thinking to add colorful fruits and vegetables in your diet.

Then probiotics are usually a supplement, but they also can be brought to us through things like live active cultures in yogurts. Yogurt can be dairy or non-dairy. If you do eat dairy, I usually try to guide you towards a grass milk fed dairy and if you cannot tolerate dairy, you can also have different yogurts that are non-dairy, but also have live active cultures in them which bring back these good bugs to your gut. Another way to enhance forms of probiotic in your foods are through fermented foods. Examples of fermented foods are miso paste, kombucha, sauerkraut, certain pickles, kimchi and several other foods. One example is kefir, which is a soured yogurt. By the way, in having these foods the fermentation process actually brings back good bugs to your gut and helps that balance that we are looking for. The other thing I would also say is that when I mentioned whether it's dairy, non-dairy, whichever type of yogurt, I also talk about un-fruitful yogurts.

Why do I say that? I explained to you that blueberries are a great antioxidant and super healthy for us, but a fruited yogurt that contains blueberries also has a ton of added sugar. What I would say about the sugar which I also wanted to explain was that the added sugars in things like yogurt work against the positive components of what that yogurt might contain. I will share with you a statistic that I share with individuals that I work with. In the United States our recipes are standardized to ounces, pounds and that is how we bake and that is how we cook, but our food labels don't match this. Our food labels are in grams, so many people are confused by how many grams of this, that or the other nutrient on food labels actually translate. Four grams of sugar is roughly one teaspoon and that way when I have someone checkout whichever yogurt that they want to buy, if there are 24 grams of sugar in a half a cup yogurt which has blueberries in it, that's a ton of sugar that's added to it that you don't need.

My suggestion is buying a good source of yogurt, add some great blueberries to it, use some cinnamon for sweetness, it's surprising that cinnamon has several brain benefits. One of them is that it actually has a slight sweetness to it, and it could be great on your yogurt instead of adding sugar or something else. That's my tip about sugar and I would just say that the added sugars in food are something that we actively need to be concerned about when it comes to our mental wellbeing, because there are studies that have linked sugar with the cognition and harmful developments on our memory. There have been studies that have linked sugar with worsening symptoms of depression and worsening symptoms of anxiety. Being aware of the source of sugar that you're eating as well as the fact that it has these worsening benefits, and I'm just talking about sugar from the mental wellbeing perspective, I'm not even getting into the impact on your insulin resistance and any type of setup that that could cause for the metabolic diseases that I hinted at earlier on.

In terms of good mood foods, I will go through these simply from the perspective of ingredients that they contain and things that could be useful to your brain and your body for mental wellbeing. Blueberries are rich in antioxidants and super helpful for different

mental health conditions, which I break down in my book. Salmon, omega 3-fatty acids in salmon believe it or not also target anxiety. Studies have shown that omega 3-fatty acids help anxiety as well as depression. I know many of you listening to this probably know that already, but what I will share is that it's been studied in human trials as well as the fact that omega 3-fatty acids are usually obtained in fatty fish. Now salmon obtain their omega 3 from what they eat in the ocean, that includes algae and it includes things like craw. You can also obtain plant-based sources of omega-3 fatty acids, the absorption in the brain is slightly different, but they are still helpful if say for example you are plant based and you don't eat fish. There are ways that you can obtain that through algae, through sea vegetables, through certain seeds and nuts.

Some of the seeds include chia seeds which you might have heard about, as well as flax seeds which can be added to your diet. Dark chocolate is one that many people love. It's the super dark, more natural chocolate that is very rich in flavonoids and it is also a fermented process that makes the super dark, natural chocolate. I would suggest trying those out and having your pallet get used to a slightly darker chocolate, the darker the better, because that is actually what gives you the brain benefit. When people say chocolate may help your mood or may be a good food in this context, I'm really referring very specifically to the anti-oxidant punch, the flavonoids that are in the dark chocolate and that really is from the natural forms that are found. Also, if bake, there's a type of cocoa called Dutch processed. There's nothing wrong with Dutch processing, it's actually done to make the flavor of the cocoa less harsh, but the truth is it removes much of the antioxidant effects. As I went through the research of understanding this, I now use a more natural form of cocoa rather than the Dutch processed, only because I know I'm getting the brain benefit from the natural form.

