

Publication

Evaluation of potential short-term exposures to NO2 from cooking

Bart Eklund, CIH, and Todd Bernhardt, MEM, published an article in the journal *Human and Ecological Risk Assessment* that provides commentary on factors that complicate indoor air measurements of nitrogen dioxide (NO_2) during cooking with natural gas appliances.

Bart and Todd's work, funded by the American Gas Association, seeks to add to the body of research cited often in recent news reports that question the safety of gas appliances. These popular press articles, they argue, rely on limited academic research that do not appear to properly account for typical cooking times and bias in NO_2 measurements, which limit the accuracy of their findings.

In the article, "Evaluation of potential short-term exposures to NO_2 from cooking," Bart and Todd point out that there are no indoor air standards in the U.S. for exposure of the general population to NO_2 and identify the relatively short duration of typical cooking activities, which could change estimates of NO_2 in indoor air from gas stoves and ovens. They also address the likelihood of bias in indoor measurements of NO_2 due to the presence of interfering compounds such as nitrous acid (HONO). They provide an approach for reevaluating indoor air measurements for comparison to available NO_2 standards, which includes correcting for the duration of cooking time and for the bias from HONO.

Read the article abstract and review purchase options.

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