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Green tea, black tea consumption and risk of lung cancer: A meta-analysis

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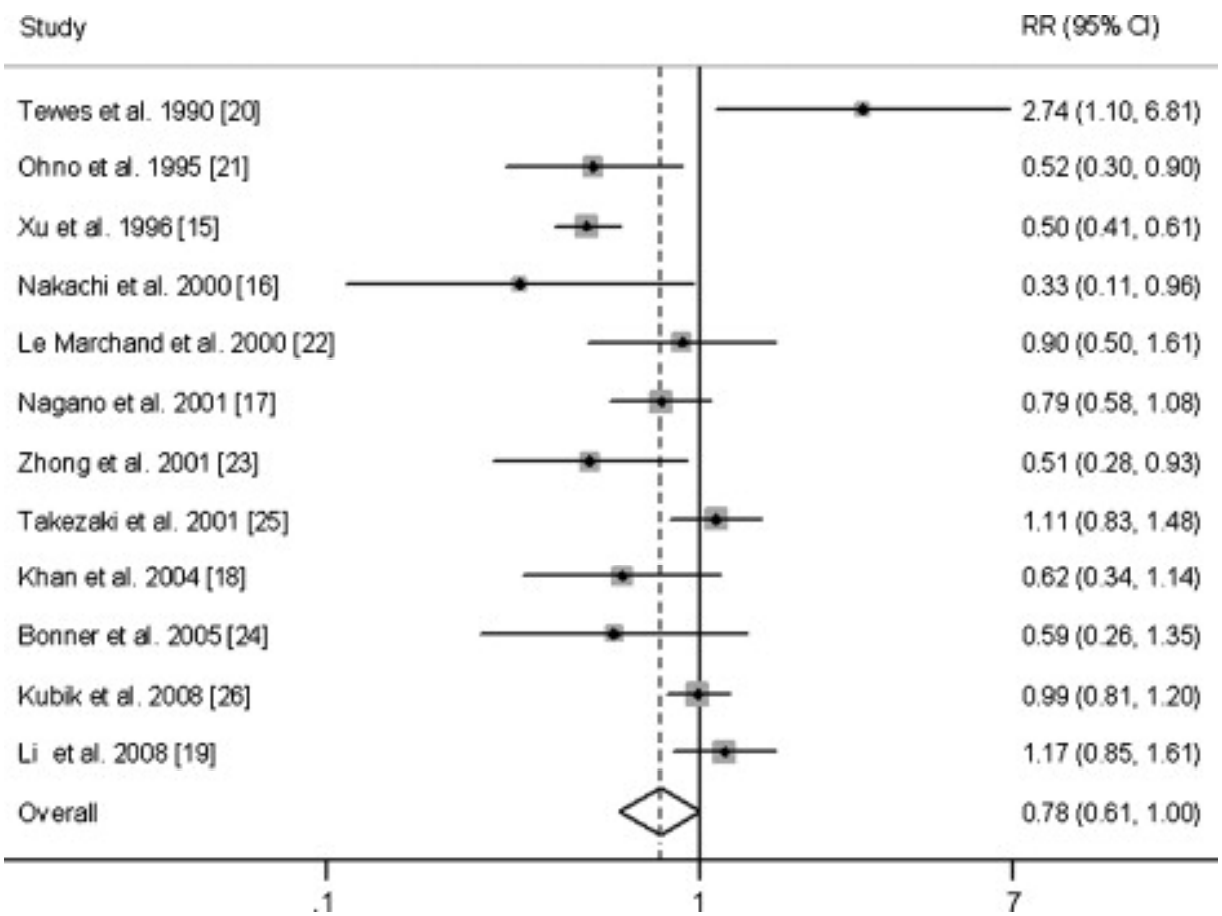
ABSTRACT