People may roll their eyes when I say, "eat more vegetables" or "eat more leafy greens", but the reality is that studies of folate and methyl folate for decades have shown an improvement in mood from these substances. You can also get them through food and leafy greens is one of the richest sources of folate, the greener the better. Green tea is an excellent pick-me-up. If caffeine is not something your body can tolerate, green tea has EGCG in it, which is a nutrient, an antioxidant that can actually give a person a little boost of energy and make them feel better. It also has positive effects for mood. The last little funny guy here is pomegranates. There are many more foods that I'd list, but I wanted to touch on some high notes here, because pomegranates were found to be helpful as well.

For spices and mental wellness, I wanted to touch on the fact that there are many things that we don't realize have positive benefits for our brain health. One of them is turmeric and many people may have heard about turmeric, may even be taking a supplement and may be using it in a particular way, either cooking with it or having a tea for example, but turmeric should be eaten with a pinch of black pepper or used, even if it's in a tea or a soup or a smoothie. Say you don't cook with turmeric, use it with a pinch of black pepper, because the piperine in black pepper activates the active ingredient in turmeric to make it more available to your brain and your body.

It's important to understand that there are very simple things in our kitchen cabinets that could be helping us if we start to implement them by using them in our cooking, in our day-to-day eating and spices is one of them. My favorite of those is actually turmeric,

because it has a lot of good benefits. On this note I will also touch on some anti-inflammatory foods and I think that the way to understand foods that are anti-inflammatory is really to understand what it is that we are trying to target. Inflammation is actually a natural part of the body's response to something. It's a protective mechanism that allows our body to defend itself against, say an infection or an illness or maybe an injury. Think about the scab that you had if you fell over, but when inflammation occurs on a chronic basis, it can lead to various diseases. Where anti-inflammatory foods become extremely useful is that basically what we are doing is we're harnessing the use of antioxidants which work by reducing the levels of free radicals. These free radicals or radical oxygen species get formed in the body as part of our metabolism, but they can also lead to inflammation when they are not contained by how we can eat in a better way to combat them.

Adding anti-inflammatory foods to your diet will help to provide a healthy balance, but also help to combat these radical oxygen species that get formed and that can cause harm in our body if we are not eating a healthier diet by embracing anti-oxidants and anti-inflammatory foods. Some anti-inflammatory foods are colorful vegetables which contain the polyphenols that we spoke about, as well as several others and also include things like omega 3s. The food sources of that also have a pretty rich anti-inflammatory effect. I would also just mention while we're on spices that there are lots of spices which in fact help with our immunity as well, remembering that the gut also houses a portion of our immunity. Things like ginger, garlic, capsicum which is found in chili peppers, and turmeric all contain immune boosting properties that are helpful to us. In omega 3-fatty acids, I mentioned them earlier, and I would just say here that if you are on a supplement, that's great, I know that you would be discussing that with your doctor, but there are also food sources to get these.

When I wanted to mention the B-vitamins, I would say that very broadly, whichever diet you embrace and you eat, there are many foods that are rich in the B-vitamins that are good for your brain and good for your mental health. Some of them are B-12, B-2, B-9, as well as some others. And these are from food example of food that contain vitamin B. I will end shortly, but one of the things I will share with you is that I think it's really important that food is loved and enjoyed, because I think that if we forget that there is joy in how we eat, then I think we forget that there's pleasure in this process. It's not only about the health variables or the nutritional or nutrient values for mental health, it's also about enjoying how we eat, enjoying who we eat with, and enjoying the fact. This little child in this video, I know I can't play the video, is actually a healthy eater who is embracing the joy of freshly picked strawberries on a farm on England and I wish you could see it, because what it does is it shows you how delighted he is by the strawberry and it's such a simple thing.

So I would just ask you to always remember there's much joy in how we eat and these are some resources, including my book, but also the National Center for Complementary and Integrative Health, a website that I think you might find useful if you had more questions. And thank you.

Ken Duckworth ([00:50:12](#)):

Uma, thank you so much.

Uma Naidoo ([00:50:14](#)):

Thank you.

