

All-Four-Low Macro Minerals

INTRODUCTION

Besides extremely high copper toxic patients, we found that one of the most difficult mineral patterns to devise a nutritional correction program for was those individuals with low (below normal) levels of the first four (macro) minerals. These minerals include calcium (Ca), magnesium (Mg), sodium (Na) and potassium (K). Such individuals present a very special case for which the strictest of nutritional programs must be designed. There are a number of reasons for this:

- They have an inability to adequately cope with stress.
- The body's tissue mineral reservoirs have been depleted of calcium and magnesium for an extended period.

ADRENAL EXHAUSTION

An all-four-low mineral pattern is usually accompanied by a wide range of distressful symptoms, not the least of which is exhaustion. It is important to realize that individuals who suffer from all-four-low macro minerals were probably at one time fast oxidizers. However, due to severe stress over a prolonged period of time, their adrenal glands eventually collapsed, as indicated by their current below normal levels of sodium and potassium.

Many of the problems associated with a fast oxidizer who has slipped into adrenal exhaustion, as indicated by all-four-low macro minerals, are directly related to inadequate reserves of calcium, magnesium and zinc.

CORRECTION OF THE PROBLEM

To correct the multitude of problems associated with four-low macro minerals, it is necessary to give relatively large amounts of calcium, magnesium and zinc as this trio of minerals is effective in alleviating current everyday stress

placed upon the adrenal glands. The adrenal glands can be made less responsive to mineral-depleting stress by supplementing the principal nutrients that are sacrificed during stress (calcium, magnesium and zinc), rather than allowing the adrenal glands to be further exhausted by stress.

FATIGUE

Although fatigue is a prominent feature of this all-four-low syndrome, some individuals who have been placed on specific therapy for this unique syndrome will experience a temporary slight increase in fatigue. It is vitally important to relieve their current stress in order to increase their ability to cope with any stress they come across in the future. We illustrate this process with the metaphor of a bank account. If you keep removing energy from your savings account, you will eventually deplete your sources of energy (burnout), but if you stop drawing on your energy reserves, then you will steadily gain interest (increase in adrenal activity).

Putting the adrenal glands to *rest*, so to speak, has been very effective in correcting the all-four-low syndrome. Before this concept, it was next to impossible to bring about such a favorable response.

Once the low levels of macro minerals have been improved and one is no longer physically and emotionally crippled by adrenal fatigue, it is necessary to expand the program to include the balancing of other minerals.

Getting through the balancing of low macro minerals is much like surviving a storm, but once through it, it is much smoother sailing.

To reiterate, a mineral analysis with low levels of calcium, magnesium, sodium and potassium represents a *metabolic special case* that requires different understanding and special supplementation.

ALL-FOUR-LOWS ARE EXHAUSTED FAST OXIDIZERS

Fast oxidation is characterized by low calcium and magnesium levels, together with above normal sodium and potassium levels. Prolonged stress exhausts the adrenal glands, which causes sodium and potassium levels to fall below normal values (adrenal exhaustion).

METAPHORICALLY, SPINNING YOUR WHEELS

Usually, a reduction in sodium and potassium values causes calcium and magnesium to elevate as a buffer against further stress. In four-low cases, the individual keeps pushing himself beyond his current capabilities.

A four-low syndrome is analogous to a motorist who is stuck in a snow drift who keeps his accelerator pedal on the floor attempting to get out. Metaphorically, the individual can be described as *spinning his wheels*.

ALLERGIES AND FATIGUE

As might be expected, individuals with the all-four-low-syndrome feel fatigued, particularly when at rest. They also, almost invariably, suffer allergies because (1) their cortisone (potassium) level is low and (2) their immune system has been impaired. This is particularly so when they have a concurrent high copper level and/or a sodium/potassium inversion (Na/K ratio of less than 2.5/1).

PUTTING THE 'ADRENALS' TO BED

As research continued into this mineral pattern, it became apparent that our original therapeutic concepts had to be modified. To break the four-lows pattern it was necessary to give calcium and magnesium to individuals who currently had low sodium and potassium levels. The rationale for

this concept is as follows. By giving calcium, magnesium and zinc, we provide *stress-buffers* that allow the adrenal glands to rest (become less responsive to stress). Calcium, magnesium and zinc are elements that effectively reduce sensitivity to current stress. By reducing the intensity of stress which the person feels, his adrenal glands react less to the stress and are, as a result, able to rest and recuperate.

NEED FOR A SMALL PROGRAM

Because of the severe mineral instability, we found that all-four-low cases can seldom handle a large supplement program. This is because certain additional products tend to over-stimulate the adrenal glands and cause other changes, which interfere with the central task of *resting* the adrenal glands.

In addition, some researchers observe that the four-low electrolyte pattern is associated with malabsorption that may stem from an impaired digestive system, or other systemic cause, which would also indicate the need for a smaller supplement program.

CONCLUSION

As stated previously, the first effect of giving calcium, magnesium and zinc is sometimes a temporary increase in fatigue. However, this is usually followed by an enhanced increase in energy as the adrenal glands respond to the rest afforded them by the program.

Cat's claw, a Peruvian herb known in Spanish as *una de gato*, has been found to act powerfully on the digestive system and may be beneficial to the individual exhibiting the all-four-low pattern.

Using the special four-lows programs, we now have as good or better success with this mineral pattern as with any of the other mineral patterns.