Can the cinnamon challenge kill you?

An Internet meme with potentially risky consequences is sweeping the Web. The question is, "Can the brutal 'cinnamon challenge' be potentially fatal as well?"

If someone can explain the appeal of the cinnamon challenge, can they clue in the rest of us? The dastardly dare that has the Internet aflutter involves the task of eating a teaspoon of ground cinnamon, without water, in less than a minute.

What could be so tough about consuming a mouthful of this innocuous-seeming spice? If cinnamon inspires thoughts of comforting apple pie and cozy cinnamon rolls, switch gears and consider Atomic Fireballs, Lava Hot Cinnamon Balls, and Hot Tamales. Cinnamon is potent, as evidenced by the reactions recorded in many a cinnamon-challenge YouTube video — coughing, choking, gagging, vomiting, crying, cursing and general signs of severe discomfort.

But all the panicked retching aside, can swallowing a mouthful of cinnamon be dangerous, or even deadly?

To understand the potency of cinnamon, ponder this: Cinnamaldehyde, the organic compound that gives the spice its distinctive flavor, is used as a pesticide and fungicide. It’s strong enough to kill little things, for heaven’s sake. The EPA warns of acute dermal toxicity; acute oral toxicity; eye irritation; dermal irritation and dermal sensitization. Granted, this is just a component of cinnamon used in concentration, but still, this demure seasoning clearly has a wicked side.
There are two species used in the ground cinnamon found in the spice aisle, Ceylon cinnamon and Cassia cinnamon. Cassia is interesting in that it contains substantial amounts of coumarin. Coumarin is the parent compound of warfarin (known by its trademarked name, Coumadin), a medication used to keep blood from clotting. Coumarin is mighty powerful and can affect blood sugar levels in people with diabetes. In people who are sensitive, coumarin might cause or worsen liver disease.

Due to concerns about the possible effects of coumarin, several years ago the German Federal Institute for Risk Assessment warned against consuming large amounts of Cassia cinnamon.

And then there’s the burn. Parenting experts recommend keeping spices out of reach from children. One of the threats to children who play in the spice cabinet is cinnamon, which when ingested can cause severe burning of the mouth and throat, requiring immediate medical attention. The burning may be so severe that the child can suffer from swelling of the mouth or throat, blocking access to air and potentially leading to death.

Obviously infants aren’t participating in the dare, and it’s highly doubtful we'll witness an infant cinnamon challenge trend, but it goes to show that cinnamon is a formidable flavoring. All one needs to see is a few “cinnamon challenge fail” videos on the Web to view the effect on teens and young adults when the powder is inhaled — which is pretty much inevitable following the gasps that occur upon the initial burning. Immediate coughing and choking are de rigeuer.

In many cases, the coughing is so severe that the challengee has difficulty catching his breath. For anyone suffering from asthma or COPD, this can be very serious. And in fact, ground cinnamon can lead to a bronchial constriction — according to the University of Michigan Health System — and that can be life threatening.

Cinnamon also contains as essential oil called cinnamal, which can act as an allergen in a fair amount of people. Those who are allergic to cinnamon can suffer from contact dermatitis — and according to the University of Maryland Medical Center, cinnamon can also cause a severe allergic reaction that can lead to anaphylactic shock. We can only hope that someone who knows they are allergic to cinnamon would politely decline the challenge; but for someone who wasn’t aware of the existence or severity of an allergy, the results could be … challenging.

So, can the cinnamon challenge kill you? Although no accounts of death by cinnamon have been reported, there are indeed risks — and it seems only a matter of time until the challenge delivers a fatal blow to some unsuspecting teen.
Comprehension Questions

1. According to evidence from YouTube videos, what are seven possible consequences of eating a mouthful of cinnamon?

2. According to the EPA, what four side-effects could result from ingesting a mouthful of cinnamon?

3. What does the University of Michigan Health System state as a life-threatening consequence of eating cinnamon in this manner?

4. The University of Maryland Medical Center states that eating cinnamon can result in severe allergic reaction that can lead to a more serious complication. Name the complication.

2. According to the article, there are two types of cinnamon. One is a parent compound of a medication. Based on the information presented in the article, how would you define a parent compound? What is the purpose of this particular medication?
3. Explain the following quote taken directly from the article, “Although no accounts of death by cinnamon have been reported, there are indeed risks — and it seems only a matter of time until the challenge delivers a fatal blow to some unsuspecting teen.” Could this happen to you or a friend? Does this change your mind regarding doing this?

4. Write a paragraph convincing someone you know NOT to do this dangerous, senseless activity. Be sure to include information from the article to support your reasons. (8 sentences, minimum)