Water: A Nutritional Requirement

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Water is the most important of all the nutrients. An animal can lose all of its fat and half of its protein and survive, but only a 10% loss of body water causes serious illness. Water constitutes 84% of a newborn puppy and 60% of an adult dog. Water is necessary for almost every function the animal body performs. While critical in life, some animals have adapted to having very little of it around. Some northern sled dogs will go months without any liquid water, surviving on consumed snow and ice. Lions in the Kalahari Desert will go up to four months, surviving on only the moisture derived from their prey. Hibernating bears will sometimes go for six months or longer without taking in any water and deliver and nurse cubs at the same time! Yet on a hot day, the average dog or cat can become dehydrated in only a few hours if fresh water is not present. Water is so essential that it is often taken for granted. Considering the huge quantity and importance of water consumed in a lifetime it is important that the quality of the water is the best possible.

How much?

There are many different factors that affect the needed intake of a dog, cat, puppy or kitten - so many that it is always wise to provide access to water at all times so that the animal can regulate its consumption as needed. A general rule of thumb is that an animal needs to consume 2.5 times the amount of water, as its daily intake of food. If an animal eats 2 lbs. of dry food it should consume 5 lbs. of water. (There are 8 lbs. in a gallon.) If he eats 4 oz. of dry food, he should drink 10 ounces of water (1¼ cup). Factors such as high heat and exercise or lactation can increase the needed amount two or three times above normal. Most animals consume more than their daily requirement. A little extra water consumption never hurts, but too little can be catastrophic. Animals that eat canned foods get most of their moisture from the food and may drink much less than an animal on dry food.

Water quality

Not all water is created equal. The amount of total dissolved solids is a useful overall index to the quality of drinking water. Water containing less than 5000 parts per million of total dissolved solids is considered acceptable for pets. Water containing more than 7000 parts per million is considered unacceptable for livestock. All untreated water can harbor bacteria, viruses, and parasites. Giardia is one of the most common problems acquired through untreated water. Household tap water is considered to be very safe, though just as with people, water that is high in nitrates, iron, or magnesium can pose long term health risks. Many pet owners give their animals bottled water if their source is questionable. However, the finest water in the world will not help if it is placed in a dirty container. Unwashed water bowls can harbor all kinds of bad organisms. Water bowls should be washed daily and disinfected periodically. Stainless steel bowls are the easiest to keep clean and resist scratches that can harbor bacteria, stoneware crock-style dishes are also a good option. Buy a good quality bowl and after it starts to look worn and scratched, replace it. Remember that if you would not drink the water from your pet's bowl then neither should your pet. One other consideration in quality is temperature. Pets prefer cool water in the summer and room temperature water in the winter. If you have an outside pet be sure to provide them with a heated water bucket or container. Snow is not an acceptable form of water for dogs or cats.

Water and sick animals

When an animal does not feel good they stop drinking. At the same time, fevers or other disease processes can greatly increase the animal's need for water. When these two occur at the same time an animal rapidly becomes dehydrated. Replacing lost fluids and preventing dehydration is one of the most important aspects in the treatment of all sick animals. Try to encourage the dog to drink. If the dog cannot be encouraged to drink, then the fluids are replaced through intravenous or subcutaneous routes. Some diseases like kidney failure or diabetes mellitus cause the animal to drink more water and urinate more frequently. The one time we do not offer a sick animal water is when it is vomiting. Many times, food and water is withheld for twenty-four hours while the animal's stomach gets a chance to rest. But never withhold water for more than twenty-four hours. An animal that continues to vomit will need immediate veterinary attention and supplemental intravenous fluids. Lifting the skin on an animal's back and watching how quickly it snaps back is a rough indicator of dehydration. A healthy animal's skin snaps back immediately, a dehydrated one goes back slowly over several seconds. If you suspect your animal is dehydrated seek medical attention.

Water and performance

Water consumption is closely related to performance. Sled dog racers have known this for years. They will go to great measures to ensure that their dogs consume water on a very regular basis and will stop frequently to warm and flavor the water with beef broth to ensure that the animals stay well hydrated. Dogs that drink during exercise stay cooler and are able to burn glucose more effectively. One study showed that dogs that were given water during exercise increased working ability by 80%.

Summary

Water is the basis for life. Give your dog free choice water of the highest quality. Sick animals and working animals respond much better if properly hydrated. So every time you turn on the tap for a drink of water do not forget to give your dog a drink,

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they are thirsty too.

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