



# Prevent your Dog's Resource Guarding Behaviour

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"Resource Guarding" is a fairly common problem among our canine companions but it is often poorly understood. Dogs who are said to be resource guarding are invariably showing some kind of aggressive response in the presence of a resource which they highly value.

Many resources of value to dogs can precipitate aggression such as **food**, **water**, **shelter**, **toys**, **bedding**, **attention from and interaction with people and other dogs or even space**, a whole territory, or smaller area, such as a hall or doorway.

Their behaviour may range from taking the resource away to stiffening of the body, staring, growling, barking, lunging, chasing, snapping and potentially biting or fighting. Dogs may direct this aggression towards other dogs or people or both.

Affected dogs are using aggression to communicate that they are **uncomfortable and anxious about being approached** when they are in possession of this valued resource. Their aggression serves as a threat that they are willing to **defend and hold their resource** potentially at the cost of physical confrontation.

# What is Resource Guarding?

The term "resource guarding" is actually unhelpful and should be used carefully. This is because it is just an umbrella term used broadly to label an entire spectrum of dogs, who may range from normal in their behaviour, to severely pathological, displaying one or more of several different diagnoses.

For example, a dog could be said to be resource guarding if it does any of the following:

- Takes a bone away to a secluded area to eat it.
- Launches an attack at the close approach of another dog when it is eating a valued treat.
- Body blocks a second dog from interacting with a person in order to receive more attention and interaction itself.
- Growls and snaps at a dog who tries to share its bed
- Steals toys from other dogs and hoards them
- · Barks at strangers coming to the home

Labelling these dogs as "resource guarding" does nothing to explain the context in which the behaviour occurs, nor describe how normal or abnormal the behaviour may be. It could be argued for instance that a dog barking at strangers as they approach the home is not only normal, but indeed exhibiting a preferred trait that we have asked for, via selective breeding.

However, there are aspects of the behaviour that we need to consider to determine if it is in fact normal. Resource guarding should be identified and correctly described as one of the following behavioural diagnoses:

# #1. Food-Related Aggression

- **Consistent aggression** (threat / challenge / contest) that is exhibited in the presence of, and only in the presence of, food (in the absence of severe hunger / starvation).
- Aggression may be shown in the presence of all edible substances or more commonly, only ones of particular high value, such as bones or treats.
- Affected dogs usually give **a lot of warning** (vocal and body language) as another individual approaches their food.
- They may just sequester and guard the food without actually eating it.

# #2. Possessive Aggression

- Consistent aggression (threat / challenge / contest) that
  is directed toward another individual who approaches or
  attempts to obtain a non-food item that the aggressor possesses.
- Affected dogs may engage in guarding, carrying, hiding/ monitoring the valued object.
- This condition is about control of activity or access to the resource, not about control of the object itself.
- In severe cases the aggressor may not even be near or using the item when they act to protect it.



# #3. Protective Aggression

- Aggression consistently demonstrated when a dog is approached by another individual or group, in the absence of a contextual / actual threat from those approaching.
- Aggression intensifies with decreasing distance between the aggressor and the approaching party regardless of attempts to appease / pacify / interact by those approaching.

## #4. Territorial Aggression

- Aggression consistently demonstrated in the vicinity of a circumscribed space (fixed or mobile), when that space is approached by an individual / group in the absence of a contextual threat.
- Aggression intensifies with decreasing distance between the aggressor and the approaching party, regardless of attempts to appease / pacify / interact by those approaching.

From here on this article will refer specifically to food-related aggression, as this is the most common and bothersome form.



# How to diagnose Food-Related Aggression

To diagnose a dog with food-related aggression, the behaviour must be **excessive in terms of its frequency, intensity and duration** and/or displayed out of context with the environment. The important distinction is it is **not normal nor adaptive.** 

Many dogs have valued and preferred resources but do not feel the need to guard them. It is dogs who are **anxious, insecure and worried** in these contexts, who feel the need to display anti-social behaviour to gain control of their unease.

Many, or even most dogs, who display food aggression suffer an **underlying contributing diagnosis of some level of generalised anxiety.** 

This causes impulse control deficits and **hyper reactivity to benign situations** which are not truly threatening. When a dog is anxious, the logical rational decision processing part of the brain (the cerebral cortex) is not able to engage or work properly, rather the emotional centre (specifically the amygdala) has heightened activity and hijacks the brain. This means the dog cannot make appropriate decisions about how to behave in regards to its context.

