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Consequences of the 'Cinnamon Challenge'

By <u>Anahad O'Connor</u> April 22, 2013 10:40 am April 22, 2013 10:40 am

It is known as the cinnamon challenge, and in recent years, the phenomenon has become wildly popular.

On YouTube, tens of thousands of videos show people shoveling a spoonful of ground cinnamon into their mouths. The videos show them coughing, choking and lunging for water, usually as friends watch and laugh.

One video has been viewed more than 29 million times. Another shows the governor of Illinois taking the challenge.

But now doctors and poison control experts are warning people that this seemingly harmless dare is more dangerous than it appears. A report published in the journal Pediatrics on Monday found that the stunt has led to a growing number of calls to poison control centers and visits to emergency rooms. Some teenagers have suffered collapsed lungs and ended up on ventilators.

"People are being poisoned and sickened because of this," said Dr. Steven E. Lipshultz, an author of the new report and a professor of pediatrics at the University of Miami Miller School of Medicine. "We have seen a rise in calls to poison control centers around the United States that mirrored the rise in YouTube videos and their viewing. And that's just for the acute issues."

The report found that in 2011, the American Association of Poison Control Centers received 51 calls related to the cinnamon challenge. Then, in the first six months of 2012, the number of calls rose to 178. Thirty of those incidents were serious enough to require medical attention.

Dr. Lipshultz found that calls to the Florida Poison Information Center in Miami about cinnamon toxicity showed a similar pattern in 2011 and 2012. Most involved adolescents who were suffering from burning in the airways and in some cases nosebleeds, vomiting and difficulty breathing.

The cinnamon dare has been around for over a decade, but its popularity took off about four years ago. Google recorded 2.4 million hits for the topic in 2012, up from 200,000 in 2009. A Web site devoted to the challenge claims that more than 40,000 videos have been posted on YouTube, and it describes the goal of the challenge as trying to swallow a spoonful of cinnamon in 60 seconds without drinking water. The task is not easy, because the spice in large quantities triggers a gag reflex.

"The first symptom is inhalation of the cinnamon," the site states, "which is almost immediately followed by 'dragon breath' where the user exhales a big puff of cinnamon."

Although the spice is harmless and potentially even healthful in small amounts, it can be caustic to the airways when inhaled, causing inflammation and scarring of the lungs. Cases of breathing problems and skin rashes have been reported in workers who manufacture cinnamon from tree bark, Dr. Lipshultz said. And animal studies show that just one instance of inhaling a large dose of the powder can produce progressive lung damage.

The problem is that cinnamon powder contains an inert substance called cellulose, which can lodge in the lungs.

"The cellulose doesn't break down," Dr. Lipshultz said. "So when it gets into the lungs it sits there long term, and if it's coated with this caustic cinnamon oil, that leads to chronic inflammation and eventually scarring of the lungs, something we call pulmonary fibrosis. Getting scarring in the lungs is equivalent to getting emphysema."

Dr. Lipshultz first heard of the challenge in March last year, after several children who were hospitalized because of cinnamon inhalation were put on ventilators. Dr. Lipshultz and his colleagues soon created a task force. At the time, neither Dr. Lipshultz nor his wife, a pediatrician, had been familiar with the stunt. So Dr. Lipshultz brought it up over dinner with his children, then ages 14, 18, 22 and 25.

"I asked if they were aware of the cinnamon challenge, and every one of them said, 'Of course we know about it,' and started laughing," he said.

One of his children, a freshman at Harvard, remarked that the game was popular in her dormitory, and she quickly pulled up videos to show him.

"I was saying, 'This doesn't look very entertaining," he recalled. "The people in these YouTube videos are actually choking."