

Wine in a box? Think 'good' not 'gauche'

June 4 2009



Boxed wine, rather than bottled, could have lower levels of chemicals that mask its fruity and floral taste, scientists report. Credit: Wikimedia Commons

In a surprise discovery that may help boxed wine shake off its image as a gauche alternative to bottles, scientists in Canada are reporting that multilayer aseptic cartons (a.k.a. ‘boxes’) may help reduce levels of substances that contribute odors to wine and can lower its quality. Their study, the first comprehensive comparison of packaging type to wine quality, is scheduled for the June 10 issue of ACS’ *Journal of Agricultural and Food Chemistry*.

Gary Pickering and colleagues note that trace amounts of chemicals called alkyl-methoxypyrazines (MPs) are generally negative to [wine](#) quality, masking the desirable fruity and floral flavors and giving wine an unpleasant green taste. With the wine industry still searching for a

way of reducing MP levels, the scientists decided to look at the effects of wine packaging and closures like corks and screw caps.

They added MPs to red and white wines and monitored levels of MPs for 18 months in wine packaged in boxes and bottles with natural cork, synthetic cork, or screw caps. Boxed wine had less MPs — up to 45 percent less — than any other packaging. Bottles sealed with synthetic cork and screw caps performed best, with natural corks associated with the highest levels of MPs. One concern with the boxed wine, however, was evidence of greater [oxidation](#) of the wine, which itself is undesirable during wine storage.

More information: *Journal of Agricultural and Food Chemistry*, Journal Article: “Effect of Closure and Packaging Type on 3-Alkyl-2-methoxypyrazines and Other Impact Odorants of Riesling and Cabernet Franc Wines”

Provided by American Chemical Society ([news](#) : [web](#))

Citation: Wine in a box? Think 'good' not 'gauche' (2009, June 4) retrieved 26 April 2024 from <https://phys.org/news/2009-06-wine-good-gauche.html>

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