Health SCIENCE®

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Welcome to the Spring 2025 issue of *Health Science* magazine!

As I was penning my thoughts for this issue, I found myself returning from the magical NHA plant-based cruise to Tahiti, and it caused me to reflect on the remarkable support that the NHA is increasingly providing to its members and those seeking to follow the lifestyle we champion.

I often like to humorously observe that when you live our health program, you don't get invited out to dinner a lot—and you don't invite a lot of folks over for dinner! My serious point is that leading this lifestyle can often be a lonely undertaking, and providing a sense of community is one of the NHA's most valuable benefits. Historically, nowhere has that sense of community been more on display than at NHA conferences, where hundreds of like-minded individuals gather annually to spend multiple days learning together, eating together, exercising together, hiking together, and simply sharing the joy of our health-promoting and health-insuring lifestyle. As my late father, Max Huberman, often liked to say, when you come to NHA conferences, it always "recharges your battery!"

Almost unbelievably, we have been holding our annual health conferences in a nearly unbroken chain since 1949, and for the past five years, they have all been sold-out events with all-star lineups of speakers and special events. It is a tremendous legacy of impact and support that is unmatched by any other organization in our movement, and it is one of which I am very proud.

A few short years ago, the NHA unveiled its plant-based travel opportunities, opening up another remarkable level of support for those following this lifestyle that even I could not have imagined. If you have often vacationed out of the country, as Wanda and I have, you know the enormous challenge of trying to eat a healthy whole-food, plant-based diet (to say nothing of being SOS-free) in a foreign land. However, through the rich partnerships my wife, Wanda, and travel agent Lisa McCarl have developed with Windstar Cruise Lines and other travel companies, we have taken away the pain points of travel while also adding the same rich sense of community that our conferences offer. On our recent Tahiti trip, over 266 travelers shared the beauty and bounty of our lifestyle!

Of course, we realize that not everyone is able to attend our conferences or join our travel excursions, and that is where the many other lifestyle-supporting initiatives of the NHA come into play. At the top of that list is this 40-page, advertising-free magazine, which is now entering its 47th year of continuous publication. From the many letters and emails we continue to receive, we know that *Health Science* remains our most cherished member benefit and represents a lifeline of support, education, and inspiration. Add to that our Health Science podcast, newsletter, and growing website archive of recipes, resources, and more, and you know that we truly do our best to keep you informed and connected.

With your continued support, our efforts will only get stronger. As always, thank you, and we hope you enjoy this issue as we glide into the promises of spring!

MARK A. HUBERMAN
NHA President

Health SCIENCE

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INTERVIEW WITH MEAGAN GREGA, MD

Mark Huberman interviews **Meagan Grega, MD**, who has channeled her energy and passion for lifestyle medicine into roles in teaching medical students, as a hospitalist, and as the cofounder and force behind The Kellyn Foundation, bringing positive change to her community and its schools.

ULTRA-PROCESSED FOODS

Jeff Pierce, MD, dives into the realities behind ultra-processed foods, explaining what they are, how they came to be so prevalent in our food supply, why they're a concern, and how to get them out of our diets. What's in your pantry?

AS DAIRY'S STRANGLEHOLD ON THE U.S. DWINDLES, A BRIGHTER FUTURE TAKES SHAPE

Olympic medal winner **Dotsie Bausch**, cofounder of Switch4Good, and colleague **Jamie Bichelman** discuss the food injustice present in the dairy industry's massive efforts to push dairy products on the U.S. despite its deleterious effects on large segments of the population.

HOW TO BUILD LEAN MUSCLE AND LOSE BODY FAT ON A WHOLE-FOOD, PLANT-BASED LIFESTYLE

Personal trainer **Maxime Sigouin** presents the three major principles needed for success in a program to improve body composition with emphasis on the importance of building strength for those over 40.

Q&A

Eileen Kopsaftis, PT, sheds light on knee pain, including why it's often misunderstood and approaches for successful treatment, and **Niki Davis, MD,** fills us in on the reasons behind fingernail ridges, including diet advice to support healthy nails.

KITCHEN PREP FOR SUCCESS

Dianne Doyle tells how the Mason-jar food swaps she and her husband, Pat, coordinate as part of their organization, Plant Based Dallas, make kitchen prep a breeze while building community and supporting those both new to and experienced in the whole-food, plant-based lifestyle.

Dear Mark,

I love the NHA, and Ron and I are thrilled to become Life Members! It is an exceptional organization dedicated to helping all of us learn how to be healthy and supporting us on our journey with the excellent publication of *Health Science*, conferences with expert speakers promoting a healthy diet and lifestyle, and the vacations to many different destinations. There is something for everyone, especially health!

The Winter 2025 issue of *Health Science* is outstanding! I especially enjoyed the interview with Dr. Robynne Chutkan, MD. I think she has a very balanced approach to health and is very supportive of her patients and their needs. Just reading the article helped me with a health issue that I was having. Dr. Frank Sabatino is one of my favorite health instructors, so I thoroughly enjoyed his article on Parkinson's disease. His explanation of the disease and its possible causes, along with the potential of a plant-based diet and lifestyle to reduce symptoms and improve quality of life, can give hope to people with the disease. And so many recipes with pictures! They all look delicious! Thank you for all the time all of you spend and the love you give to make *Health Science* a first-class magazine!

Sheron Stratton
Levittown, PA

Hi Wanda,

Mark's interview with Robynne Chutkan in the Winter 2025 issue of *Health Science* was so good! He has a talent for getting great stories and such interesting information with his questions. You can see he puts a lot of thought and preparation in. As always, the magazine was excellent from cover to cover. I don't know how he does it, every single time!

Heidi Zomnir
Gibsonia, PA

Hello Mark,

I truly enjoyed the conference last year, and the food was amazing! The 2025 conference looks like another good one! I appreciate your emails, the publications, and the podcast. They help keep me on track, which is not always easy. Thank you for all you do!

Maya Khoury
Santa Fe, NM

Hi Mark,

I just received the latest issue of *Health Science*. I had time to read the feature interview with Dr. Robynne Chutkan and really enjoyed it. So good to see doctors with integrity in the mainstream. Yay for her!

Gracie Yuen, D.C.
West Farmington, OH

Dear Mark,

I loved the recent episode of the Health Science podcast that featured the conversation between Dr. Sabatino and Mark Epstein. Thank you also for the wonderful Health Science newsletters!

Marsha Berland
Neihart, MT

Mark,

Thank you for making the replays of the June NHA Conference available to those in attendance. I have been using them as several of the speakers will be Zooming with Chat and Chew More Plants this year. Your introductions are helpful, too, as they supply information for our intros when they Zoom, but we won't steal your jokes! As I told Wanda, the June conference was well run and was a great place to learn. We took several of our members and there will be returnees for next year!

Cathy Thornhill, EdD
Winter Haven, FL

Dear President Huberman,

I enjoy all the issues of your *Health Science* magazine—thank you for doing such a good job with all the articles. It's so refreshing to look at nutrition and health the way each author expresses it.

Margaret Carlson
San Diego, CA

Hi Mark,

I just received the Winter issue of *Health Science* magazine, and as usual, I devoured it cover to cover in one sitting—excellent, as always! Best wishes for another successful conference, and I hope to be there in 2026!

Janie Nickey
Pattonville, TX

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NHA Mission

The mission of the National Health Association is to educate and empower individuals to understand that health results from healthful living. We recognize the integration of all aspects of health: personal, environmental, and social.

We communicate the benefits of an exclusively whole-plant-food diet that is minimally processed and without added salt, oil, and sugar, plus exercise and rest, a healthy environment, psychological well-being, and, when indicated, the use of professionally supervised water-only fasting. We take a leadership role in advocating health freedom issues.

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Interview with

Meagan Grega, MD, FACLM

by Mark Huberman

MEAGAN L. GREGA, MD, FACLM, DIPABLM is the cofounder and chief medical officer of Kellyn Foundation (kellyn.org), a 501(c)3 nonprofit dedicated to "Making the Healthy Choice the Easy Choice." Through its Healthy Neighborhood Immersion Strategy, Kellyn provides school-based, healthy lifestyle education and Garden as a Classroom programs; supports access to nutrient-dense produce and delicious plant-powered prepared meals via the Eat Real Food Mobile Market; engages participants in hands-on, plant-based cooking classes in community settings; and offers intensive therapeutic lifestyle-change interventions for families, employers, and community groups. Dr. Grega earned her MD degree from the University of Pennsylvania Medical School, serves as faculty for St. Luke's University Health Network residency programs, and as clinical assistant professor for the Lewis Katz School of Medicine at Temple University. Dr. Grega is a member of the American Academy of Family Physicians, is a fellow of the American College of Lifestyle Medicine, and serves on the board of directors for the American Board of Lifestyle Medicine and as annual conference chair and secretary of the board of directors for the American College of Lifestyle Medicine.

MH Prior to this interview, I did my usual background research, and the one thing I have not been able to discover is the story of your personal journey to plant-based living and lifestyle medicine. How did that come about? Did you grow up either vegan or vegetarian?

MG Well, that's a great way to start, Mark! I definitely did not grow up vegan or vegetarian. Half of my heritage is Welsh, and if you are familiar with Welsh cuisine, being vegetarian or vegan is not very common. The other part of my heritage is Pennsylvania Dutch, which is also very heavy on meat and potatoes. As if our culinary heritage wasn't enough of a challenge, my parents were both working professionals, so we grew up with a lot of the things that we would now call convenience foods or ultra-processed foods. I am blessed to have a wonderful family and a large extended family that's always been very supportive of everything I did. They put a lot of emphasis on education and service to others, and a lot of the things that you see as part of my life now I owe to that. But that doesn't include my interest in nutrition, which didn't evolve until after I completed medical school and residency.

MH Was there another doctor in the house, or were you the first physician in the family?

MG No, I'm the first doctor in the house! But I have to say I am thrilled that my son, Keith, is currently a second-year medical student with a passion for lifestyle medicine. He spent some time with Dr. Ron Weiss as a medical scribe, so we are definitely increasing the number of doctors in the Grega family!

MH How did you break away from your meat-and-potatoes, convenience-food upbringing? Was there some personal health crisis?

MG Fortunately, there was not, but as I think back on it, there certainly could have been. I grew up with way too many sweetened beverages like Coca-Cola and other sodas, which served as fuel to get me through the day, and whatever food I could easily grab was mostly what I ate. That somehow got me through high school, college, and even medical school without any significant health issues.

MH Your experience reminds me of one of my favorite observations by the great Dr. Esselstyn, who often likes to remind his audiences that most of us have a health-warranty period that can get us through the first 20, 30, or even 40 years, where we can beat our bodies up from a diet and lifestyle standpoint—but boy, if we haven't been taking care of ourselves, that warranty inevitably runs out and serious problems present themselves.

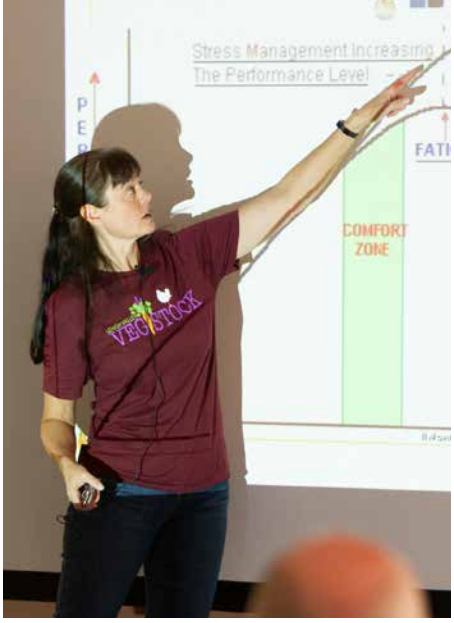
MG Absolutely, and I love that analogy. I consider myself one of the fortunate ones. I outlived my warranty period even though I did not eat very well all through medical school and my family medicine residency, when we were working 80 to 100 hours a week and mostly just grabbing whatever was in the vending machines or in the cafeteria.

MH Why medical school?

MG Believe it or not, I decided that I wanted to be a doctor when I was in high school, which was a little strange since my primary interest and involvements were in theater, dance, and modeling. I definitely thought I was going down those paths, but at some point, I realized that I didn't enjoy the type of life an entertainment career would require. I wanted to do something that really challenged my brain and would allow me to keep learning interesting things. I used to joke that if I could find a way to make a living as a perpetual student, I would! Well, I also loved science, helping people, and making a difference in my community. Becoming a doctor seemed to offer all of that.

MH That's probably why we get along so well! I was a theater major in my undergraduate days at Pitt, and one day, it occurred to me that only about 10% of actors were working, so that was not a very rational pursuit—and certainly not one that would help improve the world. For me, law was a much more logical choice, and that's what I did. I still love the theater and participate when I can find the time, but I have long considered it a better avocation than a vocation. What particular medical field were you drawn to?

MG I had initially thought that I would be a pediatric oncologist because I had done some lab research on bone cancer and oncogenes in my college years, which



PHOTOS BY ROBERT STOLPE

I found very interesting. I also liked the idea of being a pediatrician. I attended the University of Pennsylvania medical school, which is an incredible institution with great research trials and lots of clinical opportunities. However, I began to realize over time that family medicine was really more my calling, since it enabled me to take care of people over a longer period of time and in all the various phases of their life. If you think about it, family medicine is like being the jack of all trades. You may not be the master of any of them, but you are the one who understands how to evaluate and treat as the first line of defense when someone has a medical issue and who is able to take care of people over their whole lifespan while forging deep relationships with the families you serve.

MH When I read that you went to Penn and did an internship at the Hunterdon Medical Center in Flemington, New Jersey, I couldn't help but wonder whether you intersected professionally with Dr. Joel Fuhrman. I believe he not only also graduated from Penn, but also lived in Flemington and worked at the Hunterdon Medical Center.

MG We actually did, which is kind of crazy, but it wasn't related to our mutual interest in lifestyle medicine. During the time that I was a family medicine resident, he had his own independent family medicine practice, and I recall talking to him while admitting some of his patients. Of course, at the time, I did not know him as anything other than one of the attending physicians at the hospital, and I knew nothing about his groundbreaking books or his nutritarian diet. It was a real surprise when I learned many years later that our professional interests in food as medicine and lifestyle medicine were so aligned.

MH So, if it wasn't crossing paths with Dr. Fuhrman, was there someone else's book, lecture, or documentary that caused you to re-examine almost everything you had been taught in your medical training and set you off on a new path?

MG Actually, it was my own patients. Although I didn't have a nutrition background, I was aware of the concepts of the social determinants of health and bio-psycho-social family models, which gave me a broader view of health and well-being. The view became even broader during the years I worked as an officer in the Navy medical corps. I was shipped right out of residency to a clinic where I was basically the only doctor on base, taking care of retirees and active-duty military and dependents. I was out there on my own as a new doctor trying to figure out how to take care of this wide range of patients, and I did a lot of research into the medical literature to determine the best options for their care.

Right around that time, the National Cholesterol Education Program released its third version of recommendations about who should go on statins and what was considered a good cholesterol level. I was put in charge of reviewing the charts of all of our patients who had lipid panel results to determine which of our patients should be on a statin. That responsibility led me to a deep dive into the literature on cardiovascular disease, but it still didn't lead me to studies on lifestyle medicine.

During the first five years or so of my work as a family doctor, I began to realize that while I was following all the current guidelines for my patients' high blood pressure, diabetes, and heart disease in terms of labs, workups, and medications, they weren't really getting better. Maybe they were slowing down the trajectories of their diseases, but that was all. And I began to think of it like slowing down a train that's going over a cliff instead of turning it around. This was personally and professionally very problematic for me since I felt like I went to one of the best medical schools in the country. I had been trained in a really good residency program, and I was practicing medicine in the way that I was taught to practice it, yet my patients weren't really improving. I thought we would be able to restore them back to health, but it was more just managing their disease.

That realization motivated me to start seeking better answers and trying to understand why all these things were happening. But there was also a family aspect to it. At the same time that I began questioning some of the assumptions around my medical practice, my elementary school-aged children were starting to get acne, something that was happening way too early in their lives. It seemed strange since neither I nor my husband had experienced significant acne growing up. Both of my children were exhibiting a strong preference for ultra-processed food, as well. So, at the same time that I was trying to figure out what was going on with my patients, I was also trying to figure out what was going on with my kids.

