



Dogs Have Issues, Too:

Helping Your Dog Cope With Stress

Dogs Have Issues, Too: Helping Your Dog Cope With Stress

- This webinar presentation will be a very brief overview/introduction to helping dogs cope with stress. Jane Miller will provide a number of stress reduction/relaxation techniques along with monitoring methods. This is a very basic introduction to stress reduction/relaxation techniques covering the definition of stress, eustress and distress. Due to time constraints we will not be focusing on the brain's role.
- The stress reduction techniques that will be discussed include breathing, acupressure points, TTouch, canine massotherapy, reiki, meditation, and biofeedback etc. The monitoring methods of stress that will be addressed include, stress signs/body language, cortisol levels from saliva, urine and hair, heart rate and variable heart rates, breathing rates, pulse, vagal tone, biofeedback, and MRI's, which are costly and invasive and may cause stress levels to increase by the testing itself.
- Understand what is meant by good stress eustress vs. bad stress distress
- Learn various stress reduction techniques to add to your toolbox since different methods work for different dogs...one size does not fit all
- An introduction to breathing techniques, acupressure points, TTouch, canine massotherapy,
- Learn how to apply this knowledge and monitoring techniques
- Learn methods of monitoring heart rate, pulse, breathing rate, cortisol levels, biofeedback MRIs and the pros and cons of these techniques.
- Resources: An extensive list of videos, links, references, articles, websites, diagrams, etc. will be provided.
- **Speaker:** [Jane Miller, LISW, CDBC, AABP-CDBT](#)

Jane Miller, LISW, CDBC, AABP-CDBT

Author of Healing Companions: Ordinary Dogs and Their Extraordinary Power to Transform Lives.

- Works in private practice as a licensed psychotherapist/clinical social worker, with a particular interest in holistic modalities of healing.
- Miller earned her BA in psychology and biology , psychobiology/neuroscience with a focus on animal behavior from Oberlin College, and her MSSA in Clinical Social Work from Case Western Reserve University. She has received the Irene Sogg Gross Award for Humanitarian Services and has contributed scholarly essays for professional journals and anthologies in the field of clinical social work.
- Majored in Neurosciences, Biology, Pre-Med & Psychology with a focus on Animal Behavior Studied intensively the behavior of Red Kangaroos in captivity vs. in the wild. Attended The British school of Falconry (certified courses in hawk handling), Certified Reiki practitioner, QiGong instructor, and certified canine massotherapist and as a Certified Dog Behavior Consultant by the International Association of Animal Behavior Consultants (IAABC-CDBC) and the Association of Animal Behavior Professionals (AABP-CDBT). She is a member of a number of canine organizations that include PPG, Truly Dog Friendly, IAADP, DWAA, Delta Society, etc.
- Jane has appeared in the PBS program Health Visions- Animals As Healers on the healing power of animals and joined world-renowned veterinarian/author Dr. Allen Schoen to present a workshop on the topic of animals as healers at a national conference for medical professionals (See NICABM)
- After studying meditation, breathing, and visualization techniques extensively since childhood she recognized how these modalities of healing impacted humans and their animals. Miller incorporates relaxation/stress reduction techniques with humans and animals that include, breathing techniques, Reiki, energy work, TTouch, acupressure points, meditation/visualization techniques, canine massotherapy, referrals to canine nutritionists, acupuncturists, chiropractors, and other specialists as necessary.
- Miller trains the inmates at the local prison relaxation techniques for themselves and the shelter dogs we are training to be more adoptable and when the dog's have the potential placed in our program as psychiatric service dogs in training.



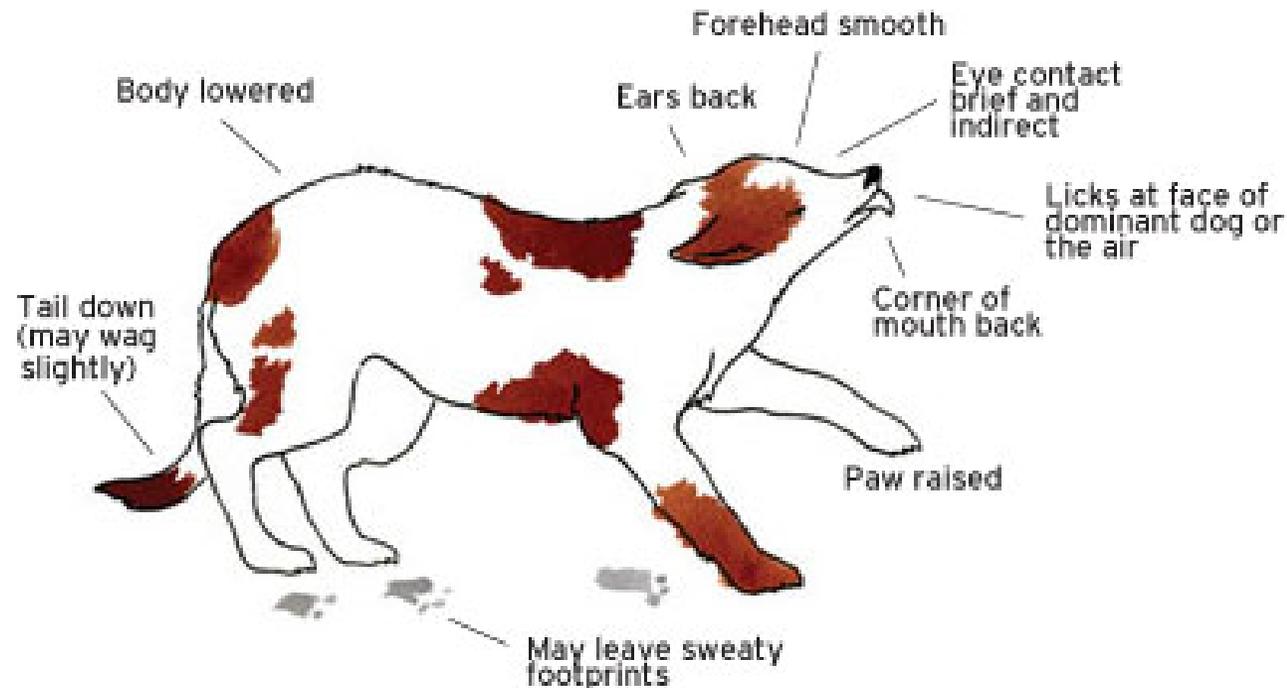
<http://healing-companions.com/>

An Introduction to This Topic

- This presentation will be a very brief overview of a number of stress reduction/relaxation techniques and methods of monitoring them. Each and every one of these can take years of studying, certifications and experience and without these I recommend you refer your clients to practitioners highly trained in these modalities and techniques. For example if you are not a trained chiropractor you would not proceed and practice these techniques. You are receiving a very basic introduction that I hope you continue to learn about. Due to time constraints we will not be focusing on the brain's role which is at least a semester long course or more.

Definition of Stress

- “Stress is the response of an organism to a demand placed upon it to change or adapt” Canine Neuropsychology, third edition, by James O’Heare, Ph. D., DogPsych, 2005, page 3.



Good Stress vs. Bad Stress

Good Stress (Eustress)

Bad Stress (Distress)

Heightened Sense of Awareness

Increases Reactivity/Jumpy

Alert

Hyper-Vigilant

Euphoria

Irritability

Learning a New Task (confident)

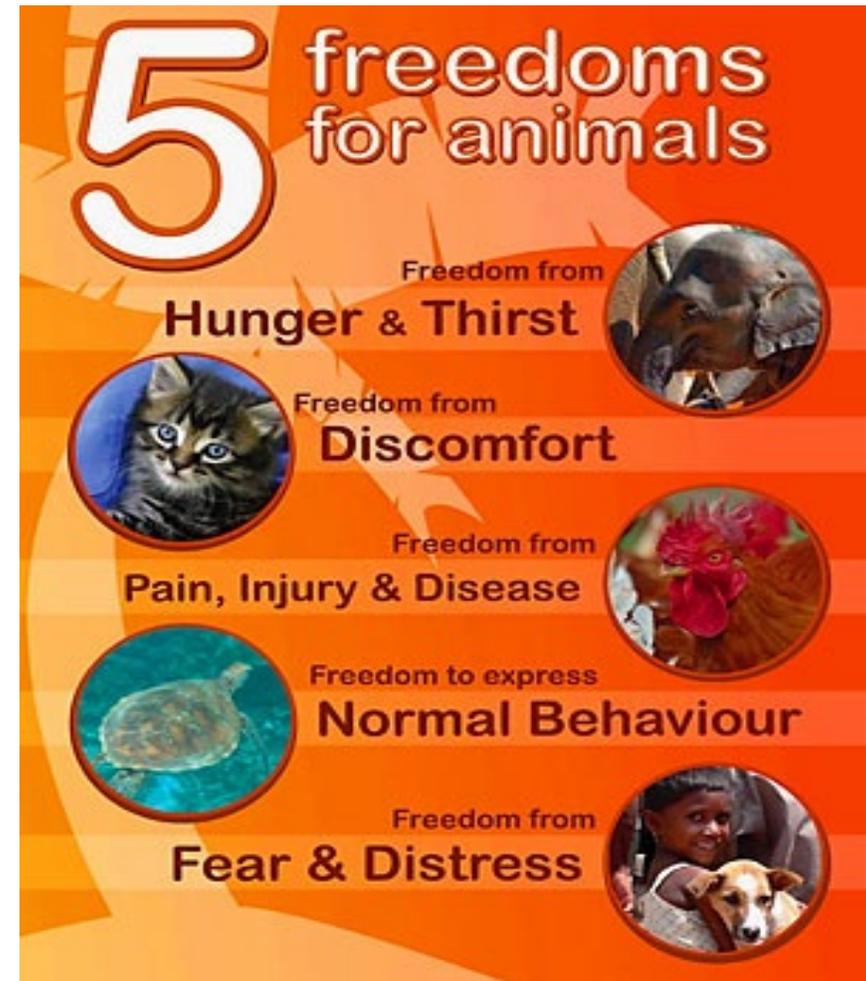
Inability to Learn (Doubtful)

<https://www.greenacreskennel.com/2015/11/01/canine-behavior-understanding-identifying-and-coping-with-canine-stress/>

Brambell Commission's Minimum Standards for Animal Welfare.

