

## **Episode 32 – No Holdin' Back Let's Talk Low Back Pain**

This is the TD Fitness Podcast with Coach T, episode number 32.

Welcome to the TD Fitness Podcast, giving you ways to live a healthy lifestyle without giving up the things that make life worth living, and, now, your host, certified health coach and personal trainer, Coach T.

Hey, guys, welcome back to the TD Fitness Podcast. This is episode number 32 and, in this episode, we are discussing lower back pain.

The podcast topics that I choose from week to week come from a number of different inspirations, if you will. A lot of them come from requests that you all may have and asked me to research and talk about. Some come from what I would call just hot topics on the health and fitness circuit, things that are in the news that I feel like I can clarify or present some information on. A lot of the topics come from what I will call my never-ending list of things that I feel like everyone deserves to know about how to live healthy, and some come from personal experiences, my own trials, my successes, my failures and some of my pain point, and I will tell that this particular topic stems from a pain point, from my lower back pain.

As I considered talking about this topic, I found that back pain is actually one of the most common reasons why people go to the doctors, one of the most common reasons why they miss work, and it's a leading cause of disability worldwide, and I also learned that lower back pain actually has a name besides lower back pain. It's called lumbago. It's from the Latin root lumbus. You've heard the word lumbar, lumbar spine, lumbar support. All of that deals with the lower spine area, so, as I started digging into the research on this particular topic, I ran across a few things that I thought I knew, but actually was pretty misinformed on, some of the myths, if you will, associated with lower back pain.

Recently, I got a sports massage. I try to do that about every five weeks, every month or so, particularly when I'm in the training period for one of my races, so I'm training for another triathlon later this year and I try to stay ahead of just the muscle therapy, if you will, by getting a massage every now and then.

When you go to get a massage, the masseuse will typically ask you, "Hey, are you having any pain? Are there any areas that you'd like me to focus on?" so, of course, I mentioned that I had some lower back pain, and she asked me, "Do you have tight hamstrings?" implying what she and I had both likely learned over the years, which is that tight hamstrings lead to lower back pain.

I answered, "Yes," and, yes, we continued to kind of go back and forth in a good way as health and fitness professionals like to do to kind of show that we know what we're talking about, but I will tell you that, when it came to this, neither one of us really knew what we were talking about because, in my research, I found two different sources that noted that tight hamstrings are less a cause of lower back pain and more of a result of it, so ... and one of the sources I consider kind of the gospel when it comes

to back pain, but I'll talk a little bit more about that later ... so tight hamstrings may not necessarily cause lower back pain, but rather may actually be a result of it. It's the whole correlation and causation thing.

It seems logical to think that tight hamstrings, when you consider the way the muscles are connected along the posterior chain, which are those muscles along the backside of your body, it seems logical to think that tight hamstrings could play a part in lower back pain, but, in this case, at least according to my research, it turns out to maybe be the other way around.

The second thing that I learned is, and I kind of knew this, but I didn't know the extent of it, and that is that lying down is ... It's assumed that lying down is good for back pain. I will tell you that while lying down does provide temporary relief, it's a far stretch to say that it's actually good for back pain.

Does your back ever hurt when you sleep for a really long time? It may not be the mattresses causing you pain, but rather the fact that you're laying down for so long, and what happens is, see, the discs in between each of our spinal bones, the vertebrae, contain protein. Those discs contain protein that absorb water, and that is what allows the discs to get nutrition, and, when we lie down, those discs fill with fluid and gradually push the vertebrae away from one another and, really, it actually lengthens the spine. That's why you're taller when you wake up in the morning than you are throughout the day.

That's also one of the reasons our backs are often stiff in the morning. It's because those discs are so full of fluid. When we get up and stand vertical, the water leaves the discs and we're back to a normal length spine, so staying in bed for more than about eight hours or so causes the spine to continue to swell and can cause back pain, so limiting your time in bed can help with this, as can selecting the right mattress for your back.

The next thing I learned is that stretching in the traditional sense, or at least the way that I used to think about it when it comes to stretching the lower back, may not be so good for it after all. When I wake up in the morning, like I said, a lot of times I will have some lower back pain, which seems to be the case, again, more often than not these days, so what I'd like to do, what I like to do when I wake up in the morning, before I even get out of bed is do the child's pose before I, like I said, before I get up. Basically, on my knees, I bring my knees to my chest and reach forward so I'm faced down, and it feels really good. It feels like I'm getting a good stretch, but this is actually the exact opposite of what I should be doing.