That was when I came across Dr. Dean Ornish's works and those of Drs. Caldwell Esselstyn, T. Colin Campbell, Neal Barnard, and Joel Fuhrman and all these studies that I had not been exposed to during medical school or in my residency that pointed to the fundamental truth that the food we consume could play such a decisive role in dictating our health. Of course, there is

Where my patients were concerned, I actually made the change [to healthier eating] for myself first, because I wanted to know how I felt and how difficult it would be before prescribing or recommending it to my patients. Confusion abounds around nutrition, and I didn't have enough training at the time to be certain that this was the way we should go.

obviously a lot more to lifestyle medicine and a healthy lifestyle than just food, but food was the starting point with our family as we tried to shift from the standard American eating pattern to a more whole-food, plant-predominant pattern.

MH Did you make an immediate diet change for yourself and encourage the rest of the family to come along, or did they have no choice because you were the cook?

MG Good question! Where my patients were concerned, I actually made the change for myself first, because I wanted to know how I felt and how difficult it would be before prescribing or recommending it to my patients. As I am sure you know, confusion abounds around nutrition, and I didn't have enough training at the time to be certain that this was the way we should go. So, I started by getting rid of all the soda. I was not much of a meat eater, but I stopped eating it all together. And over the course of a couple of months, I lost 15 pounds without even trying even though I hadn't been overweight.

I didn't even get rid of all animal products right away; I still ate some cheese and a little bit of eggs here and there. But I was surprised how much I felt like I had better energy. I had lost weight, and I felt more comfortable doing physical activity, which I noticed because I was also increasing my physical activity at that point. So, it all seemed really good.

MH How did you make the transition with your family?

MG We started by changing over to things like organic cow's milk and organic meat, thinking this was a step in the right direction. Eventually, we got rid of the majority of meat and milk products, and now some of us don't eat any meat at all. But for our family, like for most families, it was a journey. So, first, it was me, then my husband, and then we brought the kids along. We all took different lengths of time to get to where we are now with our food choices. I went the fastest to becoming primarily whole-food, plant-based, though I do still have a little cheese or eggs at times; the rest of the family had their ups and downs. Now, my daughter is closest to me in terms of being WFPB, and I would say my husband and son are whole-food, plant-predominant.

MH Looking over your bio, you seem to be one of the busiest people I know. In addition to all the organizations you serve, do you still maintain a private practice?

MG No, I don't have my own private practice. However, I still do see patients since I work as a hospitalist and do hospital shifts every month. I'm also on the faculty of the Temple/Lewis Katz School of Medicine—St. Luke's Campus and faculty for a couple of residency programs, integrating the lifestyle medicine residency curriculum into their training. One of my special interests is teaching about lifestyle medicine-intensive behavior change in our group visit cohorts.

However, my main work is serving as the Chief Medical Officer of Kellyn Foundation, which I cofounded. At Kellyn, we provide community programming in schools and neighborhoods, including intensive therapeutic lifestyle-change cohorts. That's where I do some of the actual lifestyle-change work with patients.

MH As if all that were not enough, you also play a leadership role in the organizations that certify doctors and other professionals in lifestyle medicine, do you not?

MG I do. I am active in both the American Board of Lifestyle Medicine and the American College of Lifestyle Medicine, as well as the American Academy of Family Practice. So, you are right, I definitely have a lot of different things going on. I'm never bored!

MH When you're serving as a hospitalist and making rounds on the floor, how do you incorporate your lifestyle-medicine perspective, which would seem to be in such contradiction with the "sick care" system in which you are working?

MG Part of it is compartmentalization in that I'm in the hospital to take care of the patients for the specific issues, often critical issues, that they are there for. That very often involves helping with their pain control and managing their blood sugar or their blood pressure. But for people who are open to the conversation, I can talk to them a little bit about food choices. We definitely talk about things like physical therapy and physical activity, but if we're talking about nutrition, we really have to meet people where they are and see what they might be interested in hearing about.

Keep in mind that I often only see them for a 24-hour period, because that's how long my shifts are. So, I give them information where I can, but I don't try to push them into something they're not ready for when they just came out of surgery or they just had some sort of an event.

MH What about the doctors and nurses with whom you regularly work? Have you had any positive impact on them in terms of nutrition and lifestyle?

MG Yes. In that setting I think I've had the biggest impact on the nurses I work with on a regular basis. I've been at the same hospital for 18 years or so, and many of the nurses have known me the majority of that time. They often ask me questions about what I eat since I bring in all my own food for those 24-hour shifts. When they ask for recommendations, I suggest they watch *Forks Over Knives* or read the Blue Zones books or check out Dr. Michael Greger's books and videos. I give them different suggestions depending on what they ask about. A lot of them have shifted to eating more whole-food, plant-based—maybe not 100%, but a lot differently than they were before. They often say that my food smells delicious and looks amazing, so they want to try it themselves.

MH Does your work with Kellyn Foundation intersect with your work at the hospital?

MG It sometimes does since I'm starting to see people coming into the hospital who have worked in the community with Kellyn Foundation, and they're talking about how their change in diet has made such a difference for them. So, maybe they're coming into the hospital for a knee or hip replacement, and they end up talking to me

and other doctors and nurses about how much of a difference changing their diet has made and asking for different foods in the hospital. It's like positive change coming from the outside in, instead of from the inside out.

MH Given your long-tenured position with the hospital and the megaphone that you have in the Lehigh Valley with Kellyn Foundation, have you been able to have any success improving hospital food, which is notoriously unsupportive of health?

MG I would say yes, in some cases. So, for example, in the employee and the visitor cafeterias, there have been some good changes as far as offering at least some whole-food, plant-based options. I think our best impact has been improving and expanding the variety of options on the salad bar. It's no longer just iceberg lettuce; there are chickpeas and nuts and a whole bunch of different colorful veggies. We have also seen the addition of some plant-based options on the hospital inpatient menu, although, if the patient doesn't want to choose the black bean burger, for example, we can't really force them to choose it. So, I would say there's been some progress. I would love to make it so that the default for most patients was a plant-based option that they'd be able to opt out of if desired. But that's not where hospital food is right now, at least not in our area.

MH In the faculty positions that you enjoy with Temple/St. Luke's, do you teach lifestyle medicine or at least weave it into the curriculum and training?

MG Yes, I do. I'm also the faculty mentor for the Lifestyle Medicine Interest Group for the medical students at Temple/St. Luke's. I not only teach the medical students and the residents, but they also come out with me in the community and do things with Kellyn Foundation like volunteer in the school gardens, assist with the Eat Real Food Mobile Market, and attend the therapeutic lifestyle-change intervention cohorts.

MH Are you seeing an uptick in interest in lifestyle medicine among new physicians? As I am sure you know, nutrition education has historically been nonexistent in medical schools.

MG There has actually been a huge uptick, especially in primary care residents. I am very excited about the great interest in the lifestyle medicine elective rotation I created for residents. Over 40 residents are currently rotating with me this year in that program. Many of the trainees who have completed our residency program have gone on to become board-certified in lifestyle medicine.

PHOTOS BY ROBERT STOLPE, MEAGAN GREGA & JON LATTIN

MH The challenge for new doctors seems to be how to earn a living in this field. Isn't the reality for so many that they graduate from medical school with extraordinary debt and then try to enter into a lifestyle medicine practice where insurance only pays them to do a procedure or prescribe medication but not to counsel a patient on their diet and lifestyle? Doesn't that present a major challenge to those motivated to make a living in lifestyle medicine?

MG It is difficult. And that's a challenge that every new physician has to navigate based on where they're planning to live and what type of practice they want to have. What I try to teach all my students and residents is how to weave lifestyle medicine into any other regular practice. It's especially important if they're going to be family doctors who will follow the same patients for years or endocrinologists who will be dealing with type 2 diabetes and other metabolic disorders. If they want to make a difference with lifestyle medicine, they will have to find creative ways to merge this into standard medical appointments.

I try to teach all my students and residents how to weave lifestyle medicine into any other regular practice. If they want to make a difference with lifestyle medicine, they will have to find creative ways to merge this into standard medical appointments.

One option I teach them is seeing patients more frequently and giving them homework between visits. They might start a conversation about lifestyle changes on a patient's first visit. Maybe it's only a 15- or 20-minute visit, but enough to identify a lifestyle problem like sleep or poor food choices or stress. They can send them home to watch a related TED talk or read a book as homework, then have them come back for a visit to talk more and do some shared decision-making and goal-setting.

What I would really love to have would be a way to refer patients to lifestyle medicine specialists for at least short-term care with the goal to initiate behavior change. Then, once that happens, they would return to their primary care physician for long-term care. Perhaps the visits with the lifestyle medicine specialist can be philanthropy-based, self-insured, employer-based, or patient self-pay. But I think that would be the best of both worlds. It would make it possible to integrate regular medical care with lifestyle-medicine intensivists. The goal should be for primary care practitioners to identify which of their patients could benefit from an intensive lifestyle-change program, have the ability to refer those patients to a comprehensive program, and then feel comfortable helping people maintain and maybe even extend those lifestyle changes.

MH At the very least, the exposure during internship and residency training has to be good for the physicians themselves, for their own enlightenment and well-being.

MG I'm glad you brought that up because I do find that aspect to be very, very rewarding. I certainly think the fact that the residents themselves often feel healthier after their residency than before they started is truly a positive. During their training, they have been surrounded by a culture in which the importance of eating healthier foods, getting more physical activity, and prioritizing restorative sleep is encouraged. It's good for them and is a great education on how to counsel their patients in the same way.

MH Your comments remind me of an exchange I had when I interviewed your colleague, Dr. Kim Williams, the prominent cardiologist. When I asked him why more of his fellow cardiologists and physicians don't see the data that is clearly out there supporting the value of a plant-based diet and lifestyle, I remember him saying simply that they don't see it because they can't see it, because it's not within the sphere of their personal education and universe. However, once they do see it and experience it themselves, then it's something that they can easily impart to their patients. If they never do see it, they won't.

MG Dr. Williams is right. It's very hard to "unsee" it once you have read the evidence-based research and experienced the impact of lifestyle changes on chronic disease outcomes. Incorporating lifestyle medicine into medical schools and residency programs helps open those eyes at an early stage of training. It can also produce positive peer pressure when they say to their peers, "Hey, I'm trying to get my 150 minutes a week of physical activity" or "I was just on the lifestyle-medicine rotation with Dr. Grega, and I made some phenomenal plant-based meals! Do you want to try the recipe?"

MH Can you give me an example of how you integrate lifestyle medicine into the residency programs?

MG Sure. One of the things I do is assign them to cook a whole-food, plant-based meal. They can either use a recipe or create the recipe themselves. They have to take a picture of it and then send me the recipe along with a short blurb about the health benefits of that particular recipe. I usually have a couple of residents on the lifestyle rotation at a time, and they end up talking to each other about the different recipes they have created. They also talk about convenient ways to prepare healthy food with our Kellyn Kitchens chefs. The group dynamic gives them a built-in support network.

MH Your whole notion of re-educating your residents reminds me of the title of Dean Ornish's latest book, *Undo It*. They truly have to undo what they have been taught and their way of thinking.

MG That's right—and they actually are. Being able to counsel their patients is part of the curriculum, and that is part of what they are tracked on: "Are they doing nutrition counseling? Are they doing physical activity counseling?" Most days during their continuity clinic visits they're talking about this stuff and giving handouts to patients with recommendations about increasing fruits and vegetables and decreasing animal products and processed foods in their diets. In the bigger picture, I believe that the more they are involved in teaching their patients about the link between nutrition and health, the more likely it is they will make those same changes for themselves. It's hard to talk to patients all day about healthy eating habits and then pick up some fast food for dinner that does not align with your own advice.

MH Within the constellation of all the professional things you do, it's pretty clear that the center of your universe is Kellyn Foundation. And from what I have read, Kellyn is doing the kind of work and creating the kind of programs that so many of us dream about in our health movement but haven't been successful in accomplishing—especially getting nutrition education into our schools at the elementary level and building a foundation of health community-wide. I am not aware of any other organization that is doing that successfully. What was the inception of Kellyn and how has it evolved?

MG I love telling this story, so thank you for the opportunity to do so. Kellyn Foundation started in 2007, so we're almost through our 18th year! The idea for it sprang out of the frustration I was experiencing during the early days of my primary care practice. I had already done a lot of research about how we might be able to help shift people's behavior to healthier choices. As I indicated earlier, I had successfully implemented it in my family, but I was having a hard time figuring out how to do that with my patients. My particular concern at that point was for my pediatric patients since I knew from personal experience how helpful it could be and how critical it was to intervene during their formative years.

What I was seeing year after year was that when parents would bring their children for

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their well-child checks, the kids were gaining weight and becoming less fit from a physical activity standpoint. Excessive screen time was not as much of a thing at that point, but it became more pervasive as time went on. My concern was heightened because I already knew that the parents and the grandparents in these families had chronic diseases like hypertension, high cholesterol, heart disease, and diabetes, and I felt like the kids were on the same trajectory. I wanted to intervene before that happened, but I was having a hard time doing so because, for pediatrics, we usually only see those kids maybe once a year for their well-child check and then maybe once or twice when they were sick with something. In such situations, you don't have a whole lot of time to talk to the parents about their children's future. While I would talk to them during each of their well-child checks about drinking water, being physically active, and eating more fruits and vegetables, it really wasn't making an impact on their behavior.

So, I went to my hospital administration at the time and asked, "Where can I refer these children? I see their trajectory, and they're getting worse each year. I know what's up with their family history, so I can see where they're headed. How can we head this off so that they don't end up with diabetes or hypertension?" Unfortunately, my administration basically said, "There's no place to refer them to." I was shocked and asked, "Really? How come?" And they said, "Well, because they don't have a disease yet, so you don't have a billable diagnosis to refer them." So I asked, "Well, how about the dieticians? Could I refer them to dieticians?" And they said, "Nope, no billable diagnosis to do it." Then, since the same advice applied for everybody in these families, I asked, "How about if I see them more frequently and start doing group visits with the families?" The response from the hospital was the same: "We can't approve it because there's not a billable diagnosis to cover the costs of the visits."

I remember responding in frustration, "So, do we just wait till these kids get sick before we're able to do anything with them?" And my administrators said, "No, no." They were good people and didn't want sick kids, but they also faced the same challenges saying, "The system doesn't work for this." They then suggested, "Why don't you refer them to the YMCA?" to which I said, "Well, the YMCA is great; they do some really good things, but I feel like parents need more support than just sending them to the YMCA."

Shortly after that exchange, I was kvetching and complaining about it all to a long-time family friend, Eric Ruth, saying, "I feel like I'm not able to make a difference in my patients, especially my pediatric patients but also my older adult patients, because I know that there are ways that I could help them be healthier, but I don't know how to do that in the limited time I have with them. I can't refer them anywhere." At some point, he said, "Meagan, why don't we just create the thing that you wish you had for those referrals?" And that's how Kellyn Foundation started. He was the business guy, and I was the doctor. So, between the two of us, we decided to create our program outside the medical system that existed in the early 2000s.

MH Did the initial funding come out of your own pocket?

MG For the first five years, we self-funded it because we both kept working our regular jobs and there was no other funding source. It was basically the two of us doing everything for free and putting the money in for the resources that were needed. We started with an intervention program for families, which turned out to be very similar to the CHIP program developed by Dr. Hans Diehl, although at the time I did not know him and was not familiar with his groundbreaking program. So, I basically created something from scratch for families that focused mainly on pediatrics. It involved a three-month intensive intervention and then a maintenance period for the next nine months. We created a database where people could log their lifestyle habits daily, and we gave them a score based on their performance. We also did group visits with the families and developed structured physical activities for the kids to do a couple of times a week.

MH Where did the name "Kellyn" come from?

MG That's another good question! While our initial focus was on pediatric obesity, we didn't think that we were going to be limited to that. We also didn't want the name to sound negative in terms of being just against obesity or against diabetes. One day, Eric found the word "Kellyn," which is actually an old Gaelic word that means "warrior princess," but not literally; it's more like a Celtic version of yin-yang balance. The concept behind it was that people should be striving to achieve in their lives

It's very hard to "unsee" [the value of a plant-based diet and lifestyle] once you have read the evidence-based research and experienced the impact of lifestyle changes on chronic disease outcomes. Incorporating lifestyle medicine into medical schools and residency programs helps open those eyes at an early stage of training.

the balance of their warrior side, which is the strength and courage and ambition and honor, with their princess side, which is love and empathy and service and creativity and those sorts of things. If you're only just a warrior, you might get stuff done, but you may not be a nice person to be around, and you'd miss out on the love and the empathy. If you're just a princess-type person, you're probably wonderful to be around, but you might not be able to get things done without the strength and ambition. You need a mix of both to find the best balance. That's why we chose "Kellyn," because the spirit of our programming is holistic. It's not just about what your weight is, it's not just about what your cholesterol level is. It's really about the choices and the balance you're seeking in your life.

MH What other things does Kellyn do?

