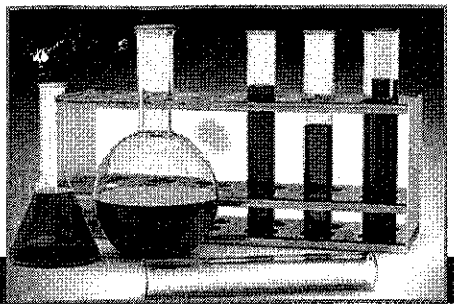

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Emotions and Metabolic Mineral Patterns

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Some time ago in 1997, I was asked by a practitioner who was studying the link between a person's physical symptoms and their emotions for my thoughts on the topic. In particular, he was interested in how to relate a person's awareness of what is contributing to their physical symptoms and how this played out in their biochemistry. The question is still relevant today so I thought I would reprint a version of my response.

Stedman's Medical Dictionary defines emotions as "Feelings. A strong feeling aroused mental state, or intense state of drive or unrest directed toward a definite object....." Emotions are feelings that can be difficult to assess, but emotions can affect behavior as well as produce physiological changes that can be measured. For example, a stressful situation can evoke the fight or flight response initiated by the sympathetic nervous system. This is a normal and essential response for survival. The response stimulates organs needed for the fight or flight response and inhibits those that are not required. The metabolic rate increases and there is an increased overall body arousal producing a somatic response.

Psychosomatic

As an example have you ever found yourself under stress such as being stuck in heavy traffic while trying to reach your appointment on time or catch your flight at an airport? The possibility of being late or missing your flight can cause the alarm stage of stress to set in. Anxiety levels can build to a point that will begin to have measurable effects on the body such as increased perspiration and respiration, increased heart rate, blood pressure, etc. We can imagine what could eventually occur if this alarm stage of stress becomes more and more severe or prolonged. This is an example of a psychosomatic reaction, in that the emotion set off a chain of events affecting the physiology causing the emotion to be felt throughout the entire body.

Somatopsychic

On the other hand physical conditions can affect one's emotions, referred to as a somatopsychic reaction. Some of the major symptoms of prolonged vitamin deficiencies include psychological disturbances. Heavy metal toxicity is associated with mental changes and hyperactivity in children. Illnesses such as Parkinson's disease, multiple sclerosis, menopause, PMS endocrine disorders, etc. are just a few of the non-psychological causes of emotional disturbances. Often patients with physical disorders can be diagnosed as having an emotional condition since their underlying problems go unrecognized. Many individuals have been prescribed mood elevators or antidepressants who were actually suffering from hypothyroidism or even anemia.

There has been a great deal of research involved in recognizing the link between emotions and health conditions. The most well-known field is psychoneuroimmunology or PNI which, explores the relationship between emotions and the immune system. However, emotions can affect many other tissues, organs, and systems of the body.

Emotions, similar to illness can develop in stages similar to stair steps. For instance, a person generally does not develop an abnormal health condition spontaneously but progresses from one step to the other. Using diabetes as an example, the first step in its development is associated with hypoglycemia, Next dys-insulinism and eventually insulin resistance, and ultimately diabetes. Abnormal emotions can develop in the same manner. For example, fright is an appropriate response to a frightening circumstance. However, fright can be intellectualized and progress to chronic fear and eventually a phobia, such as an unrealistic fear of water, dogs, cats, etc. If the chemical response to the emotion becomes prolonged and the imbalance becomes extreme then the emotion can become pathological such as acrophobia, agoraphobia, obsessive-compulsive disorder, anxiety neurosis, and so on.

Metabolic Types and Emotions

As you know we categorize diseases into sympathetic and parasympathetic groups. Generally speaking, emotions can also be grouped according to metabolic types. The fast and slow metabolic types are very similar to what has been described as having type A and type B personalities. As an example, depression is more commonly seen in individuals with a slow metabolic rate while anxiety is more common in fast metabolic types. Each metabolic type has distinctive biochemical processes and patterns making them susceptible to these emotions. Anger is another emotion that is experienced in the spur of the moment so to speak. Anger if suppressed and prolonged can progress to hostility, resentment, and frustration.

