



** This news release from K-State Research and Extension is available online at <https://ksre-learn.com/food-safety-fluffy-popcorn>

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‘Fluffy Popcorn’ has become a popular snack, but is it safe to eat?

Unique snack includes raw flour, which heightens risk of illness

By Pat Melgares, K-State Research and Extension news service

MANHATTAN, Kan. – Social media has been abuzz with a popular popcorn snack that uses a box of dry cake mix for flavor to make it fluffy, but Kansas State University food scientist has a cautionary message for those who indulge.

“Dry cake mix, or any raw flour product, can cause foodborne illness because it has not been thoroughly heated to 160 degrees Fahrenheit for safe consumption,” said Blakeslee, who also is coordinator of the university’s [Rapid Response Center for Food Science](#).

Blakeslee notes that there have been several foodborne illness outbreaks in the U.S. that have been traced back to raw flour that cause *E. coli* or *Salmonella* infections. According to the Washington D.C.-based Food Safety News, the U.S. Food and Drug Administration reports at least 168 cases and 20 hospitalizations in recent years due to consumers eating raw flour products. During milling of grain into flour, there is no heat treatment for most brands of flour available to consumers.

Fluffy Popcorn – as it has popularly been called – can be cooked to 160 F to reduce the safety risk due to eating raw flour, but the resulting effect on the popcorn may be less than what the consumer would want to eat.

Blakeslee said consumers also should remember that eating raw cookie dough, licking the mixing beaters or fingers, and other forms of consuming raw flour should be avoided.

“After handling any raw dough or batter, always wash your hands to prevent cross contamination with other foods,” she said.

Raw flour products or dough “may be a fun treat for kids,” Blakeslee added, “but keep in mind that children, older adults and immune-compromised individuals are especially vulnerable to foodborne illnesses. You don’t want to spoil the party.”

More food safety tips are available online from K-State's [Rapid Response Center for Food Science](#). Blakeslee publishes a monthly newsletter, called [You Asked It!](#), with timely tips for safe food in and out of the home.

More information is also available at [local extension offices in Kansas](#).

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FOR PRINT PUBLICATIONS: Links used in this story
Rapid Response Center for Food Science (Kansas State University), <https://www.rrc.k-state.edu>

You Asked It! food safety newsletter, <https://www.rrc.k-state.edu/newsletter/index.html>

K-State Research and Extension statewide locations, <https://www.ksre.k-state.edu/about/statewide-locations.html>

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