MG As mentioned earlier, we started with the Intensive Therapeutic Intervention Program; that was the first pillar of Kellyn. However, it was very clinically-based, and what we began to find as we ran several of these programs was that families did really well during the time that they were in the intensive period, but once they were done with the program and they went back out into what we called the "obesogenic environment," they struggled because they didn't have a support group around them. So, we decided to try to create one with the goal of helping change the culture of the Lehigh Valley. We also wanted to show that it's not that difficult to maintain their good, new health habits if they are surrounded by social norms and choice architecture that nudges them into healthier choices. That is why we used the tagline "Make the Healthy Choice The Easy Choice." We now call it Kellyn Lifestyle Medicine.

MH How were you able to make inroads with the schools in your area?

MG We started with the elementary schools because, at that point, it was still common to have ice cream bars available at the end of every school cafeteria line and there were a lot of issues that schools were looking at in terms of the wellness of their students, like decreasing recess time and trying to fit in health topics amidst all the other required curriculum. So, we decided to start with the schools and see if we could offer some healthy lifestyle education.

Fortunately, I was the physician representative on the Eastern Area School District Wellness Council, and as such, I had key connections within the school district. I asked the assistant superintendent whether we could start coming in to teach nutrition topics, and he said, "Sure, that would be great as long as the schools don't have to fund it." And that's what happened. We started teaching third graders about what counts as real food, which is food that supports our health, compared with things many of us might eat but that do not provide the same benefits of vitamins, minerals, and fiber. We have now expanded to the fourth and fifth grades and have even started The Garden as a Classroom program, where kids grow some of their own food in raised beds at their schools.

We are now in 10 school districts and work with 44 elementary schools, which has allowed us to reach over 10,000 students a year on an ongoing basis. The fourth-grade curriculum involves label reading and is called Healthy Choices. The fifth-grade curriculum is Eating Out Survival Skills. The Garden as a Classroom program involves growing things like spinach, kale, mesclun mix, carrots, onions, tomatoes, beans, and more in raised beds at the schools. We now call the entire program Kellyn Schools.

MH It sounds like your goal is to make the Lehigh Valley the next Blue Zone!

MG It's funny you should say that because when Dan Buettner came out with his book by that name in 2008, we actually thought to ourselves, "Why not? Why shouldn't we be able to have a Blue Zone here in the Lehigh Valley?" Now, I don't know whether it will ever become a certified Blue Zone, but the goal for us remains to help people "make the healthy choice the easy choice" and, more importantly, to shift social norms so that the healthy choice becomes the default choice and to make the healthy options easier to find.

MH Have your educational efforts had any positive impact on the school lunches offered by the district?

MG We have had varying success with that, and it's certainly a large and ongoing problem. Lunch contracts are different for each school district, and many have a food service provider for a certain number of years, then put it out for bid and end up with a different provider. We have had some progress, such as getting local apples onto the menus and cutting down on the number of desserts at the end of the elementary school lunch lines. The Healthy Hunger-Free Kids Act was actually very helpful in enabling us to move the needle on some of these things. Perhaps our greatest impact has been through our involvement in the Wellness Councils for the different school districts. These councils are the ones that make the guidelines as far as what foods are brought into the classroom for parties or birthdays or things like that, and we've seen some good shifting there as well.

MH What are some of the other educational programs of Kellyn Foundation?

MG In addition to Kellyn Schools and Kellyn Lifestyle Medicine, we have also created Kellyn Kitchens and Kellyn Lifestyle-Medicine Meals. We are also planning in the coming year to expand into medically tailored meals through a partnership with Meals on Wheels of the Greater Lehigh Valley. Currently, our medically tailored meals are limited to those who are self-purchasing them, but we would love to be able to offer that as an insurance benefit for people who have high blood pressure, diabetes, or similar conditions.

MH That is truly an extraordinary number of great programs that you operate. I assume that Kellyn is a 501(c)(3) charity, so that donations for all of your projects are tax-deductible. Is that right?

MG Absolutely!

MH Where does the majority of your funding come from?

MG It's hard to say a majority, since we operate like a patchwork quilt of programs that all attract their own funding. For example, we've worked over the years to have different organizations adopt schools

and pay for the programming of the elementary schools. Right now, our largest corporate sponsor of the elementary school programs is the Reilly Children's Hospital of Lehigh Valley Health Network. They are currently sponsoring 40 of our schools.

MH That is fantastic! What other fundraising events do you hold?

MG One that's a lot of fun is our Lehigh Valley VegStock, which is usually held on the second Saturday of October. It's an all-day festival that takes place along a rail/trail path by beautiful Bushkill Creek. We have vendors and live music all day, coupled with lifestyle medicine lectures and crafts for kids.

MH Your VegStock seems very different than most of the Vegfests that I have attended where the vegan donut vendor seems to be the most popular.

MG To be fair, we definitely have some vendors whose food options are the less-healthy vegan type, but we really encourage a lot of the whole-food, plant-based vendors, too. Kellyn Foundation also provides food as a vendor, and all of our offerings are whole-food, plant-based, which I know you observed firsthand when we brought our Eat Real Food Mobile Market truck to Dr. Ron Weiss's Ethos Farm Days weekend.

MH And I believe you host an annual symposium, both for fundraising and education.

MG Yes, we host the Lehigh Valley Lifestyle Medicine Symposium. The goal of the event is to educate doctors, nurses, dieticians, psychologists, licensed clinical social workers, and health coaches, but it's also open to teachers, administrators, community members, and nonprofit leaders. We offer different pricing tiers based on whether you need continuing medical education credits or if you're coming as a community member and just want to learn the information.

MH One of the things that has to be very special for you is that Kellyn Foundation has become a true family affair. Tell me about that.

MG That is so true! Eric Ruth is my business partner; he's not a relative, but he and his wife and kids have been friends with my husband and me for so many years that they are like family. On the actual family end, my daughter, Amanda Pietrobono, is our Director of Operations and Culinary Medicine, and her husband, Andrew Pietrobono, serves as the Executive Chef for Kellyn Kitchens. Both of them are graduates of the Culinary Institute of America and are very talented cooks.

MH You must have great family meals!

MG We do. I am so, so lucky! In 2023, we took our first large family vacation in probably 15 years. We went to Italy and were there for at least nine days. I remember thinking before we went, "Wow, we're going to get all this great Italian food," and we did. But I have to tell you that the best food that I ate in Italy was the food that Amanda and Andrew made at our villa. They are phenomenal chefs.

MH Tell me about your son, Keith, whom I had the pleasure of meeting this past summer at Ethos Farm Days.

MG Keith is currently in his second year of medical school at Temple/St. Luke's where I am on the faculty. I'm very blessed to have him still live in the area, so I get to see him often. He hasn't chosen his specialty yet, but I know Dr. Weiss is trying to pull him in the direction of internal medicine while I'm trying to pull him in the direction of family medicine. Of course, he'll make his own decision about what sort of doctor he wants to be, but he loves lifestyle medicine so we'll see how he integrates that into whatever area he settles on.

MH Last but not least, let me ask about your husband. Is he involved in the work of Kellyn Foundation?

MG Not formally. He is a mechanical engineer who works in technical sales for things like corrosion resistance. However, he always helps out with all our events and is our go-to person for whatever we need.

MH I know that another major involvement of yours has been with the American College of Lifestyle Medicine. Tell me about your role with them.

MG I currently serve as secretary of their Board of Directors. I have also been their annual conference chair since 2021 and have served on several other task forces.

MH Are ACLM conferences just for medical professionals?

MG Definitely not. I would say medical professionals are probably the majority of attendees, but it is multidisciplinary and wide-reaching. We also attract healthcare executives, healthcare policy advocates, and even business entrepreneurs in the lifestyle-medicine space.


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MH And it continues to grow?

MG Yes, it definitely does. At our 2024 conference, we were maxed out with almost 2,500 live attendees as well as several thousand virtual attendees.

MH Let me ask you about the subject of a lecture you gave at Ethos Farm Days that I found incredibly interesting. I think you called it "Longest Life Lessons," and you described the "marginal decade" so many folks face as they get older. It reminded me of a video that Dr. Alan Goldhamer often uses in his presentations entitled "Make Health Last. What Will Your Last 10 Years Look Like?"

MG I know exactly which video you're talking about. I believe the Canadian Heart and Stroke Association created it, and I like to show it as well, since it really drives home the difference in life experience that you're going to have in those last 10 years of your life based on the choices that you're making earlier in your life. Sadly, in America and a lot of the developed world, we have a certain life expectancy that we accept as typical, namely, living to your late '70s. However, as so many of us have discovered, life expectancy is not necessarily a measure of health. It may be your lifespan, but it's not necessarily a healthspan. And the marginal decade I talk about refers to the fact that, for most people in the United States, you may still be alive during those last 10 years, but the quality of your life may be significantly limited in terms of both mobility and morbidity.

The good news, however, is that we now know that people who are following a whole-food, plant-based diet; who are getting regular physical activity and paying attention to restorative sleep; and who are nurturing their social connections, managing their stress, and avoiding the risky substances have a much longer healthspan. Even at 90 or 100, it's not inevitable that aging is going to take away your vitality. But if we live a standard American life, it makes sense that we're going to get standard American diseases like everybody else does. Therefore, the challenge for us is to swim upstream if we want to be able to have as long of a healthspan as possible.

MH Since obesity, and particularly childhood obesity, has long been one of your particular professional interests, I couldn't leave this interview without asking your opinion on the seeming explosion of advertising that we are witnessing for GLP-1 medications like Wegovy and Jardiance.

MG I'm disappointed and very concerned about the way that the healthcare conversation in the nation is shifting to "How do we make GLP-1 drugs cheaper?" as opposed to "Should we really be using GLP-1 agonists in so many patients?" Now, having said all that, I do think that there are some patients for whom a GLP-1 medication could be very helpful, at least for a certain period of time, so long as it is combined with an intensive, therapeutic, lifestyle-change program that will permit you to maintain your weight loss and continue your healthy habits when you go off the medication.

It is important to note, however, that we have no idea what will happen to people if they are on a GLP-1 drug for an extended period, for 10 years or even for their lifetimes; we don't know what the long-term side effects will be. We also know that when you lose weight with these medications, you often lose proportionally more lean muscle mass versus fat mass than you would if you were losing weight in other ways, which makes participating in resistance training extremely important to maintain as much lean body mass as possible.

Once again, I don't want to come out as saying that nobody should ever be on a GLP-1 agonist, because I believe there are patients who can benefit. However, it should not be seen as a quick fix, because it's not going to result in good long-term outcomes unless patients combine the drug with the healthy lifestyle factors that we know from large-cohort, observational studies make the difference—what you eat and how you move and how you sleep and how you connect with other people. An injection can't give you that.

MH I recently watched a video on GLP-1 medications by Dr. Michael Greger in which he pointed out that while this new class of weight-loss drugs are more effective than some of their predecessors, the typical weight loss amounts to only 20, 30, or 40 pounds, and that loss is not nearly as dramatic as weight loss after gastric bypass. He also noted that early studies are clear that the moment you stop taking these injections the weight comes right back on. Therefore, if you want to keep the weight off, and you don't make other changes, Dr. Greger reminds users that they will have to be on these medications for the rest of their lives.

MG And that's my concern as well. In the weight-loss arena, we seem to be guiding people down a pathway similar to what we do with diabetes, heart disease, hypertension, and more. Instead of giving them lifestyle guidance and providing support for healthy behavior change at an appropriate therapeutic dose, we just say, "Here's your pill," and maybe quickly mention that they should eat healthier, lose weight, and exercise more. Just to be clear, I'm not anti-medicine for everything, but I don't think that medicine should be the only answer.

MH Finally, it's been my observation that there are a lot of women physicians who have come forward in lifestyle medicine, like Drs. Kristi Funk, Monica Aggarwal, Robynne Chutkan, Melissa Sundermann, and more. Is that a trend?

MG I don't know if it's a trend, but I think that the holistic tenets of lifestyle medicine resonate with a lot of female physicians, particularly the focus on mental, physical, emotional, and spiritual health. I also think that a lot of mid-career physicians, both female and male, have looked at their lives like I did and have reached the same conclusion: the current medical scenario is not what they signed up for. So, they look for a different approach, and lifestyle medicine is what many of us have found.

Having like-minded, passionate, kindred spirits has been the best piece of embracing lifestyle medicine, regardless of gender. I think everyone in the movement is there because they really believe we could be providing better healthcare and that we could get better outcomes and feel better about what we're doing if lifestyle medicine became the foundation of how we interact with patients. As I mentioned earlier, conventional medicine is necessary for certain instances or situations, but it's really lifestyle that has to be the bedrock.

MH I've really enjoyed this interview, Dr. Grega, but most of all, I look forward to sharing you and your wisdom and learning more about your work at the 2025 NHA Conference this June. I know that our attendees will be excited to meet you.

MG It's been wonderful talking with you, and I also am really looking forward to the conference!

Ultra-Processed Foods

What they are, why they're a concern, and how to kick the habit

by Jeff Pierce, MD

Based on the preponderance of scientific evidence spanning many decades, the National Health Association recommends that we consume a whole-food, plant-based diet. This diet is comprised of foods that, by and large, we can grow in our gardens and find at the local farmers' market. They would be recognizable by our grandmothers, and we can prepare them in our own kitchens with commonplace ingredients. These are the types of foods that we have been living on, and thriving on, for as long as humans have been on the planet.

But in the last 50 years or so, there has been a major change in our dietary pattern. Instead of healthy, locally grown produce, more and more of us are consuming "food-like substances" that have been greatly altered and sometimes even completely created in a lab. These substances, known as ultra-processed foods (or UPFs, for short), are drastically changing our diet, our bodies, and our societies. And as we will delve into, UPFs are in large part responsible for a population suffering from increased rates of chronic illness and early death.

First, a little more on definitions

Whole and minimally processed foods include fruits and vegetables, legumes (which are beans, lentils, chickpeas, and split peas), whole grains like brown rice and quinoa, nuts and seeds, herbs and spices, and mushrooms. Cooking beans, blending whole apples into applesauce or smashing oat groats into rolled oats are all examples of minimally processing foods. We've been doing this sort of processing for a very long time.

But the higher the degree of processing that is done to these foods, the more they tend to have healthy components removed and unhealthy components added back in. Brazilian physician and researcher Carlos Monteiro first published the concept of ultra-processed food in 2009. [See the NOVA classification sidebar for more info.] He and his team define it as "industrial formulations manufactured from substances derived from foods with little, if any, whole food and typically with added flavors, colors, and other additives."[1] They include sweeteners, emulsifiers, and other additives that imitate certain sensory qualities or cover up undesirable characteristics of a product. In other words, UPF ingredients are not typically found in a home kitchen, and products made with them usually include lots of added salt, fat, and sugar and are often sold in a plastic package. Many UPFs are made from the cheapest plant

These substances, known as ultra-processed foods, are drastically changing our diet, our bodies, and our societies. And as we will delve into, UPFs are in large part responsible for a population suffering from increased rates of chronic illness and early death.

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ingredients, such as refined by-products of corn, soy, rice, and wheat, but they can also be animal-based, such as processed meats like bacon, pastrami, and Spam.

How did this happen?

How, in such a short amount of time, have we gone from a population that ate the majority of our diet from whole and minimally processed food to one that now gets close to 60% of our daily calories from UPF?[2] Let's look at three important contributors to the rise of UPF in our diet.

Innovations in food processing and distribution

Processing isn't new to the human diet. Human ancestors were likely cooking food over a million years ago, and we've been grinding, salting, curing, baking, and fermenting for many thousands of years.[3] But during the 1970s, new innovations in food processing and mechanization allowed for massively increased production and the ability to get these foods to more people. New methods and more food preservatives were developed to increase shelf life. Techniques were developed to more efficiently refine whole foods into their component parts of sugars, starches, proteins, and fats. Vacuum sealing and deep freezing allowed companies to distribute these foods widely. Unsurprisingly, families started switching from time- and labor-intensive "made-from-scratch" meals to convenient frozen TV dinners that could be unwrapped, reheated, and enjoyed in a fraction of the time. With ready-made meals filling our stores and fast-food restaurants, access to affordable processed foods has skyrocketed. And now, with the power of modern technology, apps on our phones can have UPFs showing up on our doorstep even quicker.

Government support

Government subsidies have also contributed to the rise of UPF. The U.S. government uses billions of dollars from our taxes to artificially lower the price of certain crops; corn and soy are now particularly cheap to produce. They are used mostly as feed for factory-farmed animals and for making into highly processed substances like high-fructose corn syrup and soybean oil. Now, with the advances in food technology mentioned above, along with subsidized ingredients, UPFs like corn chips and soda are very inexpensive to make and can be sold for a huge profit. And the best way to get them sold is through consumer marketing.