Ken Duckworth ([00:50:14](#)):

That was excellent. A ton of questions and I'll do my best to organize them. A couple of questions about fasting and how do you think about fasting as it relates to mental health?

Uma Naidoo ([00:50:30](#)):

That's a great question. I think there's a ton of good evidence around fasting and metabolics in terms of how our body responds, how there could be improvement in metabolic disease, insulin resistance and that type of thing. I don't know that we're at the point in studies so far that we know the actual impact on mental health and I'm sure that those studies will share more information, but I don't think we are at the point of knowing that. What I would say is if you are using that type of diet, make sure that you discuss it with your doctor, because certain medications of course need you to be having food at a certain point to take them. I think that's a green light so far.

Ken Duckworth ([00:51:17](#)):

All right, thank you. There's a question on gaining weight and on a person with an eating disorder. I'm going to ask you your nutritional approach, so let's say second generation antipsychotics, Clozapine, Zyprexa, Seroquel, they often cause a decrease feeling of fullness and people tend to put on weight. How do you think about that problem from a nutritional perspective?

Uma Naidoo ([00:51:44](#)):

Tips that are one of the ways to almost offset what we know to be those side effects can be employing these pillars of how you are eating and embracing a healthy diet, because although my focus is not necessarily on weight loss, I notice that many individuals come back and say, "Hey, Dr. Naidoo, I lost five pounds. All I'm doing is eating all the vegetables you told me about." But it's actually not as simple as that. I think that when people are embracing these healthy pillars of the different components which set you up for improved gut health, reduced inflammation, embracing anti-oxidant foods, including polyphenols in your diet through the different colors of fruit and vegetables and other foods, including healthy spices, you are automatically eating in a healthier way.

I think that in certain conditions we did find that things like omega 3s were particularly important, supplements such as N-acetylcysteine were important, but there were food sources of that. Vitamin B-9 was important and making sure that someone was not deficient in magnesium and zinc. Then, when someone is gaining weight in that way, as hard as it is, we have to work with them towards steering them away from the standard American diet and the foods that-

Ken Duckworth ([00:53:12](#)):

Also known as SAD, right?

Uma Naidoo ([00:53:15](#)):

Yeah, also known as SAD. And here's where I think, something that I didn't address earlier was the fact that when we speak about foods, we also understand that not everyone has the same resources available to them. What I will share about that is healthy eating can embrace things like frozen vegetables and fruit, because in this country frozen fruit and vegetables, which say you cannot get to or organic produce is super expensive where you are and maybe you don't have a farmer's market that is bringing fresh fruit and vegetables at a lower cost close to where you live, embracing frozen vegetables, as long as they don't have added sodium, syrup or sugar in them. If there's a sauce packet I should be able to just toss that out and just steam them or stir fry them and they're pretty inexpensive for families. A large bag does not cost that much, same thing with blueberries for example.

It turns out that wild blueberries have twice the amount of antioxidants, so if you see them frozen, why not get that if a tub of blueberries can be \$5 or \$6 sometimes? I think it's important to understand we can still do this on a budget, we can still embrace healthier eating. The environmental working group has a list called the Dirty Dozen of the foods that they suggest every year and they update it every year to try to get organic if you can. I try to have people balance that out with the Clean 15 list, all available on the internet, which are the produce or foods that you can get, and they don't have to be organic. That's another way to balance it out and an additional way is the fact that certain legumes, lentils, beans are very inexpensive. They bring back really good nutrients to your diet. A large bag is pretty inexpensive, it can feed a family over several weeks, depending on how you portion it out and those canned options can also be great as long as you just wash off the liquid they come in.

Ken Duckworth ([00:55:16](#)):

That did answer a different question that came in, you answered it. How do I work with this? I live in something of a food desert and you've answered that question with legumes, frozen vegetables, frozen fruits. If you don't have access...

Uma Naidoo ([00:55:30](#)):

Exactly and the other thing I should've said, Ken, was that I talk about salmon and I talk about healthy sources of seafood and that kind of stuff. I would just say that there are also canned versions of fish and certain seafood, which are completely fine to incorporate into your diet. I try to put out some information on Instagram about the versions we've looked at nutritionally, but please don't feel that if you can't get sockeye salmon from somewhere or you do see it and it's really out of your budget, that you can't obtain these nutrients through say canned foods as well.