Again, I learned this in the research, so, going back to the explanation about the elongated spine in the morning, when we stretch the spine through a child's pose or anything that ... where you pull your knees to your chest, we're actually aggravating the discs while they're in their bloated state first in the morning, and this can provide temporary relief for about 15 or 20 minutes or so, but what happens is the pain will actually come back and it would be worse than it was before. That caused me to really think about something that I've talked about before, but really just failed to put two and two together, and that's the whole stability versus mobility discussion in relation to the lower back.

In episode number seven, that one was titled The Single Most Important Movement Concept, A Simple Fix to Rid Yourself of Common Joint Pain, and I talked about the relationship between stability joints and mobility joints. In the core region, which includes the lower back, a lot of times we don't think of that as a joint per se, but, really, it does play into the joint equation. The core region needs to be

stable, not necessarily mobile. Lying down stretching may only cause short term relief in some people, so instead of focusing your energy on stretches that bend the spine, maybe focus instead on stabilizing and controlling the spine, so those are some of the things that I learned right off the bat, again, through researching this topic.

Now, I want to get into some of the causes of lower back pain. Let's talk about where it comes from. How did we get here? There are some things that we really don't have too much control over, one being bulging or ruptured discs. Remember, those discs act as cushions between the bones, between the vertebrae in your spine, and the disc can bulge, rupture and then press on a nerve, and that can cause some significant pain.

Another is arthritis, so, when you think about how arthritis can affect our bones, it can affect the lower back. In some cases, arthritis in the spine can actually lead to a narrowing of the space around the spinal cord, and that condition is called spinal stenosis.

Skeletal irregularities, back pain can occur if you have an abnormal curvature in your spine. I remember when I was in elementary school, they would check our spines for scoliosis. Scoliosis is a condition where your spine curves to the side, and that can lead to back pain, too, but, generally, only if the scoliosis is somewhat severe, and then you have things like osteoporosis. Your spine's vertebrae can develop compression fractures, for lack of a better term, if your bones become brittle.

Those are some of the things that we really can't control, just some of the disease like things that can cause lower back pain, but then there are some other causes as well. You have the obvious ones like a fall or, probably the one we're most familiar with, heavy lifting, particularly, heavy lifting and doing that improperly. That can actually cause a bulging or ruptured disc, so when you're lifting, think about using your back. People say use your legs instead of your back because, when you use your back, that can lead to back pain, right?

I will tell you that, using your legs to lift and not your back, that really only applies to heavier items. For example, it doesn't make sense to do a full squat to bend down to pick up a golf ball, so be smart about that, but, generally speaking, when you're lifting heavier objects, you do want to engage the glute muscles, the quads. Bend down and keep a solid posture and then push up through the balls of your feet ... or through the heels of your feet. I'm sorry.

Some of the less thought of actions, too, that came to mind as I was putting together the show notes for this episode, I have been wearing a backpack to work, which is not really anything new, but I have a lot farther walk between from the car to the Metro and then from the Metro to where I actually work, and having a heavy, improperly fitting backpack can cause lower back pain.

The same thing with a book bag, for example, that's always slung over one side. That can cause some asymmetry, some symmetry errors in your posture, and that can lead to back pain as well, so it's some of those things that we don't think about too often that we may do every day that could contribute to some of the pain that we have in our lower back, and then this is a big one for me, sitting for a majority of the day, and this is definitely a contributor to my back pain.

You've heard me talk about the stand-up work desk. I have one at home. I'm using it right now. At my current job though, I have not been able to get a stand-up workstation, so still working on that,

but I really think that a big reason why my lower back pain has flared up is because I am sitting for a majority of the day, and I'll talk a little bit about how to mitigate that here in a bit.

Also, a lack of movement and exercise, again, this, I can legitimately say this applies to me over the past couple of months or so. Because I am seated for most of the day, I need to be diligent with getting up periodically, but I'm not. I forget. I get busy at work, and what happens when we don't get up at certain intervals throughout the day, when we stand up, we load the spine and activate the muscles that have not been activated, those muscles that get weaker when you're seated. Those same muscles need to be strong. They need to be developed and they need to be able to provide stability to prevent things like lower back pain.

