

# Stress, Magnesium, and Addictions

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Addictions can be related to stress and magnesium deficiency. Therefore, physiological and metabolic factors are associated with addictions. The “fight or flight” aspect of the stress response involves psychological and emotional factors, especially anger and fear or anxiety. An awareness of the physiological and psychological factors associated with addictions can support a person in his/her 12-step recovery program.

It is a well established scientific fact that stress depletes a person’s magnesium reserves. It is also a fact that magnesium is important in regulating a person’s blood sugar. If there is a deficiency of magnesium, this can lead to problems with blood sugar (glucose) regulation. Glucose has been referred to as the “fuel” of the brain. Glucose is needed for healthy brain function. Unstable blood sugar levels may fuel addictive cravings. These could be sugar cravings, carbohydrate cravings, alcohol cravings, adrenalin cravings (excitement), sexual cravings, and other addictions.

According to Dr. David Watts, research director at Trace Elements, Inc. in Addison, Texas, there are two types of magnesium deficiency that are revealed in a hair tissue mineral analysis (TMA). One type is an *absolute* magnesium deficiency that is substantially below the *ideal* level in a hair tissue mineral analysis. The other type is a *relative* magnesium deficiency that is reflected in a high *ratio* of calcium to magnesium (Ca/Mg) in a hair tissue mineral analysis.

Calcium and magnesium help to regulate insulin and, therefore, blood sugar levels. A high Ca/Mg ratio is associated with too much insulin and low blood sugar. Calcium and magnesium also help to regulate muscle tone. Calcium contracts muscle and magnesium relaxes muscle. Magnesium deficiency is related to muscles spasms, twitches, and tight muscles. A high ratio of Ca/Mg is associated with intense anxiety, addictive cravings, alcoholism, and codependence.

Magnesium is nature’s calming mineral. It has an anti-stress effect by slowing the activity of the adrenal glands and helping to regulate the “fight of flight” response. In this way, magnesium helps a person control anger and fear. On the other hand, alcohol and stimulant drugs deplete magnesium and exacerbate stress and the various problems that are associated with intense stress. With repeated use of alcohol and stimulant drugs, the body’s magnesium reserves are further depleted with a worsening of a person’s problems that are related to magnesium deficiency.

The research into hair mineral analysis (TMA) that was carried out by Drs. Paul Eck and David Watts led them to describe the calcium “shell.” This concept refers to the build-up of excess calcium in the cells and tissues that is revealed in a high level of calcium together with a high Ca/Mg ratio in the hair TMA. The excess calcium builds up around cell walls and blocks energy production within the cells. The high calcium level forms a “shell” and tends to numb the person’s feelings and blocks feelings. Nutritionally, potassium, zinc, magnesium, and vitamin A help to break up the calcium “shell.” When the calcium “shell” breaks up, the person may be

flooded by intense feelings that have been numbed or blocked. The calcium “shell” has functioned like a dam that has kept intense feelings from the person’s awareness. When the calcium “shell” breaks up, it is like a dam breaking and there is a flood. The flood of feelings can feel overwhelming to the person. The flood of feelings usually is temporary, but while they are being experienced, the person needs emotional support in order to cope with the intensity of the feelings.

Sodium, magnesium, and stress are closely related. As a person’s stress intensifies, the sodium level increases and the magnesium level decreases. A vicious cycle is often triggered involving sodium, magnesium, and stress. Anything such as alcohol or a stimulant drug that depletes magnesium can intensify this vicious cycle. As magnesium decreases, sodium tends to increase. This mineral dynamic in a person can lead to more intense anger and rage. The anger and rage can reach a threshold at which the person’s emotions and behavior bypass the higher cognitive control centers and operate at a quick trigger reflex level. Alcohol and a stimulant drug can further lower the magnesium level and raise the sodium level. As sodium increases, anger and rage intensify. This increases the risk for abuse and violence with explosive anger and rage. On a physical level, the low magnesium level that contributes to this phenomenon can also lead to an increased risk for a heart attack or stroke.

Supplementation with magnesium can help a person restore a better balance between calcium and magnesium. As the Ca/Mg ratio becomes better balanced, blood sugar regulation tends to improve. When this occurs, there is better nutritional support for addiction and alcohol recovery. In most cases, in order to support recovery, it is necessary to either raise the magnesium level and/or reduce the magnitude of the Ca/Mg ratio.

### **Psychological Reactions to Stress**

As a person’s stress intensifies, there is a tendency for a psychological entity called the *Judge* (Inner Terrorist) to inflate and have a dominant effect on the person’s emotions and behavior. As the *Judge* inflates psychologically, the person’s stress intensifies as part of a vicious cycle. The *Judge* can trigger depression, anxiety, and low self-esteem. Addictive cravings may intensify in response to this psychological reaction. Addictions tend to distract a person and help to numb the awful feelings that are triggered psychologically by the *Judge*. As stress intensifies, an inflated *Judge* can bring on unbearable *terror* or an overwhelming sense of *doom*. With such intense awful feelings, the person may feel an urge to numb these awful feelings. Other effects of the *Judge* are to support a feeling of entitlement, addictions, and denial.

Experience has shown that it is possible to “shrink” the *Judge* and greatly reduce its psychological and emotional impact on the person. The *Judge* tends to “shrink” with relaxation techniques such as deep breathing, yoga, tai chi, biofeedback, and meditation. Magnesium supplements can also have a substantial relaxing effect. As the *Judge* “shrinks” with relaxation, the person may experience a reduction in anxiety and a lifting of depression. Addictive cravings may then diminish.

One of the important benefits of magnesium supplementation is that it reduces the intensity of the stress response and calms the nervous system. This helps to “shrink” the *Judge*. Magnesium also helps to reduce an elevated sodium level that intensifies the “fight or flight” part of the stress response. Magnesium also helps to reduce addictive cravings and supports the recovery process.

On the road to recovery and maintaining sobriety, it is important to (1) take stock of your stress condition, (2) know your magnesium status, and (3) be aware of your *Judge* and its ploys. It is important to practice stress management techniques. A person’s magnesium status can be assessed with a hair tissue mineral analysis. Working towards identifying and “shrinking” the *Judge* can be very helpful on the road to recovery and maintaining sobriety.