Marketing

Most fruits and vegetables have a very slim profit margin and are therefore not marketed. (How many times did you see a commercial for rutabagas during the last Super Bowl?) UPFs, on the other hand, make companies a lot of money, and mega-corporations invest heavily in marketing. McDonald's, for example, spent 1.9 billion dollars in 2022 on advertising in the U.S. alone.[4] With this level of investment, these companies have a variety of means at their disposal to efficiently sell their goods. They spend money for the best shelf space at supermarkets.[5] They sell UPFs at non-food retailers such as gas stations, hardware stores, and even schools and hospitals—places where we should be offering the best that nutrition has to offer.

A disproportionate amount of marketing is targeted towards people of color.[6] Marketing also frequently focuses on children. Sugary breakfast cereals are often displayed physically closer to the ground, right at eye level for little consumers. With input from child psychologists, young consumers are reached by TV commercials, print media, social media, and video games. In fact, TV alone exposes children to tens of thousands of junk food commercials per year.[7] Supermodels, soccer stars, and music superstars are all paid to encourage us to consume more UPF.

As publicly traded companies, UPF corporations have a fiscal duty to constantly increase sales.[8] They don't have a duty to improve our health, though they may seem like they are trying (e.g., breakfast cereals with front-of-the-box advertising touting added vitamins and minerals to subtly convince parents that eating them must be good for their children). These powerful companies have the budgets and the influence to even pay scientists to publish papers minimizing the harms caused by UPF.[9] They have led public health campaigns that focus on exercise, thus distracting us from the ill-effects of eating UPF.[10] If this discussion on shady marketing practices makes you think of the tobacco industry, it's for good reason. In the 1980s, the two biggest tobacco companies (Philip Morris International, which owns the Marlboro brand, and R.J. Reynolds Tobacco, which owns Camels) bought the world's largest food companies: Nabisco, General Foods, and Kraft.

The NOVA System[20,21,22]

GROUP 1: UNPROCESSED OR MINIMALLY PROCESSED FOODS

Unprocessed or natural foods are obtained directly from plants or animals and do not undergo any alteration following their removal from nature. Minimally processed foods are natural foods that have been submitted to cleaning, removal of inedible or unwanted parts, fractioning, grinding, drying, fermentation, pasteurization, cooling, freezing, or other processes that may subtract part of the food, but which do not add oils, fats, sugar, salt, or other substances to the original food.

GROUP 2: PROCESSED CULINARY INGREDIENTS.

These are products extracted from natural foods or from nature by processes such as pressing, grinding, crushing, pulverizing, and refining. They are primarily used in homes and restaurants to season and cook Group 1 foods and prepare dishes from scratch. They are usually free of additives, though some may include added vitamins or minerals.

GROUP 3: PROCESSED FOODS.

Processed foods are products manufactured by industry with the use of salt, sugar, oil, or other Group 2 substances added to natural or minimally processed foods (Group 1) to preserve or to make them more palatable. They are derived directly from foods and are recognized as versions of the original foods. They are usually consumed as a part of or as a side dish in culinary preparations made using natural or minimally processed foods. Most Group 3 processed foods have two or three ingredients.

GROUP 4: ULTRA-PROCESSED FOODS

Ultra-processed foods are industrial formulations made entirely or mostly from substances extracted from foods (oils, fats, sugar, starch, and proteins), derived from food constituents (hydrogenated fats and modified starch), or synthesized in laboratories from food substrates or other organic sources (flavor enhancers, colors, and several food additives used to make the product hyperpalatable). Manufacturing techniques include extrusion, molding, and preprocessing by frying. Beverages may be ultra-processed. Group 1 foods are a small proportion of, or are even absent from, ultra-processed products.

The Benefits of UPF

UPFs do have a beneficial side. For many people living in poverty, UPFs are often what is available and affordable. Not everyone can afford a refrigerator and a freezer, and trips involving bus rides to the nearest grocery store are arduous, especially when working one or multiple jobs. Having access to food that can be stored at room temperature for a long time is essential for many folks. Similarly, not every household has a stove and oven. Having microwave-ready meals can be important to these families. Even when there is access to a full kitchen, some folks don't have basic cooking skills or may not have the cooking equipment necessary to prepare a meal from scratch.

Reviews of many studies specifically focused on UPFs have found that they were associated with many conditions, including obesity, several cancers, type 2 diabetes and gestational diabetes, cardiovascular disease, intestinal disorders such as irritable bowel syndrome (IBS) and Crohn's disease, fatty liver, anxiety, depression, dementia, and death. [13,14]

The Harms of UPF

Unfortunately, and not surprisingly, the harms of UPFs far outweigh the benefits. We know from the landmark 2017 Global Burden of Disease study that eating a poor diet is the greatest risk factor for dying.[11] Kevin Hall's important randomized controlled trial from 2019 proved that UPF causes increased weight gain.[12] Reviews of many studies specifically focused on UPFs have found that they were associated with many conditions, including obesity, several cancers, type 2 diabetes and gestational diabetes, cardiovascular disease, intestinal disorders such as irritable bowel syndrome (IBS) and Crohn's disease, fatty liver, anxiety, depression, dementia, and death.[13,14] And importantly, these associations stayed strong even when adjusting for differences in education, socioeconomic level, salt and sugar intake, general dietary pattern, and others.

Why Are UPFs So Bad for Us?

This is a complex question. Let's focus on four areas.

Healthy ingredients are removed.

During the many processes that isolate a plant's proteins, carbohydrates, and fats, thousands of other components are removed or destroyed. For one, UPFs have had most or all of their fiber removed. Fiber is a critical component of a healthy digestive system, helping to prevent constipation, inflammation, and colon cancer as well as improving health in general due to the diverse ways the gut microbiome orchestrates our health. Other components that are lost in processing are antioxidants. We need antioxidants like vitamin A, vitamin C, polyphenols, and beta-carotene to reduce oxidative stress, the wear and tear on our bodies due to metabolic processes over time. Another critical component removed is water, which is taken out to prolong shelf life. Therefore, UPFs are often dry (though food additives may give the perception of moisture), and without the water to dilute the calories, they are more calorically dense, so we can eat much more before the stretch receptors in our stomach tell us to put the brakes on. Compare cookies with strawberries; the fruit is less energy dense, in part, because it is diluted with zero-calorie water.

There are roughly 10,000 additives in our food stream. The exact number is not known since the FDA does not keep a full list. Amazingly, many of these additives have never been presented to the FDA and have entered our food supply without any government oversight.[15]

Unhealthy ingredients are added.

When food is altered in a laboratory and many healthful components are removed, it becomes necessary to add back other substances to make it palatable. The goal, of course, is not just to make the food taste "okay," but to go way beyond that. Food scientists use salt, refined sugar, unhealthy fats, emulsifiers, flavor enhancers, coloring agents, and many other substances to make the foods extremely appealing. They have a large arsenal to choose from; there are roughly 10,000 additives in our food stream. The exact number is not known since the FDA does not keep a full list. Amazingly, many of these additives have never been presented to the FDA and have entered our food supply without any government oversight.[15]

UPFs lead to a tendency to overeat.

If we just ate some UPFs once or twice a year, we wouldn't experience all the problems associated with them. But not only do we eat them regularly, we tend to overeat them when we do. There are multiple reasons why we overeat UPFs. Marketing, as mentioned above, is clearly one reason.

Another reason is how they are designed. UPFs are engineered by scientists. Many hours and dollars are spent creating the perfect balance of salt, sugar, and fat. The mouthfeel is also deliberately fashioned, tending to be soft. This allows us to eat faster, therefore consuming more calories per minute since we aren't wasting all that time chewing.[16] Even crunchy snacks like potato chips dissolve after the first crunch or two.

Perhaps the most unsettling reason we tend to overeat them is that UPFs can truly be addicting. Globally, we see UPF addiction rates similar to addictions to tobacco and alcohol.[17] In large part, the addictive potential is likely due to the fact that UPFs are processed to hit our bloodstreams quickly, much like coca leaves have a mild effect on humans until they are processed into cocaine. Similarly to those addicted to drugs like heroin, people with a UPF addiction may exhibit an inability to stop consuming them, even though the substance is known to be causing harm. Additionally, people may experience intense cravings for UPF. (Few of us wake up in the middle of the night to have one more serving of cabbage.) Their slogans say it all: Lay's brand potato chips promises, "Betcha can't eat just one," and Pringles brand tells us, "Once you pop, you can't stop."

UPFs have negative environmental effects.

While the majority of this article has delved into the direct harms these substances have on our bodies, there is a toll on the environment as well. Through its effects on ecosystems, the modern industrial food system that supplies the building blocks of UPFs is the leading cause of loss of animal habitat and biodiversity. Pristine rainforest is being chopped down and wild animal species are becoming endangered and extinct in order for us to have fast food and snacks that make us chronically sick. This same system is a leading source of greenhouse gas emissions. Additionally, UPFs almost always come in plastic packaging, the majority of which does not get recycled. In fact, Coca-Cola company, along with PepsiCo, Nestlé, Unilever, and other UPF companies, are the world's largest plastic polluters.[18] These plastics frequently end up in our oceans, killing birds, fish, and sea turtles, and eventually make their way into our food supply in the form of endocrine-disrupting microplastics. In order for us to be truly healthy as a population, our environment must be healthy as well.

It is best to think of UPFs as a drug, and one that was designed to get us and keep us hooked. Don't think of your habit as a personal weakness, or a lack of willpower. Realize UPFs for the dangerous substances that they are, created by companies focused on making money, not on keeping us healthy.

How do we take back control?

For people struggling to quit eating UPFs, you are not alone, and it's not your fault. Remember, it is best to think of UPFs as a drug, and one that was designed to get us and keep us hooked. Don't think of your habit as a personal weakness, or a lack of willpower. Realize UPFs for the dangerous substances that they are, created by companies focused on making money, not on keeping us healthy, regardless of what the front of the box may say. While it usually isn't easy to give them up, it'll be worth it. After some weeks to months you may find that a stubborn chronic condition is finally improving. Consider some of these tactics to kick the habit.

Keep them out of the house.

Our friend Chef AJ likes to say, "If it's in your house, it's in your mouth." The first step is to leave UPFs at the grocery store. The majority of the items in a supermarket are full of UPF ingredients, so focus on the produce section and the bulk aisle. Become a dedicated reader of ingredient labels on every box, can, and wrapper.

Sometimes keeping them out of the house can be trickier than it may seem. While some UPFs are obvious, such as sodas and Twinkies, some foods may have just one or two ingredients that sneak in that you hadn't noticed. If you are trying to get as many UPFs out of your diet as possible, you will have to start with a fine-tooth-comb approach on the foods already in your house to make sure UPFs in them aren't flying under the radar.

Fill your body with whole plant foods.

Shoot for a diet made up of healthy, delicious, whole, and minimally processed foods. Some substitutions are straightforward. Replace breakfast cereals with homemade oatmeal. Skip the chips, and instead use fresh crunchy veggies as a vehicle for your hummus and guacamole. Ditch the soft drinks, diet drinks, and energy drinks, and make water your drink of choice, with some tea and coffee for their antioxidant benefits. Don't forget the little stuff: gum, mints, and such.

Some changes will take a little more time and dedication. You may want to invest in some books, videos, or a live class to learn how to make your own sourdough or 100% whole-grain breads. Learn from folks like Brittany Jaroudi, Chef AJ, and Cathy Fisher, and become a wiz in kitchen with healthy desserts. As you start to make amazing black bean brownies, you won't think twice about leaving the boxed brownie mix at the store. As Dr. Greger puts it, "Think outside the box."[19]

Try these additional tips to help you walk away from UPFs. Aim for 7–9 hours of quality sleep so you don't crave UPFs the next day. Managing your chronic stress can reduce the drive to seek comfort in junk food. Surround yourself with really healthy eaters, and you'll likely start to eat healthier, too. Lace up your jogging shoes, as once people start a regular exercise routine, they may see their diet improve subconsciously.

Get active.

You vote with your dollar every time you leave the UPFs at the supermarket. But also consider asking your local and state representatives to take UPFs out of our school cafeterias. Push them to create a rating system that puts warning labels on foods high in salt, sugar, and saturated fat. Petition your local hospital to take cancer-promoting processed meats like bacon and sausage off of their hospital menus. Changing the current state of affairs won't be easy, but every effort counts.

We have evolved over millennia to thrive on the natural foods that grow abundantly around us. In an amazingly brief amount of time, our food supply has been flooded with substances that are bad for our health, pushed on us by powerful companies that profit off of our addictions. The good news is that we have the power to leave them on the shelves and keep them out of our diet. We must do this, for our health, our children's health, and for the planet.

*For a list of references used for this article, please email **jziegler@HealthScience.org**.*

PHOTO BY MONCHO CAMBLOR

JEFF PIERCE, MD, is dual board-certified in family medicine and lifestyle medicine. He is passionate about using a whole-food, plant-based diet and other lifestyle medicine modalities to help people get healthier, get off of medications, and live longer, fuller lives. His goal is to meet his patients where they are and work with them at their pace to improve their health, one day at a time.

Dr. Pierce attended the University of Texas-Pan American, Baylor College of Medicine, and the Santa Rosa Family Medicine Residency in northern California. He currently provides lifestyle medicine consultations at Love.Life Telehealth (love.life/telehealth) in addition to providing high-risk obstetrical care at Contra Costa Regional Medical Center.

His hobbies include running, gardening, homesteading, playing the saxophone, and making his daughter laugh.

As Dairy's Stranglehold on the U.S. Dwindles, a Brighter Future Takes Shape

by Dotsie Bausch and Jamie Bichelman, Switch4Good

Assigning a nearly $800-billion industry as your organization's adversary doesn't happen haphazardly—just as that very industry doesn't sit on the doorstep of $1 trillion annually by chance and because of good behavior. Indeed, the road to Switch4Good being at the forefront of the opposition to the dairy industry's might—from unscrupulous marketing tactics to manipulative public relations, from cunning multi-sector outreach to corrupt political pull, and from the debasement of science to dastardly designations of influencers and figureheads—was a long and winding path, not unlike the rock-strewn, uneven, treacherous roads I battled en route to becoming a dairy-free Olympic medalist.

The path to systematically battling the dairy industry move-for-move required a deeply personal experience of dietary racism; a shocking, indefensible move in which the oppressive industry wielded its power to silence detractors; an obsessive personal and organization-wide commitment to studying and analyzing the dairy industry's playbook that guided them to such unruly influence across other industries; and an inspiring ethos of "feel the fear but do it anyway" that has guided us to the front lines of this years-long battle and has both Switch4Good and dairy-free advocates everywhere poised to topple Big Dairy.

Dietary Racism on Display at the Olympics

My good friend Kendrick Farris, a three-time Olympic weightlifter, famously spoke on the topic of food justice, saying, "Going for gold means not leaving others behind." But the dairy industry didn't become a multibillion-dollar industry with an ethos of inclusiveness. Most of the world's population is lactose intolerant, and that included some of my non-white Olympic teammates. A staggering 65% of the global population cannot digest cow's milk, and that troubling figure catapults up to 95% among Black, Asian, Native American, Latin, and Jewish populations. Put simply, most of the world is operating within systems that ignore their lactose intolerance. Dairy is the foremost allergen plaguing kids under 16, causing inflammation, illness, immense discomfort, the inability to breathe, and a host of other complications. When this fact is glossed over, we witness devastating, preventable deaths among children failed by the negligence of others.

When nutrition-based organizations do Big Dairy's bidding and falsely but confidently declare that children can grow out of their dairy allergy, and when harmful claims are propagandized until they become

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the common refrain in nutrition circles, the result is that everyone from student athletes to aspiring Olympic medalists is manipulated into believing dairy is necessary to attain everlasting glory.

As a competitor in the 2012 Olympics, I desired only the best foods for my body to achieve peak physical performance. Similarly, the view among my teammates was that anything that could detract from their well-being—let alone actively sabotage their health—was an obvious fuel source to avoid. With the prospect of Olympic glory nearing fruition, backed by an unwavering team-wide commitment to peak physical health, why did coaches encourage my teammates and me to consume a food source—cow's milk—that would physically undermine us, temporarily incapacitating my BIPOC teammates?

As an Olympian, I relentlessly pushed my body to its physical apex. My impeccable diet was demonstrative of the tremendous effort I put into maintaining its well-being. The notion, then, of consuming something so deleterious—in fact, downright poisonous—to athletic performance was utterly preposterous.

A great number of questions ruminate in your mind when your training includes cycling 100 miles daily for five hours straight. Among the most counterproductive and, frankly, haunting thoughts that plagued me leading up to the Olympics was: why is the U.S. Olympic Team encouraging us to refuel with something our bodies steadfastly reject? Ultimately, my cycling teammates and I won the silver medal in the 3,000-meter Team Pursuit event in spite of coaches and nutrition experts nearly forcing bovine-pus water down our collective throats.

