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Scientists examine Wint-O-Green effect

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Wint-O-Green Lifesavers (Photo: [Andrew Magill](#))

Stand in a dark closet with a friend, chew on some Wint-O-Green Lifesavers, and watch the blue-white sparks fly. It's called the Wint-O-Green Lifesaver effect.

Ken Suslick is a professor of chemistry at the University of Illinois at Urbana-Champaign. He's interested in the light produced by Wint-O-Green Lifesavers, which he calls triboluminescence. The basic way it works is this: When a sugar crystal is broken, positive and negative charges develop on opposite faces. As they're pushed away from each other, the charges want to get back together. So they jump across to each other and cause a very small lightning bolt. So, chewing on a Wint-O-Green Lifesaver is like making a lightning bolt in your mouth.

In 2007 Suslick and a graduate student did an experiment where they sped up the reaction, by a lot. They used ultrasound waves to accelerate sugar particles up to the speed of a jet airplane. When the particles smashed into each other, they broke apart and created the Wint-O-Green effect, only the intensity of those tiny lightning bolts was a thousand times greater. That's how Suslick could measure the temperature of the reaction. He called the Wint-O-Green Lifesaver effect a "cold spark".

Our thanks to:

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