

Noakes' low-carbohydrate, high-fat diet: Call for evidence

To the Editor: My 85-year-old father has been a life-long smoker, he remains fit and well and writes a blog about the pleasure he gets from smoking and the benefits in terms of weight loss. Another 127 85-year-old lifelong smokers have written to him saying they have also maintained a normal weight throughout their lives; they feel

healthy and enjoy smoking. My father would like the *SAMJ* to publish these letters as evidence of the health benefits of smoking.

Of course, this paragraph is fictitious, but the biases are plain to see. It is extremely unlikely that this submission would be accepted for publication in the *SAMJ*. Why then was the article by Professor Tim Noakes 'Low-carbohydrate and high-fat intake can manage obesity and associated conditions: Occasional survey'¹ accepted for publication? His data amount to 127 unsolicited letters from people who have followed his message regarding a low-carbohydrate, high-fat (LCHF) diet in books and popular media. They are entirely analogous to the letters from smokers we allude to and are open to exactly the same biases. Neither should be confused with a case series, which would be a collection of medical cases seen by a doctor under controlled circumstances and reported from the clinical records.

A collection of selected and unverified anecdotes that support the well-publicised conclusion of an author does not provide any scientific basis for that conclusion. Yet despite these major methodological flaws that are irreconcilable with basic scientific practice, Noakes' article is presented as a 'clinical study' and makes quite stunning outcomes claims for an undefined intervention, even suggesting that 'LCHF has the potential to "cure" some individuals with morbid obesity, [type 2 diabetes mellitus], hypertension or metabolic syndrome.'

We are not arguing against the diet itself and note the current evidence of the health benefits provided in the article. LCHF may in time turn out to be a major advance in the control of metabolic syndrome, which is one reason why the evidence needs to be of the highest quality. However, in contrast to Noakes' suggestion that his 'findings invite disproof' from a properly designed study, we believe that the burden of proof lies with the proponents of LCHF diets. His collection of anecdotes published by the *SAMJ* adds no substantive data to this important issue and cannot be used to make efficacy claims or even as a contribution to a discussion of clinical equipoise. We would request that rather than publishing unsolicited letters Professor Noakes writes a systematic review of the evidence for the health benefits of LCHF diets and presents it in the *SAMJ* so that we can all become properly versed in the topic.

Tom H Boyles

Sean Wasserman

*Division of Infectious Diseases and HIV Medicine, Department of Medicine,
University of Cape Town, South Africa*

1. Noakes T. Low-carbohydrate and high-fat intake can manage obesity and associated conditions: Occasional survey. *S Afr Med J* 2013;103(11):826-830. [<http://dx.doi.org/10.7196/SAMJ.7302>]