An anxious dog will respond to a perceived threat with one of the "four F" behaviours:

- 1. FLIGHT: Get away or create distance
- 2. FIGHT: Use defensive aggression
- 3. FREEZE: Stop moving and shut down in an attempt not to provoke any problems
- 4. FIDDLE: Engage in displacement behaviours



### **FEATURE**

**Prevent your Dog's Resource Guarding Behaviour** 

Almost all animals will initially choose the flight option if available and only progress to the fight option (aggression) when:

\* There is **no option to get away** (cornered, on a lead, restrained etc)

\* They have learned through experience that aggression is a **successful way to remove the threat** and make them feel better.

This is the reason that dogs who display resource guarding types of aggression (or any type of aggression) may look convincingly confident and "assertive" when the underlying emotion is invariably fear / anxiety.

Think of it this way: if one feels calm, confident and content, one does not feel the need to deploy anti-social behaviour. **Anti-social behaviour is always caused by an underlying negative fear-based emotion.** On the flip side, when we feel frightened, anxious or insecure we may use aggression as a means of gaining some control over the environment to alleviate the stress and feel safe again.

## So what causes Resource Guarding?

Like absolutely any behaviour, the outcome is a result of a combination of three overlapping causal factors:

1. GENETICS is responsible for temperament and personality type, such as level of boldness, fear or emotional resilience. However genes are not entirely fixed, as was once thought, – their expression is influenced by epi-genetic factors, such as nutrition, stress and experience itself. Genetics decides "what may be" NOT "what will be". This is why for example two human identical twins can turn out very different in terms of their personalities, preferences and abilities.

As a canine example, it is known that puppies from malnourished mothers are more likely to be anxious and show aggression around food. This is an example of how an "epi-genetic" change (stress in utero) influences these animals' behaviour.

An argument can be made that a level of resource guarding is normal and appropriate as it confers a survival advantage to be able to successfully hold life-giving resources. However, **most well-fed healthy domestic dogs should not need to risk confrontation over food.** A normal dog can be expected to behave appropriately around food, which means that if it has never been teased or threatened around food or starved then aggression should not be shown.

**2. LEARNING and experience act upon the genes to influence behaviour.** Dogs have some critical or "sensitive" learning periods in which their brains are like sponges when they form powerful neural and behavioural templates.

The socialisation period in dogs is between 3 and 12 weeks of age. It can be very difficult to alter perception and "unlearn" things learned during this special time.

Therefore, puppies who are malnourished, may be predisposed to developing food-related aggression as they may be hyper-aroused and reactive around food and/or may have learned that aggression

is the most useful strategy to keep hold of this precious resource. Dogs who have negative learning experiences around food (perhaps attacked by another food aggressive dog) may also become anxious / fearful in this context and begin to display aggression.

**3. ENVIRONMENT** must consider both the external and internal environment of the dog.

\* External environment provides the context for the behaviour. It will be influenced in the case of food-related aggression by the amount of food available, how many individuals

may be competing for the resource and how close they are to the aggressor with the resource.

\* Internal environment relates to how the dog feels and how is it functioning, which will be influenced by numerous factors such as pain, discomfort, itching, thermoregulatory status, neurochemistry, hormonal fluctuation, energy / metabolism status and of course level of hunger vs satiety.

Context is of such importance for any behaviour. A dog who is chronically hungry and has associated changes in neurochemistry, hormones and irritability will be more likely to risk aggression over a food resource; in this case the behaviour could be considered normal not pathological. In contrast if a dog is full and still displays significant aggression over a food item this is less appropriate for the circumstance.

# **Busting Resource Guarding Myths!**

There are many myths and much misguided information surrounding resource guarding behaviour in dogs so it's time to sort the fact from the fiction.

## MYTH #1: "Dogs who resource guard are dominant"

Aaahhh the "D" word, how it makes my blood boil... You may have heard that dogs who guard resources are "dominant" or trying to establish "dominance". This is totally untrue. **The concept of dominance**, **as it has been applied to dog behaviour, is a complete myth.** It has no scientific merit, accuracy or validity and can be considered total nonsense. Canine cognition and reasoning is that of approximately an 18-month old toddler. Dog behaviour is driven by the emotion and motivation of the dog at the time, NOT by any broader concept of trying to establish oneself among an imaginary social order.