"The Five Freedoms"

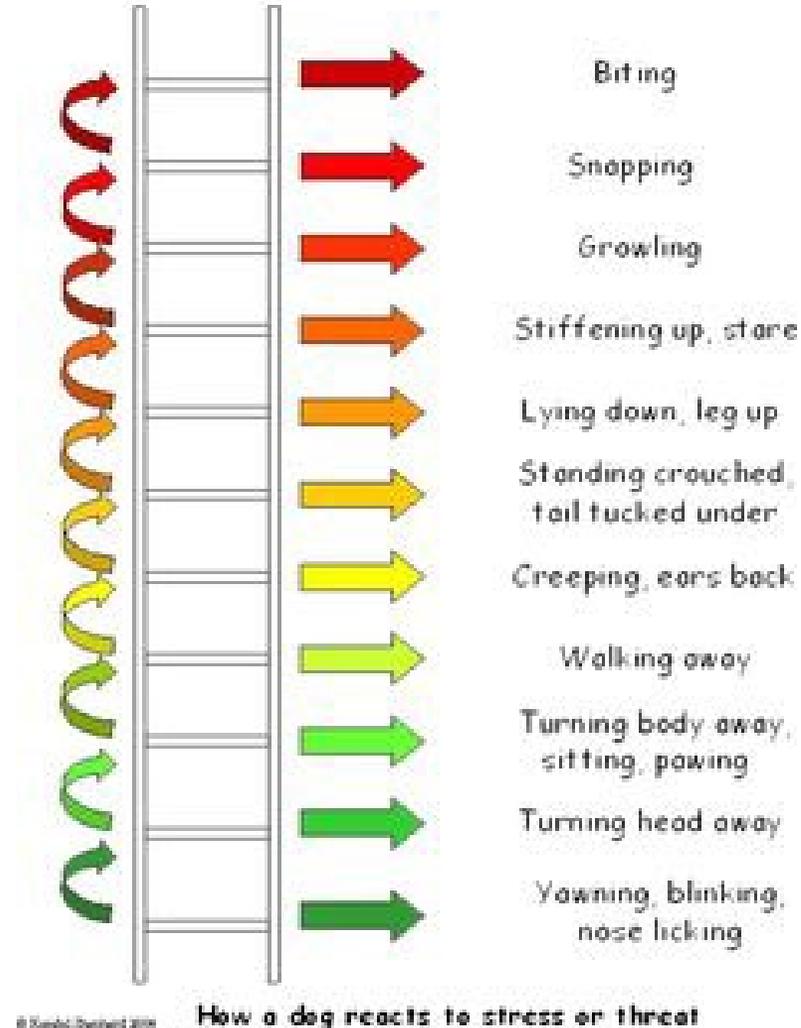
1. Ensure your pet is free from hunger, thirst, and malnutrition.
2. Ensure your pet is free from discomfort.
3. Ensure your pet is free from pain, injury & disease.
4. Ensure your pet is free to express normal behavior.
5. Ensure your pet is free from fear and distress.



How Can You Tell If A Dog Is Stressed

The Canine Ladder of Aggression

1. Excessive Shedding
2. Pinned-Back Ears
3. Licking of the nose and lips
4. Yawning
5. Panting
6. Destructive Behaviors
7. Avoidance
8. Accidents
9. Excessive Sniffing
10. Illness
11. Excessive Barking/Howling
12. Shaking Off- Like After a Bath



Calming Signals

-Turid Rugaas- International Dog Trainer



Paw Raise

Look Away

Lip Lick

Look Away



Look Away

Blink

Ears Shifting

Still Paw Raised

Big Blink

Stress Reduction Techniques - Basics: Increase or decrease in the following depending on the canine: Exercise, nutrition, down time, sniff time, playtime, mental stimulation, etc.

1. Breathing Exercises

- a) The Stimulating Breath (Bellows Breath)
- b) The 4-7-8 (Relaxing Breath) Exercise
- c) Breath Counting

2. Dog Acupressure Points

- a) Dog Acupressure Chart Information
- b) Acupoints to Reduce Stress

3. Dog Massage

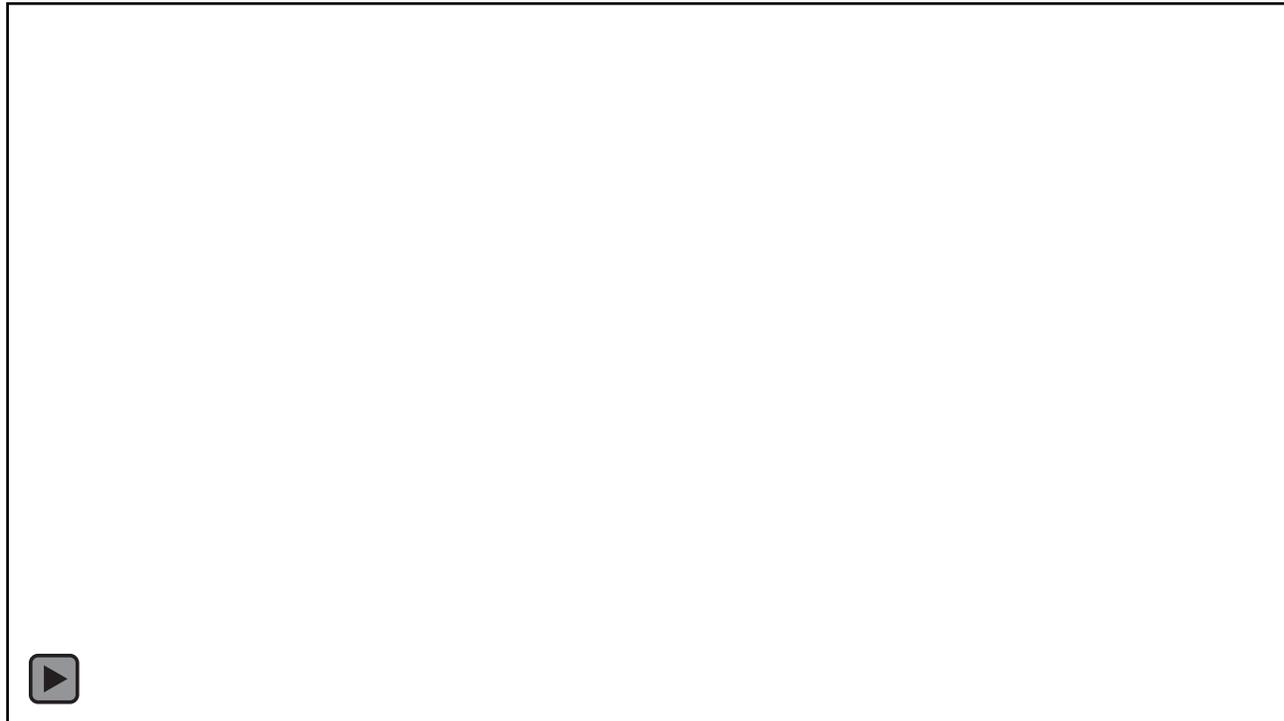
- a) Dog Massage for Stress & Anxiety Video demonstration

- Different techniques work for different people and dogs. This is not a one size fits all. I believe this makes it crucial that you have a range of methods and techniques in your toolbox. Or have built relationships with specialist that are experts and trained in the range of options to assist our dog's in living a healthier life with less stress, reactivity, and discomfort.

