When A Dog With Kidney Disease Won’t Eat!

One of the most upsetting symptoms for the owners of a dog with kidney disease (KD) is to witness their best friend turning their nose up at food. Inappetence is the term used by many vets and online articles about canine kidney disease to describe this symptom, but this is somewhat misleading because, in reality, inappetence means a lack of appetite. KD dogs don’t lack the desire to eat, but they do commonly suffer from nausea, dental pain, acid reflux, stomach ulcers and gastric conditions that prevent them from eating regardless of how hungry they are.

I wish to make it clear at the start of this article that I am not a vet. The information and suggestions provided here are from my experience and knowledge researching canine kidney disease over some years. The owners of dogs with the disease have also supplied some of the information, along with various tips and tricks, gained from their experience in caring for their dogs together with essential help from their knowledgeable vets. In all cases and before adopting any suggestions, please consult your vet about any proposed deviations to existing management and treatment plans, so that a professional clinical examination and any necessary tests are undertaken beforehand.

All dogs are different, and some suffer from more than a single health concern. Your dog’s history and specific physical health concerns may cause the following information and suggestions to be inappropriate. It is pertinent to reiterate the point that this article relates to nausea and other associated canine kidney disease symptoms only.

The psychological barrier

When a dog refuses to eat a particular food because of digestive issues and nausea, it then remembers the experience and associates it with that specific food. Consequently, later in the day or even the next day (after the nausea issue is resolved) the dog will continue refusing to eat this same food. Luckily for owners, dogs have a relatively short recent memory ability, which means they will often forget the initial sickly experience after about three days. The best course of action is to have several suitable variations of dog food on standby, so these can be used immediately after a bout of inappetence.

Johan Lind and a group of researchers at Stockholm University studied the memories of 25 species of animals, including dogs. They came to the surprising conclusion that dogs' short-term memory is only a few minutes. My own experience is that it depends on the dog, but all of them certainly seem to forget what they associated nausea with within in a 3-day time-span.

Another method of encouraging eating is to use aroma disguisers as appetisers. Dogs have a fantastic sense of smell, so even just a few crumbs of a favourite food or a teaspoon-sized drizzle of things like organic honey will often be enough to kick-start eating the food lying underneath. While some appetisers may not be the best food ingredients for kidney dogs, tiny amounts used intermittently are not going to adversely affect the diet and management regime to any great extent.

Popular dog-favourite appetising enticements include:

- ✓ Chicken-flavoured baby food.
- ✓ Bacon rind.
- ✓ Cream cheese.
- ✓ Coconut oil.
- ✓ Shavings of a favourite treat.
- ✓ Baked pieces of tinned dog food.
- ✓ Boneless sardines.
- ✓ Organic pure honey.
- ✓ Egg white (cooked).
- ✓ Bread smeared with tomato sauce.
- ✓ Cat food (seems to work for some).
- ✓ Vanilla wafers.
- ✓ Butter croissants.
- ✓ Sweet potato.
- ✓ Cheddar cheese.
- ✓ Green tripe.
- ✓ Marshmallows.
- ✓ Unflavoured unsweetened yoghurt.
- ✓ Crispy cooked chicken skin.
- ✓ Chicken stock.
- ✓ Liverwurst or pepperoni sausage.
- ✓ Peanut butter.
- ✓ Pumpkin.
- ✓ Jam (check there's no xylitol in it).
- ✓ Unsalted pretzels.
- ✓ Parmesan cheese.
- ✓ Steamed cauliflower.
- ✓ Canned tuna in water.

Over-facing a dog with a more substantial or even a standard-sized meal is also a

common mistake. When dogs feel nauseous, they will understand what is expected of them and shy away from the challenge of eating a massive bowl of food. Tiny amounts given more frequently are not only more appetising, they also prevent stress on the kidneys and reduce the likelihood of further nausea. The kidney organs have to deal with the by-products of ingested food, so larger meals merely produce larger volumes of toxins in circulation. These additional toxins then cause gastric upset and nausea to occur, and the vicious circle repeats itself over and over again. Compromised kidneys can often deal efficiently with tiny amounts of food. Hunger and the lack of nausea break the cycle, encouraging them to eat more small amounts of food a couple of hours later.

