

- S1 00:03 [music] Welcome to the Sports Medicine Podcast, brought to you by the Sydney and J.L. Huffines Institute for Sports Medicine and Human Performance and the Department of Health and Kinesiology at Texas A&M University. At the Huffines Institute, we're always working to facilitate, apply, and bring you the most up-to-date coverage of the wide world that is sports medicine and human performance, all in a language you can understand and share with your friends. And now, here's our host, the director of the Huffines Institute, Dr. Tim Lightfoot.
- S2 00:32 Hello, and welcome to the weekly edition of the podcast from the Huffines Institute for Sports Medicine and Human Performance. I'm your host, Tim Lightfoot, and we are so glad that you took the time to download us and that you're listening today. Our goal is to bring you an interesting person in the world of sports medicine and human performance every week. And we have done that again this week. We are really pleased to welcome to the podcast this week Dr. Mark Faries. Welcome to the podcast, Mark.
- S3 00:58 Hey, welcome. It's great to be here.
- S2 00:59 Yeah. We're glad to have you. I'm going to tell the audience a little bit about you and why you're here, and then we'll just jump into the conversation at that point. So Dr. Faries is an associate professor and extension health specialist with the Texas A&M AgriLife Extension Service. And he is also an adjunct assistant professor within the Texas A&M College of Medicine. He's toured all the great universities as far as his educational degree preparation goes. He has a degree from Texas A&M, a degree from Baylor, and a degree from the University of Texas, Austin. We won't ask him which his favorite was because we know what the answer to that would be.
- S3 01:34 Good [laughter].
- S2 01:35 He's had a variety of experiences over his career to this point. He was an associate professor at Stephen F. Austin State University. He's been on the board of directors for the American College of Lifestyle Medicine, chair of the publications and communications committee for the American College of Lifestyle Medicine, and a variety of other things including extension health specialist, as we mentioned a while ago. And so people may be wondering, first of all, what is extension? So share the audience, and then we'll just go from there.
- S3 02:07 All right. I'll start. Around 100 years ago, the Public Land Grant Act that established great universities like Texas A&M established it for research, teaching, and extension. So conceptually, extension is about taking the research and translating it via educational programming to the needing people in the community who need to find out what that research is discovering. Early on in extension on the human side, it was more family and consumer science, the needs that were being met. We also had ag production, and ranching, and farming. And to be honest, a lot of the innovations that we have in production now, currently on the agricultural side, are due to the wonderful efforts in extension over the past 100 years. And so generally, that's what our goal is, is to translate via education to change behavior. By definition, Everett Rogers defined extension in 1963 that since its inception, the purpose is to change human behavior by teaching people how to apply the results of scientific research.
- S2 03:17 So it's interesting that there's so much emphasis now on trying to get technology out of the universities to help people out in the environment, or out in the real world. People forget extension's been there a long time doing that.

- S3 03:29 And you know what? We have a presence in all 254 counties across the state of Texas.
- S2 03:34 And most states are like that, though. It's part of the land grant mission for most universities.
- S3 03:37 That's correct. That's correct. One of the problems has been is that the human health efforts, especially in changing human behavior, is in the scope of things is somewhat recent. Right? And so over the last decade or maybe 20 years, we've always been embedded to some degree in health. It might have been preserving fruits and vegetables 90 years ago, which is still true today. But the expanse of the education and the programming and the general efforts in health have been growing consistently. We are now at a cusp to where it's growing exponentially because of all the concerns with chronic disease and that 80% of all chronic disease are preventable with lifestyle behavior.
- S2 04:24 And I really didn't put it in the introduction, but your background is in exercise physiology--
- S3 04:27 That's right.
- S2 04:27 --exercise science. And people might be listening going, "Wait, why do we have this extension guy [laughter] on here talking on a sports medicine and human performance podcast?" But in reality, that's-- you just talked about the healthy lifestyles part of extension and what's happening. And that's really what you've been brought on to do, in the last year or so, with the extension services, to start to incorporate that into the extension outreach.
- S3 04:49 That's it, and it is integrated. I mean, even if you consider the psychophysiological aspects of sport performance. I mean, to isolate the physical and physiological aspects alone only gives you part of the picture, just as it is to isolate only the psychological side. It is that neuromuscular connection. It is that psychophysiological connection. And so yeah, I got my master's in exercise physiology, and it was wonderful. But at the same time, my frustrations were growing because I knew what to tell people, but I didn't know how to get them to do it. And so that's what started transitioning me into questions on, "How do we help people change? How do we help people adopt those behaviors?" And it even goes back before then when I was originally working with athletes. And I started working with fitness models, and then I would have women in the gym come ask me, "Hey, I want to work with you. I want to look like that fitness model." But that was a whole different type of population and concerns and perspectives that I had never dealt with, and it just became very intriguing to me.
- S2 05:56 And so part of your position now is to help emphasize and strengthen the health component of the extension world out there. And you and I were having a conversation about how-- you taught, I believe, consumer science. And so tell us a little bit about how extension is-- that part of extension is changing to subsume more of the health and to help people live healthier lives.
- S3 06:17 Yeah. The first thing is a name change. And so our unit, within AgriLife Extension, is now the Family and Community Health Unit. And so we are sort of the intellectual hub, but we provide assistance and whatever the needs are of the county extension agents out in each of the counties. We give them whatever they need to help facilitate this changing of behavior. So that has been doubled, so to speak, in that now the agents are not family and consumer science agents anymore. They are family and community health agents. So their business cards are changing. Their titles are