Calming the Fearful Dog



Thresholds and Doing Nothing



Arousal, Anxiety and Fear



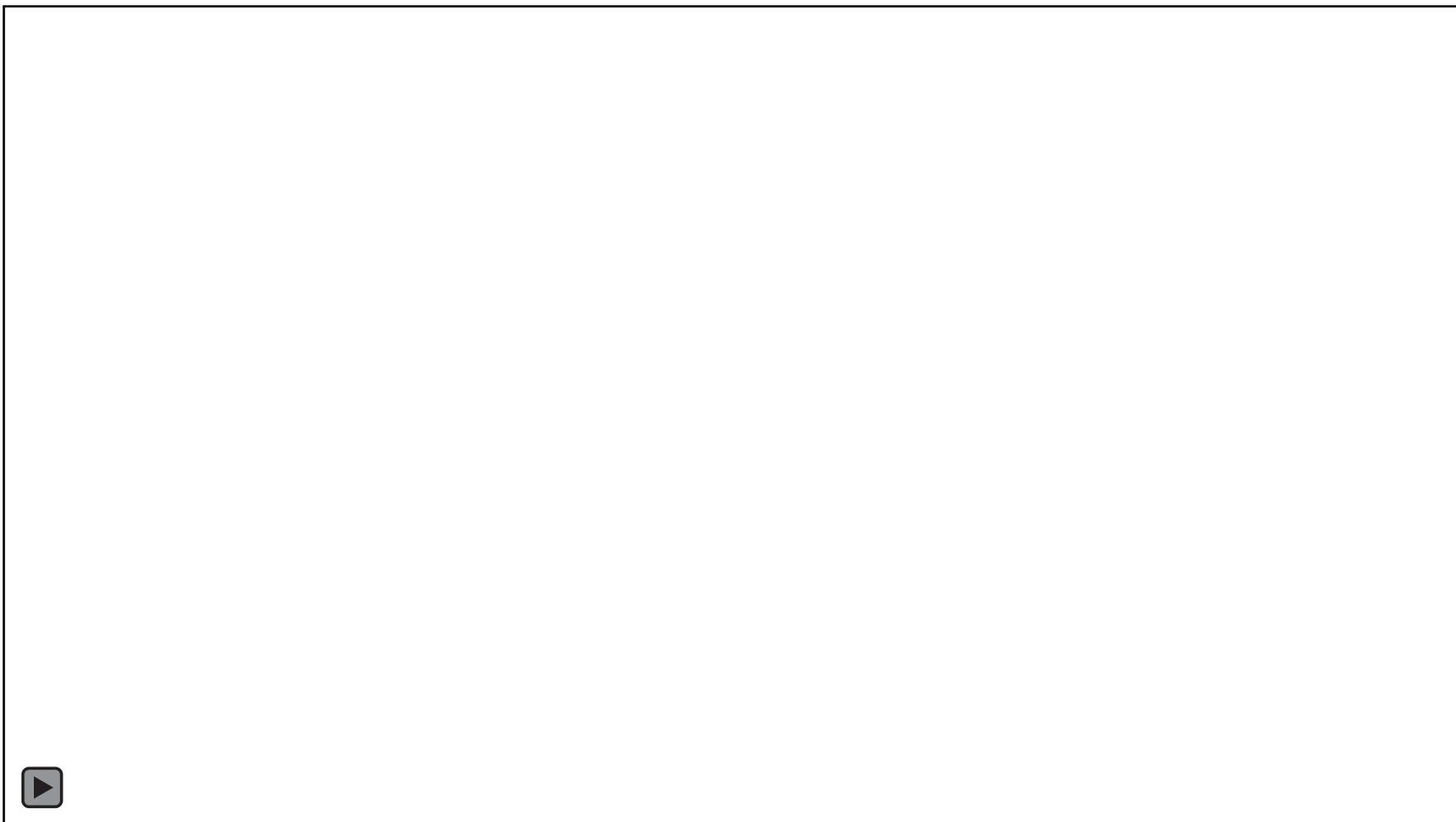
The Stimulating Breath (Bellows Breath)

- Adapted from a yogic breathing technique. Its aim is to raise vital energy and increase alertness.
- Inhale and exhale rapidly through your nose, keeping your mouth closed but relaxed. Your breaths in and out should be equal in duration, but as short as possible. This is a noisy breathing exercise.
- Try for three in-and-out breath cycles per second. This produces a quick movement of the diaphragm, suggesting a bellows. Breathe normally after each cycle.
- Do not do for more than 15 seconds on your first try. Each time you practice the Stimulating Breath, you can increase your time by five seconds or so, until you reach a full minute.
- If done properly, you may feel invigorated, comparable to the heightened awareness you feel after a good workout. You should feel the effort at the back of the neck, the diaphragm, the chest and the abdomen. Try this breathing exercise the next time you need an energy boost and feel yourself reaching for a cup of coffee.

Video of Dr. Weil demonstrating the Stimulating Breath:

<https://www.drweil.com/videos-features/videos/the-stimulating-breath/>

Bellows Breath Video



The 4-7-8 (Relaxing Breath) Exercise

- Exhale completely through your mouth, making a whoosh sound.
- Close your mouth and inhale quietly through your nose to a mental count of **four**.
- Hold your breath for a count of **seven**.
- Exhale completely through your mouth, making a whoosh sound to a count of **eight**.
- This is one breath. Now inhale again and repeat the cycle three more times for a total of four breaths.

• Video of Dr. Weil demonstrating the 4-7-8 Exercise:

• <https://www.drweil.com/videos-features/videos/breathing-exercises-4-7-8-breath/>

Dr. Weil 4-7-8 Relaxing Breath Video



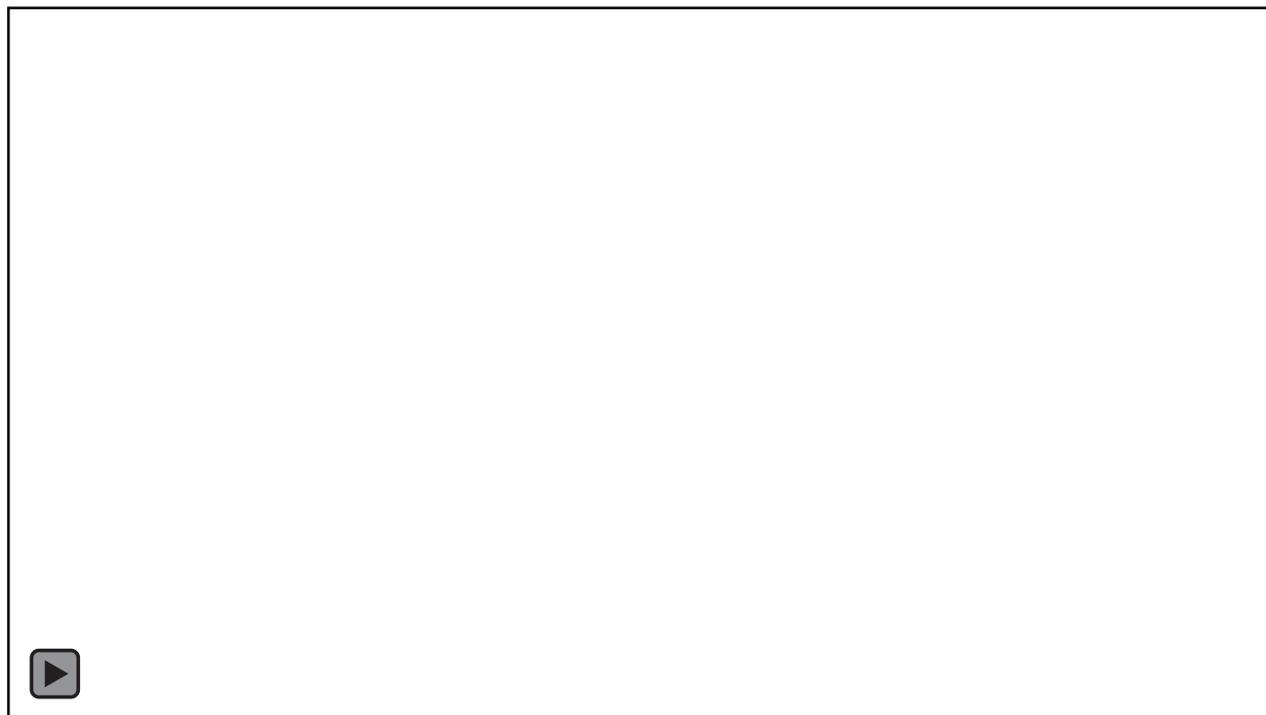
Breath Counting

- If you want to get a feel for this challenging work, try your hand at breath counting, a deceptively simple technique much used in Zen practice.
- Sit in a comfortable position with the spine straight and head inclined slightly forward. Gently close your eyes and take a few deep breaths. Then let the breath come naturally without trying to influence it. Ideally it will be quiet and slow, but depth and rhythm may vary.
 - To begin the exercise, count "one" to yourself as you exhale.
 - The next time you exhale, count "two," and so on up to "five."
 - Then begin a new cycle, counting "one" on the next exhalation.
- Never count higher than "five," and count only when you exhale. You will know your attention has wandered when you find yourself up to "eight," "12," even "19."
- Try to do 10 minutes of this form of meditation.

