



## Epidemiological evidence for the association between red and processed meat intake and colorectal cancer



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A perspective paper was synthesized during the workshop “How can we approach consensus on the healthiness of red meat?” held in Oslo, Norway, in November 2013 (Oostindjer et al., 2014). DE Corpet and S De Smet had the honour to participate in this exciting and stimulating meeting and co-signed the article. D Demeyer was acknowledged in the article for his comments on the draft. The leading authors of the paper probably had the intention to present a balanced view of the discussions, making clear that health issues associated with the consumption of red meat are manifold. However, reaching consensus on a number of critical issues was an ambitious task. The resultant article contains some very interesting information and focuses on the role of red and processed meat in colorectal cancer development. However, not all comments from the co-authors were taken into account in the final manuscript, resulting in a scientifically incorrect statement in the abstract: “Epidemiological and mechanistic data on associations between red and processed meat intake and CRC are inconsistent...”

Because of the high visibility of this abstract through many websites and journals we have to strongly object to that statement. Indeed, the work of the group led by DE Corpet supports the guidelines on intake of red and processed red meat set by the World Cancer Research Fund (WCRF/AICR, 2011). In Belgium, D Demeyer and S De Smet were part of a working group that prepared an extensive report justifying the introduction of these guidelines in Belgium (Superior Health Council Belgium, 2013). Through extensive investigation of the literature the Belgian group confirmed the consistency of the epidemiological data, whereas indeed “underlying mechanisms are unclear” as reported elsewhere (Demeyer, Mertens, De Smet, & Ulens, in press). The major evidence supportive of “inconsistency” comes from the group working with DD Alexander (e.g., Alexander, Miller, Cushing, & Lowe, 2010) and was presented by DE Weed at the Oslo workshop. However, as detailed elsewhere (Superior Health Council Belgium, 2013), the convincing power of these review articles suffers from some selectivity in references used, from their definition of processed red meats, and from conflicts of interest. In addition, Alexander et al. (2010) did not consider weak risk factors (less than 1.20) as relevant although they are significant, and would account for a large proportion of the disease burden at the population level (Brenner, Kloor, & Pox, 2014). Furthermore, each new study on meat and cancer adds to the evidence that the link is real (see e.g. Di Maso et al., 2013). We are therefore convinced that “apart from some

uncertainty related to age and ethnicity, epidemiological data are consistent, although the underlying mechanisms remain unclear”.

To conclude, Oostindjer et al. (2014) present a comprehensive summary of a workshop gathering a group of 23 scientists with sometimes widely different views on a problem not reflected in the main scientific background of the group. We understand that not all parts of the text can be fully accepted by all authors. However, these 23 authors doubting the overall consistency of the epidemiological evidence in the abstract seems to be “a bridge too far”.

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