

# Antacids for Calcium Supplementation ... Do We Need to Sound an Alarm?

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I have been bothered for some time with the prolific advertisements throughout the media, touting calcium-carbonate antacids for calcium supplementation. My basic chiropractic philosophy against any routine medication is one reason for my concern. However, the problem deserves much more scientific scrutiny and certainly could be considered alarming.

My philosophy tells me that neutralization or other such impairment of hydrochloric acid content of the stomach must necessarily impair digestion and therefore absorption of vital food substances, not the least of which is protein. Gastric acidity is required to convert pepsinogen into pepsin for protein digestion. It also aids in changing iron into a soluble form and allows manufacture of the intrinsic factor so important with vitamin B12. It additionally functions as an antiseptic, which could be thwarted with regular use of an antacid.

Such a problem was particularly revealed with a patient's hair mineral analysis was recently brought to my attention. This 35-year-old female felt "disastrously ill" with a variety of symptoms, and her test results for mineral levels in the hair revealed a phosphorus level of 6mg. Normal phosphorous is considered to be 16mg. The level of phosphorous in the hair is considered to be an indicator of protein use or intake in the body, and this level of 6mg was one of the lowest I have seen.

I consulted with her on the telephone, and despite my repeated questions about medication use, she continued to relate that she was not on any medication of any kind. She then made a remark that is so typical of patients, namely, "I do take Tums<sup>TM</sup> everyday, but of course that is not medication." Her dosage of this "non-medicine" was two tablets, four times per day. I asked her why she took the antacid, and her reply was, "I thought that I needed the extra calcium."

In my years of practice, I have noticed several things about patients. They virtually all have the concept that if one tablet per day is good, two tablets per day has to be better. They also do not consider many medications as being truly medications. I have diabetics state that they do not take medication, and then say that they are "on insulin, but that is not medication." Or they may say, "I do take Dilantin<sup>TM</sup> and phenobarbital for seizures, and they are under control; therefore I didn't think that it was important." My personal favorite is, "I take an aspirin every day, but that is not medication."

Despite my aforementioned concern about routine medication and the possible disastrous health consequences, the absurd use of antacids for calcium supplementation can be more simply questioned. In a nutshell, what patients hear via the media or from their physician, however inaccurate or biased, becomes gospel in their lives. They certainly also seem to feel that if a pharmaceutical company says that it is good to take antacids for calcium, then it must be okay; of course, double or triple the amount recommended must be even better.

Here are some interesting considerations:

Most typical antacids have patient directions and warnings printed in such small print that they are barely readable. Virtually all that I have seen (some read with a magnifying glass) state: "Do not take more than 16 tablets per day, and do not take the maximum dosage for more than 10 days."

The Merck Manual (16th Ed., 1992) discusses antacids and ulcers at length. The information is indeed interesting. For one, it states that in gastric ulcer patients, gastric acidity is almost always normal. That is no surprise to a chiropractor, and the reasons for development of an ulcer even with normal gastric acidity, have been well developed by Dr. Paul Eck at Analytical Research Laboratories in Phoenix, Arizona.

Briefly, Dr. Eck states that stresses on the body cause overuse of resources to combat the stress, one of these resources being protein. Protein deficiencies of intake or impaired utilization create a cannibalization of body protein stores. If that subsequent "robbing" of protein stores occurs in the stomach, cellular integrity is impaired, and the offending and newly castigated bacteria *h.pylori* begins the breakdown of a section of the stomach lining. An ulcer is the result. Such is also the theory regarding many other organ systems and their diseases, based upon the chiropractic premise. It still holds true. We also recognize that killing off the associated bacteria still leaves the impaired stomach lining.

The Merck Manual goes on to state that calcium carbonate, when used as an antacid, is an "absorbable antacid" and "these soluble antacids should be avoided." Why should they be avoided? According to Merck, "absorbable antacids, (in) continuous use, may cause alkalosis or the milk-alkali syndrome. Since symptoms of this complication are not distinctive (nausea, headache, weakness), the disorder may progress unrecognized to irreversible kidney damage" (emphasis added). I question whether most patients know about the "continuous usage" clause, even if they do have a magnifying glass. I have suspicions that many otherwise healthy patients are seriously overmedicating themselves in the quest for a calcium supplement.

The calcium excess that may result, coupled with the increased tissue alkalinity, causes precipitation of calcium into stones and calcium concretions, impairing kidney function: irreversible kidney damage may occur.

The personal (medical) physician of two of my patients recently recommended that they take two aspirins per day and two Tums<sup>TM</sup>, and that would be sufficient to maintain them in good health. How reassuring! I would certainly be heartened to have that information. As is so often the case, the patients literally laughed at the naivete of their doctor, walked out and vowed never to darken his door again.

Despite substantial evidence that recommended use of a calcium carbonate antacid for calcium is seriously and dangerously in question, there is major evidence that calcium supplementation is likely not indicated for prevention of osteoporosis. Many cultures have far less intake of calcium in their daily diets when compared to the United States, and these cultures consistently have far less osteoporosis than we do. As in most deficiency states, it is the utilization of calcium that is the problem. Cholesterol and fat metabolism follow the same philosophy.

Personally, I have for some time recommended to my patients that they not take antacids for calcium supplementation. It is highly questionable that they need calcium supplementation in the first place, and it is even more questionable that antacid use is the preferred route. You may wish to re-evaluate your patients' symptom complaints and question them regarding the use of antacids. The results may be revealing, if not life-saving!

If you would like information on osteoporosis along with the fat metabolism controversy, please

write me at the address below. There is no charge.

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*(Request: osteoporosis and cholesterol)*

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