Large, tasty popcorn kernels with infrared cooking
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No movie experience is complete without popcorn, whether plain, buttered, or coated with sweet or savory toppings. Microwaves and counter-top air poppers are common appliances for making this tasty snack at home, but now, a study in ACS Food Science & Technology reports that infrared cooking is yet another way people can make the treat. Using a pilot infrared popping system, the researchers were able to produce a version of the snack that taste-testers liked.

Infrared cooking has been gaining steam in home-sized pizza ovens and outdoor grills because it heats food quickly and evenly, without needing as much energy as other techniques.

Previously, Majid Javanmard and colleagues showed that this cooking method is successful at making popcorn. So, to optimize the method for this snack, the team developed a pilot infrared popping system with a rotating chamber that held corn kernels close to two infrared lamps. They tested the new system with three different levels of heat power (600, 700 and 800 W) and found that 700 W produced the highest amount of fully or semi-popped kernels, as well as the largest kernels.

Then a sensory panel also determined that the popcorn from 700 W lamps had the best color, taste and firmness, scoring over four on a five-point scale for overall acceptability. Based on their results, the researchers say that their infrared system can make tasty popcorn in a more energy-efficient way than traditional methods.


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