

**Using Food in Training**  
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There is a widespread belief that it is unwise to use food treats to train dogs. The reasoning behind this is that dogs should work for their owners, not for food. Animal learning theory tells us however that dogs, and other animals including humans, will work for whatever is pleasant and enjoyable.

Things that reward behavior and make it more likely to occur are called positive reinforcers. For most dogs, food is much more reinforcing and therefore more motivating than are verbal praise and petting. This is because food is a primary reinforcer meaning that it is tied to basic survival and the response to food is unlearned.

Thus, dogs may more be more likely to do what we want them to do in return for a treat rather than a pat on the head. Food can be a very powerful and effective training tool if used in ways that follow the principles of animal learning theory.

First, it is well known that the best way to teach an animal a new behavior is to reinforce the behavior every single time it occurs. Once the desired behavior is occurring consistently under these conditions, the best way to keep the animal responding is to gradually begin to reward the behavior some of the time rather than all the time. In technical terms, this is called changing from a continuous to a variable schedule of reinforcement.

As an example, to teach a dog to sit, a small tidbit can be held above his nose and moved backward so that the dog follows it by lifting his head up. As the head goes up, the rear goes down, and Voila, the dog sits and immediately gets to eat the treat. In a short time, the dog will be sitting reliably when a treat is held in front of his nose.

At this point, if we pretend that we have the treat in our hand, the dog will sit even if he doesn't get the treat that particular time. If the treat is then given on an intermittent schedule, say 9 out of 10 times, then 7 of ten, then 8 of ten, then 5 of ten, etc. down to once or twice out of ten, with periods of more frequent rewards thrown in from time to time, the sit response will be reliably maintained. This is because it is worth it to the dog to sit because there is always the possibility that a tidbit will appear. People play slot machines for long time periods based on this same principle of variable reinforcement!

This failure to change gradually from continuous to intermittent reinforcement is one reason why people have problems with their dogs responding correctly only when food is available. The second way food can be used incorrectly is when it is first used as a cue without making the transition to using it only as a reinforcer.

In our example above, the food was used both as a cue to sit as well as to reward the sit response. In order not to make the response dependent on the food the dog should not see the food before he sits and should not be able to predict under what circumstances the food reward will be given and when it will not.

Using food as positive reinforcement makes it more likely the dog will respond when he might not if a less powerful reinforcer was used. Rather than food being unacceptable in training, when used correctly it results in a win-win situation. The dog more easily does what we want him to do, and he does it happily and reliably because good things happen to him when he behaves correctly.

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