changing. And so that is a very clear sort of line in the sand, so to speak, in that-- and our leadership has really done well to put us in that direction. But just because the name has changed doesn't mean that we have the capacity to do what we need to do to change human behavior as it relates to physical activity and diet. We may not have the full capabilities. And so how do we internally educate and get everybody up to speed where they need to be to be that local expert with their boots on the ground? Visibility. We started this conversation talking about what is extension? What's funny is I'll talk to doctors all the time with exercise as medicine and lifestyle medicine. And I tell them what extension is, they're like, "Man, that's the greatest thing I've ever heard." And it is. It's a beautiful thing, but because we're moving into this area of health, which is somewhat new at the capacity that we're doing it, we need to increase that visibility and the credibility within those fields so that we can start working together in a better-integrated fashion.

S2 08:00 So let's just talk about the magnitude of the workforce that you have out there. We have, I think you said, 254 counties in the state of Texas, just Texas alone. How many extension agents are out there?

S3 08:11 250. Serving all 254.

S2 08:14 So that's a lot of people.

S3 08:16 It's a lot of people.

S2 08:17 A lot of people to make this kind of change and there's a little bit of the shift with.

S3 08:20 Yeah. It's a great setup. The infrastructure is there. The network is there. The tradition of success is there, and that's why we have our Healthy South Texas initiative which is now moving into Healthy Texas with support from Chancellor Sharp because he has even seen-- look, we've had all this success via extension in other areas, ag production, for example. Why can't we utilize that success and learn from that and implement it into this human health, specifically with chronic disease reduction?

S2 08:53 Well, it's interesting. You and I were having a conversation earlier when we were talking about all this. And to some extent, extension-- and you kind of mentioned this earlier. Extension has always been involved with health, primarily from a food standpoint, especially helping people know how to make healthy meals, how to grow their own produce. And these are ideals that are continuing to pop back up in the national conversation.

S3 09:17 It is and it's different now. Diet especially has a-- there's two things. There's much more awareness related to diet than there ever was, not only in sports performance and supplementation, but even how it would work in the non-athletic population in all the different diets. And, "Should I eat this?" Or, "Can I cut this out?" Or, "This is okay to eat but you have to cook it this way or for this long." I mean, there's so much more awareness, but also there's so much more advocacy for healthy eating coming out as well. And right now, you're right. Dietary aspects tend to rise to the top. And the largest cross-sectional study to date looking at the risk factors for premature death and disability in the US lists now diet as number one. And it's now surpassed smoking which comes in second. The third leading risk factor behavior is insufficient physical activity. So even though it doesn't get the attention right now, a part of our job is to make sure that it's not left aside, so to speak, because of all the great benefits for physical activity that people can get to, again, to prevent, reverse, and even treat the chronic diseases that were so troubling in our national healthcare cost system.

S2 10:38 Yeah. Given the work that you've done with the American College of Lifestyle Medicine, you'd seem to be the perfect person for this job. Well, let me back up and ask you to tell us a little bit about the American College of Lifestyle Medicine. Help everybody understand what it is.

