The use of cranberry juice to prevent urinary-tract infections has been discussed in the popular literature (e.g., 1) and now Sobota has shown that cranberry juice prevents bacteria from adhering to urogenital epithelial cells (2). If the small amount of vitamin C in the cranberry juice were to interfere with assay for glucose or hemoglobin, the benefit of drinking the juice might be compromised for patients in long-term care facilities.

At this laboratory, we decided to compare the reagent-strip results (Chemstrip 9, Multistix 10 SG, and Hema-Combistix) for glucose and hemoglobin in urine from 28 patients who had been drinking either approximately 100 or 150 mL of low-sugar or regular cranberry juice daily for seven weeks.

The following tabulation shows the results. In only one patient did more than two urine specimens give positive results for glucose (>50 mg/dL) with the Chemstrip 9, and the same was true for the Multistix 10 SG and Hema-Combistix. In five of the 14 patients who had at least one urine specimen positive for hemoglobin, and who were drinking regular cranberry juice, only the Chemstrip 9 gave positive results. Similarly, of those drinking low-sugar cranberry juice, two of six had positive results for hemoglobin by the Chemstrip 9 only.

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Interference with Dipstick Tests for Glucose and Hemoglobin in Urine by Ascorbic Acid in Cranberry Juice

To the Editor:

Recently, Zweig and Jackson (Clin. Chem. 1986;32:674) reported on ascorbic acid interference in reagent-strip reactions for assay of urinary glucose and hemoglobin. They concluded with a plea to manufacturers to minimize or eliminate susceptibility of tests to interference from ascorbic acid, where possible, because ingestion of vitamin C supplements is so common.

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