As the Switch4Good organization's origin story attests, I felt all of these experiences deeply, from the remarkable highs to the crushing lows. My milk-tainted Olympic nutritional experiences were received in such a frustrating manner that they influenced the following decade, culminating with the dairy industry flexing its ill-gotten muscles and forcing NBC to take down an anti-dairy commercial that should have aired during the closing ceremonies of the Olympic Games. As the dairy industry has come to find out in the ensuing six-plus years since that incident, they really, *really* messed with the wrong person.

Dietary Racism: A Deeply Embedded Problem in Our Country's History

An ever-present, unrelenting, guiding belief in this constantly moving mind of mine is that there are other populations of people disproportionately affected by a society that is indisputably built to cater to those who are affected less severely by the consumption of cow's milk. I recognize that, on the whole, others do not have the podium—literally and figuratively—that I worked so tremendously hard to attain, and in many cases, they are operating within social structures that disregard their important voices.

I've said it before: "When a white majority makes decisions that will negatively impact minorities, it's not just ignorance, but a form of racism." When lawmakers and those in a position of considerable political power wholly dismiss, disregard, and omit the needs, health, and overall well-being of the most vulnerable populations in a society, those decision-makers have clearly failed the people they are tasked with representing.

As we'll explore below, the policies (or lack thereof) that the meat and dairy lobbyists have influenced, as well as the societal progress that these industry powerhouses proudly stand in opposition towards, reek of injustices. That, of course, will not stand for much longer.

To narrow things down to an even more perceptible level, consider the upcharge that you are assessed when you visit a coffee chain and the price of your latte is bumped up by about a dollar for ordering nondairy milk instead of the standard, default cow's milk. In effect, you are being punished for the moralistic choice of opting for a healthier alternative that is both better for you and better for the planet. Furthermore, this is a stark example of dietary racism in everyday lives because the predominant racial populations that compose lactose-intolerant customers are overwhelmingly BIPOC. Indeed, if you belong to a culture that abstains from cow's milk for cultural reasons or if you happen to be a BIPOC customer who is lactose intolerant, you are effectively being penalized by coffee shops for your identity.

Yet, the decision makers at the C-suite level in coffee chains and the owners of small businesses alike have told us directly to our faces that it is significantly more profitable to disregard their plant-based clientele in favor of a nondairy milk upcharge.

Policies founded on principles of dietary racism are further perpetuated by organizations with obscure names who do the dairy industry's bidding, putting forth "expert" commentary that BIPOC individuals should either drink lactose-free cow's milk or—I kid you not—overcome their lactose intolerance by drinking more cow's milk.

Within this last year, a corporate whistleblower confirmed for us that Starbucks made $1 billion in profits alone by charging customers for nondairy milk alternatives.

The dietary racism that is inherent in businesses like coffee shops, then, is self-sustaining. Armed with enough dirty science to suggest that lactose intolerant, BIPOC customers need only consume more dairy to overcome their afflictions, policies of charging for nondairy milk are confidently put in place by bamboozled C-suiters and small business owners. These policies are further cemented by the monstrous profits pulled in by charging up to $2 extra per latte for nondairy milk instead of the default cow's milk. Opposition to inherently racist policies is then either ignored or disregarded because that cash cow is far too profitable.

Here's the thing: major coffee chains produce major revenue off the backs of lactose-intolerant customers paying for nondairy milk. Within this last year, a corporate whistleblower confirmed for us that Starbucks made $1 billion in profits alone by charging customers for nondairy milk alternatives. At what point, we demanded to know, are the inconceivably large profits that businesses operating in the coffee industry make off of customers of color enough?

But that's begun to change, thanks in part to Switch4Good's multipronged campaign. As October gave way to November in 2024, after more than three years since the launch of our Justice Cup Campaign and several months into our collaboration with a corporate insider, Starbucks announced

We discovered that the USDA propped up the dairy industry to the tune of $1 billion by featuring cow's milk across public schools in the U.S. Per the USDA's own analysis, though, almost 30% of untouched milk cartons were being discarded, leading to $300 million in taxpayer-funded monies essentially going directly into the trash each year.

that it dropped the nondairy upcharge in North America. Here's some context for our corporate campaigning "coincidences": Starbucks UK happened to drop their nondairy upcharge just three weeks after the launch of our Justice Cup Campaign, and did the same in North America just weeks into the new CEO's tenure and on the heels of our series of actions throughout Seattle. Other major coffee chains are poised to follow suit.

Again, although we wholeheartedly believe that the most vulnerable people in the U.S. have largely been ignored throughout the twisted history of the dairy industry's influence in America, we also maintain that they have not been failed irredeemably. And that's where we come in.

Our indefatigable efforts in the realms of policy, public outreach, and science and research have not only forced policymakers and the public alike to rethink the narrative on dairy's role in the future of Americans' health, but our work has significantly weakened the dairy industry's stranglehold across several sectors. If you ever wondered if Dotsie Bausch, Switch4Good, and a slew of other dairy-free champions were standing up for your right to a dairy-free future, read on.

The Fight for Food Justice in Our Everyday Lives

After testifying twice before the Dietary Guidelines Advisory Committee and meeting with the Center for Nutrition Policy and Promotion and the Department of Health and Human Services on four occasions, we succeeded in achieving the necessary first step in pushing the United States Department of Agriculture (USDA) to acknowledge soy milk as "nutritionally equivalent" to dairy milk in the 2020–2025 Dietary Guidelines for Americans (DGA). This goal was attained by catalyzing an eager base of followers who responded to our months of public outreach and education by submitting 20,000 public comments to the USDA in just 10 days, demanding the removal of dairy from the DGAs.

For the next iteration of the DGAs, we have upped the ante, imploring the USDA to remove dairy from being its own category, instead integrating dairy into the protein category. And if you are wondering why we are so resolute in our focus to improve the Dietary Guidelines, you'll soon learn that the results are immensely far-reaching.

In 2023, we met with and testified in front of the USDA's Food and Nutrition Service to improve the Special Supplemental Nutrition Program for Women, Infants, and Children known as the WIC program. This program is influenced, in large part, by the nutritional recommendations set forth in the Dietary Guidelines for Americans. Thus, as a result of our efforts in both revising the DGAs and campaigning for improvements to the WIC program, Switch4Good was instrumental in pushing the Food and Nutrition Service to include nondairy and plant-based options in the WIC program for the first time since the program's inception in 1972.

In addition, the WIC program now features fewer dairy options overall, which speaks to a greater emphasis on nutritional and cultural inclusiveness for the vulnerable populations participating in the program—decades late as this shocking adaptation and pivot from the federal government may be. The nutritional necessities of BIPOC individuals have largely been ignored since the WIC program was established in the 1970s. It brings me to tears to think that the nearly seven million participants in the WIC program will now be able to purchase plant-based yogurts, cheeses, and milk for the first time without fear of unrelenting gastrointestinal damage.

These momentous victories at the federal policy levels have been immensely gratifying and offer us reassurance that our extraordinary efforts haven't been in vain. The future of our policy work is as intensely bright as the dairy industry's shady dealings is dark. And that's not all.

Our savvy researchers and healthcare professionals discovered that the amount of waste produced by dairy milk cartons in public schools throughout the U.S. is utterly shocking. Recognizing that the National School Lunch Program features an immense number of holes in it, we discovered that the USDA propped up the dairy industry to the tune of $1 billion by featuring cow's milk across public schools in the U.S. Per the USDA's own analysis, though, almost 30% of untouched milk cartons were being discarded, leading to $300 million in taxpayer-funded monies essentially going directly into the trash each year.

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Abhorred, we sprang into action. In 2023, we worked with Senators John Kennedy (R-LA), Roger Wicker (R-MS), John Fetterman (D-PA), and Corey Booker (D-NJ), who introduced the Addressing Digestive Distress in Stomachs of Our Youth Act (H.R. 1619/S 2943) into the Senate that September. The ADD SOY Act, as it was cleverly acronymed, was a first-of-its-kind bill championed by those who recognized just how damaging it would be to continue to do things the way they have always been done.

Since then, and for the first time since the National School Lunch Program was established—an era in which public schools were still segregated, mind you—a bill was proposed that would require public schools to offer a nondairy milk option to children. Additionally, the bill would direct the USDA to fully reimburse schools for the cost of the soy milk provided at the same rate as dairy milk. As it currently stands, the Lunch Program requires that a nondairy milk alternative "be based on an identified medical or other special dietary need that restricts the student's diet" and supported by documentation from a "medical authority or the student's parent or guardian"—not exactly inclusive of racial identities who are largely lactose intolerant and/or those who adhere to a nondairy diet for cultural reasons.

Furthermore, the current iteration of the Lunch Program doesn't provide the school reassurance that they will be fully supported for the costs incurred by providing nondairy milk alternatives to students in need, noting that "the school food authority [must] pay for any additional expenses resulting from providing the substitute"—again, not much incentive for schools to cater to students in need.

Today, the bill has been renamed FISCAL: Freedom in the School Cafeteria Act, which seeks to capitalize on the momentum built from the 2023 introduction of the ADD SOY Act.

Make the Switch, for Good

The dairy industry and the federal policies they influence thrive on obfuscation and misdirection. When the science is made to appear confusing—or downright persuasive *in their favor*—as to whether or not dairy has a place in your family's everyday life, it can feel wildly overwhelming. When your child's school forces dairy milk upon its students at lunchtime because the federal government made it overwhelmingly difficult to attain an accommodation and for the school to be reimbursed for nondairy milk expenses, the dairy industry flourishes on your demoralized state. When your local coffee shop charges up to $2 for nondairy milk alternatives and ignores your pleas for a more affordable cup of coffee, the dairy industry prospers on your deflated hopes. The more dread and confusion that they can instill in your life, the better for them—and the worse for you and the most vulnerable populations in society.

All of these reasons are why we have made life-changing dairy-free resources as easily accessible as possible. Whether you are a new mom inundated with information, an older adult concerned about the well-being of your grandkids, a single dad trying to make the best decisions for your child, an amateur student-athlete yourself, a person devastated by a recent medical diagnosis, or simply someone who is confused by the intense volume of pro-dairy advertisements and paid influencers on social media, we have cultivated a haven for you to cut through the noise and learn about the benefits of a dairy-free lifestyle in a nonjudgmental environment.

Whether you fight alongside us on the front lines at our next coffee shop protest, author a letter to your local lawmaker attesting to the benefits of a nondairy policy, or simply have a conversation with family and friends about why you are choosing a plant-based milk alternative at your next meal, we see you, appreciate you, and value your efforts.

*For a referenced copy of this article, please email **jziegler@HealthScience.org**.*

A game changer with Olympic level compassion, **DOTSIE BAUSCH** leads with her heart. Her 2015 Ted Talk, "Olympic Level Compassion," in which she revealed that her 2012 Olympic silver medal-winning ride with Team USA was powered by plants, inspired many to adopt a plant-based diet. Dotsie was one of the athletes featured in the 2018 documentary, "The Game Changers," executive produced by James Cameron.

Named one of the top 20 most influential vegans in the world by VegNews magazine, Dotsie founded Switch4Good, an evidence-based nonprofit that fights the misinformation spread by Big Dairy. Whether she's teaming with health experts, athletes, and the International Olympic Committee to write the first playbook for plant-based athletes titled "Let the Plant-Based Games Begin"; working with Washington legislators to get soy milk added as an option in our schools; joining other social justice warriors to get Starbucks to drop the plant-milk surcharge; or leading her team at Switch4Good to teach parents and doctors about the harm drinking cow's milk does to kids, Dotsie Bausch is making the world a kinder and gentler place for people, animals, and our planet.

JAMIE EVAN BICHELMAN is an award-winning journalist and a mental health researcher. Jamie proudly utilizes his graduate degree from NYU in psychology, graduate degrees from Harvard University in psychology and journalism, and graduate certificates in nutrition, food sustainability, and health across the lifespan to provide evidence-based reporting to readers around the world. Jamie enjoys learning about animal behavior and exercise physiology and lives with his fiancée and rescue cats.

How to Build Lean Muscle and Lose Body Fat on a Whole-Food, Plant-Based Lifestyle

by Maxime Sigouin

It's inevitable: as we age, our body composition changes. Left unaddressed, we lose muscle mass and strength, and body fat increases (particularly in the abdominal area) while bone density decreases. But with knowledge comes power, and with the proper tools and guidance, it's possible to improve body composition.

One of the most important elements in building a plan to counteract these aspects of aging is to get help from a knowledgeable fitness and health coach who has helped others achieve the exact transformation you want to accomplish. I'm Maxime Sigouin, the founder and CEO of Fit Vegan Coaching, one of the world's top whole-food, plant-based body-recomposition coaching programs, and I've helped over 900 clients between the ages of 45 and 80 years old reach their goals of building lean muscle, losing body fat, and building stronger bones on a whole-food, plant-based lifestyle.

I started coaching because I lost my late fiancée to breast cancer and my grandfather to bone cancer, and after seeing the suffering that they went through, I didn't want anyone else to go through that. I knew that one could greatly reduce their risk of all chronic illnesses by simply having a healthier, leaner, and stronger body while fueling themselves on a whole-food, plant-based lifestyle. My job is to educate and support my clients to get them to their goals in a faster and more sustainable way that doesn't compromise on the quality of the diet. With this kind of teamwork, clients actually get better results faster and are able to keep the weight off.

The perks of having a coach go far beyond just a training program. A good coach will not only build a custom game plan for you but will also teach you why and how the plan will help you reach your goals. In this way, you will gain an understanding of how it all works, so that you can eventually stand on your own two feet.

The perks of having a coach go far beyond just a training program, because the reality of going through a transformational journey is that lack of knowledge is only one of the aspects that prevents people from reaching their goals. The other parts are your mindset and current unhealthy habits. A good coach will not only build a custom game plan for you but will also teach you why and how the plan will help you reach your goals. In this way, you will gain an understanding of how it all works, so that you can eventually stand on your own two feet.

Along the way, your coach will hold you accountable and will help you navigate the "speed bumps" of life, like family emergencies, travel, and complications with work. He or she will also help you identify and remove self-sabotaging or limiting beliefs that may cause you to go off track and not come back for a while. When you hire a good coach, your investment goes towards certainty and the peace of mind that what you are doing is effective and that you will actually get the outcome you are after in a safer, efficient, and sustainable way.

Let's go over how to shift your body composition and what actually matters. The elements of an effective program include eating enough of the right foods, increasing protein intake to levels that support body recomposition, committing to a regular resistance and strength-training program, and, finally, increasing metabolism.

Principle #1: You must eat enough food/calories daily, or you may end up looking "skinny fat."

One of the big mistakes I see people make is they restrict too many calories from the start.

You're probably aware that one pound of fat is equivalent to 3,500 calories and that if you want to lose one pound a week you should consume 500 fewer calories per day. If you want to lose two pounds a week, you would remove 1,000 calories a day, and so on. While it's true that one pound of fat equals 3,500 calories, it's not true that you need to create this much deficit to lose just one pound.

Let me explain the basics of how the body works when it comes to energy and fat loss. You have to understand that your body is primarily a survival machine. Your body doesn't care that you are trying to lose fat and build muscle. All it cares about is survival. Imagine being stranded in the desert with only 50 almonds and a limited water supply, unsure of when you'll stumble upon more sustenance. In this scenario, you'd naturally strive to stretch those almonds as far as possible, rationing them meticulously in hopes of eking out their nourishment until you're rescued or you discover more food.

When you severely restrict your calories, your body goes into preservation mode. It wants to hang on to your body fat, which is extremely counterproductive if your goal is to become leaner and stronger.

Now envision having half of your almonds taken away, leaving you with just 25. This reduction would undoubtedly intensify your determination to make each almond count, prompting you to conserve them even more fervently. Picture stumbling upon 10 additional almonds during your trek through the barren landscape. Rather than devouring them immediately, you'd likely opt to safeguard them for later use, recognizing the unpredictable nature of your circumstances and the value of every morsel. In essence, you'd shift into a mode of survival instinct, prioritizing preservation and strategic consumption to sustain yourself amidst uncertainty.

Now let's replace the almonds with the fat you have on your body. It's the same concept. When you severely restrict your calories, your body goes into preservation mode. It wants to hang on to your body fat, which is extremely counterproductive if your goal is to become leaner and stronger.

Another process also takes place. Your body will go into a catabolic state, meaning one in which it's working to reduce body tissue. In the process, it breaks down lean muscle tissue, not just fat. This is for one reason: lean muscle tissue requires a lot of energy to maintain. You can imagine that in a steep calorie deficit, your body would want to get rid of the thing that requires the most amount of energy from the small amount of food you are eating. Your body will instead prioritize its energy towards the vital organs and vital functions of the body instead of the muscle.

