

## Stress: What is Stress and How Does it Affect Blood Sugar

## **Excerpt from a Stress Presentation Transcript**

...Before we get into more of what you can do about it, I want to make sure that you understand what stress is, and the mechanism by which it expands your waistline, zaps your energy, makes you foggy and contributes to disease. According to the Institute of HeartMath, where I studied and became certified as a trainer many years ago, stress is a term that's used to describe the wear and tear the body experiences in reaction to everyday tensions and pressures - the wear and tear in reaction to everyday stresses and pressures. When your stress and pressures exceed your ability to cope comfortably with them, becomes a stress.

What people don't realize is that there's good stress and there's bad stress. If you attempt to pick up a weight that's just a little bit too heavy for you, and you can do a few of those and then you have to put it down, that puts stress on your muscle and it asks your muscle to get stronger, to increase the muscle fibers so that next time you can pick it up. If a couple of days later you go pick it up, you may actually be able to do a little bit more. If you do that every other day, consistently, within a month or two, it's going to be light, and you're going to be going to another, heavier weight. That stress on your muscle is called a eustress, a good stress – it's called an E-U I think, eustress. That's a good stress.

Another stress might be you pick up a weight that's way too heavy for you, and you pick it up in a jerky motion, really fast, and try to lifting it before you even realize. And as you lift your arm, it drops and you tear muscle. That's a bad stress. It's a negative stress, because it injured your muscle. It was more than your muscle could handle – not just by a little bit, but by a lot.

This happens to us in life. When you're under stress, it can hurt your relationships; it can make you pretty cranky and irritable. It can hurt your health, because it changes the chemistry in your body. It can hurt your work performance, because the chemical soup that gets secreted when you're under stress actually turns off what I call your 'wizard' brain – the smart part in the front, the part that's good at solving problems – and it turns on your 'lizard' brain – the part in the back that's only job is survival.



It also hurts your enjoyment. If you're stressed all the time and you're feeling jittery and anxious and unhappy with your life, then you're not going to have very much fun.

Let's talk about some of the major causes of stress. A big cause of stress can be limiting beliefs, and we all have limiting beliefs – they're beliefs that tell us to do or not do certain things, because we've come to believe that there's a certain outcome.

What's a limiting belief? This is a societal kind of limiting belief that used to be very prevalent, and it fortunately today is getting better – is that women are less able to be successful in business than men. If you're a woman and you've grown up with that belief, your mother passed that on and said, 'You need to be a housewife. The best job you're ever going to get is a grocery store clerk, because women don't become doctors. Women don't become lawyers. Women don't get PhDs, because women aren't as smart and competent as men.' That's a limiting belief. If you really take on that belief, you might be the world's best genius or the best neurosurgeon ever, but you're working as a cashier in a grocery store because you were fed that and you never pursued your career. You never went to college, you never pursued it.

That's an extreme example, but that's an example of limiting beliefs. I'll tell you another limiting belief I learned from one of my mentors in this whole stress management thing. His name is Berry Neil Kaufman, and he told a story about a woman who wouldn't get on an airplane – wouldn't get on an airplane. She had children in California and she lived in New York and she wanted to get on an airplane and go visit them and see her grandchildren, but she was scared.

He asked her these questions and found out that the reason she was afraid to go on an airplane was that she had been taught in her religion that if you die, and you can't have a proper burial, that your soul will be doomed to hell and you won't be welcomed into Kingdom of God. She carried that belief, and she wouldn't get on an airplane – and she didn't realize that she carried that belief until he started to dig and ask questions.

He turned to her and he said, 'Wow. So you believe that this god that you have honored and adhered to the wishes of and prayed to your entire life, and you've been a good person your whole life, if you die, you die in a plane crash and they can't recover the body, that you will never be welcome to be with this god.'



When he put it that way, she laughed. She goes, 'Well, of course not. I've been a good person; I've been all my life. It's not my fault.'

And he said, 'Exactly.'

She let go of that limiting belief on the spot, and a few months later she sent him a postcard from California, and said she was enjoying time with her grandkids. By the way, this was her third trip out there.

That limiting belief kept her from going on an airplane for many, many, many years. She let go of it and it opened up worlds to her.

What limiting beliefs are you holding that are keeping you back, that are keeping you stressed? Because you don't want to be a cashier when you have the brain of a nuclear physicist, and you're feeling frustrated and held back – huge.

Another thing that causes stress is when you live out of alignment with your core values. We provided you a means to get in touch with your core values. In the email that was sent out today, the April....what day is today? Whatever. The one we sent out today for the third day of this program, was one that said, 'Revisit the Inspired Health Vision system.'