Video of Dr. Weil demonstrating Breath Counting:

<https://www.drweil.com/videos-features/videos/breathing-exercises-breath-counting/>

Breath Counting Video



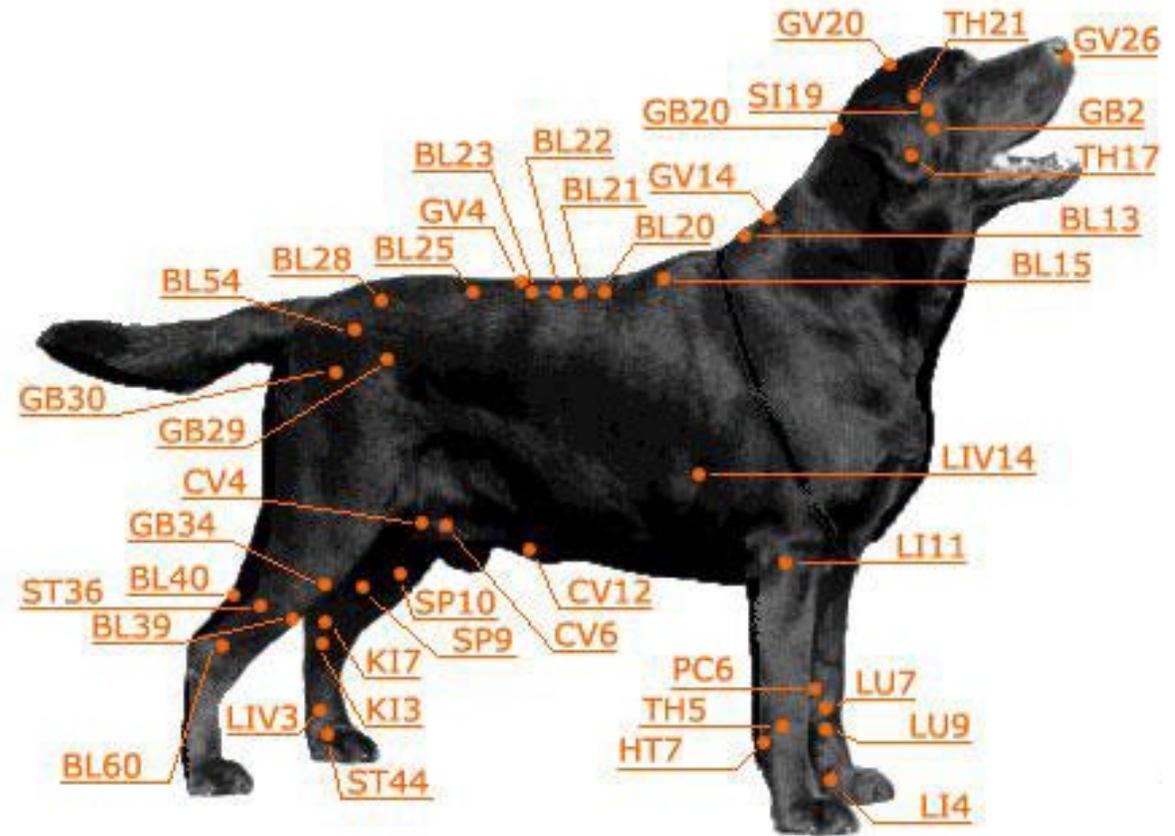
Dog Acupressure Points

calms the spirit, clears the mind

On top of the head, in a notch just forward of boney protuberance on the midline, between the ears. Use back and forth motion in the notch.

Hundred Meetings

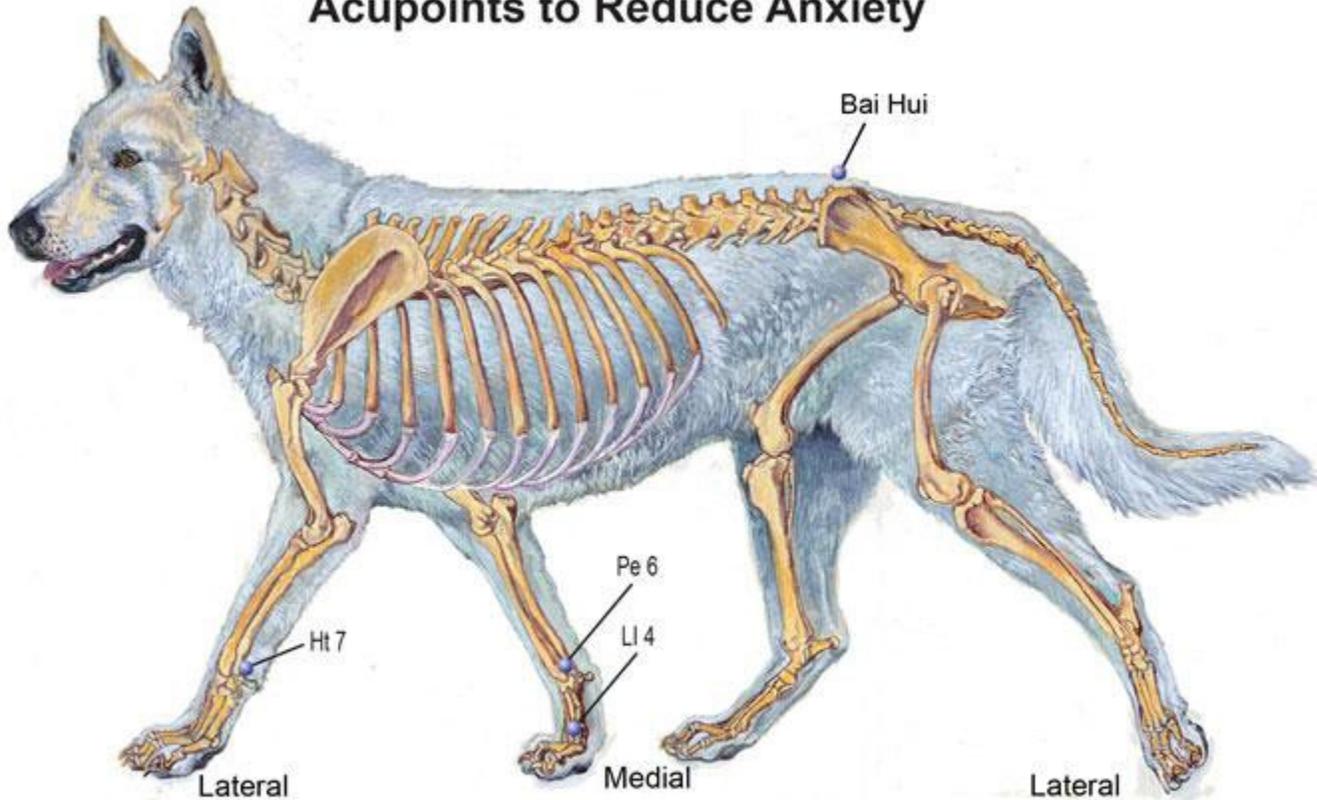
GV20



For more information go to: <http://www.luckydoghealth.com/dogacupressurechart.htm>

Acupoints to Reduce Stress

Acupoints to Reduce Anxiety



Points	Location
LI 4	At dewclaw, medial aspect of foreleg.
Ht 7	Located on the outside of the foreleg, in the deep crease of the carpal joint.
Pe 6	Located on the inside of the foreleg, about 2 inches above the wrist.
Bai Hui	Found on dorsal midline at the lumbosacral space.

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www.animalacupressure.com

For more information go to: <http://www.luckydoghealth.com/dogacupressurechart.htm>

AN SHEN, PEACEFUL SPIRIT, AMAZING ACUPRESSURE POINT

CLASSICAL POINT – AN SHEN, PEACEFUL SPIRIT, Amy Snow and Nancy Zidonis

Classical acupressure points are taken from Traditional Chinese Medicine literature. These acupoints may or may not be located on the 12 major Meridians or 2 Extraordinary Vessels. Classical points have their own Chinese “pinyin” name and their own functions and energetics.

An Shen, Peaceful Spirit, is especially powerful and commonly used for dogs and cats. This Classical point is not associated with a channel or any of the 365 transpositional acupoints. It’s a rare dog that doesn’t enjoy a good rub behind his ear – that’s exactly where An Shen is located. Quite a few cats are given to enjoying a rub on An Shen and even make an effort to rub up against you right on the exact point.

-

Benefits

An Shen is a calming point and thus resolves shen (i.e., the spirit of the animal) disturbances. It is known to help dispel anxiety, fear, grief, and timidity. An Shen can be used for behavioral issues such as obsessive-compulsive disorders, aggression, and lack of focus for training. The Classical An Shen point is also used to address physical issues such as seizure disorders (Internal Liver Wind), hearing loss, nose bleeding, nasal congestion, facial swelling or paralysis, and stiffness of the head and neck.

