Dynamic Chiropractic

VITAMINS / SUPPLEMENTS

Conflicting Updates on Iron, Chromium, Meal Size, Milk, and L-carnitine

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Keeping up with nutrition is one of the hardest things holistic healers can do. The amount of new information (and contradictory information) that comes out each month dwarfs other areas where chiropractors need to keep up. We will start this month with a few examples of why nutrition can be frustrating.

Iron

A couple of years ago, news was made about iron's role in oxidative stress, and a study in Finland showed a correlation between heart disease and high body iron stores. The assumption was that the iron helped catalyze free radical reactions. In an extensive review, researchers concluded that high body iron stores do not increase the risk of coronary heart disease.[1]

Chromium Picolinate

The last time I wrote about chromium picolinate in this column, it was a positive study on swimmers showing increased strength and decreased body fat. This is a study on chromium supplementation using a placebo, chromium chloride, and chromium picolinate with a controlled 60-minute strength-straining program five days per week for eight weeks. The researchers concluded that chromium supplementation did not increase fat loss, muscle mass, or strength.[2]

Meal Size

Recent studies have been indicating that eating more small meals results in lower cholesterol and insulin, and decreasing the risk of cardiovascular disease. This study compared a nibbling diet (12 meals a day) to a gorging diet (two meals a day) with similar nutrient and calorie profiles. This was a short-term study; each group followed the prescribed diet for two weeks, with a three-week washout. The authors stated that the findings of this study did not support earlier findings of differences in lipid profiles with different eating patterns. The only exception was a significant increase in HDL cholesterol after the gorging meal pattern.[3]

Milk and Diabetes

A few years ago, there were some studies which indicated there may be a correlation between the introduction of cow's milk (before 3-4 months of age) and the development of insulin-dependent diabetes mellitus (IDDM). Therefore, some physicians have been recommending that families with risk for insulin-dependent diabetes mellitus avoid introducing milk to their children. This study of 253 children from families with IDDM who had early exposure to cow's milk did not reveal any association with IDDM and cow's milk.[4]

L-carnitine

L-carnitine has been controversial in its ability to help or hinder athletes. It has been proven to help patients with angina. It has also been clinically proven to lower triglycerides in some people. The vast majority of recent studies on carnitine supplementation on athletes have been negative. This study, giving marathon athletes 2 gm a day for six weeks resulted in increased running speed and lowering of heart rates.[5]

Conclusion

All five of these studies directly contradict the findings of others. I believe most clinicians just want the truth; unfortunately, predicting how specific substances can affect human physiology is often very difficult. One study, whether positive or negative, should make us aware of a problem, but unless multiple studies can be performed by various independent researchers who come up with similar conclusions, we should always proceed with caution and lean toward the recommendation which could do the least harm to a patient. Using the iron study as an example, until other researchers can confirm it, I will continue to recommend to patients with a high risk for cardiovascular disease that they continue to monitor their iron intakes.

References

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