Teflon and Human Health: Do the Charges Stick?

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Assessing the Safety of the Chemical PFOA

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Introduction and summary

Recently, the public has become concerned about the potential human health effects of PFOA (perfluorooctanoic acid or perfluorooctanoate), a chemical used to produce substances needed to manufacture Teflon and many other products. The Environmental Protection Agency (EPA) has
been reviewing the scientific data on PFOA and at press time for this publication was working on its final report about the human health effects associated with PFOA (the draft assessment was released in January 2005). In 2004, concerns about PFOA were widely reported in the media because the EPA claimed that DuPont, the manufacturer of Teflon, had not adequately reported information about PFOA's presence in water supplies and its ability to cross the placenta from mother to fetus. It is important to note that even while some media reports may have caused misunderstanding by calling PFOA a "Teflon chemical," PFOA is not present in the final product of Teflon-coated cookware; it is only used in the manufacturing process of the product.

While concerns about PFOA's effects on humans have arisen recently, data on PFOA's presence in humans and its effects on both animals and humans has been collected for more than 20 years and can be used to evaluate the potential for harm from PFOA. Research has shown that very high doses of PFOA can cause harm in animals, but the amount of PFOA to which the general population is exposed is hundreds to thousands of times lower, and biological differences may make concerns about some of the observed effects irrelevant to humans. Additionally, studies of workers (who are exposed to much higher doses of PFOA than the general population) have not shown the same effects in humans that occur in animals.

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