

Information Sheet

Adrenalin – The Fast and the Furious

Adrenalin (also known as Epinephrine) is a hormone and neurotransmitter. Hormones can influence thought patterns and stimulate the brain (Aloff 2002). It is important to understand how adrenalin works in the body, as it is contributing to your dog's behaviour.



Adrenalin's Function in the Body

Adrenalin increases the flow of blood to the brain and muscles to improve the “fight-or-flight” response to stress, or whenever life gets exciting or scary. It works to increase heart rate, breathing rate, and blood pressure while decreasing the flow of blood to and function of organs that are not involved in responding to emergencies (like the digestive system). Adrenalin gives that surge of energy in stressful situations.

Adrenalin impacts the release of the stress hormone Cortisol. Under normal circumstances, hormone concentration in the blood is regulated at a constant level. Under stress, this regulation does not work anymore, so raised levels of cortisol in the blood can occur.



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Good Stress and Bad Stress

Life can be exciting, scary, and at times, alarming. For your dog, an example of exciting may be a car ride to the dog park, an example of scary may be a visit to the vet, and an example of alarming might be when a pot is dropped in the kitchen. All of these situations would cause adrenalin to be released into the body.

You might think a long walk may reduce your dogs stress, but not if your dog pulls hard on the lead, barks and lunges at other dogs, or gets worried by loud noises such as cars and trucks. So, a tired dog is not necessarily a calm or happy dog.

If you constantly engage in activities which cause your dog to be stressed or aroused, your dog will have high levels of stress hormones in the bloodstream which can deplete the body, create fatigue and eventually lead to muscle atrophy.

The body's stress-chemical production is cumulative and can take weeks to months to return to normal (Frediani 2000).

What Can You Do To Reduce Your Dogs Stress?

It is impossible to avoid all stress in life. If your dog experiences a particularly stressful situation, it is a good idea to take your dog home and spend a couple of days helping him to chill out. This may include:

- Not taking your dog outside the yard and just chill out at home (aka 'couch days')
- Engage your dog in varied and interesting enrichment activities such as Kongs and puzzle toys
- Do some basic training or tricks training
- Nose work games such as finding a treat under a row of plastic cups, or hiding food in the yard
- Learn techniques such as Tellington Touch to help your dog relax

Life is Stressful

Arousal and excitement do have their places. Some dogs love high energy play or playing catch and Frisbee. And minor stressors are all just part of life. Just make sure you have the best of both worlds to offer your dog.

Being aware of how adrenalin works in the body can help you to prevent constant levels of stress in your dog, which can affect behaviour and health in the long term.

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References and Further Reading

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