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Location

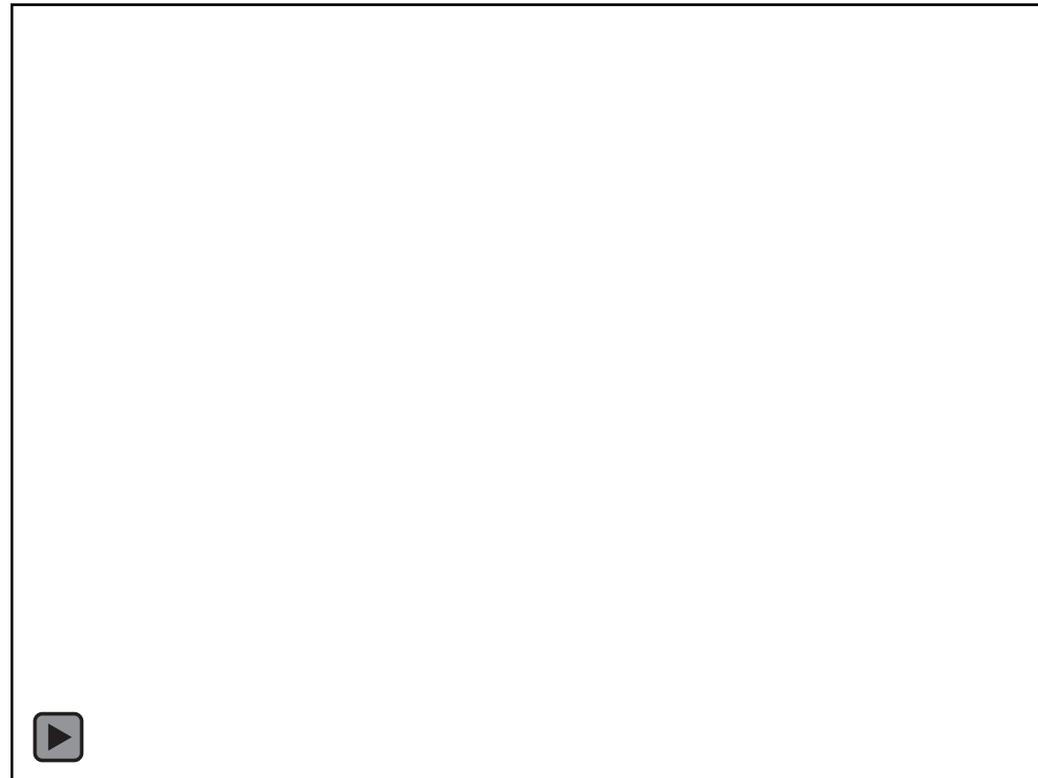
The location of the An Shen point is the same for dogs and cats: on the back side of the animal’s ear midway between the base of the ear (Triple Heater 17) and Gall Bladder 20 which is located in the depression created below the occiput and the wings of the atlas.

<https://www.animalacupressure.com/>

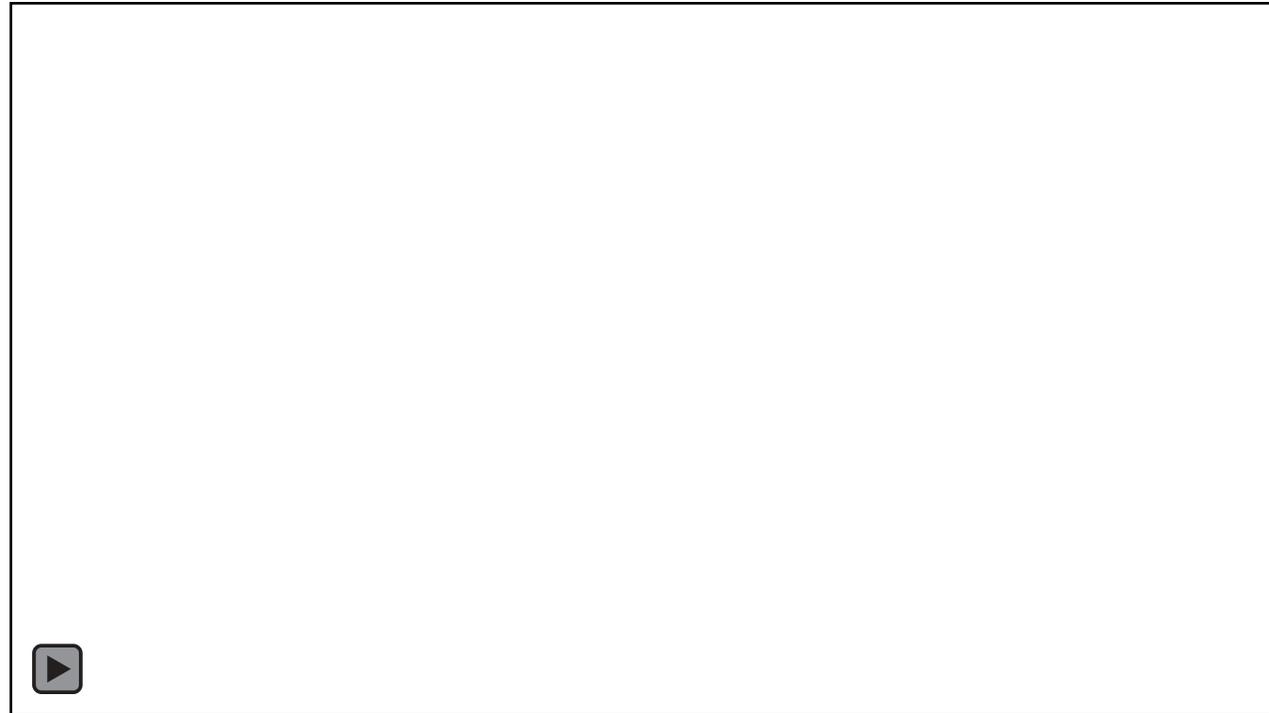
Dog Massage : Dog Massage for Stress & Anxiety

<https://www.youtube.com/watch?v=a2Lv0oJrGyQ>

- I do NOT recommend treating a dog WITH FOOD when in a relaxed state. Would you eat candy while you are meditating or receiving a massage? Could possibly effect relaxed state by altering digestive system, enzymes, etc.



Tracy & Finola Demonstrating Relaxation Technique (In a noisy hotel hallway) <http://youtu.be/k9YTGxFI1II>



TTouch

- Developed by Linda Tellington-Jones.
- Goal of TTouch is to “stimulate the function and vitality of the cells in an animal’s body, and to activate unused neural pathways to the brain.”
- TTouch engages the parasympathetic nervous system, relaxing muscle tension and allowing heart rate, blood pressure and circulation to slow, in effect bringing stress levels down. Bringing the stress level down may allow a dog to have more body awareness, which can help if the body is compensating because of a past fear or pain, says Frediani. “The touches, in some fashion, help to release that memory and bring about healthy function in the cells.”

Tellington TTouch

- <https://www.ttouch.com/>

Tellington TTouch® Quick Guide To Calm Dog Anxieties

Tellington TTouches
Tellington TTouch was developed by internally recognized animal expert, Linda Tellington-Jones.

	Noah's March	Ear TTouches	Lying Leopard TTouches
Helps	Grounds; Enhances Awareness, Boosts Confidence, Reassures	Calm, Soothes, Balances, Quiets Respiration, Improves Digestion, Alleviates Shock	Releases Fear & Pain, Decreases Nervousness, Relaxes, Develops Trust, Reduces Sensitivity
How To	Long sweeping strokes, from head to tail, down chest, along sides and legs to toes.	Gently stroke around base to tip of ear; alternate ears. Repeat several times.	With fingerprint area, push skin around in a circle, the size of a pencil eraser. Complete 1 full circle and continue another quarter. Apply where dog enjoys.
			

Remember to slow and deepen your own breathing while applying each TTouch.

Frequency

— Mild Issues —
Start with Noah's March.
If additional calming is needed, add Ear TTouches and Lying Leopard TTouches.

— Moderate to Extreme —
Use daily for 5-20 minutes and during upsets.

If behaviors persist or worsen, add in additional CalmDogsNaturally.com tools using Flower Essences and Essential Oils & consult with Sandy Rakowitz or other Certified TTouch® Practitioner through www.TTouch.com.

Copyright 2012, Sandy Rakowitz
For more in-depth help, to set up a consultation, class or training via phone, skype or in person
Purchase Quick Guides, Anxiety Scale, Flower Essences, Tellington TTouch, and Young Living Essential Oils:
Visit www.CalmDogsNaturally.com or call (434) 973-8864

How to do the Tellington -Touch

The foundation of the TTOUCH method is based on circular movements of the fingers and hands all over the body. The intent of the TTOUCH is to activate the function of the cells and awaken cellular intelligence – a little like “turning on the electric lights of the body”. The TTOUCH done on the entire body, and each circular TTOUCH is complete within itself. Therefore it is not necessary to understand anatomy to be successful in speeding up the healing of injuries or other ailments, or changing undesirable habits or behavior.

To do the TTOUCH, imagine the face of a clock on your animal’s body, half an inch to one inch in diameter. Place your lightly curved fingers at six o’clock on your imaginary clock, and push the skin around the face of the clock for one and a quarter circles. Place your thumb two to three inches from your forefinger and feel a connection between thumb and forefingers. When possible, support the body gently with your free hand, placing it opposite the hand making the circle. Maintain a steady rhythm and constant pressure around the circle and a quarter, whether the TTOUCH is light or firm, pay particular attention to the roundness of the circles.

