Nutritionally Oriented Physical Exam: Vitals and Measurements

Transcript

We are going to take a look at a physical exam form. This is a form that's a PDF file, that's available to you to use, to copy and give to your client to assess what's going on from a physical perspective. We are going to go through this, and I'll talk to you about how you can turn that over to your client and how you can actually use it yourself.

Before we begin let's make sure that you are aware that any of the information I'm presenting here is not intended to replace a one-on-one relationship with a qualified healthcare professional.

It's also not medical advice and when you are presenting to your clients you need to be really careful and make sure that they are aware that what you are presenting, and what I'm presenting here today, is intended as a sharing of my knowledge, information, clinical research and clinical experience over many years.

I encourage you, and you should encourage your clients, to make their own healthcare decisions based upon your research and in partnership with a qualified healthcare professional. This is especially true for people who are on any medications. I just want to make sure that the things that we talk about in terms of nutrition are not going to interfere with the protocols.

This is a form set up so that you can give it to a person and have them fill it out for you, or you can take it and fill it out for them as you are doing their exam. You put their name and the date. I usually get a person's height and weight just because it's a great way to start out. You know how tall they are, you know what they should be weighing, and you can follow them through and do periodic check-ins as their weight is changing. Their frame size is important to know, because a small person is going to weigh less obviously than a large-boned person.

A good way to know the frame size is to take your thumb and your first finger and wrap it around their wrist or have them wrap their thumb and forefinger around their wrist is actually a better way to do it. But you'll get a sense yourself when you've done many, whether they are small, medium or large, based on how you can wrap around.

You have them take their thumb and their forefinger and wrap it around their wrist. If those fingers overlap it's definitely a small frame. If those fingers kind of almost touch or touch at the tips they are medium. And if there's a gap between where the thumb and the forefinger end on the wrist then they would be a large frame.

It's a rough estimate and you can usually tell by their shoulder girth, but the wrist seems to be a really easy way to know. The next thing you want to do is count their number of respirations. So if you are with the person, they are sitting across from you, you can just tell them to breathe naturally and just watch and count using your timer, how many times their chest expands and contracts within a minute.

The next thing we'll look at is taking the pulse, the pulse is measured in beats per minute. You've probably taken a pulse before but I figured I'd walk you through the correct way to do it, and also so that you understand how to explain it to your people if you are having someone take it.

Here's a picture of various ways of taking the pulse. There are two ways, one is one the wrist, which is called the radial pulse and the other is in the neck, which is called the carotid pulse. When you are doing the radial pulse, you take two fingers of the opposite hand and you place them alongside the wrist right at the thumb side, and you wait till you feel the pulse.

Don't use your thumb, always use your other fingers because your thumb has a pulse of its own. You'll feel the pulse and then look at your watch, I usually like to start on an even integral, a half minute or a minute, and then I usually like to count for 15 seconds. Sometimes I'll count for 30, sometimes I'll count for the full minute.

It depends on who I'm dealing with; whether they have some known cardiovascular issues, or if I've taken their pulse and it feels somewhat irregular then I'll want to go for the full minute and get a sense of how many beats per minute they have. You'll see two different pictures of how to do the radial pulse and then we'll take a look at the carotid pulse.

If you are doing it on someone you take two fingers and you are placing them on—it doesn't really matter which fingers you use. You can use your thumb and middle finger. You can see that it's approximately an inch below the jaw line, maybe up to an inch and a half, and then it's lateral to the midline where you feel the bone and the thyroid cartilage.

You'll feel it the more you practice it. Practice it on yourself. If you are going to be doing it on someone else, be really comfortable explaining to someone how to do it.

There are two different pictures there, one of a doctor doing it on a person and then the other one is how to do it on yourself, so let's continue.

And then temperature, you are going to have a person take their temperature. You can use a digital thermometer, but I find the digital thermometers are not quite as accurate as the old fashioned kind.

The old fashioned kind is no longer made with mercury. They are made with another kind of metal, but they are the same idea where there's a chamber, and when you put it under the person's tongue, the metal moves up and stops at the temperature that's calibrated to the body.

Next we are going to look at blood pressure. We are going to be taking blood pressure in a functional way: we are going to be taking it seated, supine—which is laying face up—and also standing.

There are a number of ways you can take blood pressure. If you are seeing the person in your office and you've been working in medical practice, you know how to take blood pressure, you will take it in the old fashioned way, which is using the stethoscope, the cuff around, you pump to inflate the cuff, and you look at the little monitor.

It's usually a manual monitor. It's not digital, it's a needle that moves up indicating the blood pressure measurement. If you've never done that before, practice and you want to learn how to do it. If you've never done it before then go ahead and get one of these automatic types.

