



Medical Myths, Busted

Video Transcript

[Video: The words "IU" on crimson banner left]

[Video: The word "DAY" on red banner right]

[Video: Two banners come together to form the IU DAY banner]

[Words appear and encircle top and bottom of IU Day banner: ALL IU. ALL DAY.]

[Words appear on black film strip with IU DAY banner at top: MEDICAL MYTHS, BUSTED]

[Video: Aaron Carroll, MD, MS sitting in a chair in front of a window overlooking the IUPUI campus]

[Words appear: AARON E. CARROLL, MD, MS, Professor of Pediatrics]

Aaron Carroll: I'm Aaron Carroll. I'm a professor of pediatrics here at IU School of Medicine. We got into the whole debunking medical myths thing years ago. The way I would describe medical myths is they're stories we tell ourselves about our bodies or health or the way that medicine or science towards health works. They're stories that make sense and they become myths because even when good research proves they aren't true, we continue to believe them.

[Words appear on black film strip with IU DAY banner at top: MEDICAL MYTHS: KIDS IN DAYCARE CATCH MORE COLDS]

There's a lot of fear in some young parent's advice that if they put their children out and they expose them to the world that they are more likely to get sick and that this is a long term problem.

There is some mild evidence that shows that, you know, of course when you put kids in new situations they do pick up more illnesses, because that just makes common sense. If you expose kids to stuff they will pick it up. What is also true though, is that it doesn't matter when you do it, that you sort of get the same number of illnesses. If you start putting a child in daycare at one, they may get more illnesses for a period of time, but that means they'll actually get less illnesses later when they're exposed to those same viruses when they go to school. Whether they get it sooner or later, no one really knows what the difference is.

I can make a good argument though, that you'd rather have a kid get sick and miss a few days of daycare than to miss a lot of school.

[Words appear on black film strip with IU DAY banner at top: MEDICAL MYTHS: "THE FIVE-SECOND RULE"]

One, I just can't believe people worry about this one so much. So, you know, there's this belief ... First of all, it's a crazy belief. There's this believe that if you drop food on the floor, if you manage to pick it up within five seconds it's going to be safe. That's sick crazy. So there have been many, many, many studies done and it seems like one comes out every year, where scientists go through the motions of dropping food on the floor and then picking it up after certain amounts of time to see if that changes how much bacteria or other germs get transferred. Of course, as you might imagine, stuff transfers almost instantly. Now, it does matter what kind of surface it is, how hard the stuff is dropped or thrown, and what kind of food it is, but it's all irrelevant. Stuff goes almost immediately. What's baffling though, is who cares? You know, it's a minimal amount of stuff. Really it is and things no matter how ... The things that are cleaner, the things you obsess about over the times.

So if you look in your kitchen, the floor is almost always cleaner than things you don't consider all the time like a refrigerator handle or the counter, both of which have been shown in studies to have more bacteria per square inch than the floor does. 'Cause that's what we worry about and that's what we clean. The number one filthiest thing in people's kitchens by far is the sponge because we use the sponge to wipe up all the dirt and then almost no one cleans it. So it's just collecting, collecting, collecting. You know, while the floor might have something like one bacteria per square inch, and that kind of order, the sponge might have 20 million.

We're worrying about the wrong stuff. So next year when you see that study debunking the five second rule, let's fixate less on the fact that the five second rule isn't true and worry more about the fact that we're obsessed with the stuff that we shouldn't be.

[Words appear on black film strip with IU DAY banner at top: MEDICAL MYTHS: SITTING TOO CLOSE TO THE TV RUINS YOUR EYES

There's this idea that if you sit too close to the TV that somehow your eyesight gets ruined. You cannot ruin your eyesight in this way. Your eyes work by your muscles pulling and pushing your lens just to keep everything in focus and those muscles work incredibly hard. It's

something on the order of like if those muscles were working just as hard in your legs, you'd be walking like 50 miles a day. So there's no question that the harder you make them work the more tired they're going to get. But just as with walking, when your muscles get tired, you rest them and then they are fine.

There's no evidence at all that somehow sitting too close to the TV or any of the other things that might make your eyes work a bit harder, leads to long term damage in their ability to function and that somehow that's going to lead to wearing glasses or anything else.

[Words appear on black film strip with IU DAY banner at top: MEDICAL MYTHS: EXERCISE IS THE KEY TO WEIGHT LOSS]

So one of the things that's always baffled me is that research shows that exercise is not the key to weight loss. That what we do in the kitchen matters so much more than what we do in the gym and yet people are fixated on fitness and trying to be more physically active as the way to get themselves to lose weight.

There was a study just last year which really pointed this out quite well. They took a bunch of people who wanted to lose weight and they gave them the usual weight loss advise and things you would do in physical activity, but then six months into the trial they gave half of them wearable tech. It was an armband that would keep track of how physically active they are and then they thought this would make them exercise more, this would help them to lose weight. At the end of the two years, it turns out that the people who used the wearable tech actually lost significantly less weight than the people who did not.

It made no difference in their physical activity at all. It might lead to some short term changes, but it doesn't really appear to drive behavior change in the way that we might hope.

[Words appear on black film strip with IU DAY banner at top: MEDICAL MYTHS: POST-WORKOUT PROTEIN IMPROVES MUSCLE GROWTH]

You know lots of people believe and certainly lots of body building experts and lots of you know, trainers, will get into the idea that you really have to start pumping up the protein, especially after you workout, that that's how you build muscle mass. There is no good evidence for that whatsoever.

Eating lots of protein will not necessarily trick your body into building up protein. Your body will either just use that protein for energy or else you wind up excreting it. But this idea somehow that it's timing too, that right after you workout is a time when your body is immediately going to building up muscle fiber and that you really need to flood the system with protein, there's nothing to that either. It takes a fairly decent amount of time to eat food, break it down into what it is, move it out into the bloodstream and then get it all over the body where it might be used and there is no magic window in a 24 hour day cycle or any cycle for that matter, of when you need to consume that protein in order to have the body want to build it up.

In a normal diet with a normal amount of protein, you're going to see that kind of thing happen. There's just no evidence that you need to really do much more.

[Video: IU Day Banner}

[Transcript ends]