Some dogs respond well to hand-feeding. They trust you as their owner, provider and guardian, and that's often enough reassurance to have them eating out of your hand. Of course, every dog is different, so what may work for one will not necessarily work for another.

Stomach ulcers

Stomach and other gastric tract ulcers are a common occurrence in canine kidney disease. They cause both pain and discomfort - and consequently inappetence. Ulcers often arise due to high acidity along the digestive system, more commonly in the stomach itself. If you notice consistently higher than normal levels of pH results in blood and/or urine tests reports, then talk to your vet about the possibility of ulcers affecting your dog's eating habits. It is worth mentioning that a small amount of cooked chopped green cabbage or cabbage water given every three days in the diet can help prevent ulcers forming.

Corticosteroids (glucocorticoids such as Prednisone in particular) and NSAID medications such as carprofen (Rimadyl, Novox), deracoxib (Deramaxx), meloxicam (Metacam), and others are known to adversely affect the stomach linings increasing the risk of gastric inflammation. Check the medications prescribed for your dog and talk to your vet if any fall into these categories. Some bacterial infections along the digestive tract can also contribute to ulcer formation (helicobacter pylori abbreviated to H. pylori being a common but not exclusive culprit), so ask your vet to investigate this possibility. The results of a human study presented in the 2003 issue of the Journal of the American College of Nutrition showed that infection with the H. pylori infection was more likely in individuals with low blood levels of vitamin C, though whether this is also the case in dogs I don't know. It may be worth administering vitamin C (in the form of ascorbic acid) as a dietary supplement to help prevent this possibility arising. Excessive levels of exercise also contribute to ulcer formation due to trauma and inflammation of the digestive system. Stress and anxiety are also acknowledged contributors.

A gastroscopy is often considered the best way of checking for ulcers. The vet can examine the physical characteristics and health of the digestive tract through the

stomach to the colon, identifying any abnormalities along the way. A suitable ant-acid is likely to be prescribed if abnormal levels of stomach acidity are thought to be the main problem causing ulceration.

Blood seen in vomit or faeces should immediately be brought to your vet's attention, because this may have originated from a haemorrhaging ulcer. The loss of blood under these circumstances can sometimes quickly become life-threatening, so never hesitate to seek early professional assistance.

Acid-reflux

Wall, furniture, paw and toy licking is an all too common symptom of acid-reflux because dogs instinctively try to relieve the associated heartburn – and in some cases, it is a stress-reaction to the discomfort they are experiencing. They will also lick their lips and repeatedly swallow as they try to rid themselves of the acidic taste and excess saliva produced. Dogs will also typically burb, heave or vomit up bile-like substance and will appear "out of sorts" and irritable. Inflammation of the oesophagus occurs due to excessive gastric stomach acid, pepsin, bile salts, and other components contained in gastrointestinal fluids causing damage to the protective mucus lining. Inflammation along the digestive tract is a prevalent condition in canine kidney disease and leads to the formation of ulcers if left untreated.

Curiously, studies have shown no evidence of mucosal erosion or ulceration in cats with chronic kidney disease (J Vet Intern Med 2014), yet the owners of dogs with kidney disease very commonly report these symptoms occurring. The reason is likely to be a combination of different things including a change in eating habits, frequent diet alterations, the introduction of various medications along with their associated side effects, and adverse reactions in the digestive tract creating metabolic acidosis (caused by reduced kidney function). Kidney disease and significant uraemia erode the gastrointestinal tract membranes, which undoubtedly leads to a disruption of the healthy acid-alkali balance.

The increase of toxins circulating in blood produces nausea – and acid-reflux may be secondary to that symptom or linked to any of the other factors mentioned above. And even despite these various influences, Katie Tolbert, DVM, PhD, DACVIM, an assistant professor at the University of Tennessee's College of Veterinary Medicine, says acid-reflux is common in between 10% to 55% of all dogs anyway, regardless of whether they have kidney disease or not.