After each circular TTOUCH you can either move to another spot at random, or you can run parallel lines on the body by making a circle with a little slide and then another circle. Both types of movements induce relaxation and improve self confidence.

By placing your free hand in a supporting position and making a connection between your two hands, this will keep the animal in balance and enhance the effect of the TTOUCH.

Most of the time, clockwise circles are the most effective for strengthening and rehabilitating the body, as well as improving self-confidence and performance. However, there are times when counterclockwise circles are appropriate for releasing tension. Practice both directions and trust your fingers if they are moving in a counterclockwise direction. <https://buddhadog.com/>

TTouch Study



- One study, done at the Biofeedback Institute in Boulder, Colorado, showed that TTouch can create changes in certain brain waves. During the study, the brain wave patterns that emerged during TTouch were different from those that emerged from simple petting, stroking, or massage. The results suggest that TTouch may relax the body and brain while simultaneously encouraging an alert, thinking state

Monitoring Techniques Using Bio Feedback

Typically, deep breathing, relaxation and visualization procedures are used with feedback of information, although the specific training procedures vary according to the purpose of the training or therapy.

Learning to change physiologic functions is a skill, and like all skills, practice and knowledge are essential.

Self-regulation of body processes is possible because mind and body interact. To understand how powerful the connection of the mind and body is, imagine what happens inside the body when you step on a slithering black snake. The first response is body arousal as adrenaline is released and other responses prepare the body for fight or flight – and then you discover that it was only the garden hose! Or remember what happens to mind and body when you are rushing to an important meeting and you get stuck in a snarl of traffic that isn't moving. The mind perceives a stressor and the body responds.

Well known brain processes govern the physiological response to mental activity such as stress. When stress continues, physical symptoms might develop. Through relaxation and stress management, however, other brain processes are triggered that reduce the stress response and enable the body to recover. Because mind and body interact, we can guide the body toward health when stress, disease processes or injury have hindered the body's natural tendency to remain healthy. Biofeedback instruments are important while learning self-regulation because, like feedback from a mirror, the feedback from the instrument helps the trainee gain control of mental and physiological processes that enhance optimal functioning. Biofeedback instrumentation is no longer needed when self regulation skills are mastered, just as the dance studio mirror is no longer needed when the dancer has mastered the dance.

<https://www.qualitytherapycenter.com/>

Monitoring Techniques Using Bio Feedback Continued

The key elements in biofeedback training that make self-regulation possible are mind/body interaction, feedback of information, increased awareness and practice. In many applications the skill of deep relaxation is also essential because relaxation promotes health and is helpful in treating and preventing many disorders. In other applications, such as recovery of muscle function after injury, the primary tool is feedback, with a therapist functioning as a coach, and teaching skills for improved performance. The seemingly simple process of feedback facilitates learning and the acquisition of self-regulation skills that become life-long habits.

BIOFEEDBACK INSTRUMENTS AND APPLICATIONS

Biofeedback instruments are highly sensitive, safe electronic devices that monitor physiologic processes. Physiologic signals from the body are amplified by the feedback instrument and converted into useful information. The biofeedback instrument may have a meter, light, computer display or tone that presents this information to the trainee.

Muscle Tension Feedback – The electromyograph (EMG) measures the electrical activity of skeletal muscles monitored with sensors placed on the skin over appropriate muscles. EMG feedback is used for general relaxation training and is the primary modality for treatment of tension headache, bruxism and temporomandibular joint problems, chronic pain, muscle spasm, and partial paralysis or other muscular dysfunction due to injury, stroke or congenital disorders. Physical rehabilitation through neuromuscular re-education is an important application of EMG feedback.

Thermal (blood flow) Feedback – Thermal feedback instruments measure blood flow in the skin. When the small vessels in the skin dilate, blood flow and temperature increase, and when these vessels constrict blood flow and temperature decrease. The vessels in the fingers are particularly sensitive to stress (vasoconstriction) and relaxation (vasodilation) and therefore feedback of finger

Monitoring Techniques Using Bio Feedback Continued

Thermal (blood flow) Feedback (continued) – temperature is a useful tool in relaxation training. Blood flow feedback is also used in the treatment of specific vascular disorders including migraine headache, Raynaud’s disease, essential hypertension and valcular complications of other diseases such as diabetes.

Electrodermal Feedback – The electrodermal response (EDR) feedback instrument measures skin conductivity from the fingers and palms. The EDR is highly sensitive to emotions in some people. EDR feedback has been used in the treatment of excessive sweating (hyperhidrosis) and related dermatological conditions, an for relaxation and desensitization training.

Brainwave Feedback – The electroencephalograph (EEG) monitors brainwave activity from sensors placed on the scalp. Applications for EEG feedback are currently being developed. These include: epilepsy, hyperactivity and attention deficit disorder in children, alcohol/chemical dependence and other addictive disorders, traumatic brain injury, sleep onset disorders and insomnia.

Special Applications – Specialized biofeedback instruments have been developed to facilitate self regulation in a variety of stress related and organic disorders such as heart arrhythmias, fecal and urinary incontinence including bedwetting, respiratory problems and irritable bowel syndrome.

Neurofeedback Resources

See Sebern Fisher's research:

www.sebernfisher.com

Bessel Van Der Kolk:

www.besselvanderkolk.com

Brain research see Gazzaniga and neuroplasticity:

<https://www.youtube.com/watch?v=K2eC3514jMA&feature=youtu.be> ,

“How little we know about stress.” by Simon Gadbois at SPARCS Conference:

- The importance of the human-animal bond and how that increases oxytocin. We need to help dog's develop coping skills, Balancing the negative and positive stressors in their lives. Teaching your dog ways to self-regulate is imperative and I highly recommend the breathing, visualization, meditation, acupressure points, TTouch, canine massotherapy techniques briefly covered in this presentation and in addition to body language which depends on the individuals knowledge and observational skills, getting baselines of heart rates, pulses and breathing rates so you can monitor major fluctuations. Maintaining balance in our dog's lives is crucial and what might be stressful for one dog might be a de-stressor for another. A herding dog might demonstrate a reduction in stress levels after herding sheep when another dog might have stress increase. Individualize ALL canine stress reduction protocols to that specific dog, the amount of exercise, mental stimulation, etc. Be aware that canines pick up on OUR ANXIETY and levels of stress so it starts with us and the environment they live in. Finally, I want to reiterate ONE SIZE DOES NOT FIT ALL! We are here to help the dog's and our client's live more comfortably, in homes filled with love, respect, trust, security and balance (homoeostasis for everyone.)

Monitoring Your Pet's Respiratory Rate

- A resting respiratory rate is the number of times your pet takes a complete breath (in and out) within a 60 second period while at rest or sleeping (as opposed to when active, playing or dreaming).
- Respiratory rates should be monitored in pets with significant heart disease and a risk of developing congestive heart failure (fluid in or around the lungs). This type of monitoring helps to catch the earliest signs of congestive heart failure before the condition develops into an emergency situation potentially requiring hospitalization and oxygen therapy.
- How to measure your pet's resting respiratory rate
- Wait until your pet is sleeping soundly (i.e. not dreaming), and not panting or purring.
- Count the number of times the chest rises and falls (1 full rise and fall equals 1 breath) over 60 seconds.
- Do this at least once a day for 7 days, and record your pet's resting respiratory rate on your calendar.
- This will help you determine your pet's average resting respiratory rate.
- Most dogs and cats have a normal resting respiratory rate with breaths per minute ranging between the mid-teens to mid-20s. In general, a resting respiratory rate over 35-40 breaths per minute is considered abnormal. Specifically, for your individual pet, any increase more than 20% above their average resting respiratory rate is considered abnormal.
- If you discover an elevated resting respiratory rate in your pet (without any evidence of difficulty breathing, increase in cough or change in character of cough), recheck their resting respiratory rate again in 30-60 minutes. If your pet's resting respiratory rate remains elevated, please contact your veterinarian or the cardiology service at BluePearl Veterinary Partners as soon as possible

Medical Article: <http://bluepearlveter.com/monitoring-your-pet%E2%80%99s-respiratory-rate-at-home/>

Canine HPA Axis

**Psychogenic Stress in Hospitalized Dogs:
Cross Species Comparisons, Implications for
Health Care, and the Challenges of
Evaluation**