What most people do when they start a body-recomposition journey is drastically cut their food intake overall or cut out a food group like carbohydrates, and they drastically increase their exercise output. That approach leads most people to looking "skinny fat"—skinny with a shirt on and fat with a shirt off.

The way to avoid that is to start with a small calorie deficit. Use a calculator like tdeecalculator.net and enter your information. It will calculate the daily calorie amount needed to maintain your weight. From there, subtract just 200-300 calories. This will be your starting point, the number of calories you need to consume per day. Our goal is to encourage it to break down fat rather than muscle, by balancing the catabolic state with its opposite, the anabolic state. Your body is in an anabolic state when it is working to grow and develop body tissue; this is where you want to be if you are looking to gain muscle mass.

Principle #2: You must hit the daily protein intake required for body recomposition.

I know protein is a hot topic in the vegan and whole-food, plant-based movement, so please be open-minded.

I will start by saying that I agree with Dr. Greger, Dr. Klaper, and Dr. Barnard, all of whom have been on my *Fit Vegan* podcast; you *do not* need to worry about protein if your goal is simply to be healthy and lighter. The standard protein recommendation of 0.8–1.0 grams per kilogram of body weight is more than adequate and is easily attainable in a well-balanced, diverse, WFPB diet.

But if your goal is to improve your body composition by building more lean muscle and decreasing body fat, you want to increase your daily protein intake to around 1.6 grams of protein per kilogram of body weight. You must also commit to strength training a minimum of three times a week, which we will cover in the next section.

Why the increased need for protein? Resistance training causes microtears in muscle fibers. The process of repairing the microtears is what rebuilds the muscles so that they are stronger than they were initially. To do so, the body needs the additional amino acids provided by proteins to repair and rebuild stronger muscles. This is what we mean when we talk about recovery after exercise. Without a sufficient amino-acid presence in the diet, the body must grab them from your current lean muscle mass, which will put you in a catabolic state once again.

For building lean muscle and reducing body fat, you do not need to be concerned with the amounts of carbohydrates and dietary fats you consume; it's the small calorie reduction and the protein levels that matter most. That said, I do agree that eating a higher carbohydrate and lower fat diet is the healthiest. So, for the remainder of your calories, focus on healthy carbohydrates and minimize fat intake.

Reaching the daily 1.6 g/kg protein goal while staying committed to a whole-food, plant-based diet will require a dietary shift to the highest protein options. While all plants contain protein, you'll have to focus primarily on those with the most, including soy products (soy milk, tofu, tempeh, natto, edamame); lentils, chickpeas, and all beans/legumes; nutritional yeast; wild rice (a seed) and grains such as quinoa and oats, especially sprouted oats; all sprouts; seeds (hemp, chia, flax, etc.), and nuts. Higher protein vegetables include spinach, peas (a legume), cauliflower, Brussels sprouts, broccoli, and mushrooms.

While many people use protein powders to boost their intake, the NHA's commitment to truly whole foods is recommended. You may want to consider working with a plant-based dietician who understands how to work within NHA guidelines to build a comprehensive program to meet your protein per kilogram needs. As long as you stay within your calories and hit your protein goal, strength training will shift your body composition positively.

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Principle #3: Work your muscles and bones with resistance/strength training.

To resculpt their bodies, most people tend to move towards doing more cardio to try to burn fat—walking, hiking, yoga, Pilates, swimming, cycling, running, etc.—but that's not an effective way to shift one's body composition. Resistance training is the most powerful way to build muscle; nothing can replace it. It is also one of the best ways to strengthen your bones, as in order to strengthen them you have to put some amount of healthy pressure on them to give them a reason to become stronger.

You will want to do resistance training a minimum of three times a week for 20–45 minutes each time, depending on your starting fitness level. Anything less than three times a week is not enough of a constant stressor to demand the body to get stronger. This can be at home with resistance bands and weights or by going to a gym and using the equipment there. Either can be effective, so start with whatever makes you the most comfortable and is sustainable. (Don't automatically dismiss home workouts. As an example, I helped my mom, who is 58, lose over 50 pounds just with home workouts.)

A good place to start would be with what we call a full body split, meaning you work the full body three times a week. Alternate those three workout days with a day of rest in between them to allow your body to recover. Remember, that is where the muscle-building process takes place.

Your body will always adapt to the environment that you've created for it. If you sit on the sofa all day and barely move, your muscles will start to atrophy, your body will become stiff, and you will become weak. But if you demand that it walk, lift, squat, push, pull, and run, it will be forced to get fit enough to keep up *as long as you are consistent*. It's a part of our survival instinct.

Resistance training is the most powerful way to build muscle; nothing can replace it. It is also one of the best ways to strengthen your bones, as in order to strengthen them you have to put some amount of healthy pressure on them to give them a reason to become stronger.

> [Reverse dieting] is the game changer that will set you up for success in maintaining your new body going forward. It needs to be a planned-for step, because reaching your goal weight is not the end of the body-recomposition process. Reverse dieting can't be rushed; it takes roughly four months.

Principle #4: Speed up your metabolism after fat loss by reverse dieting.

After you've lost your excess weight, you will need to speed up your metabolism so that you can maintain your new body while eating more food. Here is how it works. When you go into a body-recomposition phase, your metabolism will naturally slow down as you eat slightly less food and burn more energy through your workouts. This slowdown of the metabolism is normal, and there is nothing we can do about it during a fat-loss phase.

Once any extra weight is gone, most people tend to get excited about having reached that goal and want to treat themselves. Those whose fat-loss method was unsustainable to begin with often go back to their old way of eating. These are mistakes that will undo the hard work already done, because after losing fat and having a slower metabolism, your body is like a sponge, and if you give it too much food too soon, it will be stored as fat for the future. (Remember the almonds-in-the-desert analogy.)

So here is the key point on how to reverse diet. Imagine your metabolism is represented by a flame. At the end of a fat loss, you have a really small flame because you lowered your calories over time and exercised more to get the body you wanted. If this were a camping situation, would you throw a big log of wood on that small flame? No, you wouldn't, because the small fire wouldn't be able to handle the large log. Instead, the flame would be extinguished. When people take in more food than the body can handle, the body will store it as fat for the future—the very opposite of the desired result. Instead, you want to grow that metabolic flame effectively. Here's how. You throw smaller pieces of wood on the fire over time until you get a raging flame. Eventually you can throw that big log on, and the fire will be able to handle it.

The same goes for your metabolism. Instead of throwing several hundred or potentially thousands of calories at the slower metabolism, you should slowly increase intake by 50–100 calories a day. After a week, you'll evaluate how the body has responded. In other words, you let your body get adjusted to the slightly higher intake, then increase it some more. You are basically tricking the body into handling more food without storing it as fat.

On average, we've been able to increase people's food intake after fat loss by 600–1,000 additional calories per day to maintain their new, leaner, stronger body, and at Fit Vegan Coaching, we've done this process hundreds and hundreds of times. This is the game changer that will set you up for success in maintaining your new body going forward. It needs to be a planned-for step, because reaching your goal weight is not the end of the body-recomposition process. Reverse dieting in this way can't be rushed; it takes roughly four months. Without it you are more than likely to have the weight come back on. Simply put, the faster you increase your caloric intake, the more chance there is that you'll put the fat back on that you worked so hard to get off.

I hope this article is and will be useful on your transformational journey. There is so much more to having an incredible transformation, but now you have the basics to get you started in the right direction with the right mindset and philosophy. I hope to have the opportunity to serve you some more in the future.

*For a referenced copy of this article, please email **jziegler@HealthScience.org**.*

MAXIME is the founder and CEO of Fit Vegan Coaching, one of the world's top whole-food, plant-based, body-recomposition coaching programs. Over the past four years, Maxime and his team have helped over 900 clients completely transform their body composition and health. A passionate advocate for the plant-based lifestyle, Maxime became vegan over a decade ago and has dedicated his life to helping others thrive on plants.

Driven by the mission to help transform 10,000 people by 2033 (and 1 million by 2050) by using the power of a WFPB lifestyle and exercise, Maxime combines evidence-based strategies with compassionate coaching to help clients get lean, thrive, and disease-proof their bodies. He is the host of the successful *Fit Vegan* podcast, where he shares insights, client success stories, and expert interviews to inspire others to embrace a plant-based lifestyle.

Maxime is also a hybrid endurance athlete. Originally from Canada, Maxime now lives California with his wife, Ivy, and their dog Tempeh. Together, they aim to create a healthier, more compassionate world.

So many people I know seem to need knee replacements. Are there body mechanics I should be aware of or exercises I should do to prevent knee deterioration for myself?

EILEEN KOPSAFTIS, BS, PT

Are there ways of moving in daily life and exercises we can do that will reduce our risk of needing this surgery? The simple answer is that it depends.

In the 30 years I've worked with the patient population, I've seen a trend from only replacing joints when the person is nearly incapacitated from pain to replacing joints of those who report they had little to no pain, even on stairs, prior to surgery. This may be why it seems so many "need" a total knee replacement (TKR). My question is: do they really?

Since prosthetic knee implants last on average 15 years and younger and younger people are receiving them, this would seem to be creating a large population of patients that will require a revision (second replacement) later in life. This is a disturbing trend, don't you think? Especially since TKRs require the pounding of a prosthetic device into the bones above and below the knee joint. It's not really as simple a surgery as one might be led to believe.

Healthcare politics and medical ethics aside, let's look at what can be done for knee health by beginning with what doesn't help and then finish with what does. It's important to know what *not* to do as well as what to *do*.

Things that can wreak havoc on knee joint health include impaired function above and below the knee, being inactive, performing inauthentic resistance exercises, and an unhealthy diet.

A big reason joint damage occurs is as a result of chronic inflammation. This was determined by the Stanford School of Medicine. Chronic inflammation is most often due to a diet rich in animal foods and high in fats. This same diet also creates excess weight, promoting an inflammatory chemical cascade that adds insult to injury.

So, if you're consuming a healthy WFPB diet, low in fat and devoid of animal foods, can you still experience joint damage over the years? Yes.

Your knees could be called your upper ankles and your lower hips. They are weight-bearing joints, but are stuck between the hip and the ankle with no place to go, so they are a common victim of pain and injury if either the hip or the ankle has impaired function. Most people, when experiencing knee pain, only focus on their knees. This is a very bad idea and tends to beat up the knees more than help because the deficits happening above and below get ignored.

Knees are also a common victim of inactivity, because they depend so much on the function of the hips above and the ankles below. Years of prolonged sitting can lock the front hips short, weaken the back hips, and cause limited ankle motion. This negatively impacts knee function.

While inactivity wreaks havoc on your whole body, not just your knees, the wrong kind of exercise can be almost as damaging as lack of exercise. There are extremely inauthentic exercises performed in countless gyms across the country every single day.

Does this mean if you both consume a healthy diet and exercise consistently, you won't experience joint damage? Not necessarily. Unfortunately, many commonly performed exercises can be harmful to joint function. The popular exercises for strong knees can promote more harm than good to those fairly simple hinge joints. Using machines or weights while seated and straightening or bending your knees against resistance causes stress to the integrity of your knee joints.

Most people consider these great exercises for quads and hamstrings, but they are not authentic movements you would do in real life or while engaged in any sport activities. These exercises do not promote healthy knees, because weight bearing is absolutely required for authentic training and conditioning. Performing exercises sitting or lying down does not provide what's really needed for pain-free physical function in real life.

What to do?

Even if you've experienced physical injury, this doesn't mean you are forced to suffer from long-term joint damage post-injury, as is so often believed. There are some very effective strategies you can use to promote healthy recovery.

If you're reading this magazine, you probably have the right diet, so let's look at some facts behind training for healthy knees.

First, ensure your ankles have full mobility and stability in all three planes of motion: forward and backward, sideways, and while turning. They must move well and be stable in all directions to promote healthy knee function. Your knees count on what happens below them much more than you know. A common cause of knee pain when descending stairs is impaired ankle range of motion. Performing weight-bearing calf stretches and dynamic stability exercises in all three planes is critical for your knees (and your whole body) to be truly supported from below.

Second, ensure your hips are functioning with full mobility and strength in all three planes of motion. A common cause of knee pain when ascending stairs is weak hips. Performing weight-bearing stretches, lunges, and squats in all three planes (authentic resistance exercises) will help your knees (and your whole body) to be supported optimally from above.

I'll say it again. Your knee is stuck between your hip and your ankle with no place to go and nowhere to hide, and you must work on making those areas healthy and strong to have well-functioning knees.

Mainstream knowledge of exercise tends to be stuck in just one plane of motion and focuses on isolating body parts. It's crucial to learn to train in all three planes as a whole body because this is how your body is designed to function in real life. Since learning accurate movement really requires demonstration, see my free three-plane Movement Performance Assessment and exercise video, which are available at mwpPrivateClub.com.

What causes ridges in fingernails?

NIKI DAVIS, MD

Fingernail ridges are quite common. They are usually of no concern, but they may occasionally indicate an underlying health issue.

Nails are composed of a protein called keratin, which is also found in skin and hair. The three main parts of a nail are the nail matrix, the area where the nail grows at the base of the nail; the nail plate itself, the visible part of the nail; and the nail bed, on which the nail plate sits. Nails are formed by the nail matrix, where cells multiply and layer on top of each other, then harden in a process called keratinization. Healthy nails are typically smooth and free from irregularities, but various factors can interfere with their growth, leading to ridges or other abnormalities.

Ridges in fingernails are generally categorized into two types: longitudinal ridges and transverse ridges.

Longitudinal, or vertical, ridges run from the base of the nail to the tip. They are relatively common and typically harmless. They become more visible as we age due to the body's producing less natural oil, which leads to drier nails and more noticeable ridges. Frequent hand washing or exposure to harsh chemicals can exacerbate dry nails, making ridges more prominent. Trauma to the nail, such as habitual nail picking, may also cause longitudinal ridges, and some individuals may have a genetic predisposition to them. Medical conditions such as psoriasis, lichen planus, eczema, rheumatoid arthritis, and peripheral vascular disease can also contribute.

Transverse, or horizontal, ridges run side to side across the nail and may indicate a temporary disruption in nail growth. Known as Beau's lines, they were first described in 1846 by French physician Joseph Beau. Often, Beau's lines occur at the same nail location in most or all nails, because they are caused by illnesses severe enough to interrupt nail growth. Since nails grow about 1mm every 6–10 days, these ridges can provide hints about the timing of a disease.

Transverse ridges can have other causes, too. A common one is trauma to the nail, such as from manicures or poorly fitting shoes. Medications such as chemotherapy drugs or others affecting cell division can also lead to transverse ridges. In people with Raynaud's disease, cold exposure can cause them, and transverse grooves can be associated with other conditions, such as viral infections, pemphigus, and Kawasaki disease. Severe illnesses or infections, including COVID-19, have been reported to interrupt nail growth, causing horizontal ridges.

In addition, nutritional deficiencies can contribute to both longitudinal and transverse ridges. Addressing these deficiencies through dietary changes may improve nail health.

- Iron deficiency can lead to brittle nails and ridges. Be sure to consume iron-rich foods such as spinach, kale, and beans.
- Magnesium is vital for protein synthesis and new nail formation. Magnesium-rich foods include leafy greens, legumes, nuts, and seeds.
- Zinc supports nail tissue growth and repair. Eat zinc-rich foods such as pumpkin seeds and whole grains.
- Biotin (vitamin B7) strengthens nails and prevents brittleness. Sources include nuts, seeds, sweet potatoes, and bananas.
- Vitamin B12 deficiency can cause bluish nail discoloration in addition to longitudinal streaks. Supplementation may be necessary if blood levels are low.
- Vitamins A and C both promote collagen production, essential for nail health. Incorporate fruits like oranges and strawberries and vegetables such as carrots and bell peppers in your diet.
- Omega-3 fatty acids, found in walnuts, flaxseeds, and chia seeds, hydrate nails and reduce inflammation around the nail bed.

To treat and prevent nail ridges, consider the following tips:

- Stay hydrated; adequate water intake helps nails remain hydrated and less prone to dryness and ridges.
- Follow a balanced diet to ensure your meals include essential nutrients for nail health.
- Protect your nails by wearing gloves when cleaning or working with chemicals.
- Avoid aggressive nail care and minimize trauma. Refrain from overusing nail polish and avoid habits like nail picking.
- Address underlying conditions. If nail ridges are associated with medical conditions, managing the condition may improve nail health.