HTMA Patterns and Emotions

HTMA patterns not only reflect the neuroendocrine dominance of an individual but may also reveal clues about their underlying emotional makeup. Stress affects the neuroendocrine response or dominance. This response may then be reflected in the mineral pattern that is under neuroendocrine control. Stress whether physical or emotional affects people in different ways. Two people under the same type of stress can manifest completely different physical symptoms. One may lose their appetite, the other may have an increase in their appetite. One may lose weight while the other may gain weight. Stress in the family unit can be reflected in the children's response, one child becoming withdrawn the other acting out or even developing a dermatological condition. One person may have an arthritic condition that flares up the other may have an arthritic condition that improves under stress. This is due to the end-organ response based upon sympathetic and parasympathetic dominance. When the mind perceives stress the signal goes to the cortex where there is cognitive recognition of the stress. The signal travels to the limbic system which stimulates an emotional response. These signals are then integrated and if perceived as a threat the hypothalamus triggers a sympathetic or parasympathetic response involving the thoracolumbar region or the craniosacral cord region thereby eliciting an end organ response innervated by those neuro branches.

Sympathetic End Organ Response

Appropriate anger can be a normal response based on circumstances. However, suppressed anger can be classified as a sympathetic emotion. In the Fast metabolic types, the sympathetic neuro-endocrine branches are dominant, which affects the cardiovascular system. Any emotion that further stimulates the sympathetic branch would in turn heighten a cardiovascular response. This is why anxiety and suppressed anger are associated with cardiovascular disease. As one can probably guess anger elicits an adrenal response which in turn elevates sodium and potassium retention which is associated with hypertension in fast metabolic HTMA patterns. Of course, other minerals and endocrines are also correspondingly affected which can also contribute to hypertension, arthritis, and other health conditions. Prolonged anger that has been repressed leads to hostility.

Parasympathetic End Organ Response

When the parasympathetic branch of the neuroendocrine system is dominant stress will further reduce the metabolic rate in general. Parasympathetic discharge affects the stomach, small intestines, liver pancreas, etc. Stress therefore can lead to fatigue, depression, constipation, poor digestion etc. Adrenal and thyroid insufficiency is commonly found in individuals with a slow metabolic mineral pattern and other conditions such as osteoarthritis and joint stiffness can also develop with chronic stress conditions.

The connection between the immune system and emotions is a fascinating and complex topic that has garnered significant attention from researchers and scientists. While the relationship is not fully understood, there is evidence to suggest that emotions can influence the functioning of the immune system and vice versa. Here are some key points to consider in this discussion:

Bidirectional Communication: The immune system and the brain communicate bidirectionally through various pathways, including neural, hormonal, and immunological pathways. This communication allows the immune system to respond to emotional and psychological stimuli and, in turn, influences emotional states.

Stress and Immune Response: Stress is known to have a direct impact on the immune system. Chronic stress can lead to the release of stress hormones like cortisol, which, in excess, can suppress immune function. This can make individuals more susceptible to inflammation and mood disorders. There is evidence to suggest that chronic inflammation, often seen in autoimmune diseases, can contribute to the development of mood disorders like depression and anxiety. Conversely, experiencing chronic negative emotions might contribute to increased inflammation in the body.

Biochemical Imbalances: Neurotransmitters, which are chemicals that transmit signals in the brain, play a significant role in regulating mood. An imbalance in neurotransmitters like serotonin, dopamine, or norepinephrine can contribute to mood disorders, even when there's no obvious external cause.

Gut-Brain Axis: Emerging research suggests a strong connection between the gut and the brain. The gut microbiome can influence brain function and mental well-being. Disturbances in gut health might contribute to mood disorders.

Trauma and Early Experiences: Past traumatic experiences, especially during childhood, can have long-lasting effects on mental health. These effects might manifest as depression or anxiety even when the connection to the past trauma isn't consciously recognized.

Psychological Factors: Subconscious psychological processes or unresolved emotional conflicts might contribute to unexplained mood disturbances.

Neuroplasticity: The brain's ability to adapt and change throughout life can sometimes lead to maladaptive patterns. Over time, these patterns could contribute to mood disorders.

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