The American Society of Nephrology stated in 'Science Daily' (2015) that certain medications commonly used to treat heartburn and acid reflux may have damaging effects on the kidneys, so it's imperative for acid-reflux to be correctly diagnosed by a vet and suitable treatment options professionally considered. The medications of particular concern are PPIs (proton pump inhibitors), which include omeprazole (Prilosec), pantoprazole (Protonix) and esomeprazole (Nexium). It is

disadvantageous to administer any of these or other PPI variations to treat a dog for acid-reflux, when it may not have acid-reflux. A vet will clinically assess the situation and advise accordingly.

An influential 2016 study first published in the Journal of the American Society of Nephrology (Proton Pump Inhibitors and Risk of Incident CKD and Progression to ESRD by Yan Xie, Benjamin Bowe, Tingting Li, Hong Xian, Sumitra Balasubramanian, and Ziyad Al-Alyfound) found that patients who took PPIs had a 96% increased risk of developing kidney failure and a 28% increased risk of chronic kidney disease compared to the patients who took alternative histamine H2 receptor blockers.

The alternatives to these stronger PPI ant-acids include baking soda (sodium bicarbonate), but it may not be suitable in all cases so always consult your vet before using it. Baking soda can also be helpful in reducing high potassium levels. Potassium citrate is another potential remedy for acid-reflux (and for lowering high serum potassium). Slippery Elm and pure organic honey are also known to help reduce acidity. A group of drugs called H2 Blockers are the more common alternatives. These include Pepcid (famotidine), Zantac (ranitidine) and Carafate (sucralfate). The doses of some of these need careful and cautious assessment when used with kidney disease, so always consult your vet about them. Some vets occasionally prescribe Tagamet (cimetidine), but this is often best avoided as it can interact adversely with certain other medications and lead disastrously to higher levels of creatinine (dogaware.com).

Nausea and vomiting

Nausea is virtually synonymous with canine kidney disease. I have never known a KD dog traverse through the disease without this symptom occurring – and usually, it happens frequently and progressively. Nausea is undoubtedly the primary cause of a dog refusing food. Who among us would want to eat anything when all we feel like doing is throwing up?

A wide variety of problems happen with kidney disease to cause nausea. One of the most influential is a change in potassium levels which rise as the kidney organs increasingly fail. This problem, termed hyperkalaemia, produces nausea, lethargy and an irregular slow pulse. In sharp contrast, dogs in the later stages of kidney disease tend more often to lose their appetites which often cause their blood potassium level to fall dangerously low. For this reason alone, frequent and thorough blood testing that includes a potassium level check is vital to ensure your vet is aware of any changes up or down. Hyperkalaemia can be life-threatening if left untreated.

Protein in the diet also plays a significant role in producing nausea. Too much protein in advanced kidney disease leads to a condition called uraemia, where extremely high levels of creatinine and BUN (blood urea nitrogen) circulate in the

dog's blood. Reducing protein in the diet to different levels at different stages of the disease is known to help reduce the likelihood of severe uraemia, but owners need to be careful because the loss of adequate amounts of protein can also lead to malnutrition which increases the prospect of early morbidity. Kidney disease often presents owners and vets with dilemmas. Knowing which course to take for the best is always a challenge.

Medications that vets might prescribe to help reduce and even eliminate nausea (or the gastric issues causing nausea) include Cerenia (maropitant citrate), Ondansetron (Zofran), Promethazine (Phenergan), Metoclopramide (Reglan), or Meclizine (Bonine, Antivert). Some of these drugs are available in some countries over-the-counter and without prescription, but owners would be taking a considerable risk in administering any of them without veterinary supervision and approval. Some of them have dangerous interactions with other medications, while others are not suitable under certain circumstances, so never take the risk of inadvertently making things worse. A vet can also help assess which combination of anti-nausea medications would be safe to use when a single drug fails to produce the desired effect.

