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Erratum

Re: J.H. Meurman & J. Uittamo. ***Oral micro-organisms in the etiology of cancer.*** Acta Odontol Scand 2008; 66: 321–6.

The authors Jukka H. Meurman and Johanna Uittamo would like to make the following corrections to their article:

The reaction from alcohol to acetaldehyde shown in Figure 1 should lead to acetate, not acetone. The correct Figure is shown below.

In the paragraph on "Alcohol related carcinogenesis" the key publication regarding local acetaldehyde exposure and the occurrence of cancer should have been the paper by Väkeväinen et al. "High salivary acetaldehyde after a moderate dose of alcohol in ALDH2-deficient subjects: strong evidence for the local carcinogenic action of acetaldehyde" (Alcohol Clin Exp Res 2000;24:873–7), and not Muto et al. (Carcinogenesis 2002;23:1759–65).

The reference given in the legend to Figure 2 should be Homann et al. "Increased salivary acetaldehyde levels in heavy drinkers and smokers: a microbiological approach to oral cavity cancer" (Carcinogenesis 2000;21:663–8). The correct reference was erroneously replaced by another publication of the same group.

The paragraph "Inhibiting or eliminating microbial acetaldehyde production" needs to be explained further. The use of 4-methylpyrazole which chemical is an alcohol dehydrogenase inhibitor might indeed also inhibit microbial acetaldehyde production, but the concentrations needed are so high that the use of this chemical in humans is not warranted.

The authors also want to emphasize that microbial ADH does not saturate with alcohol. Hence, the higher the alcohol consumption of an individual, the higher gets the salivary acetaldehyde level. The effect of tobacco and alcohol use appears synergistic and poor oral hygiene often goes hand-in-hand with these two risk behaviors.

The authors hope that the key message is still clear: several oral microbial species are capable in metabolizing alcohol to acetaldehyde and this fact might explain why use of alcohol statistically links with the prevalence of oral cancer.

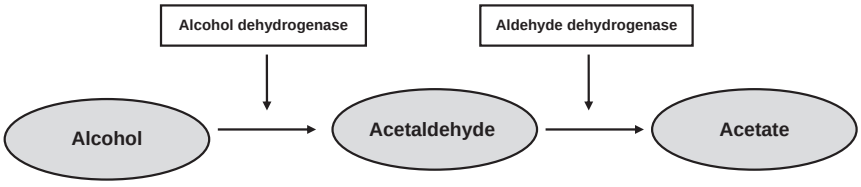

Figure 1.

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