In episode number six, it was called Be Fit While You Sit, Tips for Staying Healthy with a Desk Job, I talked about this very same thing, so you can refer to that, and I'll put a link to it in the show note as well.

Next, a lack of a properly developed core, one of my favorite posts on the entire TD Fitness website since I've been doing this since 2011, one of my favorite posts is called Training Your Core The Right Way. I highly recommend it, and I'll link to that in the show notes as well, but I talked about the components of the core musculature, and the core consists not just of the rectus abdominal muscles, the abs, the six-pack that most people see, but it's also the oblique and transverse abs. It's also the lower, the muscle surrounding around the lower back, and it's also the muscles in the pelvic floor, too, so sit-ups don't cut it, right?

You have the obliques and transverse abs on the side, the lower back. The core muscles all work in concert with one another to provide stability when you're transferring force between your lower body and the upper body or vice versa, so, in everything, from a baseball swing to kicking a ball to pushups, to pull-ups, to walking and running, that core has to engage as a unit, not just as a single set of muscles in the front, on the side or in the back, but engage as a unit to provide that stability, that core stability throughout.

Another cause for lower back pain, over-training. You've heard it before, right? Too much of anything can be bad for you, right? Think about things like weighted back extensions or the prone Supermans where you're lying facedown and you hyper-extend the back. That can put the back in some very precarious positions particularly, again, if it's weighted, so, when you do back extensions with heavy weights or stiff leg deadlifts with a lot of weight, you really need to be careful about that, and think about why you're training your core that way.

Just as sit-ups alone aren't going to train your core, movement in the opposite direction isn't going to train it either. Again, going back to training your core the right way, that blog post that I did a while back, I talked about some isometric exercises, things like planks, bridges. Those are the types of exercises that truly engage the core, and those are the things that most mimic the way we use our core in real life.

Now, risk factors, the first is age, so back pain is more common as you get older, starting around age 30 or 40. There you go. Maybe that explains my problem right there, right? My mom, before she passed, she suffered with back pain for a number of years in her 70's and 80's, and it's just something that is a reality, particularly, for older adults, but if you're aged 30 or 40, I don't think it's something that

you really should have to contend with, and what I'm trying to provide here are some avenues, some mechanism to address that pain, but another risk factor is your psychological condition.

People who are prone to depression and anxiety appear to have a greater risk of back pain, which this was something that surprised me and, as I thought more about it, I started thinking maybe it's posture related because, when you think about it, your physical condition affects not only your physiological ... or psychological, I'm sorry. Your psychological condition not only affects your demeanor, but it also affects the way you present yourself. Are you hunched over? Are you sad, depressed, looking down all the time, or are you confident? Are you feeling good about yourself? Are you upright with the chin up, facing forward?"

It could be posture-related, but it also highlights the power of the mind and psychological effects on physical well-being, which is something that I may dive into deeper at another episode, but I think that there is a strong link there and, really, bears fleshing that out.

Another risk factor, smoking, because this can keep your body from delivering enough nutrients to the discs in your back. We talked about how they get their nutrients through liquid, through water. Poor nutrition, food doesn't just give us energy, it literally provides nutrients to our entire body, and then excess weight. It should be no surprise that carrying too much weight puts extra stress on your back.

Now, let's talk a little bit about prevention and treatment. There are some common things that you can address. Many address the causes we mentioned earlier, things like maintaining a healthy weight, because being overweight strains your back muscles. If you're overweight, trimming down can prevent or help alleviate some back pain and knee pain for that matter, but that's kind of the topic in the next couple of episodes, so, for this episode and the next couple, I want to hit some of the more common pain points, those painful joint areas in the body and give you some insight as to why that pain exists and give you some tools to put in your toolbox on how to alleviate or prevent those types of pains, so think knee pain. Think shoulder pain. That's where we're going in the next couple of episodes.

Proper posture and body mechanics can go a long way with prevention and treatment, so I want you to be mindful of how you stand. Poor standing posture causes a constant spine load and can lead to chronic muscular pain, so you should maintain a neutral pelvic position. If you stand for long periods, you could place one foot on some elevated platform like a small footstool or something like that to take the load off of your lower back. Shift your weight. Alternate feet when you do that.