I know a lot of you look at that and say, 'Ugh. I don't have time for this – just tell me what to do.' But when you get in touch with your core values, and you realize how often you're living out of alignment with them and you make shifts there, you'd be amazed, amazed at the results you get. I would encourage you to go back and visit that.

It's repeated on the Module 3 page – I told you everything was going to keep coming back to haunt you. On the Module 3 page it says 'revisit' that. Just know what your core values are – know what they are.

I had one person on the phone call...we did a group sharing of our core values and she said at the beginning, 'One of the reasons I have a really hard time with sticking with the diet, and I periodically go eat Cheetos and M&M's is because I really...I just love to socialize with my friends. When I go there, they eat that stuff and so I just naturally want to be part of it.'



I asked some questions, went through a process with her, and got her to get in touch with her core values, and her core value of health was higher than her core value of fitting in. She went through the program, she came to one of my classes in person – probably six or...a year later maybe – and she was looking really good. She had gotten her body down to 192 pounds to 130 pounds or 25 pounds.

She said to me, 'You ruined Cheetos for me.' I had to laugh. After she got in touch with and in alignment with what her strongest values were, and then when she learned what Cheetos did in her body, and how it was negatively affecting her, it was easy to let go of them. That's what I want for you. We're going to talk about how living out of alignment with your core values is so important.

Other causes are illness. If you've got a raging gastrointestinal bug problem, a flu or a cold that puts stress on your body. If you have injuries – a broken arm or a broken leg – your body's really getting into getting that fixed. That's a stress on your body.

If you've changed career, or even making lifestyle changes, like what we're doing here, can be a cause of stress if you let it to be. It will be a little bit of a stress at the beginning, until you establish the habits that you need to replace and stay in touch with your core values. Finances, obviously, are a source of stress for a lot of people – so are relationships and world events. If you're listening to the news every day, you're getting stressful event after stressful event thrown at you. It's going to put a damper on your physiology.

You might be thinking, 'Now that I understand the process of stress, how do I get rid of the stress?'

Let's talk about what happens when your body gets stressed, and why it's so negative. Then we'll talk about how you get rid of it.

The first thing – when you're stressed, when you hear something stressful or you're worried about getting someplace on time, you feel tension, you feel tightness.

You might feel strain or even frustration; muscles tighten – usually in your neck or your shoulders or in your belly. You may feel your heart rate pounding – your heart pounding, your heart rate increases. Sometimes you even just start to sweat, like 'huh,' you're going to break out into a sweat, when you're scared, when you're stressed.

Here's the rub that really people don't realize this: when you're stressed your logical thought process is inhibited and your irrational and unreasonable thoughts take over. The 'got to get out of here, the how I escape' takes over.

Cortisol, the stress hormone, inhibits the prefrontal cortex, which is the high level thinking, and it stimulates the limbic area of your brain, which is that emotional fight-flight area. When you're really relaxed and feeling good, you have a more of a push towards DHEA and the parasympathetic nervous system and neurotransmitters, which calm, heal and increase your digestive capacity. When you're stressed, your body and your mind lose their equilibrium. It's disrupted. The physiologic part is your body; the psychological is your mind – your brain, your emotions.

When you feel out of synch on a regular basis, or over a long-term period, the effects become disabling. You can no longer get into repair mode easily. You can no longer decrease your heart rate or your blood pressure, and you can develop complications.

This is serious, and this lesson is really serious. There's not a...I don't want to give you a lot of to-do's. I want to share with you this information and any of these pieces that apply to you; you'll have tools so that you can do.

When you have a little bit of an occasional stress, it's like invigorating – 'Oh I have to hurry up and get this paper done, I have to study for this test tomorrow' or whatever it might be, 'this deadline at work.' It gives you a little bit of an energy boost, like 'Oh, I've got to get this done,' and it helps you to achieve your goals.

When the stress is chronic and sustained, it leads to these long-term and short-term health consequences. It can permanently compromise your health and accelerate aging. When you're stressed and you're releasing cortisol, it can inhibit other hormones.

Here's how a stressful event goes . You're under stress, your body releases cortisol. Within about 30 minutes, normally the cortisol will breakdown into the building blocks and those building blocks can be used to create DHA or other hormones, like your sex hormones. But if you keep thinking stressful thoughts, and the stress response is triggered over and over, the cortisol will persist longer, and those building blocks that were used to create the cortisol are basically stolen away from building DHEA and sex hormones.



Just as a reminder, DHEA is another hormone that's secreted by your adrenals. It has the opposite effect of cortisol. It's good for healing and repair and regeneration. It's often called the anti-aging hormone.

