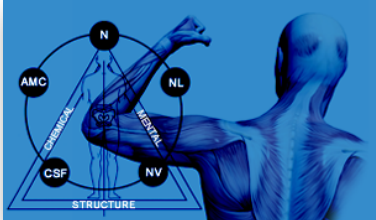


Pathways To Health



A Healthcare and Selfcare Newsletter From The International College of Applied Kinesiology - USA Chapter

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Your doctor of applied kinesiology is uniquely trained and qualified to provide care for the health issues covered in this newsletter.

Please share this newsletter with friends and family!

*The information in this newsletter is not intended to diagnose or treat the individual.

Many symptoms and illnesses have a common cause

Autonomic Dysfunction: Cause For Complex Illness

To be healthy you have to make sure the fundamentals concerning your health are taken care of (i.e. enough sleep, some exercise, quality food, etc.). Yet, you may be doing all the right things and still not be healthy. Often the reason for this situation is that your nervous system is not working efficiently for you; the organs, systems, and functions of your body are not being regulated and coordinated by your autonomic nervous system.

There are two branches to your autonomic, or unconscious, nervous system, the sympathetic and parasympathetic, and they are distributed throughout your body. The parasympathetic nervous system is like your brakes - it slows you down and relaxes you and it controls all your body functions that work in a relaxed state. The sympathetic nervous system is like your gas - it speeds you up and controls everything to do with your "flight or fight" response.

For you to be healthy, your body needs to normally function in a state where your parasympathetic nervous system has slightly more tone than your sympathetic nervous system. In that state your body regulates, coordinates, repairs, and maintains itself properly. In that state your body will have good absorption and elimination, you will sleep well and wake rested, you will feel relaxed and energetic, your muscles, bones, joints, hair, and nails will be strong and healthy, your cuts, strains, and injuries will heal readily. Athletes will be able to train intensely and

frequently, recover quickly, and respond to exercise rapidly.

If your sympathetic nervous system has more tone than your parasympathetic nervous system, your body won't be able to regulate and heal itself; you will tend to have digestive problems (heartburn, indigestion) and poor elimination, sleep poorly, wake up tired, have joint and muscle aches and pains, have weak and slow growing hair and nails, have muscle atrophy, thin skin and hair, and cuts, strains, and injuries will heal very slowly, if at all.

When your sympathetic nervous system is overstimulated for too long, your body will be breaking itself down quicker than it is repairing itself. It is common to experience high blood pressure (may be low, if very chronic), fast pulse, dilated pupils, dry mouth, cold and clammy hands and feet, exaggerated reflexes and startle easily, excessive muscle tension, anxiety, mind racing, inability to focus, poor memory, poor stamina, a "sensitive stomach," and even low libido and arousal.

It is common for doctors to have diagnosed these symptoms as being caused by nervous exhaustion, chronic fatigue syndrome, and fibromyalgia syndrome. It is also common to have been treated by many doctors, often from different specialties, for the wide range of symptoms related to this condition and experience little to no relief and a lot of frustration.

How does this sympathetic nervous system overdrive develop?

From stress, whether physical, chemical, or emotional, that overwhelms your body's ability to adapt efficiently.

Your doctor specializing in applied kinesiology (AK) is trained to identify and treat imbalances of your autonomic nervous system (ANS). History, physical exams, lab findings, and applied kinesiology testing allows your AK doctor to determine if symptoms or illness are caused by autonomic imbalance/dysfunction.

Your parasympathetic nervous system is distributed to your body from the vagus nerves, cranial nerves, that run through your upper neck and then to your heart, lungs, and organs and glands in your abdomen and your pelvic splanchnic nerves that arise from the sacrum and control organs and glands in the pelvic region. Chiropractic spinal adjusting and craniosacral therapy, core methods in applied kinesiology, balance tone and function of the ANS. Acupuncture/meridian therapy is also a useful method in AK that produces measurable improvements to ANS tone and function.

A multifaceted approach is usually necessary to restore function to the autonomic nervous system. Sleep more since chronic sleep deprivation is a common cause for this problem. Learning to naturally use diaphragmatic, deep belly breathing to increase parasympathetic tone and relaxation.

Meditation, visualization techniques, biofeedback, cognitive behavioral

therapy, yoga, tai chi, and chi gong also relax the sympathetic nervous system and improve tone of the parasympathetic nervous system. Interval exercise has been shown to improve parasympathetic function at only 10-20 minutes a day when structured properly.