Try externally rotating your arms around the shoulders, and do this by turning your thumbs outward, and what that does is correct your posture with a chin and shoulder retraction. It brings your chest more to the forefront, brings your shoulders back and it lifts your head, and that in itself improves your posture, and that can reduce the lower back pain and the strain on the lower back muscles, and this is a good plug for not walking with your head down all the time, looking at cell phone.

We have become a cell phone, a smartphone, a mobile phone society. I get it, so there's oftentimes where we're looking down. We're seated at our desks. We're looking down there. All of those things add up to create small stresses on your lower back because that's where a lot of that stress is stored and particularly if you have a poor posture when you're standing or sitting, so good posture can reduce the stress on the back muscles.

Speaking about sitting, you have to be mindful how you sit, too, so I want you to choose a seat with some good lower back support. Some armrests and a swivel base is recommended. Consider placing a pillow or a towel rolled up in the small of your back, and that's to maintain that normal curve in the lower back area.

Also, keep your knees and your hips level, so make sure your seat is at the right height. You don't want it too low. You don't want it too high, and try to change your position frequently, at least every half hour or so. Again, this is something that I am not as good at, but I've tried to be more diligent about it recently.

Now, when you're lifting, I want you to lift smartly, okay? Avoid heavy lifting if possible, but if you have to lift something heavy, like I mentioned earlier, let your legs do the work because those are some of the most powerful muscles in your body. You want to keep your back straight. Don't twist while you lift because that can place an asymmetric load on the lower back area.

Bending should occur at the hips and the knees. That's why a proper squatting technique is important whether you're a weightlifter or not, and in order to perform a good squat, you need to have an adequate range of motion, so, when lifting something heavy, try to hold the load close to your body to reduce the stress on the lower back and, if you have to, find a lifting partner if the object is heavy or awkwardly sized. Guys, this is for you and me, okay? It's okay to ask for help when lifting something heavy, right?

Next, try to build muscle strength and flexibility. Abdominal and back muscle exercises that strengthen the entire core, again, help condition the muscles to work together. That's how they're meant to work in real life, in the activities of daily life, and, as I said, flexibility in your hips and your upper legs align your pelvic bones to improve how your back feels.

This is where a good physical therapist is really worth their weight in gold because they can dig into the way that you move and help you improve in those areas, and I want you to stretch. It's not just important to feeling good after you exercise. No. Stretching is part of a broader approach to have adequate mobility and flexibility that allow your body to move throughout the required ranges of motion without placing undue stress on any one part of your body, okay?

Exercise, so, here, we're talking regular low impact aerobic activities, those that don't strain or jolt your back. That can increase strength and endurance in your back and allow your muscles to function better. Walking, swimming, those are good choices. That's what comes to mind, and I will tell you that walking is so underrated. In most people's mind, it doesn't seem like you're doing much when you're walking, but I'm here to tell you that there are so many benefits from walking, whether you are just starting an exercise routine or whether you are a highly conditioned athlete or somewhere in the middle like me.

I did a walking class at the gym last week, and I loved it. It was called Elevate, and it basically varied the incline and the speeds of walking, and I felt like I had run a race afterwards. Walking is good for you, all right?

Actually, we do pre and postnatal training here at TD Fitness, and one of the best things I feel like I can prescribe for expecting mothers is walking, that, and Kegel exercises, but I really stress the walking

because it does so many things for you. With every step there is a series of actions that take place that we don't even realize because we've just been doing it from an early age. Your arms, your hips, your core, they all play a part.

Stuart McGill wrote a book on back pain, and in Stuart McGill's book call the Back Mechanic, he writes, "Each step is a series of small muscle contractions that work to keep the pelvis from sinking down on one side and bending the spine," so the arms swing, the walking speed, the elastic tissue in the back, which all help to unload the spine while walking, all of that works together. That's why it's easier to walk for long periods than it is to stand for long periods. Similarly, walking briskly is better for much the same reason, because the greater amount of movement keeps the spine unloaded. If done right, walking can be one of the best pain soothers you have ever experienced.

Next, you want to train your core. I referred back to Training Your Core The Right Way. Again, I'm going to link, too, it here, but I talked about ... I just mentioned Stuart McGill, so Stuart McGill is basically the back pain guy, Dr. Stuart McGill, and he has done a lot of research. He's published numerous articles, numerous books. If you talk to people in the health and fitness field and you're talking about lower back pain, Stuart McGill is going to come up in the conversation.

