

*What causes
bloat, and can
it be treated?*

Stomach Trouble

When her Weimaraner refused breakfast one morning and started panting, my client Roberta didn't suspect it was bloat. The line Dexter came from did not have a history of the life-threatening condition, and to be extra cautious, Roberta fed him a diet she thought would prevent it. What she didn't notice that morning, as Dexter tried to vomit but only dry heaved, was the telltale swelling behind his ribs.

Before long, weakness led to staggering. She brought him to my veterinary hospital flat out, unable to even lift his head. Within seconds, I had the diagnosis—bloat. This dangerous condition is when the stomach swells with air or food and is often diagnosed with torsion, which is when the stomach rotates, blocking both ends like a sausage, preventing food or gas from exiting.

The question of why dogs bloat plagues veterinarians. We don't know if the air builds up and causes the stom-

ach to twist, or if the stomach twists first, leading to an accumulation of air. It's often seen in large dogs who have deep chests.

As the stomach fills with air, pressure builds, preventing blood in the hind legs and abdomen from returning to the heart. This reduces working blood volume, sending the dog into shock. Without treatment, they die.

When Dexter came into my clinic he was already going into shock—his heart rate was high, his pulse weak, and he was getting worse.

Veterinarians treat the shock with intravenous fluids and take the air out of the stomach by needle or by passing a stomach tube.

Once stable, the dog goes into surgery. We deflate the stomach and turn it back to its correct position. Then, because 80 to 90 percent of dogs who bloat will have the condition again, we perform a procedure called a gastropexy, in which we tack the stomach to the abdominal

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wall to prevent another torsion.

But there's also a devastating side effect to bloat that can cause dogs not to survive the treatment: As the stomach rotates, it drags the spleen and pancreas along with it, cutting off the blood flow. The oxygen-starved pancreas produces toxic hormones, including myocardial depressant factor (MDF), which targets the heart and literally stops it cold. A dog can go through successful treatment, but the re-established blood flow ushers the deadly MDF out of the pancreas. Unfortunately, that is what happened to Dexter after surgery, and he did not make it.

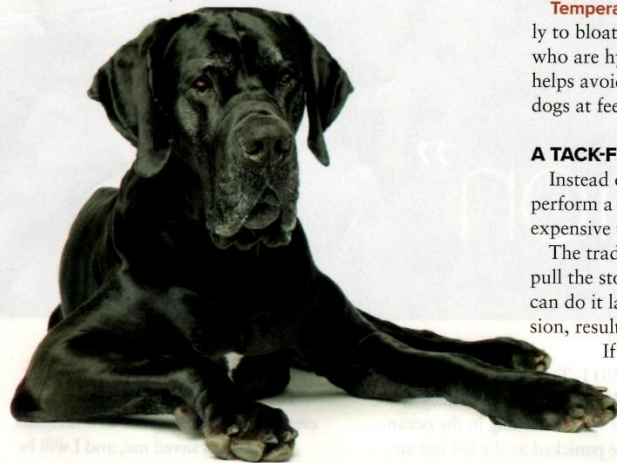
In general, the mortality rate for bloat ranges from 15 percent to 45 percent with surgery, but if the dog is depressed when arriving at the veterinary hospital, he is three times more likely to die. The ones that come in comatose are 36 times more likely to die.

PREVENTING BLOAT

For decades, veterinarians and dog owners have been trying to determine how to prevent bloat. There's a lot of misinformation about what causes the condition, and separating folklore from scientific fact can be difficult. We do know that the following are factors in determining risk:

Age Dogs over seven years old are twice as likely to bloat than dogs two to four years of age.

Sex Males are twice as likely to bloat as females.



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Neutering or spaying has no effect on risk.

Anatomy Dogs with a deep, narrow chest—very tall rather than wide—suffer the most from bloat. Great Danes, who have a high height to width ratio, are 5 to 8 times more likely to bloat than those with a low height to width ratio.

Size Large or giant breed dogs at greatest risk include the Great Dane, Saint Bernard, Weimaraner, Irish and Gordon setters, Standard Poodle, and Doberman Pinscher.

Genetics If a dog has relatives (parents, siblings, or offspring) that have suffered from bloat, there is a higher chance he will develop bloat.

Certain foods Certain dietary ingredients have been blamed over the years, but the data is inconclusive. However, we do know that foods containing soy bean meal or having oils or fats in the first four ingredients increase the risk by four-fold.

Eating habits Dogs fed one meal a day are twice as likely to bloat as those fed two meals a day. Rate of eating is also a contributor. Fast eaters have five times the risk than dogs who are slow eaters. We can try to slow them down by using bowls with fingers or putting large rocks in the bowl. Note: Studies showed that food bowls on the floor caused bloat, but a few years later, this was debunked and elevated food bowls were found to be just as much a risk. Conflicting results like this mean a solid recommendation can't be made.

Temperament Unhappy or fearful dogs are twice as likely to bloat as those who are happy. Stressed dogs and those who are hyperactive are more likely to bloat. Being calm helps avoid bloat. We can reduce anxiety by separating dogs at feeding time.

A TACK-FUL SOLUTION?

Instead of waiting for bloat and torsion to occur, we can perform a preventive gastropexy. The surgery is far less expensive than treating an emergency GDV.

The traditional way to do this is to open the abdomen, pull the stomach to the side and stitch it in place. Now we can do it laparoscopically, which requires a smaller incision, resulting in less pain and a faster recovery.

If your dog has had direct relatives that suffered from GDV, you may want to consider the surgery. For a specific recommendation, speak to your veterinarian about your dog's risk factors. **FD**