

THE ART OF THE DOG FART

There really isn't anything like it. There are things that come close, like cracking open a rotten egg or forgetting to empty the kids lunch box at the end of term and being smacked in the face with the foul smelling rotten salami and cheese sandwich two weeks later. Yet when our dog farts it generally calls for an evacuation of sorts.

There have been times when his flatus has smelt so fatal that I have lifted up our newborn baby and moved him to another room, because I was certain that level of carbon dioxide and methane were toxic. Talk about putting my nose out of joint!

Usually our 45 kilogram bundle of fur and farts sleeps outside in his cosy kennel, but winter has been exceptionally cold this year and he's taken to sleeping in the lounge room, so we've really copped it when it comes to the gaseous expulsions of his digestive tract. A mixture of hot air from the heaters, closed windows and Nanooks' bottom is an overpowering concoction to say the least.

WHAT'S THE SCIENCE BEHIND THE SMELL?

A dogs fart is ranked pretty high on the stink-o-meter, it contains a number of atmospheric gases such as nitrogen and oxygen plus gnarly non-atmospheric gases including carbon dioxide, hydrogen and methane; Methane being the gas that is thought to be responsible for the mass extinction of the dinosaurs.

Once food is swallowed it moves down the esophageus in wave like contractions landing in the stomach where it is stored and broken down into a thick liquid called chyme. A dogs stomach is extremely acidic, about 1-2 PH. The hydrochloric acid residing in a dog's stomach is far more acidic than that of a human – enough to burn your hand if you were to touch it. Luckily, a dogs stomach is lined with a thick mucus which protects surrounding tissue and prevents the stomach from digesting itself with the powerful acid it stores.

The contents of the stomach is then moved into the small intestine. The small intestine is a long hollow tube. About four times the length of your dog's body. The broken down food is

further treated with gastric juices which are secreted from the pancreas and gallbladder through openings of the small intestine. The main job of the small intestine is to absorb nutrients of the liquid food that has been broken down by the stomach.

The liquefied food is then moved into the final part of its digestive journey, the large intestine (also known as the colon). The colon has the important job of saving water and electrolytes to hydrate the body. The bacteria of the large intestine help to break down the final, hard to process food matter. During this breaking down process, healthy gut bacteria emit their own flatus, which in turn your dog must pass. Up to 75% of gas produced by your dog is not his fault. The healthy gut bacteria are responsible for those stinkers!

Research suggests that dogs who eat soybeans, peas, beans, milk products or have a high fat diet are susceptible to producing an eye watering stench from their nether regions.

Also, dogs that swallow air while eating, especially those dogs who chow down their food at the rate of knots are at a greater risk of chronic flatulence. Overweight and obese dogs are at risk too, especially the ones who aren't getting adequate exercise (regardless of their diet).

There are some medical reasons for chronic flatulence. Some of which include:

- Inflammatory bowel disease
- Small intestine bacterial overgrowth
- Irritable bowel syndrome
- Intestinal parasites
- Enteritis (inflammation of the small intestine caused by a pathogen)

If you are concerned about the alchemy of your dog's essence, get the all clear from the vet to rule out any of these kinds of illnesses.

Farting is nothing to be ashamed of. We all do it, in fact some of us up to 25 times a day! In the late 1800's people paid big money to see 'Le Pétomane', a French entertainer who had an amazing ability to fart on command. He had remarkable control of his abdominal muscles, which allowed him to play his intestinal trumpet for audiences far and wide. Maybe our canine companion has a career in it! ■