One of the things that you can do to train your entire core is what Dr. McGill calls the Big Three Exercises. One is a modified type of crunch. Another is The Bird-Dog, and another is the side plank, and what I'm going to do is provide links to all of these in the show notes. Again, he calls these the Big Three, and they're based on his numerous years of research and countless number of clients, patients and students that he's had, and they've studied what it is that is most common among all of the lower back pain issues they see, and they've come up with these three exercises as the best ones to do to address, again, what the large majority of those with lower back pain, to address the causes for those with lower back pain. Those are some things that you can do.

Now, moving, looking towards the way ahead, what I've tried to do here is provide some self-help, if you will, when it comes to addressing low back pain. That said, you heard me mention Stuart McGill a couple of times. Dr. McGill, like I said, is the lower back pain guy, so I'm going to provide a couple of links to some of his resources in the show notes, one of which is his book called Back Mechanic. This is the one that ... It's meant for people to read to help themselves fix their low back pain. He has resources, too, for health and fitness professionals, but Back Mechanic is the one that's written for those of us who just want to fix our own back pain, and then, like I said, I'm going to refer to his Big Three Exercises for lower back pain as well.

Now, all that said, if you feel like you've done a pretty good job at all that I've mentioned in this episode with the exercising, with moving regularly, with training your core the right way, if you feel like you've been doing all that and your pain still exists or if you have very severe pain from the beginning, you may want to see a doctor because there could be an underlying issue or one of those causes that I mentioned at the beginning of the episode that we can't necessarily control, one of the diseases, for example, so you want to seek professional help and advice when it comes to that.

You should note, too, that pain that lasts longer than about three months is considered chronic pain, meaning, ongoing, and it needs to be addressed either through some of the recommendations given here or, again, by a professional.

Let me give you a couple of takeaways and a caution. Takeaway number one, if you have back pain, it does not mean you have to have it forever, okay? It can be reversible, and much of it is reversible through, again, some of these self-help strategies. Just understanding what it takes to maintain a strong and healthy core can prevent or alleviate some back pain.

Takeaway number two, it doesn't always require surgery. I've heard people say before, "Yeah, I have, I have back pain, but I really don't want to get surgery." It doesn't necessarily have to go that far, okay? That's like far right. You don't have to go far right. Let's start on the left and gradually work on some of the things that we can work on and see if that works first because, nine times out of 10, it does.

Then takeaway number three, the causes for low back pain vary from one individual to the next, so don't use your buddy's prescription and think that that may work. By prescription, I mean medication prescription, which is never a good idea, or even exercise prescription because, again, different causes, the causes vary from one individual to the next, so you don't want to assume that whatever worked for your friend is going to work for you, okay?

Then one caution, be careful because there are a lot of products on the market that promise relief when it comes to back pain or prevention when it comes to back pain, but there is no definitive evidence that I found that any special mattress or that special shoes or inserts or even back supports are going to work for everyone, so just be careful where you spend your money in that regard.

Hopefully, this episode will help you with your lower back pain, but before I sign off, there is something that I want to do, and that is really just to thank all of you for your support. I've received a number of messages and positive feedback on the podcasts and some of the topics, and I really do appreciate that. I read every single of them and I try to reply to every single of them as well.

I just got a note from [Reggie 00:31:59] today, and I so much appreciate that. Alison has reached out to me. Crystal, Steph, so many others, thank you all so much for the positive feedback because it really does help with the motivation and the desire to want to continue to provide you guys with some positive health and fitness advice and, hopefully, it's helpful, so if you do have feedback, positive or negative, I welcome negative feedback, too, because that helps me to improve and provide a better service to you all. All you have to do is reply to the email that I send out with the podcast or newsletters, so just hit "Reply." It comes directly to my inbox, and I love reading all of those.

Now, as always, the show notes for this episode can be found at [tdfitness.net/032](http://tdfitness.net/032). There, you can listen to the episode, you can watch the episode or you can read the transcript. Also, this is important because I threw out a number of links in this episode, all of the links that I referenced here will be available on the show notes page, so, again, guys, I want to thank you so much for tuning in.

Have a blessed one. Coach T out.