S3 10:51 It is. And so it started out mostly as physicians who in part were setting up their practice, the way they did healthcare, by using lifestyle to prevent, treat, and reverse disease, treating the cause. And so if your blood sugar is high, it's probably due to your diet, so let's treat that instead of just depending on the medications to treat the symptoms. And so you had this growth which is now exponential, and not only doctors but healthcare practitioners and even beyond, the allied health field. We have the fitness industry that's involved. And how do we work together as a team to, again, target this causes, these true causes of mortality and morbidity? And so now, that has grown-- again, the membership has grown exponentially. We have a yearly conference. We are now starting to integrate and work more closely with ACSM and ACE alongside other practitioner-related fields to continue to grow this message. And how do we get that out? And so I was looped in early on because the physicians who pulled me in were banging their head against the wall because they were like, "I'm telling these patients to do this but they're not. Can you come help us figure out how to make that work?"

S2 12:11 Right. And so now you get to do it for the whole state.

S3 12:13 Now I get to do it for the whole state [laughter].

S2 12:16 So I also noticed that you are the founder of a website called [fitnesspudding.com](http://fitnesspudding.com). So tell everybody what [fitnesspudding.com](http://fitnesspudding.com) is and what you're trying to accomplish with that. Maybe then we'll loop back to how that all affects the whole big mixture here.

S3 12:31 Yeah, so the purpose of that website is just to-- debunk or not, but just to approach with evidence as much as we have and sometimes common sense, the leading timely potential myths or fallacy that exists with health, wellness, and fitness. Which originates back in my personal training days when I would hear one trainer say this, and then another trainer say something completely different, and which one was right? And so it's always bugged me, these kind of contradictions, or when you deal with the behavior. And so I just wrote one not too long ago on, "Can I have a fat tongue? Can I have fat bones?"

S2 13:11 A fat tongue?

S3 13:12 A fat tongue or fat bones.

S2 13:14 I hadn't heard that one [laughter].

S3 13:15 Yeah, my number one hit blog is, "Do bananas cause belly fat?" And so that is, and oddly enough, it's the number one by far, the most clicked-on blog post. And so--

S2 13:30 Where do these myths start?

S3 13:32 Well--

S2 13:32 We'll come back to-- it's just amazing, some of these.

S3 13:35 Yeah, it is, and everyone is different, so like the bananas causing belly fat, it most likely comes from the glycemic index, which bananas rank fairly high. And then you deal with things with insulin and fat storage, etc., and belly fat. Which it is busted, there's no truth to that. But fat tongue comes from a study that came out and

showed that obesity, there's a correlation with fat deposits inside of the tongue. And so a lot of these start with research and start with science. But what happens is, if it's a journalist, for example, that takes that, puts a twist to it, puts a title-- so right now I got to do one on cinnamon and weight loss, following the holidays and Thanksgiving, particularly with Christmas coming up and all the desserts that have cinnamon. But this idea that science has shown, in mice, this relationship to fat metabolism and a chemical within cinnamon. And then you have journalists that would take that and cinnamon prevents weight loss or-- and so people read these titles and take it as truth. And then it can perpetually spread across the media outlets from there. You have celebrities a lot of times that are the cause of this, or their trainers, or sometimes it's common myth. Sleeping with a bath soap between your knees to reduce cramps, that's an age-old-- as far as my grandma always talked about that, this idea of doing that and reducing leg cramps. But is there any truth to that? Is there any science? And so I'm really-- now I'm not only intrigued about kind of seeing if those are debunked or not - it's sort of fun - but I really like how do we train the next generation of scientists and practitioners to take these on, using the evidence instead of perpetuating them? It's unfortunately, it is the common practice now.

- S2 15:25 Bless you for that. We need a lot more of that out there. That's [fitnesspudding.com](http://fitnesspudding.com), for those of you that are listening.
- S3 15:31 Yeah, and we will have-- I'm working with Dr. Mike Roberts at Auburn. We're going to be working toward a site, so be looking out. [Exercisefacts.org](http://exercisefacts.org), to where we're not necessarily debunking myths, per se, but what we're trying to do is, again, be that liaison between the science and the practitioner and the science and those who need it most, in the most unbiased way possible.
- S2 15:52 Well, it sounds like your career really has taken this turn of-- I almost call it a scientific translator, helping take what the research is showing, and whether it be through this website, whether it be through your work in extension, whether it be through the American College of Lifestyle Medicine, trying to help translate that into healthier behaviors for the public.
- S3 16:12 It is, and it's exciting, too, because it allows you to venture into a bunch of different fields. It allows you to continually learn, which is probably one of the main driving forces behind it, as well. But also you get to keep the nerdy side as well. Right? If I'm having to translate this article, I'm going to have to dig into those p-values and that effect size and that partial eta-squared, and that research design. And was the sample size large enough? And if it was a rat study, for example, how do we translate that? How do we take something that was with 10 people in a lab, very internally valid, but how does that translate? Or does it? There's no right answer to those, at the same time, but I think that's intriguing as well as-- it's way more complex than just repeating what the research has said, in other words.
- S2 17:01 Right. So we have students that listen to this podcast and I can imagine we'll have some that will go, "Wow. I'd like to do that." So if you had somebody come up to you and ask you about that, how can they get started in this? How can they start to work towards this translation to the community?
- S3 17:20 Yeah. So I think there's a few ways. Generally speaking, public health and extension sort of reign as the ones who are dedicated to this mission. With chronic disease, especially if you're dealing with behavior, you have to be in a position-- it depends on which route you want to go. Do you want to do more research and drive the field forward and try your best to translate that yourself? Or do you want to pick up that position like I have? Where I do some research but more often than not I collaborate

