# Death by chocolate

People have a love affair with chocolate. Many of us at this moment are dreaming of our next encounter with a rich, delicious, chocolaty dessert. Some of us even have a twinge of envy for Augustus Gloop and his plunge into Willy Wonka's chocolate river. (Seriously, provided you can swim, there's very little downside...until you get sucked up into the giant pipe.)

The bitter reality is that chocolate kills. In the case of humans, you'd truly have to be a glutton on the order of sweet Augustus to even come close to death by



chocolate. We're talking 85 Wonka bars in one sitting. Unlikely, unless chocolate hits the competitive-eating circuit. (Let's hope not.)

## The killer substance in chocolate?

Theobromine. Caffeine (also in chocolate) and theobromine are both methylxanthines, which are toxic in large quantities. Humans are very adept at metabolizing (processing) theobromine before it can build to toxic levels. Dogs, however, process theobromine much more slowly, making death by chocolate a very real thing in veterinary medicine.

Theobromine kicks the nervous system into high gear—producing muscle tremors, seizures, an irregular heartbeat, internal bleeding and even a heart attack. Whether or not your dog is at risk depends on several factors.

#### Bitter, milk or white?

The type of chocolate consumed makes a huge difference in the toxicity of chocolate. Dark chocolate, baking chocolate and cocoa contain the highest levels of theobromine. White chocolate and milk chocolate have the lowest levels. What that means is that a small amount of dark chocolate could take down your dog, while a similar amount of white or milk chocolate may produce few or no symptoms at all.

### How big is your pooch?

The weight of your dog is another factor in determining whether you should be suitably freaked out or not. The bigger the dog, the more chocolate he can safely consume without symptoms. On the other end of the spectrum, an 18pound dog that eats three squares (three ounces) of unsweetened baking chocolate is at significant risk of chocolate poisoning.

#### How much chocolate did the dog eat?

The more chocolate consumed, the higher the concentration of theobromine. While a 50-pound dog is likely safe after scarfing down a stray milk chocolate chip found lingering in a kitchen corner, that same dog is at risk after consuming an entire bag of semi-sweet chocolate chips.

Check out this cool <u>chocolate toxicity calculator</u>. Though it's fun to play with the calculator, your best bet is to view all chocolate as potentially poisonous and keep it well away from your beloved pet.