Stress that's chronic, that you don't learn to manage and mitigate and calm down, can age you faster. In addition, it throws off your hormones in such a way to produce belly fat. I have a quote of a study from JAMA, the Journal of the American Medical Association: 'Chronic stress increases cortisol and decreases DHA. Cortisol triggers muscle breakdown into blood sugar and increased insulin levels. Insulin inhibits fat burning and accelerates fat storage, and DHEA significantly decreases visceral and subcutaneous abdominal fat and significantly increases insulin sensitivity.'

Don't you want to be able to get more DHEA and less cortisol? This was demonstrated by a six-month randomized double-blind placebo controlled preliminary trial – that's mumbo-jumbo journal language for, 'It was a study where they had a control group and a regular group. Then they studied them and made assessments about what was going on there.'

Let's talk a little bit about limiting beliefs and thoughts and emotional patterns. A lot of people will blame things, events for their stress: 'Oh! It was a traffic accident. Of course I'm stressed. Oh! I got fired. Oh, somebody died. Oh, we ran out of money.' That, they believe, is the cause of the stress – but indeed, it's not the situations that cause the harm, it's how you respond to them. It's how you feel about the events that determine whether you become stressed or not. I'm going to share another story that some of you have already heard, but I'm going to share it again because it's a good story. Very short. I have a friend here in Austin who lives in an area called Bastrop. It's in the southwest end of town – actually, out of town, but the southwest end of this area.

He had just finished building a beautiful house in the woods – all environmentally friendly: straw bale, the whole bit. Had a lot of interns coming in learning about permaculture in exchange for helping on the house. I mean, just really dedicated to environmental friendliness, health friendliness.

So, he had this house in Bastrop. Back in September, there were fires in that area of town, and a lot of houses burned to the ground. A couple weeks after the fires – about a month after the fires – he came to one of my monthly potlucks.



I said, 'Oh, Craig, how you doing? Oh, what happened with your house? Did you survive the fires? Did anything happen?'

He said, 'My house burned down.' Like it was just normal conversation, and he was just happy as can be, talking to people. He wasn't happy about his house burning down, but he didn't allow that situation to bring him down and give him stress.

I said, 'Oh my gosh, what are you going to do about it?'

He said, 'I'm going to rebuild it. What else could I do?'

I said, 'Wow, you're not all upset and stressed about it.'

He said, 'Look, I don't have any control over the fires. The fires happened. My house burned down. I'm going to build it again. I did it the first time, I learned a lot after the first time. I'll probably do it quicker this time, and I'm just going to do it again. I'm going to make it happen again.'

That was an amazing way to look at the situation. He didn't have to be stressed. Most of us think that just because something bad happens, we have to get stressed, and we don't. The tools we're going to teach you are going to help you prevent that.

Your negative emotions – every time you get frustrated or feel insecure or worried or feel depressed, that leads to a disorder in the rhythms in your heart and the synchronization in your heart and your nervous system, and it inhibits your optimal health.

When you have positive emotions – like joy, appreciation, care and love and kindness – there's a harmony between the rhythm of your heart and your nervous system. That promotes health and wellbeing and even really good performance, better relationships. There are a lot of stressful things that happen in the world. There are economic things – there are earthquakes, there are tornados, natural disasters, murders, robberies – you name it, things happen.

People need to cope and develop coping mechanisms for handling the stress. What most folks turn to are either stimulants – drugs, caffeine, various and sundry prescription and non-prescription drugs; foods, foods are huge – stuff your face, don't think about the stress.



It distracts you. These are all distractions. Some people go and gamble – all sorts of things that you can do to distract yourself from the stress.

That's not managing the stress. What we want to do is teach you how to transform the stress. Here are some things you can do to help mitigate the effects of stress on your body – reduce the effects of stress on your body and actually put you into the state that supports you, that rebuilds you.

Appreciation, the power of appreciation: there's an appreciation game that I talk about on the website, where you play the game where every time you change positions, go to a different room, a different location in the building, outside, you have to find three things to appreciate. Three things! And that's not just the first time, like if you go from your office to your kitchen from your office to your kitchen, that's four sets of three appreciations. You think by the end of the day you're going to feel really enveloped in appreciation?

It shifts your brain chemistry, it shifts your insulin levels, it makes your body burn fat better – there are a whole lot of benefits to appreciation. Some ways to express that appreciation would me mini-vacations. What I talked about before and what I took you through, going through that process of breathing appreciation, breathing appreciation.

The other thing that's super important anecdote to stress is fun. How do you identify all the things that you enjoy that are fun? How do you create a fun plan for your life?

The other thing that really anecdotes stress is really focusing on you and your positive aspects, having high self-esteem.

Then there are relaxing activities – what do you enjoy doing? Those could be good anecdotes to stress, to get your body in that calmer state, not just to kind of drug it into a different state. Those relaxing activities could be anything – it could be floating in a pool, it could be getting in the hot tub, it could be getting a massage, it could be reading a book – anything you find relaxing.