# MYTH #2: "Dogs need to be taught to tolerate having their food removed to prevent resource guarding"

This is a common but misinformed myth. Many people intuitively feel that they should teach their dog to accept having to relinquish their food to people. But let's go back to how learning and experience affects behaviour. If we repeatedly approach a dog when it is eating and steal its food away, then we are actually teaching the dog that there is cause for concern around food, especially when people approach. The dog is actually learning that people approaching when it is eating constitutes a threat, as they are likely to take its food away. In many dogs this will cause defensive aggression where they may otherwise have been relaxed around food.

Instead what we need to **teach dogs is that they need only to feel good and optimistic when they are approached during eating.**This means we should not take away their food but add other extra high value items to their meal such as tossing some chicken or cheese

into their bowl of kibble. In this way the dog learns: I love it when people come near me when I'm eating, as good stuff happens: I get extra food to enjoy.

# MYTH #3: "Some breeds are natural resource guarders and it is normal for them to show aggression around food".

It is not normal or natural for a dog to behave out of context with actual threats in its environment or be paranoid when there is no need to be. If resource guarding is more prevalent in certain breeds than others the reason for this will be an **underlying propensity towards fearfulness and anxiety in the genetic lines.** It could also be influenced by how the dogs are raised (experience and environment).

For example, if coming from a puppy farm, where bitches may have been malnourished or the puppies improperly fed or cared for, this will likely precipitate behavioural problems including food aggression. Additionally some breeders may have been practising taking food away from the puppies which will affect their emotional state and behaviour where food and people are concerned.

### MYTH #4: "Dogs who guard resources should be punished".

This is a harmful and potentially very dangerous myth. If dogs who are already anxious and fearful around food are then made to have an even more negative experience and association with this context through confrontation (verbal or physical punishment), then this will make them more fearful and will further teach them to behave defensively. Many dogs with food-related aggression are made far worse by people who have tried to "correct" or punish them.

Punishment is rarely (and I would argue is never) appropriate for dogs: it increases fear, anxiety, confusion, reactivity and potentially aggression and erodes the trust and bond they have with us. It is simply not helpful in most circumstances as it may significantly worsen emotion and behaviour of the dog.

Remember, if a dog is showing aggression, it is fearful / anxious / insecure / uncomfortable in the situation. Thus to address the behaviour we need to address the underlying emotion – not simply suppress the undesirable behaviour with punishment.

#### MYTH #5: "Dogs with resource guarding will grow out of it"

This is simply not true. Dogs with anxiety disturbances, who feel the need to deploy aggression, will not simply self-cure or get over it. They are abnormal and need intervention.

# So what can be done about Resource Guarding?

Like most diseases or troublesome behaviour, prevention is better than cure and we need to set our dogs up for success. To reduce the likelihood of any dog displaying food-related aggression we should do the following:

- Ensure we source puppies from reputable sources, where we can meet the parents and ensure they are of sound health (physical and mental / emotional health).
- 2. Chat with the chosen breeder to ascertain their rearing and training methods. If they are restricting food and/or water, doing nothing to alleviate competition between the puppies, feeding a poor quality diet, punishing the puppies or practising taking their food away then this means these puppies will be more prone to developing behavioural and health problems.

- 3. Ensure that puppies have adequate nutrition and parasite control.
- 4. Ensure that puppies have necessary **peace**, **calm and privacy when eating** so they can feel calm, confident and secure in this context.
- Ensure that puppies have positive experiences around food and learn that we are no threat to them when eating.
- 6. Never tease, threaten or punish our puppies / dogs

# **Treatment for Resource Guarding**

Despite our best intentions and efforts some dogs will be affected by food-related aggression and these dogs must **get appropriate help immediately, rather than allowing their disorder to escalate.** First we need to understand what we are dealing with...

Dogs showing undesirable behaviour, especially any form of aggression, need to be assessed by a veterinarian who is competent with behaviour problems and mental illness in dogs. Ideally a vet who has undertaken further study and gained additional qualifications in behavioural medicine. General practitioner vets receive little to no education and formal training in regards to behavioural problems and mental illness in dogs. As such, they are often ill-equipped to help, or sadly, may even give inappropriate detrimental advice.