You can either do a wrist cuff or an arm cuff. The wrist cuff some people say they are not as accurate and they are off a little bit but they are close enough. But really if you are doing it yourself in an office you want to do either the old fashioned sphyg or the arm cuff.

But you make sure that when they are doing the wrist cuff that they hold their hand over their heart and there's usually a little arrow on the unit that tells them where to hold it over their heart, and it's like a heart monitor because that's how it's reading it. It's reading the heartbeat and then detecting the pressure in the cuff.

Let's talk about the ways that we do this functionally. In a typical, medical conventional setting blood pressure is just done seated. It's usually done in just one arm. However, I like to do it in both arms to see if there's a difference, especially in an older person, or a person with known cardiovascular issues, because it is a good screening tool.

If there's a difference in the blood pressure between the left and the right that's greater than 10 points, top or bottom number, that can indicate there's a blockage or some sluggishness in the cardiovascular system somewhere and it's something that would need to be further investigated.

Have them seated with their legs uncrossed and measure the blood pressure of the left arm, and then the right arm and record them down in the little spaces here. The next thing you want to do is have them lying down face up, which is called the supine position, and get them relaxed and then measure their blood pressure again.

It is generally going to be less than the seated, usually in the range of 10 points so it could be more or less, depending on the person. Once you've measured it lying face up, then you want to measure it standing up. But here's the trick, you want to get it *immediately* upon arising. The reason it's important to take the blood pressure immediately upon arising from laying down to standing, is so that you can capture the response of the sympathetic nervous system.

That's indeed what we are measuring with this, which is an indirect measurement of the health of the adrenal glands. So immediately upon rising. Generally what I do is, I'll inflate the cuff while they are still lying down and I'll ask them to stand and then I click it on and take the measurement once they are standing up.

If the blood pressure does what it should when they stand up, which is to increase at least the top number, which is called the systolic, goes up by 10, then you are done. If it doesn't; if the systolic either stays the same standing from lying or it goes down, then it's a suggestion that there's some adrenal stress.

And what we want to do then is time it and take it again in another minute, and just keep taking it every other minute up till five, until it either increases by 10 points from the lying down measurement or you've reached five minutes. If they've reached five minutes and they are still not back to where they were when they were lying down, that's suggestive of some severe adrenal distress or some sympathetic nervous system impairment; that the sympathetic is not able to respond, and that's usually a sign of adrenal fatigue.

You are basically recording them: It's approximate one minute, two minutes, three minutes, four minutes, five minutes. If you are off by a few seconds here or there, no worries. That's a summary of how to take a functional blood pressure.

You can do this with a person and practice it a few times till you get good at it, or you can explain it to a person or give them this paper to fill in and have them work with someone who can help them to do it. It's not that hard when you use one of the automatic cuffs.

After we've taken the blood pressure, we take some measurements and these are things you can teach people, instruct people, to do on their own at home, even if you are seeing them in your office. Sometimes you may not have that much time in the office, but as you are getting used to this it's probably not a bad idea for you to practice.

Again, it depends on your license, whether you are really allowed to be doing measurements. I think most people can do measurements on others. If you are a massage therapist you've got a license to touch people. A personal trainer would have that and of course a chiropractor, MD, acupuncturist could all do these measurements if it seems appropriate.

If you are working with somebody on weight loss or fitness or increasing their strength or stamina, changing insulin resistance, working on the effects of stress, then getting these measurements before and after are very, very helpful. I've got this picture, the neck you are going right across the neck, the chest you are going to measure across at nipple. The arm: you are going right around the middle of the top of the arm.

The waist is right at belly button; the arrow is just slightly off. I had a hard time getting it aligned but it's right around belly button level. The wrist of course is at the bony part of the wrist. The hip is where the trochanters meet. That's the outer part, those bony protrusions at the end, that's where the hip is.

And then the thigh would be midway down the thigh. You can see there's a spot on your chart for you to write this in and again I've got the reminder of where the spots are. And it's good for having for your people too that they could know exactly where. And obviously if you are doing extremities you are going to do the left and the right, chest and neck and waist etc. is going to be just the one obviously.

For the hip and the waist you want to get the waist-hip ratio. The waist-hip ratio is used as an indicator of excess belly fat, and it's definitely going to be a measurement in insulin resistance. When you have insulin resistance what you are going to see is that the waist-hip ratio increases.

In a female with that ideal perfect figure there's a 10-inch difference between the waist and the hip. But most people don't have that and there's usually 80% you want the waist to be no more than 80% of the hips in a female and no more than equal in a male, obviously that's at the higher end of normal for the ideal, you want to be less than that.