Letter of response to the commentary written by Dr Howell

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Dr Howell has undertaken some excellent work on the mechanisms of action for cranberries and urinary tract infections (UTIs) and she raises some interesting points in her commentary. However I must dispute some of the assertions she makes.

Dr Howell argues that Cochrane reviews have been used to evaluate drug therapies, but they may not be the most effective way to review randomised controlled trials (RCTs) of food products. Cochrane methods are primarily designed to systematically search, identify, quality assess and synthesise RCTs of a range of interventions. In addition to evaluating the effectiveness of drug therapies, Cochrane reviews cover an extensive range of other topics such as health technologies, complementary therapies and dietary interventions including food products, for example, garlic[1] and green tea.[2] Cochrane methods are appropriate for a wide range of interventions, and food products are no exception, especially when producers and manufacturers are keen to assert that they can prevent or treat clinical conditions. Clinicians and the general population would expect them to be assessed for quality and effectiveness against the same criteria as other preventative and curative interventions. Indeed, although cranberry juice is a beverage, many of the cranberry products we considered in our review were tablets or capsules, and never developed to be consumed as food items.

Any methodological problems that exist regarding assessing the effectiveness of cranberry products lie in the primary RCT research, and Dr Howell does acknowledge this point. Her own excellent research has been instrumental in identifying the amount of bacterial anti-adhesion compounds (A-type proanthocyanidins) in any products in order for them to be effective in preventing UTI.[3 4] I agree with Dr Howell that most of the studies were not standardised to include enough of the active ingredient to achieve 'clinical efficacy'. Efficacy is the extent to which an intervention does more good than harm under ideal circumstances, such as in RCTs and asks the question, 'Can it work?'.[5] The answer to this question is: *Yes*, cranberry products possibly 'can' work in ideal circumstances for some women who have recurrent UTIs. However, I would argue that efficacy is not the most important endpoint—much more important is how *effective* cranberries are. Effectiveness assesses whether an intervention does more good than harm when provided under usual circumstances and asks the question, 'Does it work in practice?'.[6] The answer to this question at the current time is: *No*, they are unlikely to work in practice and the reasons vary according to the underlying aetiology of UTIs and also by the cranberry products themselves. UTIs are most frequent in sexually active women and occur in clusters with long periods (several months) where patients are symptom free. However, the cranberry juice trials had a large number of dropouts/withdrawals indicating that drinking two glasses of juice a day, for an indeterminate amount of time may not be acceptable for some women. If this amount is not drunk on a regular basis, then it is unlikely that the juice will have a protective effect. Therefore we concluded that no more trials of cranberry juice were necessary due to the problems with the acceptability of the product. Cranberry capsules or tablets may overcome some issues with compliance, but from current evidence they do not appear to be any more effective that the juice, possibly because they do not contain enough of the active ingredient. It is not the case that cranberry tablets and capsules will never work, but that more trials are need to assess the effectiveness when using a standardised product.

Competing interests None.

References

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