Importantly, dogs with behavioural problems should not go to trainers. These dogs are potentially abnormal and unwell. A veterinary consultation is needed to rule out contributing medical factors and make a diagnosis. A vet or veterinary behaviourist needs to establish whether the dog is displaying a problem behaviour or behaviour problem. This is an important distinction, as it requires very different treatment approaches.

a) **Problem behaviour:** this is an undesirable behaviour (to us) but normal behaviour for the dog. Importantly, the dog is normal and is behaving within context. These problems can be alleviated with training and learning (teaching an alternative response). This is where a competent force- free / fear-free behavioural trainer is needed.





### **FEATURE**

# **Treatment for Resource Guarding**

**b) Behaviour problem:** This is an abnormal behaviour, excessive in frequency, intensity or duration or displayed out of context. This is caused by inherent disturbances in the dog's brain and body. These problems cannot be fixed with training as they are medical disorders. Just like a dog who is extremely hungry and irritable / aggressive around food, due to an underlying disease state of Diabetes. This cannot be addressed with training, rather the disease needs to be corrected in order for the behaviour to change.

If the dog is afflicted with a true behaviour problem, such as foodrelated aggression, then it needs multi-angled treatment under the guidance of a vet, which involves a three-pronged approach of **Medication, Modification & Management.** 

The treatment needs to involve all three components because together they address all three causal and contributing factors to behaviour (genetics, learning, environment).

- **1. MEDICATION** aims to correct and normalise any genetic disturbances in the brain and body. It is used to correct a disease state and to render a patient more functional, adaptive and happy. It has nothing to do with sedating the patient –this is an unacceptable side effect in most cases.
- **2. MODIFICATION** refers to modifying the behaviour. Many call it behaviour modification but I prefer to term it "emotional modification," as this is what we are aiming to achieve in order to then change the behavioural response.

Modification addresses the learning / experience of the patient and aims to remodel and rewire the brain to make them feel better in the contexts in which they are uncomfortable, and therefore choose more appropriate behavioural responses.

Many patients with anxiety disturbances cannot engage in useful modification until they have their neurochemical abnormalities improved with medication as above, because they are too stressed, aroused and reactive to rationalise, concentrate and learn.

**3. MANAGEMENT addresses the environmental component of behaviour.** It involves controlling the environment to set the dog up for success and prevent any circumstances which may contribute to sparking aggression (controlling triggers).

Practically this means that dogs, who feel anxious in the presence of food, should be isolated in a safe spot to eat where they can feel calm and confident that they will not be disturbed. In many mild cases of food-related aggression, management on its own can be employed to "solve" the problem. However, this does not address the underlying emotional problem. If we choose not to medicate, or modify the behaviour, and only to manage the dog, then we need to commit to diligent and vigilant life-long management to ensure the patient cannot be disturbed or approached by anyone when eating.

## Conclusion

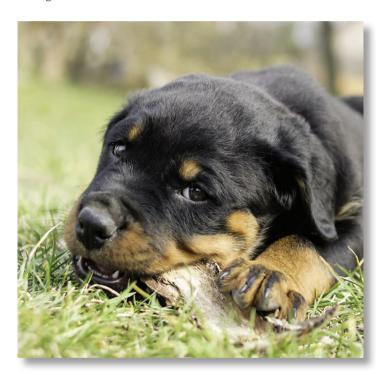
Resource Guarding is a collective term for what may be one or more of several different behavioural pathologies involving aggressive behaviour in the presence of valued items.

It is caused by a combination of genetics, epigenetics, learning / experience and environment / context. It exists along a spectrum of normal to very abnormal and the distinction lies in whether the behaviour is contextually appropriate or excessive in frequency,

intensity or duration.

It needs to be diagnosed by a veterinarian and distinguished from normal but undesirable behaviour. There is invariably underlying fear and anxiety involved when dogs show aggression around resources, and as such, it is nothing to do with "dominance".

Prevention involves ensuring that early health and experience (even before birth) is optimal. Treatment is best implemented via the classic 3-tiered approach of medication, modification and management.



## About the author

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Elle graduated from Murdoch University in 2010. Starting out in emergency and critical care, she quickly found her passion for behaviour and mental health in animals.

Fascinated by this blossoming field, Elle undertook further study through the University of Sydney in 2015 and sat her membership exams in veterinary behaviour in 2016. Elle's behavioural mantra is "compassion, communication, co-operation, cohabitation" and she brings her great enthusiasm to the

Adelaide Veterinary Behaviour Services team.