Reviewer's report

**Title:** Cruciferous vegetable intake is inversely associated with lung cancer risk among smokers: a case-control study

**Version:** 1  **Date:** 13 January 2010

**Reviewer:** Antonio Agudo

**Reviewer's report:**

Major compulsory revisions - NO

Minor essential revisions - NO

Discretionary revisions:

Although the core of the paper is cruciferous, there is an association with total vegetable intake and (to a lesser extent) with fruit intake. Since these three variables are most likely related, the effect of cruciferous would be reinforced (if confirmed) if these three variables were mutually adjusted (i.e. included in the same model). In order to avoid collinearity, maybe the amount of vegetables 'other than cruciferous' instead of total vegetables could be used in this model.

Using the reported frequency for each crucifer, and assuming known quantity (grams) for a standard serving, the amount (rather than frequency) of crucifers could be estimated. Furthermore, taken into account that the list of crucifers is limited and data are available, it would be relatively simple having an estimate of total glucosinolates. This would help to disentangle the effect of such compounds (as precursors of ITC and I3C) from other components of cruciferous that could also have some protective effect, such as vit. C or carotenoids.

Different crucifers differ according to the type of glucosinolates; aliphatic are rather precursors of ITC, while other are rather precursors of indole type compounds. This could be somehow mentioned in the discussion.

In order to provide an idea of the validity of information, the estimated intake of cruciferous among controls should be compared with available estimates of these foods in the same population.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**
I declare that I have no competing interests