with those who are doing the research, to answer. And so extension and public health tend to be a great outlet for that. Those who are pursuing a PhD, it could be the same way. But I have colleagues back at Stephen F. Austin, Dr. Eric Jones, for example, that he is phenomenal researcher. He's a phenomenal teacher, and he has found his niche in his areas where he's able to not only do the research and train students in that, but then translate it out to the populations because his job allows for that. And he's found his-- he just found that spot. And so sometimes it's not necessarily the bigger university. It could be a regional institution that allows for that flexibility and autonomy to spend a little time in the translation as opposed to full out, all the time, just the research side.

S2 18:36 Yeah, looking for grant money.

S3 18:37 Looking for grant money. Now, and if they have interest, they can always contact me, because not only do I have Fitness Pudding, but then with exercisefacts.org. And I think there's a ton of ways for us to be out in the media, out in the Internet and online with Facebook and doing this on our own. I mean, the collective effort would be phenomenal as opposed to depending on these few individuals to perpetuate this evidence-based translation.

S2 19:03 So are you going to accept blogs and such from external people for both exercisefacts.org and for fitnesspudding.com?

S3 19:12 Yeah. Right now, Fitness Pudding, no. It would be more of, hey, kind of bring the potential myth forward. Fitness Pudding, because it was sort of a labor of love initially, it's unfortunately not set up right now to translate to a massive scale, and I probably should have thought of that beforehand. I just did it for fun, and it still is. Exercise Facts, however, would be more willing to take on those who are sort of wired this way, and "I want to present the research to practitioners and people in an unbiased way," then I think that would be more possible. Feel free to contact me or Dr. Michael Roberts at Auburn.

S2 19:50 Cool. Well, Mark, we've really enjoyed having you on today. Thanks for being here.

S3 19:54 Wow, I sure appreciate it. That was fun. Good to see you again.

S2 19:56 Yeah. Time flies by quick, doesn't it?

S3 19:57 I think it does [laughter]. I was just getting warmed up.

S2 20:00 As our regular listeners know, this is the time in the program where we ask our guests for their take-home message. So if you had to think of one thought that you wanted everyone to remember that has listened to this podcast, what would that be?

S3 20:11 Probably the biggest thing is that everything is integrated. Years ago, somebody told me that-- we were talking about nature versus nurture, and a very wise man told me, said, "It's not black or white. It's herringbone." And the more that we can see how things integrate, and be open to conversations that may be going against our biases, and seeing both sides, and being able to see how those interact, and take a more integrated approach, I think, an honest approach to what the evidence currently is, and knowing where those limitations are will help us greatly. Especially us who are trying to translate this information out to the public.

S2 20:53 That's a great take-home message for all of life in general right now.

S3 20:56 Amen.

S2 20:56 Not just about science [laughter]. So again, thank you for being with us today.

S3 21:00 Thank you very much.

S2 21:01 And thank you all for taking the time to download and listen to us. Again, regular listeners of the podcast will know that this is also the time when we have our podcast question of the week. And here with our podcast question of the week is executive producer Carlos Guevara.

S4 21:14 Where does fat tongue come from?

S2 21:16 Thank you for that question, Carlos. Be the first one to send us an email with the correct answer to [huffines@T-A-M-U.edu](mailto:huffines@T-A-M-U.edu). That's Huffines, H-U-F-F-I-N-E-S, at [tamu.edu](http://tamu.edu). And if you're the first one to send us that email with a correct answer, you'll win one of those nifty podcast T-shirts that we have. So send us your answers. We've also been known to send out more than one T-shirt a week as well. So again, we thank you for taking the time to download and listen to us. We hope that you will be with us next week, when we have another interesting person from the world of sports medicine and human performance with us. And until then, stay active and healthy. [music]

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[silence]