Letters to the Editor

THE AUTHORS REPLY

We thank Dr. Hoffer (1) for his interest in our work on vitamin C deficiency (2). In his letter, Dr. Hoffer questions the methods used for handling, storing, and analyzing our samples. He stated that we did not deproteinize our samples, but we indicate in Materials and Methods that “... 50 μL of salicylsalicylic acid were added as a deproteinizing agent ...” (2, p. 465). We agree that ascorbic acid is more stable at −70°C for long-term storage; however, samples were stored at −20°C for less than 6 days, and plasma ascorbic acid has been shown to be stable under these conditions (3–5). Dr. Hoffer also questions the reliability of our high performance liquid chromatography method, yet we clearly described using certified controls from the National Institute of Standards and Technology (NIST). This is the universally accepted method of ensuring that an analytical technique is reliable, including the measurement of plasma ascorbic acid (6). A control sample from the NIST was run after calibrating and after every tenth sample analyzed, and the observed coefficient of variation ranged from 4.9% to 7.8%. Dr. Hoffer makes these assertions because he questions the proportion (~50%) of our subjects with subnormal plasma vitamin C and points to the study by Gan et al. (7) (of which he is a coauthor), showing that only 13% of their reference outpatient population had subnormal plasma vitamin C concentrations. However, their study included subjects who were not fasting at the time of blood collection, which is a clear limitation in a study that aims to assess ascorbic acid status.

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Conflict of interest: none declared.

REFERENCES

5. Nagy E, Degrell I. Determination of ascorbic acid and dehydroascorbic acid in plasma and cerebrospinal fluid by liquid
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