

Plasma Levels of Nitrate and Risk of Prostate Cancer: A Prospective Study—Letter

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Wu and colleagues provide a fascinating insight into the potential role of nitrates in aggressive prostate cancer (1) with the suggestion that higher nitrates might be beneficial. Wu and colleagues also draw attention to the emerging relation of higher nitrates with lower cardiovascular disease risk (1). Despite a meticulously conducted study, the authors are rightly cautious in interpreting their novel findings and do not place undue weight on any potential mechanistic pathway. Nevertheless, it is intriguing to note that nitrates are thought to be endocrine disruptors whose administration has been shown to decrease testosterone

production in male rats (2). Antiandrogens are a keystone of prostate cancer treatment, even at castrate levels of serum testosterone (3). Moreover, despite the creation of a positive climate of opinion concerning androgen replacement therapy (4), it has nonetheless, eventually, come to light that androgen replacement causes cardiovascular events (5). Androgens as a factor in both prostate cancer and cardiovascular disease would provide a parsimonious, unifying explanation for disparate observations (1), as well as offering the promise of providing an organizing principle for dietary advice and new directions for the prevention and treatment of two of the most common and serious diseases among men. To what extent such possibilities could be relevant to the current program of reducing nitrates in drinking water remains to be determined.

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Disclosure of Potential Conflicts of Interest

No potential conflicts of interest were disclosed.

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