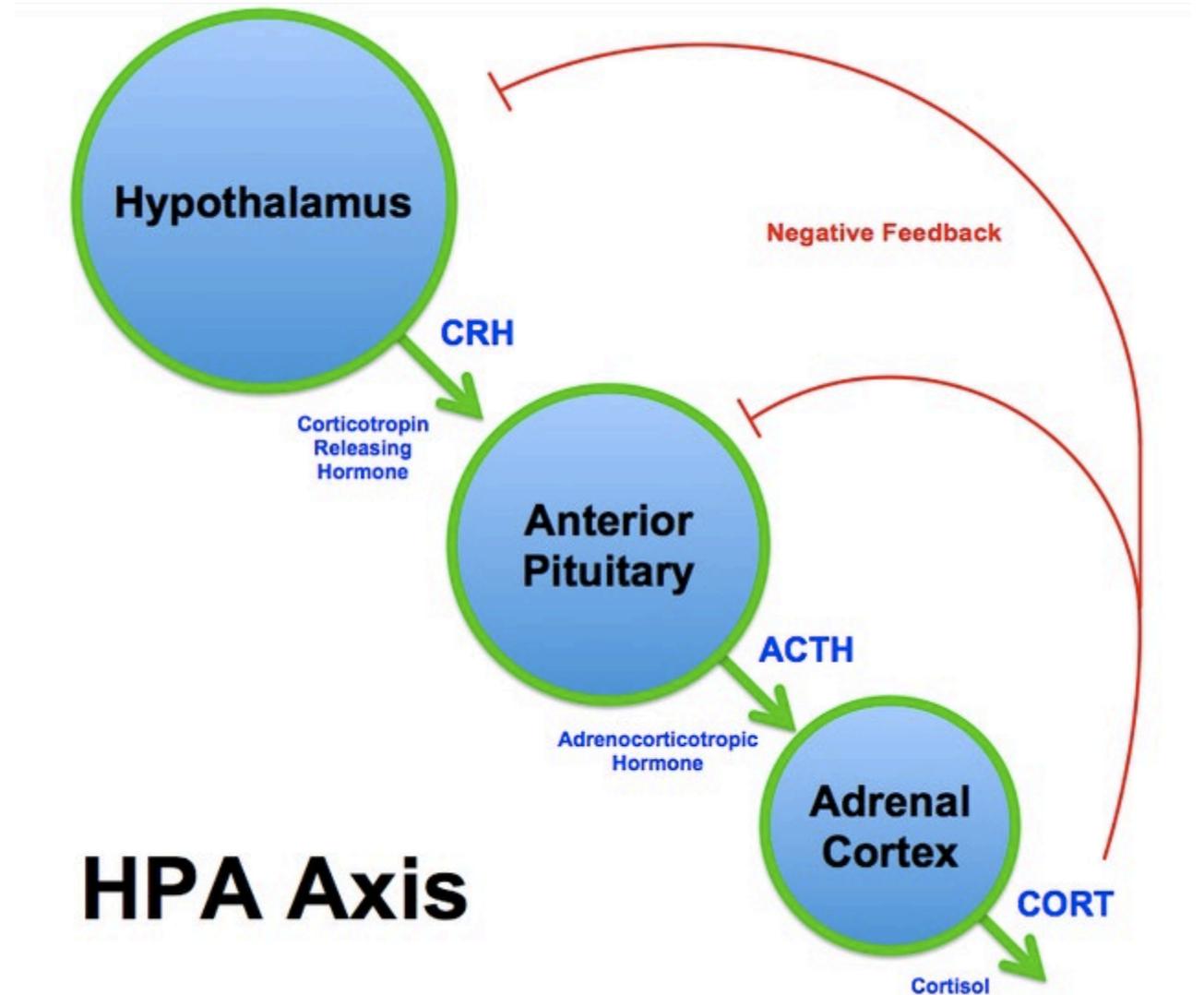
[Jessica P. Hekman](#)¹, [Alicia Z.
Karas](#)^{2,*} and [Claire R. Sharp](#)²

SEE: <http://www.mdpi.com/2076-2615/4/2/331>

**Using hypothalamic–pituitary–adrenal
measures for assessing and reducing the
stress of dogs in shelters: A review**

[Michael B. Hennessy](#)

See: <http://www.sciencedirect.com/science/article/pii/S016815911300227X>



What's Normal?

Normal Heart and Pulse Rates

- **Puppy** (less than 1 year): 120-160 beat per minute
- **Small, miniature or toy breed** (30 pounds or less): 100-140 beats per minute
- **Medium to large breed** (greater than 30 pounds): 60-100 beats per minute

Normal Breathing Rates

- 10-30 beats per minute
- Up to 200 pants per minute (breathing with its mouth open and tongue out)

Normal Temperatures for Dogs

- A temperature of 100°-102.5° is normal
- A Temperature lower than 100°F or greater than 104°F is an emergency; call your veterinarian at once

Know What's Normal

Know What's Normal 

It will be easier to recognize what is abnormal for your pet if you first become familiar with what is normal. Observe how your dog breathes, eats, drinks, walks, urinates and defecates so you will be sensitive to changes that might signal problems.

Check the Scene

Before approaching an injured dog, look around for potential hazards that may still exist and could potentially harm you. For example, if an animal has been struck by a car, make sure there are no other cars approaching before running into the street; or if your dog is in a fight, don't get between the two animals or you might become the next victim.

Check the Dog

Make an initial evaluation that should be completed in about 1 minute. Do the following:

- **Situation.** Quickly observe the animal's body; posture; presence of blood, urine, feces or vomit; breathing pattern; sounds and other materials (possible poisons around the dog).
- **Airway.** Is it open? If not, see Airway, page 36.
- **Breathing.** Is the animal breathing? If not, see Breathing, page 36.
- **Bleeding.** If the animal is bleeding, see Bleeding, page 48.
- **Circulation.** Is there a heartbeat and a pulse? If not, see Circulation, page 37.

- **Mucous membrane color.** See Observe Your Dog's Mucous Membrane Color, page 27.
- **Capillary refill time.** See Capillary Refill Time, page 28.
- **Level of consciousness.** Is the animal alert, awake, seizing, disoriented, hyperactive, depressed or unconscious? If the animal is seizing, see Seizures, page 101.

Always have the telephone number of your veterinarian, 24-hour veterinary emergency hospital, American Society for the Prevention of Cruelty to Animals' Animal Poison Control Center (1-888-426-4435) and animal shelter or animal care and control agency readily available!

Heart Rate and Pulse

You can feel your dog's heartbeat at about the point where the left elbow touches the chest (about the fifth rib). **Remember to use a light touch; if you press too hard you will not feel the pulse.**

1. Lay your dog down on her right side. But, if it's easier, allow her to stand.
2. Gently bend the left front leg at the elbow and bring it back to where it touches the chest.
3. Place your hand or a stethoscope (available at most pharmacies) over this area to feel or hear and count heartbeats.

Know What's Normal



You can feel your dog's pulse by lightly touching your middle and index fingers to these three additional locations.

The Inner Thigh. (This is the easiest of the three locations to feel the pulse.)

1. Lay your dog down, on either side.
2. Gently lift her upper hind leg away from the lower hind leg.
3. Place your two fingers as high up as possible on the inside of either leg, just where the leg meets the body wall.
4. Feel for a recess in the middle of the leg approximately half way between the front and back; this recess is where the blood vessels run and where you will find the pulse.



Just Below the Wrist (Carpus).

1. Have your dog sit or lie down.
2. Locate the area just above the middle pad on the underside of either front paw.
3. Lightly place your middle and index fingers at this point.



tips

What's Normal

Normal Heart and Pulse Rates

Heart rates outside these ranges could signal an emergency:

- Puppy (less than 1 year old): 120–160 beats per minute
- Small, miniature or toy breed (30 pounds or less): 100–140 beats per minute
- Medium to large breed (greater than 30 pounds): 60–100 beats per minute

Normal Breathing Rates

- 10–30 breaths per minute
- Up to 200 pants per minute (breathing with its mouth open and tongue out)

Normal Temperatures for Dogs

- A temperature of 100°–102.5° F is normal.
- A temperature lower than 100° F or greater than 104° F is an emergency; call your veterinarian at once.

Know What's Normal



Just Below the Ankle (Hock).

1. Have your dog sit or lie down.
2. Locate the area just below the ankle on the top side of either hind paw.
3. Lightly place your middle and index fingers at this point.

Breathing Rate

1. Have your pet either stand or lie down.
2. Watch your pet and count the number of times that the chest rises and falls in 1 minute.

In an emergency, if you are not sure if your pet is breathing, try one of these techniques:

- Hold a cotton ball or tissue just in front of the nostrils and see if it moves
- Hold a mirror up to your pet's nose and look for condensation

Know What's Normal

Respiratory Pattern. When a dog inhales normally, the chest should expand. If the abdomen expands instead of the chest, that could indicate a problem. Exhaling should be an easy process with no work involved. If your pet makes loud, shallow or gasping sounds when breathing, or is not breathing, this is an emergency; see CPR, page 36.

How to Take Your Dog's Temperature

1. See Restraint Techniques, page 31.
2. Use a pediatric digital thermometer, found in any drug store.
3. Lubricate the thermometer with a water-based lubricant or petroleum jelly.
4. Insert the tip of the thermometer into the rectum (just beneath the tail).
5. Leave the thermometer inserted until it beeps.
6. Remove and read the number.



Observe Your Dog's Mucous Membrane Color

The color of your dog's mucous membranes (gums and inner eyelids) can help you determine if enough oxygen and blood are flowing to all of his tissues. To check the color of the mucous membranes, lift your dog's upper or lower lip and observe the color of his gums or inner lip.

