Getting the Facts Straight

Spaying or neutering your dog or cat requires the use of anesthesia, and for some that can be scary. However, the staff and doctors here at Dutch Fork Animal Hospital are here to answer all of your questions, and will happily give you information about the process. We want to shed light on the situation and all the procedure involves.

A conversation about spaying or neutering usually comes up when you pet is still a puppy or kitten, but the procedure can be performed on animals both young and old. Ideally, you will want to bring your dog or cat in when they are about 6 months old. This allows you pet to naturally mature, but also completes the procedure before they develop some of the undesirable characteristics an intact animal may have.

What exactly does spay or neuter mean?

**Spaying** is the common term for an ovariohysterectomy. During this procedure, the animal is sterilized by completely removing the ovaries and uterus.

**Neutering** is also referred to as castration, and is the common term for an orchiectomy. During this procedure, both testicles are removed.

Why should I have my pet spayed or neutered?

Unless your pet is going to be used for breeding purposes, your animal should be spayed or neutered. The longer an animal goes intact, the less likely spaying or neutering them will quell down their territorial behaviors. Here is a breakdown of the benefits by procedure:

**Spay**
- Prevents “heat” cycles in both dogs and cats
- Prevents pyometra, a serious uterine infection in dogs
- Prevents ovarian, breast, and uterine cancers
  - Dogs spayed before their first heat cycle have a less than 0.5% chance of developing breast cancer.
  - With each subsequent cycle, the likelihood of developing cancer increases.
  - After 2 ½ years of age, there are no significant protective benefits against developing breast cancer.
- Decreases hormonal behaviors such as roaming, aggressions, and so on.
- Prevents accidental pregnancy

**Neuter**
- Reduces the risk of prostatitis
- Reduces the risk of hormone-related diseases such as perianal adenoma
- Prevents testicular cancer
  - This is the second most common cancer in intact dogs
- Decreases hormonal behaviors such as aggression and roaming
- Decreases territorial spraying in male cats
Spaying and neutering are both surgical procedures and must be performed under anesthesia. This is arguably the biggest con to the procedure, and we recommend all patients undergo pre-anesthetic testing. This involves a cardiac screen and pre-operative blood work.

**What is included in the blood work and cardiac screen?**
The blood work also lets your vet know your pet's internal organs are functioning well and will be able to handle the anesthesia. At Dutch Fork Animal Hospital, all senior patients (those who are 7 years or older) are required to have pre-anesthetic blood work done prior to any surgery. This checks certain organ enzymes and helps your vet evaluate how well they are functioning. The main organs tested are the liver and the kidneys.

A cardiac screen illustrates heart function and is done a bit differently for each species.

For all canine patients, an electrocardiogram is performed, if elected. This is a non-invasive cardiac screen that detects disturbances in heart rhythm and rate. Any irregularities in heart rate can lead to difficulties with your pet handling the anesthesia during or after surgery. There are some breeds who are most susceptible to Dilated Cardiomyopathy (DCM). This is a cardiac dysfunction that affects the muscle wall of the heart and causes a decreased ability to contract. It could lead to cardiac arrest. DCM is best detected via an electrocardiogram. Breeds who are most prone to DCM are: Boxers, Dobermans, St. Bernards, Great Danes, Rottweilers, Mastiffs, King Charles Cavalier Spaniels, Newfoundlands and occasionally Cocker Spaniels and German Shepherd Dogs.

With feline patients, a cardiac ultrasound is performed. Some cats can suffer from a genetic heart condition called Hypertrophic Cardiomyopathy (HCM). This is when the heart walls become thickened, which causes a decreased filling and function of the heart. This type of cardiac dysfunction is usually found easier during an ultrasound rather than a physical exam. HCM is more common in certain purebreds including Persians, Burmese, American Shorthairs, Cornish Rex, Ragdolls, and Maine Coons.

**Myth: Spaying and Neutering causes obesity**
While obesity is becoming more and more common with pets, it is not a side effect of spaying or neutering. Obesity is due to lack of physical activity and overeating. When you pet is intact, their caloric requirements are very high because their reproductive system requires a lot of energy. Once they are spayed or neutered, their caloric requirements plummet and their food intake should be reduced by 20 to 40%. If their food is not decreased, they are consuming empty calories that their body does not need. Another culprit is not switching your dog to an adult formula once they are spayed or neutered. While intact dogs are usually transitioned to adult food once they are a year old, if they are spayed or neutered before then, they should be switched soon after the procedure.

**Myth: Spaying and Neutering will change my pet's personality**
Spaying and neutering will decrease territorial and aggressive behaviors in your pet, it will not dull their personality. It does not effect their intelligence, playfulness, affection, or guarding instincts. There is a common misconception that neutering your male will make them less masculine. They will still look as macho as before, but they may be less likely to start a fight with other dogs, which should make them a better pet.

**Myth: It is better to allow a female to go through one heat cycle**
As mentioned, the chances of your pet developing breast and/or ovarian cancer increases after each heat cycle. There is an 8% chance of developing cancer after the first cycle. After the second, the risk increases to 26%. This is why it is best to spay before the first heat cycle, unless your veterinarian recommends otherwise. If you spay your dog before the first heat cycle, there is less than one-half of a percent of developing either type of cancer.

For more information and questions about spay and neutering, please contact us today at 803-781-7483.