## Scientists from Wageningen UR and the US partners agree upon content and conclusions in article American Journal of Clinical Nutrition.

Debate has been going on in the media about a study on milk consumption and cardiovascular diseases, carried out by researchers from Wageningen University with colleagues from the United States (Harvard University and the University of California). Findings from the study were communicated in Resource, a 2-weekly from Wageningen UR (University & Research centre) based on an interview with one of the Dutch authors.

The investigators have discussed the issue again and want to further clarify the outcome of the study and put it in a broader perspective. The Wageningen and US affiliated researchers agreed upon the following statements:

The contents and conclusions of the original paper in the American Journal of Clinical Nutrition is agreed upon by all authors. It was noted that: "This dose-response meta-analysis of prospective studies indicates that milk intake is not associated with total mortality but may be inversely associated with overall cardiovascular disease risk; however, these findings are based on limited numbers."

The initial media message stated that three glasses of milk a day were associated with an 18% lower risk of cardiovascular diseases. This statement was based on four European studies, with 13,518 participants and with a relatively small number of cases (2,283 cases).

This same paper concluded in an additional analysis of a larger number of studies with many more cases, that two specific and most important forms of cardiovascular disease (heart attacks and stroke) were not significantly associated with milk consumption. Heart attacks are the most important cause of mortality, and this latter was not associated with milk intake either. Findings from this part of the meta-analysis suggest that milk does not reduce or increase the risk of heart attacks or total mortality. The relation between milk consumption and stroke was not statistically significant, but further research on this topic and comparisons of milk with other beverages is needed.

It is important to put health effects of dairy in the context of other food products in the menu. In other words, whether dairy products have a favourable or unfavourable effect on health depends on which foods they replace. It was not possible to examine such comparisons in this type of analysis.

Finally, the results of this study are not sufficient to make recommendations regarding consumption of milk or other dairy products. For that, further research will be carried out.

Link to the original research paper in the American Journal of Clinical Nutrition:

www.ajcn.org/content/93/1/158.abstract