Stress to body chemistry has to be addressed. Eating a diet that is high in refined foods, especially sugars or simple carbohydrates like fruits and grains, contributes to the problem. There are a number of common deficiencies or nutritional needs to address for balancing the ANS. Zinc deficiency is very common and sufficient zinc balances the ANS, improves sleep quality, and lowers the

high cortisol often found with sympathetic dominance.

Autonomic nervous system stress is a common denominator in a wide range of symptoms and illnesses. Treating for this condition is often the answer, especially when chronic and complex health

problems haven't been clearly diagnosed or resolved despite the care of multiple doctors. Your doctor specializing in applied kinesiology is trained to find and treat this condition and free you from the distinct limits to your health that arise from autonomic dysfunction.

References

Mark Force, DC, DIBAK, is a diplomate and certified teacher of applied kinesiology. Dr. Force has published a book on selfcare, *Choosing Health*, and practices in Scottsdale, Arizona.

AK and the Autonomic Nervous System

The claim that spinal disorders have no effect upon visceral function appears to be dissolving, with evidence emerging from neuroscience research involving both human (Rome, 2010, 2009; Chaitow et al., 2008; Masarsky & Masarsky, 2001; Budgell & Sato, 1996) and animal studies. (Rome, 2010, 2009; Henderson et al., 2007; Budgell et al, 1998; Sato & Swenson, 1984). This research confirms and partially validates what has been seen clinically among chiropractic, osteopathic, and particularly applied kinesiology clinicians for decades.

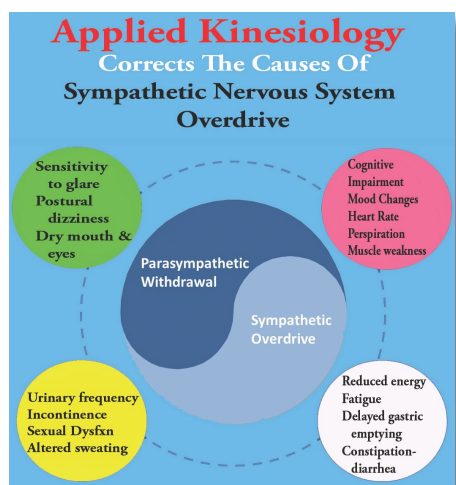
Dr. Schmitt has described how afferent inputs to alpha-motor neurons (MNs) also include collaterals from the intermediolateral (IML) column motoneurons which are the primary autonomic MNs. Therefore, changes in autonomic function will affect, in a predictable, specific fashion, the central integrative state of alpha-MNs and hence, muscle strength and weakness patterns during MMT.

This situation emphasizes a basic requirement of AK practice – the necessity to consider the individual features of each patient and the background of chronic stressors (biomechanical, biochemical, and psychosocial) that a patient brings to the examination. It is also important to recognize that viscerosomatic reflex activity occurring in a patient's musculoskeletal system may be determined before any symptoms of visceral change are evident and that this phenomena (the muscle inhibitions resulting from viscerosomatic activity) has prognostic and diagnostic value. (Cuthbert et al., 2014; ICAK USA, 2014; Duffy, 1990; Carpenter et al., 1977; Korr, 1976; Goodheart, 1965)

AKs Triad of Health model helps the clinician ameliorate each of the factors that may feed into ANS disturbances and into each other, for example: low blood sugar levels, hormone imbalances, sympathetic arousal, toxic factors, adrenal stress disorder, metabolic acidosis, emotional stimuli, allergic and digestive reactions, and much more.

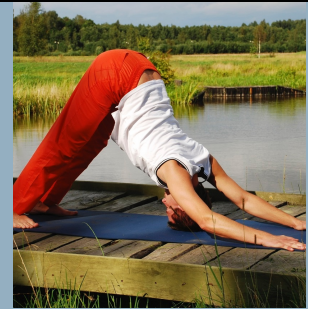
References

Scott Cuthbert DC practices in Pueblo, CO. He has published two brand new textbooks on AK in 2014, and is developing more textbooks covering the upper body, cervical spine, cranium and TMJ.





- *Meditation is directed mental focus*
- *Singleness of thought is associated with a sense of calm and restorative rest*
- *Ten minutes of daily simplicity can help you be happier and less stressed*



Meditation: The Healing Power of Stillness

In Applied Kinesiology there is a fundamental guiding principle called the Triad of Health. This reminds us to address three essential aspects of care for every patient. They are structure, chemistry, and emotion. Each influences the others so it is important to enhance all three. Our emotional health and thought patterns are ultimately our personal responsibility to direct. Meditation is a great tool to create and maintain healthy thoughts and emotions.