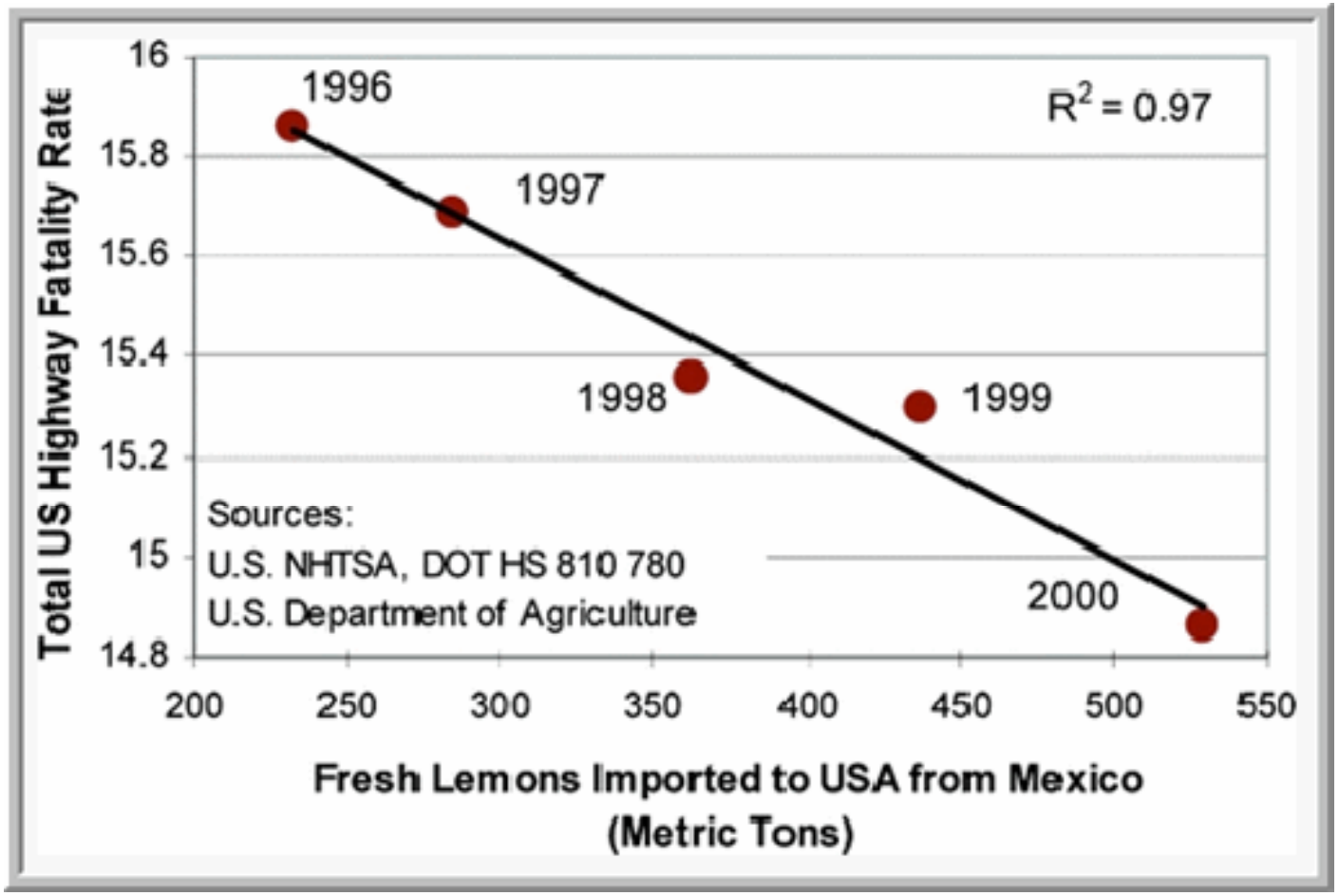
Studies investigating the association of green tea and black tea consumption with lung cancer risk have reported inconsistent findings. To provide a quantitative assessment of this association, we conducted a meta-analysis on the topic. Studies were identified by a literature search in PubMed from 1966 to November 2008 and by searching the reference lists of relevant studies. Summary relative risk (RR) estimates and their corresponding 95% confidence intervals (CIs) were calculated based on random-effects model. Our meta-analysis included 22 studies provided data on consumption of green tea or black tea, or both related to lung cancer risk. For green tea, the summary RR indicated a borderline significant association between highest green tea consumption and reduced risk of lung cancer (RR = 0.78, 95% CI = 0.61–1.00). Furthermore, an increase in green tea consumption of two cups/day was associated with an 18% decreased risk of developing lung cancer (RR = 0.82, 95% CI = 0.71–0.96). For black tea, no statistically significant association was observe through the meta-analysis (highest versus non/lowest, RR = 0.86, 95% CI = 0.70–1.05; an increment of two cups/day, RR = 0.82, 95% CI = 0.65–1.03). In conclusion, our data suggest that high or an increase in consumption of green tea but not black tea may be related to the reduction of lung cancer risk.

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5. Conclusions

In summary, findings from the present meta-analysis indicate that green tea consumption may have a protective effect on lung cancer. However, our data do not support a role of black tea in protection against lung cancer. To provide a more definitive conclusion, further large prospective cohort studies were needed in this area.





Fewer lemons imported leads to lower highway fatality rate.