Ken Duckworth ([00:56:08](#)):

What about old school tuna?

Uma Naidoo ([00:56:12](#)):

Absolutely. Absolutely.

Ken Duckworth ([00:56:12](#)):

Yeah. Good source of omega 3, because that's usually, on a budget you can usually handle that.

Uma Naidoo ([00:56:19](#)):

Exactly. Exactly. And sometimes what it's packed in and what's added, a really good option. I'm glad you mentioned that.

Ken Duckworth ([00:56:26](#)):

A bunch of questions that are very diagnosis specific. So, I don't want to develop an answer for each diagnosis, but is this something, autistic spectrum disorder, post-traumatic stress disorder, anxiety disorders, schizophrenia? In your book do you think about approaches by psychiatric diagnosis and how you approach eating information, that sort of thing? Or do you see it more as a pan diagnostic nutritional approach?

Uma Naidoo ([00:57:01](#)):

That's a great question and it's actually a little bit of both, Ken. I'll explain it to you. I have some pillars that when I work people, I teach them and that I tried to share in this presentation that we should be doing for their better mental wellbeing. Then book is divided into chapters on the different diagnoses that I think are listed on the cover, but we go into several more and the final chapter is on how to set up your kitchen and has recipes. But in each chapter what I looked at is the evidence behind the different conditions, the different foods or nutrients behind those, and then a list at the end of each chapter of foods to embrace and foods to avoid, because the ones to avoid are equally important. People don't know that nitrates in processed meat drive depression. It's very helpful to know that if you have the choice of something and you're thinking or you're not sure, you can find out that that is something to be wary of if you're struggling with depression. That's why I went into that level of detail.

So, it's divided by chapter, there are naturally some overlapping foods. I'd suggest looking at the chapter, checking that out, looking at the food list, and then seeing what you can incorporate in a healthy diet.

Ken Duckworth ([00:58:15](#)):

Excellent. A question about magnesium and anxiety, and a related question about vitamins. I'll ask the question, what vitamins do you take, a nutritional expert and Harvard trained psychiatrist, just for your general wellbeing? And how do you advise patients? Do you measure their magnesium? Do you measure B-12? What is your approach on nutritional aspect of their nervous system?

Uma Naidoo ([00:58:42](#)):

There are a lot of studies... Let me just take a step back and say that if we were not eating a SAD diet and I include myself as part of this, I live here and my diet is not perfect, I try my best like everyone else, but given that if we were eating a healthier diet, we'd probably technically nutritionally not need a multivitamin. But that being said, we are not getting all the nutrients, so basic multivitamins, there's no harm by taking that in appropriate quantities. The fact that you may find yourself nutritionally depleted doesn't mean you have to take extra vitamins, just take a multivitamin or check with your doctor if he or she has checked your levels. In terms of the approach, Ken, it tends to be highly personalized, because all the time I still have the pillars of healthy things that I would like people to embrace as part of their eating plan and then the specifics.

But it has also become more personalized and I'll give you an example, I treated a mother who came in with her daughter about a month or two back. The daughter was just accompanying her, and they shared unexpectedly that they'd both had an opposite reaction to the same healthy food. That spoke to the genetics and the microbiome and how mostly unique it is in different individuals who are biologically related. That and other research has shown me that I have to make the plan more specific for each person and that being said, there are certain things that I'd like people to try to do and follow for a specific symptom and I try as much as possible to make it work for the dietary habits that they have. Someone does not eat any beans; my challenge has to be how do I include that that they can tolerate it in a way that they can enjoy it in their diet?

Ken Duckworth ([01:00:41](#)):

I'm going to give you a chance to take a deep breath and get a glass of water. This is a question for me. Will NAMI be rolling out any programs or education on food and mood? I would love to help, and it would bring in a lot of younger people. Great question. We once had a program called Hearts and Minds, which was identifying premature mortality in people who lived with psychiatric vulnerabilities and nutrition, lack of access to healthy foods, poor medical care, maybe challenges accessing exercise, and smoking resulted in increased cardiovascular mortality and risk of diabetes. We put together a program called Hearts and Minds, it was quite successful. It needs to be updated and there's hints that we may have a funder who wants to bring it back. Of course, I would ask Uma if she would offer any nutritional thoughts for that, but the check is not cashed.