In summary, ridges in fingernails can result from a variety of causes, ranging from natural aging and nutritional deficiencies to more serious health conditions. While longitudinal ridges are typically harmless and related to aging or minor dietary issues, horizontal ridges may indicate a temporary disruption in nail growth due to illness or other factors. By maintaining good nail care practices, eating a nutrient-rich, plant-based diet, and seeking medical advice when needed, you can promote overall nail health.

PHOTO CREDIT | PETE KOPSAFTIS

EILEEN KOPSAFTIS, BS, PT, CAFS, CMI, NE, is the founder of Have Lifelong Wellbeing and the author of the bestselling book, *Pain Culprits.* She's been helping people get out of pain and age well for nearly 30 years. It is her mission to dispel inaccurate information and misunderstandings about authentic human movement and what promotes healthy aging. Eileen consults internationally, speaks nationally, publishes articles, and teaches movement and pain education classes at Hudson Valley Community College. Her online programs include the Move Without Pain Private Club and the Have Lifelong Wellbeing Academy. Eileen's passion is empowering people with truths that are not well known, but should be, so they can age well into their nineties and beyond.

NIKI DAVIS, MD, originally pursued a career in mechanical engineering, even contributing to the space shuttle program, but she realized her true calling was rooted in health and nutrition. She graduated from the University of Utah School of Medicine in 2017 and completed a family medicine residency program in 2020, switching to a new career as a board-certified family and lifestyle-medicine physician. Dr. Davis is passionate about lifestyle medicine, and now offers telehealth appointments through Love.Life Telehealth, aiming to provide comprehensive care and guidance to individuals seeking a healthier lifestyle.

Dr. Davis is a sought-after speaker and has had the privilege of learning from esteemed mentors such as Dr. John McDougall, Dr. Michael Klaper, Dr. Anthony Lim, Dr. Laurie Marbas, and Dr. Alan Goldhamer, among others. She is a regular guest on Chef AJ's YouTube channel, is certified in The Starch Solution, and is a board member of the Plant Based Nutrition Support Group.

Prep for Success with Plant Based Dallas

by Dianne Doyle

As an engineering graduate of Texas A&M, I stepped away from my career to raise our five children, and I prided myself on serving our family home-cooked meals that we thought were healthy. But in 2011, my husband, Pat, was diagnosed with prostate cancer, and in 2013, I was diagnosed with breast cancer. During my post-surgery recovery, I began to read about plant-based nutrition and was shocked to learn of all the connections between diet and cancer. We decided to embark on a six-week experiment (replicating that in the *Forks Over Knives* documentary) to test the validity of the claims made about eating whole foods in their most natural state and omitting red meat, dairy, and processed foods. After experiencing effortless weight loss, increased energy, and striking improvements in our cholesterol numbers and markers of inflammation, we decided to remove the remaining animal products from our diet (chicken, eggs, and fish) and make the changes permanent.

We both regret not having had this information before we underwent radical surgeries for our cancers, but we are now spreading the plant-based message to all our friends and family through our organization, Plant Based Dallas, in hopes of helping them prevent unnecessary suffering from not only cancer, but from all chronic diseases. To give myself credibility and confidence when talking about this lifestyle with others, I earned a Certificate in Plant-Based Nutrition in 2016 from the T. Colin Campbell Center for Nutrition Studies through eCornell. Our five children and their families (currently totaling 25 people!) are the reason for our continued passion about this lifestyle, and we take great pride in seeing them eat whole-food, plant-based and even spreading the message among their own peers.

We decided to embark on a six-week experiment (replicating that in the *Forks Over Knives* documentary) to test the validity of the claims made about eating whole foods in their most natural state and omitting red meat, dairy, and processed foods.

Pat and I enthusiastically advocate for living a whole-food, plant-based (WFPB) lifestyle, so we created Plant Based Dallas to raise awareness of its benefits and focus on teaching new followers how to easily make the transition. We learned from our experience that one of the main difficulties people have in making this transition and sticking to it is whether they have a local community support group, as many don't have a support system at home, so the mission of Plant Based Dallas has broadened from just raising awareness to providing a support group in Dallas and the surrounding areas. We organize events such as plant-based presentations, book clubs, potluck dinners, Build-A-Meal Jar Swaps, food prep and equipment demos, vinegar tastings, restaurant meet-ups, and more. Some of our members even drive two hours to participate in our events!

One of our favorite activities is our Build-A-Meal Jar Swap, which occurs every other month. To make it easier for each of us to consume more veggies, beans, and whole grains to improve our health and prevent and reverse disease—remember, our food is our medicine!—the swap allows us to help each other out by sharing the food prep.

> One of the main difficulties people have in making this transition and sticking to it is whether they have a local community support group, as many don't have a support system at home.

The process is similar to a Christmas cookie swap. We usually have 12 participants, each of whom chooses one ingredient, either a raw veggie, cooked grain, or cooked bean. They buy enough to fill 12 wide-mouth pint Mason jars after prepping. Ingredients change from swap to swap, but the ones most commonly used in recipes are most appreciated. For example, vegetables like onions, celery, carrots, broccoli, cauliflower, and cabbage are at almost every swap, but others (squash, bell peppers, zucchini, mushrooms, and tomatoes) are also often brought. These are all washed, drained, and sliced or chopped ahead of time so they're recipe ready. (Shredding is discouraged, as it makes the vegetables spoil more quickly.)

Popular grains are brown rice, quinoa, farro, and barley. We require that these be cooked and cooled ahead of time, so we usually schedule our swaps later in the day on a weekend to give participants the time to prepare and cool them before filling their jars. Beans might be black, pinto, garbanzo, kidney, or adzuki; like the grains, they must be rinsed, cooked, and drained before being packed into the jars. We ask that all ingredients be prepared no earlier than one day before the swap and without any added seasonings or oil.

Everyone brings their filled jars to the swap. Using the original box for transporting and trading is a convenient, free way to do that. We ask everyone to arrive a few minutes early, because the swap can't start until everyone's jars are there. We use a long table divided into 12 sections. Each participant places one of their jars in each section so that each area has all 12 foods, and folks then fill reload their boxes with the 12-jar variety from one of the sections. After that, trades are often made. In this way, the boxes are a bit customizable, say, if one person's family isn't fond of broccoli or another needs more of a particular food than one jar provides.

The swap goes fast; we're usually done in 20–30 minutes. We don't provide specific recipes; people use their selection of ingredients however they see fit. But often the conversation involves people sharing ideas and telling others what they plan to do with this or that ingredient.

You get the idea. Want to try it yourself? Gather some friends and give it a try! Don't have 12 people? Three, four, or six will work; in that case, each person would prep and bring four, three, or two ingredients instead of just one.

You can find more information and print detailed directions from our website by googling "Build-A-Meal Jar Swap" or by locating it on our website under the "Cooking at Home" link. While you're there, you can also find information on batch food prepping, recipes, plant-based resources, and more.

Since we have been eating this way now for more than 13 years, I created two products that make WFPB cooking easier. The WFPB Cooking Time Chart for the Instant Pot is a big timesaver. Two magnets come in a set: one magnet has a list of ingredients in alphabetical order, and the other magnet has ingredients grouped by cooking time so that you know which items can be pressure-cooked simultaneously. The magnet information is also available in a double-sided laminated card as a less-expensive option.

At Plant Based Dallas, we encourage folks, especially those new to WFPB eating, to eat simply. To help with that, I recently created a Bowl Combination Chart (Dump. Heat. Eat.) that has 28 different bowl combinations you can make by choosing from proteins, raw veggies, grains/starch, spices/herbs, and sauce ingredients, providing ideas that make pulling together a healthy, tasty meal a breeze. Both products are available on plantbaseddallas.com under the "Shop" link. Our YouTube channel has many demos that show you how to stack and layer multiple ingredients in your Instant Pot, along with other kitchen, cooking, and meal prep tips and ideas.

We are happy to make ourselves available to anyone wanting to learn more about a WFPB lifestyle. You can email us at plantbaseddallas@gmail.com, or message us on Facebook, Instagram, YouTube, or on our website, plantbasedallas.com. We invite you to start a community in your own city to help others find each other and provide support. We also encourage you to copy and paste any of the info from our Facebook group to build your own plant-based community. Let us all live well and live long!

One last thought we would like to leave with you is that it is never too late to make a lifestyle change. Pat's mother, Barbara Doyle, moved in with us in November 2023 when she was 95 years old, with the understanding that she would eat the same foods that we ate. Her pictures here, from when she moved in and one year later on her 96th birthday in November 2024, show how profound an effect eating whole foods can have on a person in such a short time and at any age. She was more than willing to share these pictures to help others make the change.

Tofu Scramble Breakfast Tacos

Start your day with a flavorful twist! These satisfying breakfast tacos bring together baked tofu, sautéed mushrooms, spinach, and colorful toppings like red onion and purple cabbage. Wrapped in a soft corn tortilla or served on a bed of fresh greens and topped with my Mango Salsa and a drizzle of Creamy Avocado Sauce, it's a nourishing dish that's perfect for fueling your morning with a savory kick!

Serves 6–8.

INGREDIENTS:

14 ounces organic firm tofu, crumbled

2 tablespoons cumin

2 teaspoons paprika

½ teaspoon chili powder

1 teaspoon garlic powder

¼ teaspoon cayenne powder

½ teaspoon black pepper

8 ounces mushrooms, sliced

1 cup fresh spinach, rough-chopped

¼ cup red onion, finely diced

¼ head purple cabbage, shredded

¼ cup cilantro

Corn tortillas

1. Preheat oven to 350°F.
2. Press tofu to remove all liquid, then crumble into a mixing bowl.
3. Add dry seasonings and mix into tofu until evenly distributed.
4. Pour onto a lined baking sheet and bake for 20 minutes. Check midway through and turn the scramble mixture to bake all sides.
5. While the scramble is cooking, dry sauté mushrooms and set aside. If they begin to stick, add 1 tablespoon water or vegetable broth and cook to desired tenderness. Once mushrooms are completely cooked, remove from heat, add spinach to mushroom pan and cover with lid until spinach is wilted.
6. Once the scramble mixture is completely cooked, remove from the oven.
7. In a corn tortilla or on a bed of greens, place a layer of the scramble mixture and add the mushrooms and spinach. Top with red onion, purple cabbage, and cilantro.
8. Top as desired with Mango Salsa and a drizzle Creamy Avocado Sauce, and dig in!

Creamy Avocado Sauce

Elevate your meals with this Creamy Avocado Sauce, a luscious, zesty blend of avocado, lime, cilantro, and just a hint of serrano pepper for a gentle kick. Bursting with fresh flavors and a silky-smooth texture, it's perfect as a raw veggie dip or drizzled on tacos, salads, grain bowls, or roasted veggies. Quick to whip up and endlessly versatile, this sauce is sure to become your go-to for adding a bright, creamy finish to any dish.

Makes 1–1½ cups.

INGREDIENTS:

1 large avocado

½ serrano pepper, unseeded (remove the seeds for a milder heat)

¼ cup cilantro, stem and leaves

2 tablespoons lime juice

1 teaspoon garlic powder

1 teaspoon onion powder

Black pepper to taste

1. Place all of the ingredients into a high-speed blender and blend until thoroughly mixed.
2. Drizzle avocado sauce on top of your favorite dish.

Chef's Note: Serranos are five times as hot as jalapeños. You can replace the serrano with jalapeño, remove it entirely, or increase the amount to adjust the spiciness of the sauce to your taste.

Mango Salsa

Add some pizzazz to your meals with this vibrant Mango Salsa! Sweet mango pairs perfectly with juicy cherry tomatoes, zesty lime juice, and a hint of heat from jalapeño. Fresh cilantro and red onion add a refreshing crunch, while a pinch of chili powder ties it all together. This salsa is a burst of tropical flavor that's perfect on Tofu Scramble Breakfast Tacos, as a dip, or as a side dish.

Serves 3–4.

INGREDIENTS:

1 pint cherry tomatoes

1 cup mango, diced

½ jalapeno, finely diced (remove the seeds for a milder heat)

⅓ cup red onion, diced

½ cup cilantro, chopped

¼ cup lime juice

1/16 teaspoon chili powder

1. Add all ingredients to a bowl and mix until fully incorporated.

Chef's Note: Let the salsa rest in the fridge for an hour or longer before serving for even more flavor fusion.

Crispy Cucumber and Tomato Salad

Brighten your plate with this refreshing medley of vibrant flavors and crisp textures. Juicy cherry tomatoes, crunchy Persian cucumbers, creamy avocado, and fragrant herbs come together with a tangy splash of apple cider vinegar and lemon juice. A sprinkle of sumac and optional red pepper flakes adds a zesty kick. Perfect as a side dish or a light, satisfying meal, this salad is a celebration of fresh ingredients.

INGREDIENTS:

3 Persian cucumbers, diced

½ pint cherry tomatoes, quartered

½ medium red onion, finely diced

1–2 cloves fresh garlic, minced

½ avocado, cubed

½ teaspoon ground sumac

½ bunch green scallion, chopped

½ cup fresh parsley, chopped

1 teaspoon apple cider vinegar

1 tablespoon lemon juice

Crushed red pepper flakes, to taste

Black pepper, to taste

1. Chop all the vegetables and herbs and add to a serving bowl.
2. Pour wet ingredients on top and toss until well incorporated.
3. Serve immediately.

Stuffed Cabbage Rolls

Discover this deeply flavorful version of the classic when you make these plant-based Stuffed Cabbage Rolls. Tender cabbage leaves are wrapped around a savory blend of lentils, nutty buckwheat, and a medley of sautéed veggies and herbs to make a delicious, wholesome dish. For an extra burst of flavor, serve them with my Tart Onion Dipping Sauce for a satisfying and perfectly paired crowd-pleasing meal.

Makes 20–24 rolls.

INGREDIENTS:

Heaping ½ cup cooked green lentils

Heaping ½ cup cooked buckwheat (see note)

1 head of green or Napa cabbage

1 small onion, diced

1 clove garlic, minced

1½ cups mushrooms, diced

1 small carrot, grated

1 small sweet potato, grated

1 cup of greens, chopped (Swiss chard, kale, spinach)

1 serrano pepper or jalapeño pepper, deseeded and finely diced

¼ teaspoon dried rosemary, ground

¼ teaspoon dried sage

¼ teaspoon dried basil

¼ teaspoon dried thyme, ground

¼ teaspoon dried oregano

Black pepper to taste

1. Prepare Tart Onion Dipping Sauce, if desired. (Recipe at right.)
2. Separate clean leaves from cabbage and soak in boiling water for 10 minutes to blanch. Remove from water and set aside. If desired, you can shave the thick white spine off of the bottom of the leaf for easier rolling.
3. In a large preheated pan, add the diced onion, minced garlic, diced mushrooms, shredded carrot, sweet potato, chopped greens, and serrano/jalapeno pepper and begin to sauté. Add rosemary, sage, basil, thyme, oregano, and pepper, and stir well to combine. Add one tablespoon of water/vegetable broth at a time if sticking. Cook with lid on for about 10 minutes or until veggies are soft and translucent.
4. Remove from heat. Add cooked buckwheat and lentils, and gently stir, then transfer mixture into a large bowl so that you can use the pan to cook the cabbage rolls.
5. Lay cabbage leaves out flat and, with a melon-ball scoop or spoon, place one scoop of the vegetable mixture onto the leaves and roll. Roll from the bottom of the leaf then fold in the sides and continue to roll. Secure the cabbage roll with a toothpick.
6. Place in stovetop pan and heat until browned. Flip and then brown the other side.
9. Remove toothpicks and serve with dipping sauce.

Tart Onion Dipping Sauce

Bring your meals to new heights with this Tart Onion Dipping Sauce. This sauce is a rich and tangy complement to your favorite dishes. Roasted white onions and garlic blend seamlessly with zesty lemon juice and a hint of black pepper, creating a velvety sauce bursting with flavor. Serve it warm atop Stuffed Cabbage Rolls, roasted veggies, or as a savory dip. It's a simple yet sophisticated addition to any plant-based meal.

Makes 1–1½ cups.

INGREDIENTS:

2 white onions, halved and peeled

2 whole cloves garlic, peeled

Black pepper to taste

1 tablespoon lemon juice

Zest of half a lemon (optional)

1. Preheat the oven to 400°F.
2. Place the onions and garlic onto a piece of parchment paper. Top with a twist of black pepper.
3. Fold the parchment paper into a package, then wrap again in foil to help retain moisture.
4. Place in an oven safe dish with a lid and cook for 60 minutes. Remove from the oven and let cool slightly.
5. Carefully transfer into a small blender. Add the lemon juice and zest (if using), and blend well until silky smooth.
6. Serve warm.

Chef's Notes: Any other grain, such as quinoa, millet, or rice, can be substituted for the buckwheat.

