Reducing stress through exercise



"How can exercise reduce stress?" Some people might joke, given that most people think of gym or exercise at classes as a source of stress. However, cardiovascular exercise such as running, tennis, and other forms of activity that raise the heart rate as well as lower-impact forms of exercise such as meditation and yoga can have a profoundly beneficial impact on the mind of an individual under high levels of stress. Equally important, exercise can play a role in mitigating some of the negative physical and psychological symptoms of a stressed-out lifestyle, such as depression, obesity, and simply feeling overwhelmed.

The conventional wisdom, as expressed by the Mayo Clinic is that exercises like running reduce stress because such activities raise the level of the production the brain's neurotransmitters called endorphins that create positive sensations in the mind of the individual. This is commonly called a 'runner's high,' although the idea endorphins play a critical role in stress mitigation has been applied to all types of intense exercise. However while "preliminary evidence suggests that physically active people have lower rates of anxiety and depression than sedentary people"? At present there is little research data to support " the popular theory that exercise causes a rush of endorphins. Rather, one line of research points to the less familiar neuromodulator norepinephrine, which may help the brain deal with stress more efficiently. Fifty percent of the brain's supply of norepinephrine is produced in the region of the brain that is connected to emotional and stress responses. The chemical is thought to play a major role in modulating the action of other, more prevalent neurotransmitters that play a direct role in the stress response. And although researchers are unsure of exactly how most antidepressants work, they know that some of these drugs do increase brain concentrations of norepinephrine.

But other psychologists think the norepinephrine link is too easy "instead, they think exercise thwarts depression and anxiety by enhancing the body's ability to respond to stress" in a more holistic fashion. In short, we are physical creatures, and biologically, exercise gives the body practice in dealing with stress under controlled and focused conditions. This affects our response to real forms of stress that tax our minds as well as our bodies. Exercise "forces the body's physiological systems all of which are involved

in the stress response to communicate much more closely than usual: The cardiovascular system communicates with the renal system, which communicates with the muscular system. And all of these are controlled by the central and sympathetic nervous systems, which also must communicate with each other. This workout of the body's communication system may be the true value of exercise; the more sedentary we get, the less efficient our bodies in responding to stress. An analogy might be with weight lifting or running-the more you do the activity, the easier it gets, and the more weight your muscles are able to bear, and the longer the distance you are able to run. Similarly, by learning to cope with small stresses at the gym, the body learns to cope with later, larger stressors under real world conditions.

The importance of cardiovascular exercise for individuals under high level of stress is especially important because stress may lead to an increase in the risk for obesity because of biological responses to uncontrolled, chronic stress: amongst a study of army recruits over an 18 year period, their systolic and diastolic blood pressure rates showed significant increases, compared to those individuals not under stress. Their BMI, waist circumference, triceps skinfold thickness (used to determine the percentage of body fat), serum cholesterol, serum triacylglycerol, and fasting plasma glucose were all dangerously high, compared to individuals not under stress. The study suggested "that reduced adrenal medullary activity may be one important causal factor" in obesity. The theory advanced by the researchers was that "increased weight gain may then trigger a subsequent activation of the sympathetic nervous system. In a setting with increased sympathetic tone, the \hat{l}^2 -responsiveness may decrease, leading to further weight gain and

BP elevation." Cardiovascular exercise, in contrast, is a kind of positive, controlled stress that reduces BMI, waist size, body fat, glucose levels, as well as cholesterol, blood pressure, and cardiovascular disease.

Cardiovascular activity can help the body cope with the obesegenic triggers that link stress and weight gain.

Meditation and yoga have often been positive sources of stress reduction even if they do not burn as many calories or subject the body to as much controlled stress as intense activities like running. Although meditation and yoga do not call upon the same endocrinological responses as cardiovascular exercise, a recent study of student nurses in a high-stress hospital environment who agreed to participate in a study of the benefits of meditation reported that the meditative techniques they learned and used enabled them to gain clarity about how to respond to multiple demands, including the demands of patients, long shifts, and their school work. "The skills that the students acquired...alerted them to their mind-body responses to stressors-the first step in managing stress. For some students, this new awareness became a cue to take time to choose a reaction to the stress, rather than reacting thoughtlessly. Thus, students were able to see an increase in control over their reactions to stressful experiences, particularly writing papers and preparing for examinations.

According to one student: "You have all this stress going on because of expectations and things you have to live up to. I found that this course has taught me to step back and not take things emotionally or personally. Just step back, accept the facts, accept what you have to do whatever you have to do, move on and find creative ways to solve problems." This meditation technique was not merely relaxation, but a kind of active aid in helping the nurses cope with the demands of their workplace and school lives. Again, in forcing them to deal with problems and reflect upon them, it was a form of controlled, managed stress that enabled them to better cope with the demands they were subject to over the course of their lives.

Even cardiovascular exercise is often called meditative by many of its adherents. Anecdotally, even if the individual is not sure why exercise works to reduce their stress, they assure researchers that it does have a positive effect: "After a fast-paced game of racquetball or several laps in the pool, you'll often find that you've forgotten the day's dilemmas and irritations and concentrated only on your body's movements. As you begin to regularly shed your daily tensions through movement and physical activity, you may find that this focus on a single task, and the resulting energy and optimism, can help you remain calm and clear in everything that you do," enthuses the Mayo Clinic, as it advocates regular exercise to patients in its literature as a stress-buster. Exercise also is reported to increase selfconfidence and lower the symptoms associated with mild depression and anxiety by giving the individual a sense of efficacy, control, and sense of command the body and thus his or her life.

It is important that too much exercise is not undertaken too soon, and the individual embarks upon it with the right mindset. Exercise should never be the source of stress for an person, as sometimes occurs for a young adult the pure pressure of high school sports, or for a professional athlete. If taken to the extreme, exercise can also provoke some of the same negative physiological responses as psychological stress. However, even if therapists are unsure how and why exercise is so effective in promoting a physically and mentally healthy lifestyle, the results seem clear that it does. When you have too much on your plate, you may end up getting negative and feel that you can't possibly get everything done. As a result, some people will just simply stop trying. But to keep yourself going, you have to stay positive. If something feels overwhelming, break it down into smaller, more manageable tasks. This way, you can sit back, take a deep breath, and recognize that what you have to do is not as impossible as you first thought. Just ensure that you are staying on task and not getting too off course. Keep your chin up and look at the bright side.

According to Crowe S. F. author of 'the effect of caffeine and stress on auditory hallucinations in a non-clinical sample". While an occasional treat is unlikely to cause any lasting damage, experts have stated that regular consumption of these types of drinks should be avoided.

We already know that stress can wreak havoc on our bodies, from disrupting our hormones, to harming our immune system, to preventing a good night's sleep. Stress can also be harmful to your heart. You can eliminate stress and protect yourself. Relax Stress is easily eliminated simply by relaxing. But if you can't get relaxed in like normal people here are a couple ways I help https://assignbuster.com/reducing-stress-through-exercise/

myself. Schedule some time to dedicate to relaxation. Yoga or meditation may be for you. Both have been proven to lower stress hormones. When you sit down to watch your favorite sports team, don't get too emotionally involved in the game. Remember; it's just a game. ↠Breast Feeding: the Best Techniques to Feed your Baby

Can't Sleep? 3 Reasons Why you Toss and Turn â†'

Drinking too much alcohol can raise your blood pressure, which could lead to heart disease in the future If you have a family that might be worth considering. Caffeine will increase your stress hormones, which will add to inflammation. Try to avoid drinks high in caffeine, including tea. Remember "Your mind is your play ground control it".(RLH)