What I would say is NAMI is a very holistic organization, we've never been interested in only one tool and I think with the rise in the science around nutrition and thoughtful approaches to getting healthy nutrition on a budget, I think this is going to be a portfolio you'll see we develop over time. Hopefully in what I would call Hearts and Minds Two, because I think cardiovascular risk is still a medical sequela of many people with mental health challenges and it is also known, and you can correct me if I'm wrong, Uma, that depression is an independent risk for heart disease and so of course the mind and the brain are all connected.

That's another good question and it is not something we have historically developed, but as Uma mentioned, this is a relatively new field and she's really a pioneering leader in this entire integrative area. Keep your eyes on our website, it's quite popular and we're hoping to be developing something once we get the funding to do that. Let's talk a little bit about questions from vegans and vegetarians. What should I eat for my mental

health, assuming I'm a vegetarian or a vegan? And are there things that I should be attending to? Obviously, B-12 is going to jump out, and could you develop that idea, but then also answer the question on top of that, please?

Uma Naidoo ([01:03:15](#)):

Sure. I think with vegans and vegetarians, I would say, that there are many ways to get your nutrients. There are actually several successful athletes who are vegan, who embrace a vegetarian diet, so I think it's about what you choose and where you choose it. It's the source of your food, the vegetables, how you bring back your protein. I think the one concern is vitamin B-12, because usually really the best sources are animal proteins and might well be deficient in that, so you might want to have that checked with your doctor and find out an appropriate supplementation. There are certainly oral pills that you can take, vitamin B-12 supplements, but a lot of people still feel that an iron shot every now and again from your doctor may work better. That's something you definitely want to check out, because a lower vitamin B-12 can have mental health consequences and neurological consequences. In terms of the foods you should embrace, if you are eating a healthy plant-based diet, there are many advocates for that type of diet being super healthy.

Like you mentioned cardiovascular disease, Ken, still the number one killer of women in the United States. It's extremely important. I would say that maybe follow a plan that gives you a balance of how to include sources of protein, the balance that we talked about and the healthy eating plate and making sure that you are checking, if you're feeling fatigued, if you're not feeling good, making sure that your doctor checks on blood levels and gives you some indication of anything you may need to be replenished.

Ken Duckworth ([01:04:56](#)):

Thank you. Could you talk about inflammation and anxiety, inflammation and depression, inflammation and schizophrenia? And what is the scientific evidence that an anti-inflammatory diet helps with those psychiatric challenges?

Uma Naidoo ([01:05:13](#)):

The way that I have understood inflammation and through the research as well is that a lot of the driver of information, certainly from the nutrition aspect, is really coming from the types of foods that we're eating. What ends up happening is those, like the client that I had that I mentioned earlier, a change in diet, increased processed foods, increased trans fats, fast foods, added sugars, all of that set up gut dysbiosis. And that imbalance of the good bugs or the good microbes and the bad microbes get imbalanced, and by the way, it's been shown in research that in a 24 hour period you can choose the healthy food or the unhealthy food and start to impact the bugs in your gut that day. You don't feel the effects immediately, you feel it down the road and that also speaks to the process of inflammation, because when you're eating the unhealthy diet, so you choose the fast foods and the unhealthy processed foods to eat today, your gut bacteria or the gut bugs are going to change.

When you set up an imbalance, a dysbiosis gets set up and sets up a process of inflammation in the gut. Over time that leads to things like a leaky gut that people may have heard of, or the medical term is intestinal permeability, and what then happens is remember, we spoke about the two-way super highway, the chemical exchange between the gut and the brain start to change. That's where inflammation in my understanding of the research of the work is what drives certain symptoms, so take for example, anxiety. Sugar, gluten and processed vegetable oils worsen anxiety, studies have shown this. All of those separate types of food, one of the ways in which they impact it is through the process of inflammation, so that's one example of how to [inaudible 01:07:25].

Ken Duckworth ([01:07:26](#)):

Question, is your book available in Spanish?