Lemon Zucchini Muffins

Moist, tender, and naturally sweetened, these muffins blend the vibrant flavors of lemon zest and juice with the subtle earthiness of zucchini. Made with oat flour and applesauce, they're a nourishing treat that adds a burst of bright, citrusy goodness that's perfect for any breakfast or snack. With every bite, you'll enjoy a delightful balance of tangy and sweet, making these a must-try for any muffin lover!

Makes 12 muffins.

INGREDIENTS:

2 cups oat flour

1 teaspoon baking powder

½ teaspoon baking soda

½ teaspoon vanilla bean powder

1 tablespoon freshly ground flaxseeds

1 cup zucchini, grated and gently pressed to remove excess liquid

1 cup unsweetened applesauce

½ cup unsweetened plant-based milk

2 tablespoons lemon zest

3 tablespoons lemon juice

2 tablespoons date syrup

1. Preheat the oven to 350°F.
2. In a medium bowl combine oat flour, baking powder, baking soda, vanilla bean powder, and ground flaxseeds. Set aside.
3. In another medium bowl combine grated zucchini, applesauce, plant milk, lemon zest, lemon juice, and date syrup.
4. Add dry ingredients into the wet ingredients and gently mix with a spoon. Do not overmix.
5. Spoon batter evenly into a muffin pan to make 12 muffins.
6. Bake for 28–30 minutes or until completely cooked.
7. Remove from heat and let cool for 10 minutes in the pan, then carefully transfer to a cooling rack. Serve and enjoy!

Applesauce Oat Cookies

Satisfy your sweet tooth with these delightful Applesauce Oat Cookies! Packed with wholesome oats and apple pieces and sweetened with bananas, raisins, and applesauce, these cookies are a guilt-free treat. Perfectly bite-sized, they bake into chewy, satisfying cookies that make for a snack or dessert that's as nutritious as it is tasty.

Makes 30 cookies.

INGREDIENTS:

1 cup gluten-free oat flour (grind your own, if preferred)

1 teaspoon baking powder

½ teaspoon cinnamon

¼ teaspoon vanilla bean powder

1 cup overripe bananas, mashed until creamy (about 2 large)

1 tablespoon golden flaxseed, freshly ground

3 tablespoons water (for flax egg)

¾ cup applesauce

1 small apple, peeled and julienned

2 cups rolled oats

½ cup golden raisins

1. Preheat the oven to 375°F and line a baking sheet with parchment paper or a Silpat.
2. In a small bowl, make a flax egg by mixing freshly ground flaxseed and water. Let sit for 5 minutes.
3. In a medium bowl, combine the oat flour, baking powder, cinnamon, and vanilla bean powder. Once completely mixed, set aside.
4. In another bowl, add the mashed bananas, applesauce, julienned apple, and flax egg and stir to combine well.
5. Stir the dry ingredients into the wet ingredients, then add the rolled oats and raisins. Mix well.
6. Using a melon baller, scoop out 30 cookies on the prepared cookie sheet. Use the flat bottom of a metal dry measuring cup or your fingers to flatten the balls into a cookie shape. These cookies will not change shape during the cooking process.
7. Bake for 12–15 minutes or until slightly golden. Cool the finished cookies on a baking rack, and enjoy!

PHOTO BY SARA RACEY PHOTOGRAPHY

JENNIFER DIAMOND is a certified plant-based health and nutrition coach who transformed her life through the healing power of whole-food, plant-based eating. After years of battling debilitating neuropathy and chronic health challenges, Jennifer embraced a lifestyle free from animal products, oil, salt, sugar, flour, and gluten. Her journey not only restored her vitality but ignited a passion for helping others discover the life-changing benefits of plant-based nutrition. Today, Jennifer inspires her global audience through her YouTube channel, recipes, and coaching practice, sharing practical, flavorful, and nourishing ways to embrace a healthier life. In this issue, Jennifer shares a variety of springtime recipes, proving that wholesome, WFPB foods can be healthy, delicious, and guilt-free!

Continuing a Family Legacy of Natural Hygiene

by Ruki Sidhwa, Naturopathic Health Coach

My name is Ruki Sidhwa, and, yes, some of the older NHA members will recognise my surname! I am the youngest daughter of the late Dr. Keki Sidhwa, one of the original naturopaths and NHA conference lecturers. Dad attended and lectured at the original American National Hygiene Society conferences annually for some 50 years. My sisters and I were lucky enough to have attended two of those with him, one in Chicago and another in Florida. I remember fondly meeting Alec and Nejla Burton (who were great friends with Dad and visited us often in the U.K.), Dr. Virginia Vetrano, Dr. David Scott, Bob and Joy Gross, Dr. William Esser, and Dr. Frank Sabatino, to name but a few.

From early childhood we shared our family home with thousands of outpatient and inpatient guests at our Shalimar Health Home. Our home was split between the family side and the clinic/guests' side. We spent much of our childhood helping in the kitchen, making juices and serving fresh water and meals (mainly fruit and salads) to our guests.

Over the years, we attended hundreds of Dad's lectures and debates. Having lived and breathed his natural hygienic work all our lives, we were all thankful for having followed this way of life and for the knowledge it gave us. Yet, some 30 years ago, I recall Dad's asking us, "So, aren't any of you going to follow in my footsteps and continue my work?" And I am sorry to say that the answer was a resounding, "No!" Instead, my sisters and I all went on to establish our own careers, myself as a factual TV producer/director and compliance specialist here in the U.K.

But now, 30 years on, I am finally continuing my father's legacy as he so wished. I have retrained as a certified naturopathic health coach at the College of Naturopathic Medicine here in London, and I have recently established "Sidhwa Health—Nature's Way" as my platform (sidhwahealth.co.uk).

So, why the change of heart?

I am continually asked how is it that I can count on just one hand the number of days I've had off sick in nearly 40 years of work. Is it really just down to good genes and/or luck?

I am eternally grateful to my parents for teaching me how to look after my health, how to boost my immune system naturally, and to share their love of everything nature has to offer. I felt it was now my turn to continue my parents', and particularly, my father's, legacy to help people to improve their health.

Over the last few years, I've become more acutely aware of how much illness and disease, including mental health problems, have become endemic in our society, and this concerns me greatly. Absenteeism in the workplace in the U.K. due to illness is at its highest level in a decade.

I truly believe that if more people knew what is causing their ill health, or at the very least contributing to it, and had the knowledge about more natural ways to ease stress (and thus better their mental health), we would be a happier and healthier society with less reliance on prescription drugs and with less prevalence of sickness and disease. In 2022, the British Medical Association reported that 25% of 17- to 19-year-olds in Britain suffer mental health issues.

My health coaching philosophy is based on the fundamental belief that if you respect and work with nature, you can take control of your health and reduce the likelihood of illness and disease. I focus on empowering clients to make small-step lifestyle changes and to set and achieve their health goals. Invariably, the areas we look at and work on together include, but are not exclusive to, nutrition, exercise, sleep, stress management, and mental and gut health. The gut/brain axis cannot be ignored; there's a reason for the phrase "gut instinct."

I am eternally grateful to my parents for teaching me how to look after my health, how to boost my immune system naturally, and to share their love of everything nature has to offer. I felt it was now my turn to continue my parents', and particularly, my father's, legacy to help people to improve their health.

Personally, I am a lifelong vegetarian (from the perspectives of both health and a love of animals), and I have exercised regularly for as long as I can remember. My greatest happiness is being outside in nature, enjoying our countryside, open parkland, or the seaside with family and friends.

I'm a keen athlete and ex-triathlete and have completed hundreds of 10Ks, half-marathons, three full London marathons, and numerous sprint and Olympic distance triathlons, and I even completed a half Ironman for my 50th birthday! I also hold a brown and white belt in Shotokan karate.

I still enjoy hiking, swimming, cycling, running, dance fitness, yoga, and strength training on a regular basis.

I love running my healthy food workshops where I recreate some of the healthy and hearty meals that I grew up on, full of plant power and nutritional goodness. Education and health are my passions, and now I get to combine the two! I love seeing clients' faces light up when they can visualise reaching their health goals and are excited about getting started on their new individualised health coaching plan. Equally, in follow-up sessions, it is fantastic to see their progress and renewed joie de vivre.

In my opinion, eating plant-based and avoiding ultra-processed foods along with exercising regularly are keys to leading a healthy life, and it's great to now see mainstream doctors like Dr. Tim Spector of the Zoe app fame (zoe.com) recommending that people try to incorporate 30 plant-based foods every week. (He includes herbs, spices, legumes, and pulses as ways to meet this goal.) I think it helps people to focus their mind.

My greatest achievements are helping clients reach their optimal health goals so that they can become more productive and feel energized and vibrant in their work and personal lives.

My areas of expertise include:

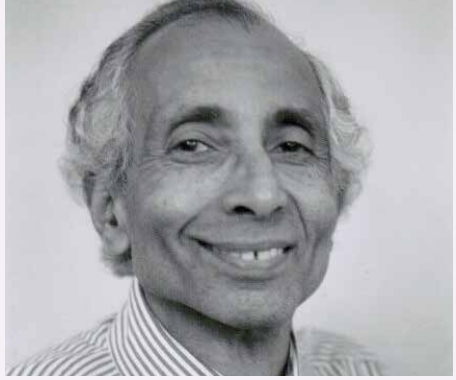
- How to improve your health and well-being
- Helping busy/stressed-out professionals in need of a better work/life balance
- Family health—how to make healthy living second nature
- Weight management
- How to have a natural, uncomplicated menopause without hormone replacement therapy

Having lived a hygienic lifestyle for so long—I recently turned 60—it's a real privilege to be sharing my Sidhwa Health tips and recipes and to help people to take back control of their health.

I look forward to continuing to spread the good work of the NHA and my late father for many years to come!

More information about my work can be found at sidhwahealth.co.uk, or please email me at sidhwahealth@outlook.com. One-on-one sessions can be arranged remotely.

Looking Within



by Keki Sidhwa, ND, DO

Editor's note: Dr. Keki Sidhwa (1926–2018) was one of the pioneering voices and leaders of the modern-day natural hygiene movement. A fixture at NHA conferences for over 54 years, he shared a close relationship with the late Drs. Herbert Shelton and Alec Burton. He was the author of several books, including *Medical Drugs on Trial—Verdict Guilty*, *Fit for Anything*, and most famously, *The Quintessence of Natural Living for Health and Happiness*, a 1994 collection of essays and talks on the art of the natural hygiene lifestyle. He was the cofounder and president of the British Natural Hygiene Society, and he single-handedly published his own health journal, *The Hygienist*, for over 50 years. He was not only a brilliant health practitioner, but also a wonderful philosopher and poet. We are pleased to reprint the following excerpt from his editorial in the 45th anniversary issue of *The Hygienist*, which first appeared in the Summer 2015 issue of *Health Science*. We think you will agree that it is worth repeating—again and again!

If we are not in harmony with ourselves, how can we possibly be in harmony with the world we inhabit? Real health is harmonious. Synchronization of the body, mind, and spirit leads to bodily health, mental alertness, and spiritual awareness.

A great awakening is taking place. Individuals all across the world are tapping into their internal power to elevate their lives to a higher octave of health and happiness. A hygienic lifestyle is the beginning of this search for inner harmony. Looking within offers keys for enlightening one's perceptions.

This is indeed a difficult and sometimes threatening time for all of us. But it is also an astonishing opportunity for growth, if we look at it this way. As I advance in age, I have come to the conclusion that the most important journey I have taken is the one into myself. Or, as the poet Yeats said, "It is not the most important journey; it is the only journey."

I have attended many health conventions where scientific explanations are given to enhance our knowledge of the physics and chemistry and biology of maintaining good health. However, I have never come across this simple guideline of looking within ourselves to recognize that it is we, individually and as a group, country, nation, who are responsible for our health.

I have always said, "Accepting natural hygiene intellectually is not enough."

You have to fall in love with natural hygiene, and this you can only do if your perception is not only an outward one, but one which is developed by looking within. Looking within helps you to revise your level of consciousness. The phrase "falling in love" is not correct terminology, although all of us use it because it has been part of our culture.

"Rising in love" is a much better phrase, for as we raise our consciousness to befriend and pour our love, we are actually accepting and loving ourselves, and this "self-love" then engulfs all in our path: human beings, animals, our planet earth, and the sheer existence of our wonderful universe. That involves taking responsibility for what we feel. It means we have to stop blaming others for our own problems. It means accepting our own contribution to conflicts and unhappiness and becoming more consciously aware of why we feel what we do.

I believe it's time to begin to heal ourselves, and in so doing so help others in our society. Growing up, we accept responsibility for ourselves by having the courage to look at who we are and what we really want out of this life. I believe peace for the world cannot be achieved without peace and harmony and order instead of chaos within our own individual self.

All life is a boomerang; we receive what we give. Love transforms all it touches—for as we grow in its light we learn to love and be loved.

You have to fall in love with natural hygiene, and this you can only do if your perception is not only an outward one, but one which is developed by looking within.

It is as vital to be physical as it is to be spiritual and vice versa.

The body reflects the disorders of the soul. If one can establish where the blockages lie, it is easier to offer advice on where that person should look for his own weakness. The more balance we hold between the masculine and the feminine (or yin and yang) in ourselves, the more streamlined our bodies become, because our body reflects our consciousness.

Effective time management is another important feature for all of us: "Yesterday is a cancelled check, tomorrow is like a promissory note. None of them are useful to us. Present times are like currency notes—use them wisely." Think deeply on this. Intellectual acceptance of natural hygiene is not enough; "looking within" is the crux of the matter.

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When you become a Life Member of the NHA by making a single gift of $1,000 or by being a Century Club Member for 10 years at $100 per year, you are making a strong commitment and vital contribution to the long-term success of the NHA. In this issue we are honored to introduce you to our new Life Members!

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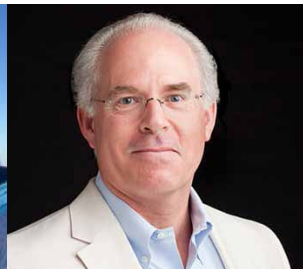

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NHA Plant-Based Travel Makes History in Tahiti!

by Wanda & Mark Huberman

In February 2025, NHA travel made history by taking over an entire Windstar Ship for a seven-day, unforgettable cruise to Tahiti and the breathtaking Society Islands of French Polynesia.

A record 266 plant-based enthusiasts drawn from the NHA and followers of Dr. Joel and Lisa Fuhrman spent a memorable week cruising, kayaking, snorkeling, diving, and exploring some of the clearest and most beautiful waters and awe-inspiring landscapes you will ever see in this unspoiled and idyllic corner of the earth. The weather was spectacular, as was the Windstar staff, who continued the exceptional service they've provided on other cruises. The plant-exclusive, SOS-free meals prepared by their amazing Executive Chef Nelish and his culinary team included abundant, beautifully prepared salad bars, extraordinary soups, fabulous entrées, and mouth-watering desserts. We also need to give a shout-out to the chefs at the Intercontinental Hotel in Tahiti, with whom we worked to provide incredible SOS-free buffets for those arriving before the cruise and staying afterward. As always, the sense of community our members experience on these small ship excursions continues to make plant-based travel a top member benefit. As we love to say, if you haven't done plant-based travel with the NHA, you haven't done plant-based travel at all!

Thank you, Wanda Huberman and Lisa McCarl, for an absolutely unforgettable trip! Had an amazing time and met wonderful people! If you haven't done a trip with NHA Windstar, you must definitely travel with them. Amazing ship, crew members, and the food was outstanding.

SHAYDA SOLEYMANI

This place is magical, pristine, and colorful.

DEBBIE KNIGHT

Raise your hand if you're already missing the fantastic friends we made, the delicious and nutritious food prepared for us, the beautiful people and scenery of French Polynesia, the amazing staff and crew of the Windstar Star Breeze, and everything about the week we just shared.

MELISSA STURGESS

Having so much fun at Huahine with the NHA. We are in love with the Dandy Blend soy latte and the wonderful buffets each day. My favorite is so many wonderful travelers and friends.

SHERREE FEDDER

A huge thank you to Wanda, Mark, Lisa, and Clayton for all their hard work and many sacrifices that made this vacation one of the most memorable and enjoyable that we have ever experienced! We will do this again for sure!

DIANNE DOYLE

This was the most awesome trip ever. There is beauty in these islands that words cannot describe. The cruise had so many awesome excursions and other activities. We even swam off the rear of the ship and then kayaked!

JANICE CAVICCHI TAPP

The food is healthy and beautiful!

JULIA DUNAWAY

The water sports were SO much fun!

LISA BORNER SALDEEN

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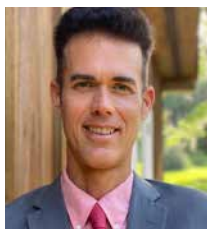

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