- If your dog has black (pigmented) mucous membranes, place your thumb on the skin just under the lower eyelid and gently pull down to observe the inner eyelid membrane color. It should be pink, which means the tissues are receiving enough oxygen.
- If your dog's mucous membranes are blue, pale, yellow, cherry red, white, brick red or brown, this is an emergency. Call the veterinarian immediately. If your dog's mucus membranes are any other color, see Poisoning, page 96.



How to Approach, Capture and Restrain a Dog

How to Approach, Capture and Restrain a Dog

Capillary Refill Time

Observing how soon the gums or inner lips return to their normal pink color after you press on them is a quick way to know if your dog's blood circulation is normal.



1. After checking the mucous membrane color, press lightly on the gums or inner lip.
2. Observe the color as it turns white and then pink again. The pink color should return after 1 or 2 seconds.
3. Call your veterinarian at once if the pink color returns in less than 1 second or more than 3 seconds. This is an emergency.

How to Approach, Capture and Restrain a Dog

Always approach a sick or injured dog slowly and cautiously. Even your own sweet pooch might strike out if frightened or in pain. Observe her posture and expressions—especially her face, ears, tail, fur and body. Listen to the sounds she's making.

As you approach, allow the animal to smell the back of your hand. Never make quick or jerky movements or loud sounds. Allow the dog to see what you are doing and watch her reactions carefully. Always speak in a soft, soothing tone to an injured or sick animal. Avoid direct eye contact—some dogs may perceive it as a threat.

Body Language Warning Signs

Any of these behaviors may signal that a dog is inclined to bite. Do not attempt treatment on any dog exhibiting any of these warning signs:

- Ears held forward; tail may wag slightly
- Growling and with fur standing up on shoulders, back and hind end
- Snarling with upper lips lifted and teeth exposed

OR. . .

- Crouching with tail between legs
- Ears held straight back or flat against the head
- Snarling and with fur on the back raised

OR. . .

- Assuming submissive posture
 - Lying on his side with belly exposed
 - Making licking gestures or urinating

Even a fearfully submissive dog can quickly become a biting dog if you continue to approach.

If you cannot safely handle an animal, call your local animal shelter or animal care and control agency. You can't help an animal by getting hurt yourself. While waiting for assistance to arrive, you can do other things to help, such as diverting traffic if an animal has been hit by a car and is still in the street, or keeping other people and animals away from the injured animal.

Capture Techniques

Always allow a dog to know where you are so you don't surprise her.

Leash. Leather, nylon or canvas leashes are strong and easy to use. (Do not use chain-link leashes.)

1. Make a large loop in a leash by passing the end you normally connect to a collar through the hole in the handle.
2. Standing just behind or to the side of the animal's head, drop the large loop over the neck and tighten.



Towel or Blanket. If the dog is small (less than 30 pounds) you can sometimes capture her by dropping a towel or blanket over her.

1. First observe the dog's position so you don't put your hands near her mouth.
2. Drop a large towel or blanket from above and behind the dog.
3. Grasp the scuff of her neck so she cannot turn around and bite your hand through the towel.
4. Transfer the dog to a sturdy box or carrier.

Gloves. While you might think wearing thick work gloves will help you safely handle a dog, they will cause you to lose dexterity, and dogs can bite through most glove material. However, wear nonlatex gloves when treating wounds to prevent the spread of infection.

Muzzle. You can purchase a muzzle at pet stores, veterinary hospitals and through pet catalogs. They come in various sizes and should be part of your pet first aid kit (see Pet First Aid Kit, page 18). Muzzles may be made of the following material:

- Soft nylon that snaps behind the ears (These are collapsible and easily washed.)
- Stiff leather with straps that hook into premade holes
- A combination of leather or plastic sides with straps that hook behind the head and a metal or

Cortisol

Normal Cortisol levels in canines:

<https://vetspace.2ndchance.info/normal-dog-and-cat-blood-chemistry-and-lab-values/>

Cortisol has a normal rise and fall over the course of the day to help your body know that it is time to be awake or to go to sleep. Your adrenals also produce it to help you deal with anything which requires some extra energy. You may need that extra energy for a good reason, such as competing in an athletic event. “Good” stressors like that are known as *eustressors*. So if you’re going to use cortisol to measure stress, you are going to be measuring both eustress and normal daily stress like hunger, in addition to whatever source of distress you may be interested in.

Cortisol levels fluctuate and are not full-proof. Cortisol levels can be identified from hair, saliva, and urine

Not all STRESSORS increase Cortisol levels (Michael Hennessy speaking at SPARCS Conference 2015). Cortisol can also increase without any stress. Chronic Stress can also dysregulate the system. Cortisol is not a perfect measure of stress. Heart rate is also not a perfect measure of stress. A more accurate measure of stress is heart rate variability and vagal tone are more accurate measurements: https://en.wikipedia.org/wiki/Vagal_tone

<http://www.care2.com/greenliving/recent-studies-shed-light-on-the-mind-body-connection.html>

For more information see: Salivary cortisol concentrations and behavior in a population of healthy dogs hospitalized for elective procedures

· [Jessica P. Hekman^{a,1}](#), [Alicia Z. Karas^{a,,}](#), [Nancy A. Dreschel^b](#) see:

<http://www.sciencedirect.com/science/article/pii/S016815911200247X>

The Vagus Nerve Explained

The vagus nerve, also known as the wandering nerve, starts in the brainstem and travels down the body. It's responsible for connecting the brain to multiple parts of your body by letting the brain know what's going on. A 2014 study also shows how the vagus nerve plays a role in conveying "gut feelings" to the brain.

What exactly does this mean? It means that the vagus nerve plays a major part in keeping us healthy due to its role in the parasympathetic nervous system – the part of us that's responsible for calming us down after a "fight or flight" response.

Measuring The Vagus Nerve

The effectiveness of the vagus nerve depends on your "vagal tone" and can be determined by measuring your heart rate. Reason being that this is just one of the many things in the body that is regulated by the vagus nerve. The bigger your difference in heart rate when you breathe in and out, the higher your vagal tone. The higher the vagal tone, the more homeostasis within the body.

From: <http://www.care2.com/greenliving/recent-studies-shed-light-on-the-mind-body-connection.html#ixzz3fcKQAbIL>

For those interested in the science behind what may be occurring, Dr. Porges's, polyvagal theory may provide a neurophysiological explanation of how PTSDs frequently inhibit feelings of anxiety and panic. (see: Porges SW. (1995). Orienting in a defensive world: Mammalian modifications of our evolutionary heritage. A Polyvagal Theory. Psychophysiology 32:301-318

Steve Zawistowski SPARCS speaker:

Hair Cortisol shows history of Stress. Stress history is recorded in their hair.

Biofeedback (Costly and need instruments and training)

<https://www.qualitytherapycenter.com/>: Biofeedback is used to reduce Autonomic nervous system activation. Heart rate variability is used in biofeedback.

Alternative Means Of Identifying Stress In Dogs

- Alternative Means Of Identifying Stress In Dogs

VOYCE

- Worn around neck like a collar
- Provides data to measure heart and respiratory rates
- A high-tech way to spot stress in your dog

There are other Monitoring devices available, however, there are currently no non-touch methods to track your dogs stress levels.

<http://voyce.com/>

Additional Tools:

- Dap Dog Appeasing Pheromone
- Calming Cap
- Flower Essences
- Calming Collars
- Thundershirts
- Magnets & Magnet Beds
- Music Canine Lullabies
- Nutrition



HERE ARE SOME RESOURCES TO GET YOU STARTED

- – *The Dog Lover's Guide to Massage: What Your Dog Wants You to Know* by Megan Ayrault. This is a beginner's guide to dog massage with easy to follow explanations and photos. More information and tutorials can also be found on Megan's site, [All About Animal Massage](#).
- – *Getting in TTouch With Your Dog: a Gentle Approach to Influencing Behavior, Health, and Performance* by Linda Tellington-Jones. To learn more about TTouch workshops, visit [TTouch.ca](#).
- – [When the Body Says No: The Cost of Hidden Stress](#) by Dr. Gabor Mate. This fascinating book provides insight into the connection between stress and various diseases and health conditions. As Dr. Mate writes, "When we have been prevented from saying no, our body may end up saying it for us."
- and Sue Furman's book
- https://www.amazon.com/Balance-Your-Dog-Canine-Massage/dp/096798176X/ref=sr_1_1?s=books&ie=UTF8&qid=1436643391&sr=1-1&keywords=sue+furman&pebp=1436643392574&perid=0GR3H1BVFMWMB7VDQJEK
-
- CANINE TTOUCH
- See;
https://www.whole-dog-journal.com/issues/13_8/features/TTouch-For-Dogs_20039-1.html:

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<https://www.assistancedogunitedcampaign.org>

<https://www.carecredit.com>

Help-A-Pet Veterinary Cost Assistance:

<https://www.help-a-pet.org/>

In Memory of Magic see:

<https://www.imom.org>

Orthodogs' Silver Lining Foundation see:

<https://www.oslf.org>

<https://www.petassure.com/ContactUs.aspx>

<https://www.petinsurancereview.com>

<https://www.pettech.net> (See Dog First Aid information)

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