Meditation is timeless practice that has been valued in multiple cultures. Accordingly, there are a wide variety of styles that sometimes incorporate a religious emphasis or a physical practice like yoga. Ultimately the universal goal in meditation is directed mental focus. The product of this focus is a potent relaxation response. Research has shown this to decrease stress, promote healing, and enhance quality of life and productivity.

Constant mind wandering on issues that are disassociated from the present moment is correlated with unhappiness and impeded performance. Consequently, being fully in the present moment, as emphasized in mindfulness meditation, increases happiness and productivity. In this practice the aim is to calmly observe your thoughts and emotions without specific attachment to them. Recognize your thought, but then let it pass by without judgment.

Many find it difficult to cease their mind chatter and rest in stillness. It may be easier to try a practice that

emphasizes a single thought focus rather than clearing the mind. Dr. Benson found that focusing on one thing, referred to a "mental key", was a reliable way to experience the deep relaxation benefits of meditation. This can be done by repeating a mantra (transcendental meditation), replaying a section of scripture (various religions), or focusing on breathing (yoga) or on movement (Tai chi).



This singleness of thought is correlated with a sense of calm and restorative rest.

We know that these practices decrease stress and several conditions are worsened by stress. Therefore we can conclude that meditation could decrease the symptom severity of multiple illnesses. Some that have been researched include Multiple Sclerosis, Asthma, Anxiety, High Blood Pressure, Cancer, Depression, Pain, and Insomnia. Sadhguru, a respected yogi and advisor to the United

Nations, says: "If you can be still, you won't be ill."

Amazingly, the impact of meditation lasts much longer than the few moments it takes to partake in it. In fact, over time it can profoundly change how you navigate and perceive life. Many studies have been done demonstrating that regular meditation practices actually change the composition and size of the brain! We also know that it helps to rewire our neuron network thereby changing which thoughts we are most inclined to. Emphasizing specific emotions over time develops patterns. For better or worse, we choose what emotions we are embracing and self-perpetuating.

Meditation is a powerful way to draw out attributes of life you desire to embrace more fully. It can deeply enhance your sense of moral purpose. You can train your brain to be more loving, peaceful, surrendered, or grateful. Set that intention or goal prior to your practice, comfortably rest, and perceive the emotion/thought that you would like to be more automatic. Ten minutes of daily simplicity can help you be happier, less stressed and more productive.

References

Angela Darragh, ND practices in Scottsdale, AZ. She founded the AK Club at the Southwest College of Naturopathic Medicine where she now teaches applied kinesiology AK as an elective.

Q&A

How do I know if I am stressed?

That is a great question because many people are not truly aware of how much stress is impacting their life. Because long-term exposure to Cortisol (the stress hormone) is destructive to many systems there can be several signs. They include immune system dysfunction like frequent infections, seasonal allergies and autoimmune diseases.

Additionally trouble with digestion is commonly a consequence. Some extreme examples include Irritable Bowel Syndrome and Inflammatory bowel disease. More examples include poor memory and insomnia. There are often other factors involved but resolving the root of mental distress and physical stress is essential to ensure rapid recovery.

I understand the idea of mental stress, but what is physical stress?

Frequently in our culture people choose to accomplish tasks instead of caring for themselves. Many people will stay awake late to finish a project or movie and then attempt to wake up early. A lack of adequate sleep impacts the body chemically.

Another example is when because of time constraints people skip meals. This results in the elevation of Cortisol because the body uses it to raise blood sugar. If this system is taken advantage of for too long it can lead to an inability to appropriately regulate blood sugar levels.

But isn't some stress ok?

Yes! We need some element of stress in order to thrive. When stressors are viewed as an opportunity to grow and move forward they are healthy for us. The trouble comes when the stress is persistent. Ideally we are motivated to take action and afterward we embrace the satisfaction and rest.

In our culture we have been trained to move onto the next task before reflecting on the gratification of the previous one. By taking a moment to recognize your achievement and be grateful you can protect yourself from the detrimental impact of persistent cortisol release.

Other than meditation how can I reduce stress?

Gratitude has been shown to help people shift from a fearful mental state and reduce stress. There is an interesting book called "Switch on Your Brain" by Caroline Leaf, PhD. In it she gives directions for building healthy thought patterns.

Also, some life-style changes that incorporate structure, organization, and planning can reduce a feeling of over-whelm. Don't forget that exercise, good nutrition, and adequate sleep are fundamental for healthy body chemistry. In the midst of a stressful experience you can use deep, slow, and evenly paced breathing to give feedback to your nervous system, slow your heart rate, and increase parasympathetic tone.