

Reply by Brandolini *et al.*

M. Arnaud does not appear to accept any criticism about the large sulfate content of some Ca-rich mineral waters. He raises some important points again, but does not answer the main errors of interpretation¹ that we developed in our first letter². We maintain our earlier point of view². The 20 mg/d urinary Ca difference that we observed in our study³ was statistically significant and the number of subjects and the cross-over design of our study led to our conclusion. We maintain that the metabolic behaviour of inorganic sulfate is not different from that of sulfate derived from the catabolism of sulfur amino acids and that both induce an acidification of urine. We are well aware of the essential role of many sulfur-containing compounds in the body and of the urinary excretion of sulfur-conjugated or -bound organic compounds, but the net requirement of sulfur is low compared with the dietary intake and most of the absorbed sulfate is excreted in the urine in an inorganic form. We still do not agree with the conclusions drawn from the study by Aptel *et al.*⁴ on the effect of some mineral waters on bone. Concerning the potential deleterious effect of an excess of dietary sulfate on colonic epithelium, we referred to the analysis and conclusions of Florin *et al.*⁵. Considering that several studies have shown that bicarbonate mineral waters are more beneficial for bone than sulfate-rich mineral waters, the only way to be done with this on-going controversy would be to carry out a similar study to ours, but with a more complete design (full metabolic balance), comparing a bicarbonate water with a sulfate water providing the same amounts of Ca and other nutrients (that is possible with another water but not with milk).

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Note from the Editor-in-Chief: This discussion is now closed

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