Now let's look at the emotional landscape. Right now what I'd like you to do is take out a piece of paper and draw a line down the middle, vertically and horizontally – so they come out as a 'T' on your paper. At the top, write your name and then write the word[s] 'emotional landscape.'



In the box in the upper left-hand side, it says 'high energy negative emotions.' What I'm going to have you do – and you can do this right now, and then you can complete it later – is I'm going to tell you a little bit about these high energy negative emotions, and then I want you to jot down one, two, three – whatever comes to your mind – of those sorts of emotions that you may get into on a regular basis.

High energy negative emotions would be rage, anger, hostility, frustration. A lot of energy goes into those activities. If any of those or any others you can think of – that would be considered high energy negative emotions, please jot those down.

Next let's talk about low energy negative emotions. Do you find yourself here? How often do you find yourself here?

So, low energy negative emotions would be things like depression, powerlessness, resignation, just emotions that are low energy...powerlessness is as low as you can get. They're associated with negative emotions.

Once you've done that, we're going to move to the right-hand side of the chart, and we're going to talk about positive emotions. Again, we have high energy and low energy positive emotions. Some examples of high energy positive emotions are exhilaration, excitement, passion, bliss – although bliss is probably more towards the middle. It's not full of a lot of energy it's just ahhhh you could just glide. But things like passion, enthusiasm, excitement – those are all high energy. Jot down any of those that you experience on a regular basis. Last, but not least, are low energy positive emotions. These are the places where you go when you meditate. So those would be things like calm, peace, joy. The thing that comes along that feels like it's low energy positive emotion.

After you've written all those down, you should have a word or two or three in each of those columns. What I would encourage you to do is use this chart – use the blank of it. You can print it out, and on the page we have actually a document that you can fill out, that you can keep track of. And you can just keep track of this throughout your experience. What's your emotional landscape? Where are you spending most of your time? If you're spending most of your time on the right-hand side, in the positive emotions, then congratulations – more power to you. If you're spending more time on the negative emotion side, then there's a lot of work that can be done. Alright?



Then in terms of high energy and low energy, it's not good to have all high energy, even if it's positive all the time, because that can be draining. You don't have an opportunity to recuperate and restore. You want enough high energy things balanced with enough low energy things to bring you into the neutral range.

Let's talk about three steps that you can take to recharge yourself, regenerate yourself emotionally.

One is building your emotional energy reserves. Well, how do you do that? You do that with joyful experiences. You do that with appreciation. You do that by having fun. You do that by engaging in meaningful relationships and conversations. You do that by appreciation others. You do that by saying 'thank you.' You do that by special things, by having fun, walks in nature, those sorts of things build.

You also want to plug emotional drains. What does this mean?

Sometimes there are people in our lives that drain us emotionally. Sometimes there are groups or activities that we're part of that we no longer have enthusiasm for or we're no longer in alignment with, that we feel obligated to continue.

What are your emotional drains? Are there any? Are there people who are naysayers? That every time you have a good idea, they blow them down - no way, not doing it.

Are there clubs that you belong to, that you joined long ago and maybe the people there are draining you? Maybe the people have bad habits, unhealthy habits, and like to complain a lot. Plug up those emotional drains. As you rebuild your emotional energy reserves – in doing things, you'll build reserves, but only if you plug the drains. If you do things to build your emotional energy, but you don't plug the emotional drains, you won't have reserves. Everything will come in and then go out.

Then old emotional habits – do you have a tendency to be perfectionistic and expect others to be that way and snap at people when they don't do things your way? Do you tend to get angry at certain things? Certain events? Do you tend to complain or drone on about things yourself? Do you tend to look at the glass half empty instead of half full? What are your emotional drains? What are your emotion habits?



The drains are those outside of you that pull you down. The habits are yours. What can you change? How can you switch it?

What I'd like to do right now is take a piece of paper. If you don't have the slides printed out, no problem, just take a blank piece of paper and write down five ways that you nourish yourself emotionally. Five ways. If you can't come up with five ways, then you need this module very badly. Go through it – go through the fun activity and create them. Add some ways that you nourish yourself emotionally.

What I'd like to do, once I finish with this presentation, and I'll let you continue to write while I go through the last three slides or four slides, which are about the lifestyle habits other than the stress piece.

I would encourage you to do this – you need to find ways to nourish yourself emotionally. When you do, a lot of the fluctuations that you have with your blood sugar will get better. A lot of the belly fat that's been accumulating and won't go away will start to melt away. The brain fog will dissipate. Your energy will rise. Always looking for that magic bullet, that magic supplement, that magic food, that magic exercise, but a lot of times it's just really getting in touch with what you need to nourish yourself emotionally and start doing it.