Uma Naidoo ([01:07:30](#)):

It's not yet available in Spanish. It is selling to certain countries that will be printing in Spanish, but in the US, it is not available in Spanish. I'm sorry, I unfortunately don't make that decision.

Ken Duckworth ([01:07:47](#)):

But it's possible if it is sold in other countries in Spanish?

Uma Naidoo ([01:07:50](#)):

Yes, it is. It is sold to several countries that are Spanish speaking as a first language, so it will be available in those countries in Spanish.

Ken Duckworth ([01:07:58](#)):

So, Spain would be an example?

Uma Naidoo ([01:08:00](#)):

Spain, Brazil, Mexico that I know of so far. There might be a few more.

Ken Duckworth ([01:08:05](#)):

Okay, so there might be a way to do it, but they're not going to be sold straight away in America.

Uma Naidoo ([01:08:11](#)):

Not in Spanish in America right now.

Ken Duckworth ([01:08:13](#)):

But if people buy a lot of them, perhaps they will produce a Spanish version.

Uma Naidoo ([01:08:22](#)):

Actually, we had so many requests for that [inaudible 01:08:22].

Ken Duckworth ([01:08:22](#)):

Well you can tell them the NAMI audience is demanding it as well.

Couple of questions about genetics. Where are we at with our understanding of genetic and how that informs both mood and nutritional strategies? Is it too early to really make any statements about that? Or is it a scenario that's just emerging or have we learned some things about this?

Uma Naidoo ([01:08:47](#)):

I don't consider myself a genetics expert. I think that the research is ongoing. In my research for this book I didn't necessarily find enough evidence to include it as a means that people should make a nutritional strategy based on that. And I stand with all the information that I shared with great humility. Stuff changes all the time.

Ken Duckworth ([01:09:14](#)):

Yes.

Uma Naidoo ([01:09:14](#)):

Nutritional science changes all the time. It's not, as you know Ken, a well-funded area, because pharmaceutical studies get a bunch of the funding and nutritional studies do not.

Ken Duckworth ([01:09:26](#)):

[BKL 01:09:26] is not a thing.

Uma Naidoo ([01:09:29](#)):

Exactly. So, I would that I don't think that we're there yet and I think that that research will be ongoing.

Ken Duckworth ([01:09:41](#)):

Let's talk a little bit about insulin resistance. This is a gentleman who is working the problem of diabetes and he doesn't develop this idea, but it's quite commonly associated with the use of psychotropic medications. He reports that he's using vegetables and fruits a great deal. Are there any specific foods that deal with insulin resistance? And could you just take a minute to develop the idea of insulin resistance and how that relates to weight and movement? I think it's an important component of this discussion.

Uma Naidoo ([01:10:20](#)):

Sure. I think I would start with the example of how we feel when we eat a healthy, well balanced salad with a good source of protein versus how you feel when you eat a sugary donut. Maybe you went to Dunkin' Donuts and you got the 20 ounce cup of coffee, where you get a quarter cup of cream in and probably six to eight spoons of sugar, I'm not saying you did that but I'm using this as an example, and then you thought, "Why don't I get the sugary donut to go with it?"

Ken Duckworth ([01:10:50](#)):

In Boston this is known as a regular coffee. For those of you who don't know and if you ask for a regular coffee, they put so much sugar in it, it's mind numbing and then they add a creamer and so it's actually wrapped up several thousand calories before you've even begun your day.

Uma Naidoo ([01:11:06](#)):

Exactly. It's my favorite coffee in Boston, but that being said, you'd have the sugary donut. You eat it and you feel okay, but then you have what people call that sugar crash. How that compares to when you had a healthy breakfast, maybe you've had a chia pudding or something more filling, full of protein or fiber and healthy fat is that you have that chia pudding and you know you're ready for a snack later in the morning you'll go towards eating your lunch. What happens with the sugary donut is you have that crash and if that's the diet that you generally are eating and you're finding that you suddenly feel exhausted or you're feeling this change in your energy or you're feeling weird, what starts to happen is that unlike the healthy, filling food that is allowing your body to break down those nutrients more slowly and give you an evening of your blood sugar, what happens with rich, sugar laden or fast foods that are processed is that your insulin starts to spike. Basically, insulin in simple terms tries to protect you by basically moving the extra sugar you've eaten and the extra calories in a different way in your body.

