High-temperature frying can produce toxic fumes, potentially causing respiratory problems

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Video Byte

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Abstract

High-temperature frying might produce delicious food... But it also carries certain health risks One lesser-known risk is difficulty breathing New research published in the journal Indoor Air shows that high-temperature frying can generate harmful emissions Exposure to frying fumes can irritate the airways and lead to respiratory symptoms Researchers showed that the fumes produced from heating protein-rich foods to temperatures over 250°C (482°F) carry toxic compounds such as isocyanic acid These compounds are produced from the nitrogen found in amino acids Exposure to isocyanic acid can damage proteins found in the airways, potentially causing respiratory symptoms The good news is that the toxic constituents in frying fumes vary depending on cooking style, cooking temperature, and whether the food being cooked is protein-rich Protein-rich foods cooked at or below 200°C (390°F) generate very little of these toxic gases... and kitchens equipped with good ventilation systems can reduce exposure Per Leanderson. Isocyanates and hydrogen cyanide in fumes from heated proteins and protein rich foods. (2019) Indoor Air