

4. Stress and Neurological Lemonade

On planet Earth, there is more than just atmospheric pressure. Us humans feel emotional pressure every day. Our body's reaction to it is called stress. But in which forms does stress manifest itself, what are the consequences, and is there really positive and negative stress? I'm Daniel, and you are about to find out.

[intro sound]

Remember the saying, "When life gives you lemons, make lemonade"? Well, it turns out that life has many many kinds of lemons to throw at you, and often, it is very hard to handle them. This applies to all stages of life. Encountering a vaccine as a child, three exams in a week as a teenager, a divorce as an adult and resistance from younger generations as an older person can all be categorized as stressful situations that trigger chemical reactions within our bodies.

Within the context of our ancestors' fight for survival, our body's fight-or-flight response during exposure to stress is quite plausible. It begins with a change in the way neuron cells communicate with each other. When acutely stressed, the body's "fear center", also known as the amygdala, activates the central system, or hypothalamic-pituitary-adrenalcortical (HPA) axis. As a result, glucose levels shoot up and the nervous system releases a flood of stress hormones such as adrenaline and cortisol, which cause further physical changes within the body. Muscles tighten, the heart pumps faster, breath rates accelerate and the sensibility of our senses increases. In the best-case scenario, you hopefully haven't had to use this internal power boost to escape from great danger yet. In today's daily climate, it is more likely you experienced stress for a certain amount of time and waited for it to fade away. This is why you should be aware that the consequences of feeling stress in one situation don't stop with your body relaxing physically and emotionally. According to [healthline.com](https://www.healthline.com), long-term effects can, within varying time intervals, include headaches, increased depression, insomnia, high blood sugar and pressure, heart burn, fertility issues, stomachaches and more. To make a long story short, extensive and unnecessary stress can weaken your immune system and make it more likely for you to experience mental health problems in the long term.

Here, we need to differentiate between eustress and distress. Eustress means positive stress and refers to common feelings in situations such as pregnancy, birthday present shopping, final exams or intense tennis matches. It increases our performance enough to meet our needs depending on the situation, but not enough to cause a full-blown fight or flight response in our body. That would be distress, or negative stress. This is the kind of stress that may cause you health issues in the long term if experienced too frequently. Situations where distress emerges are often rarer than those of positive stress, but they are also a lot heavier. Examples include the diagnosis of a life-threatening illness, the loss of a friend or family member, and the aforementioned example of divorce. As you might have noticed, they usually involve a significant negative change within your routine in life that causes the feeling of being lost.

Now, I would like to share some strategies of coping with stress with you. They are targeted towards those dealing with more extreme situations of stress, but you can use them for any kind of stress relief, also including positive stress. The only difference is that those experiencing distress may need to repeat these relaxation habits for a longer time to cure

their trauma, and perhaps seek professional support in addition. There are six specific steps you can integrate into your daily routine starting today to improve your mental health in this regard.

First, try and find out where your stress stems from. Once you do, you can optimize your behavior accordingly to minimize the time you spend dealing with this source. Next, talk it out with fools, friends and family. Sharing your worries with others will make you feel more relaxed because the burden of your mental health does not rest on your shoulders only. This may also be a therapist or another professional contact if you prefer. The third step is taking breaks. Don't wait until you hit rock bottom. Instead, give yourself a little space and reduce potential stress within your daily life. Of course, many traumatic incidents in life happen without you being able to control them. But within what you can influence, find the simplest way of getting through the day so that you can enjoy the ride. The fourth step is setting limits. You'd be surprised what kind of power the word "no" holds. The best part about it is that you are entitled to say it. Don't be afraid to let others know if you don't feel comfortable with something, and never force stressful situations on yourself just because others want you to. This is your life and you are in charge. The last and perhaps most specific step is exercising regularly. Apart from expediting endorphin secretion, physical exercise also acts as a displacement defense mechanism, meaning that you put your frustration into the energy you use for moving. Therefore, physical exercise is a wonderful example of a break as outlined in step three.

It also helps to breath in and out several times, as well as forcing yourself to smile at times. I know it sounds slightly ridiculous, but it has proven scientific benefits, such as increases in dopamine and serotonin levels. These in turn have many further advantages apart from lifting your mood – potentially even prolonging your life.

So, never despair! If you do, please reach out to your loved ones and consider receiving professional help when appropriate. You will never walk alone. Trust your silver--lining!

[outro sound]