Mirtazapine is a medication that is only available by prescription. Unfortunately, it is one that doesn't work for all dogs, but it is nothing short of miraculous for those that it does work on. Mirtazapine has the distinct advantage of dealing with three different symptoms all in one – nausea, poor appetite, and depression associated with feeling unwell. As an appetite stimulant, it overcomes the problem of dogs refusing to eat. Dosing is crucial with this medication, as excessive amounts are known to cause severe behaviour changes, irrational comportment and hyperactivity. Unlike other anti-nausea drugs, Mirtazapine acts by increasing norepinephrine and serotonin and altering neuroreceptors in the intestine and stomach that communicate with the vomit centre of the brain. Reduced doses are suggested for dogs with liver disease or kidney disease – and both owners and vets should make themselves fully aware of the signs and symptoms of serotonin syndrome, which has been known to occur in some cases. Dogs given Mirtazapine are likely to require closer veterinary monitoring than might otherwise be needed.

Peppermint, ginger, tarragon, lemongrass, cardamom and spearmint are said to be natural remedies that help ease nausea, although whether they are successful in dogs with kidney disease seems a little hit-and-miss. Small amounts of plain unsweetened yoghurt or cottage cheese are useful supplements to diet that will help ease a temporary period of nausea, as they both relieve inflammation of the stomach and intestines and can prevent bouts of diarrhoea. Pumpkin is fantastic as it can help ease either diarrhoea or constipation, according to which is occurring. Both conditions are likely to produce nausea, so adding small amounts of this fruit to your dog's food over a day or two will relieve at least one of the problems. Pumpkin contains high levels of potassium, so make sure your dog is not suffering from hyperkalaemia before using it.

Appetite stimulants

Some of the prior mentioned medications also act as appetite stimulants, with Mirtazapine (Remeron) probably being the most effective. Other stimulants include Cyproheptadine (Periactin), Diazepam (Valium), Meclizine (Bonine, Antivert), Ghrelin Receptor Agonists such as Entyce, and in countries where it is legal there is also CBD (cannabidiol).

Some of these are not always suitable for use in canine kidney disease, and some may also interact adversely with other medications or are contraindicated for other health conditions, so always do your research and consult your vet before considering any of them for your best friend. Steroids are sometimes inadvertently prescribed to help stimulate appetite, but many cause severe side effects, and some are utterly unsuitable in canine kidney disease (for example, anabolic steroids, corticosteroids and glucocorticoids). If your dog has been prescribed a steroid, consult your vet about the possible implications and interactions with kidney disease.

Natural remedies said by some to be useful include dandelion, chamomile, celery seed, and milk thistle. While I am supportive of any natural remedy proven to work, none of these have any reliable study evidence to support them as appetite stimulants in dogs. It is also relevant to mention that some have qualities or actions that are not desirable for kidney disease. Dandelion, for example, has more significant quantities of potassium and phosphorous than a KD dog should probably be receiving, so always check natural remedies, herbal extracts and essential oils with your vet before using.

Anti-nausea medications and phosphate binders

Some anti-nausea and antacid medications are not compatible with some phosphate binders. Always check with your vet for a professional assessment of drug combinations, particularly when a medication is being administered without their knowledge, prescription, instruction or approval. Some anti-nausea and antacid medications also need to be given at different times to some binders, because the binder can interfere with proper absorption and the anti-nausea or antacid can prevent absorption of the binder. As a general rule, these two different medications should be given at least one hour apart (with the binder always being administered with food), but consult your vet about specific combinations for more accurate and individual guidance.

In conclusion

Gastro-intestinal problems go hand-in-hand with kidney disease. It’s just part of the package and we need to deal with it just like the many other symptoms our dogs face while progressing through the disease. A pro-active and attentive vet is absolutely key to success, because they are able to identify the type of issue causing

a refusal to eat – and then devise and prescribe the best management plan to combat it.

However, once tackled, it is important we don't become complacent and just leave our dogs on the same medication month after month, because some of these drugs will adversely affect kidney function over time. Sometimes a change of medication or a "holiday period" from certain ones can prove very advantageous, allowing the kidneys time to rest and giving the digestive tract a test-period to see whether it deals with the original problem on its own. Always seek advice from your vet before considering any changes to the management and treatment plan.