Insulin resistance essentially gets set up when your body is getting, there could be genetic, other factors behind this, but one simple way to think about it is your body is being fed the nutrients that's causing your insulin to work extra hard and it can't really keep up. That's when it becomes resistant and really unable to do its job. I think that there's a lot of research on the pharmaceuticals and the metabolics of that. I think that one way to think about this with major mental illness or psychotropic medications is how do you eat from the get-go? If you are at an unhealthy weight when you start that medication, then you should be eating different nutrients, because all you're doing is for example that example of when I would say, "You know what, cut back on your fruit. Eat the vegetables, eat the healthy omega 3-fatty acids." Because we know that they're helpful in those conditions. "Eat these nutrients and maybe cut back on the fruit and if you want something sweet, have a few blueberries."

That's where it starts, because if you're starting off with excess weight, you are then set up for the insulin resistance. If you don't have it, it might then form. I think that's where it comes back to those pillars that people may roll eyes and say "Oh, it's just eating

another salad." It's actually more significant than that, because ultimately by embracing those pillars of good healthy eating habits you're truly impacting your mental wellbeing. And ultimately, I think people will, I think the physical effects, whether it's weight loss or through other ways are helpful too.

Ken Duckworth ([01:14:06](#)):

Yeah, so this leads to our final question and I just want to thank you, this has been a comprehensive discussion of many aspects relating to mental health and nutrition. Last question is my family's eating kind of SAD-ly, standard-American-diet-ly, and I want to improve our family culture towards nutrition that will support our mental and physical health. What's been your experience on how you move the family dial?

Uma Naidoo ([01:14:35](#)):

I think it's slow and steady change. I don't think that takeout food from a fast food restaurant, I don't think that you can switch it out with a healthier salad with great proteins and a side of vegetables. I just don't think that works. I'd love to suggest it, but in my experience it doesn't work. My tips for that are the following. One of the things I did with the food costing experiment then is I worked out for a family what it would cost to buy a rotisserie chicken, which by the way, if you can ask your supermarket what they put in it, most supermarkets don't add a ton of stuff to it. If they're adding a processed vegetable oil, not a good choice, but if it's a rotisserie chicken versus you don't have time and you're going to a fast food restaurant, we worked out that for a family of four buying daily chicken nuggets as a snack versus getting a rotisserie chicken and spreading that out over a few days for family meals or for your family dinner, was much less expensive.

Right there is an example of changing the culture of we're still getting something that looks delicious that the children might want to eat and you're making a change from the chicken nuggets to, and I'm not saying that is what the person is eating, but change to something healthier. Adding in vegetables, so maybe slowly introducing more sides of vegetables, introducing the family to a healthy salad with ingredients that they like. Food doesn't have to taste bad just for it to be healthy. I'm a big proponent of that, it's how you put it together. Maybe introducing a salad, introducing more fiber vegetables, switching out ice cream for dessert to strawberries, maybe some blueberries. Introducing ideas like that to the family and lastly, cutting back on I think the processed foods and putting in a healthier whole ingredient without disrupting things too much for the kids and for the family.

Ken Duckworth ([01:16:44](#)):

So, a gradual and steady movement?

Uma Naidoo ([01:16:48](#)):

Yes.

Ken Duckworth ([01:16:49](#)):

Towards a destination. But you'd have the conversation, right?

Uma Naidoo ([01:16:53](#)):

We'd have the conversation and I'd say "Look, we're not doing well with this. Here are the stats. We have one family member who's not well," or whatever it is. That is often a motivating factor for people to want to make change. I think it also becomes hard when people have different diets in the family, so that can be challenging for families too.

Ken Duckworth ([01:17:15](#)):

Uma, thank you so much. Your book is This Is Your Brain on Food. Let's go to the next slide really quick.

Uma Naidoo ([01:17:23](#)):

Thank you, Ken.

Ken Duckworth ([01:17:24](#)):

As we say at NAMI, you are not alone and just to let people know this is an informational webinar. It's not intended to provide medical advice on any specific topic or for any specific individual. And of course, in the shameless commerce department, this series is made possible through the generous support of people like you. NAMI provides a lot of free services and we'd like to run well on-