

Steve Dale's cat Ricky played the piano, and jumped through hoops – here's a cat who's life was totally enriched. Steve is certified by the International Association of Animal Behavior as a feline and also canine behavior consultant. He's spoken on this topic and others at meetings including the Conference of the American Veterinary Medical Association, Western Veterinary Conference and North American Veterinary Conference. He syndicated newspaper column is read in over 100 newspapers, and he is the host of three radio shows about pets and he makes frequent TV appearances. He's won many awards including the AVMA Humane Award, and Winn Feline Foundation Media Award. His website is www.stevedalepetworld.com.

FELINE ENRICHMENT: Brain Dead Fat Cats

Enrichment is quite the Buzz Word

- Environmental
- Behavioral

A matter of manipulating the environment to suit animals' behavior or to match the animal's behavior with the environment.

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"The physical environment in the primary enclosures must be enriched by providing means of expressing non-injurious species-typical activities. Examples of environmental enrichment include providing perches, swings, mirrors, and other increased cage complexities; providing objects to manipulate; varied food items; using foraging or task-oriented feeding methods; and providing interaction with the care giver or other familiar and knowledgeable person consistent with personnel safety precautions." ²

Zoos have long been interested and have participated in providing animals with behavioral enrichment, more than what our companion animals at home receive. ^{3, 4, 5, 48}

Zoos feeding road kill, hiding food (under ground debris, in pipes, etc.) in exhibits, using 'giant buster cubes,' operant conditioning, orangutan's who paint, chimpanzees who use computers – even allowing great apes to choose their own music. Simply allowing them to choose, indoors or outdoors. Rotating objects in the exhibit which seem stationary, but are not, places to sit to the vines. Choose to give themselves a shower if they so desire. If they pass by a motion detector, they get a shower. A light lets them know that food is in the termite mound, and a condiment inside for chimps varies (mustard, catsup, barbeque sauce, jams, etc). Optimum examples are chimpanzees in Chicago, who can blow air on the people. ^{46, 47, 48, 49}

It's about offering choices and giving control ⁴⁶ The secret is to think like a cat – lion or a domestic cat.

Using enrichment techniques, zoos have: Lessened stereotypical behaviors, increased animals 'natural tendencies,' enhanced exercise (lowering number of overweight animals, or animals as overweight), slowed the aging process, lessened or eliminated anxious behaviors ^{47, 48, 49}

Presumably if enrichment techniques can help zoo animals, they can help our companion animals....

Or simply, what grandpa said. "If you don't use it, you lose it." Millions of our purring pals are brain dead – they've lost it upstairs while at the same time they've gained it around their middles. And their owners have no idea because that is how they expect cats to be.

At least 30 to 40 per cent of pets are overweight; 25 per cent obese – and even greater number in cats. These tubby tabbies likely have: ^{6, 7, 8}

- Change in metabolism
- Significant health issues

The fourth annual Association for Pet Obesity Prevention National Pet Obesity Awareness Day Study found approximately 53% of cats and 55% of dogs are obese or overweight. ⁵¹

The average life span of indoor cats is about 14 years – though this is reduced to 4 years in cats that are allowed to roam free, exposing themselves to the hazards of outdoor life. ^{9, 10, 11, 12}

- Cars
- Stray Dogs
- Anti Freeze
- Wildlife
- Cold weather/Car hoods
- Cytauxzoonosis
- Human Cruelty: Shooting, cat napping
- Infectious disease

"The truth is life may be more exhilarating for cats outdoors. However, as a veterinarian my job is to encourage safety and good health," Dr. Nicholas Dodman ⁹

Millions of indoor cats are likely clinically depressed. Doing nothing all day, everyday is not normal." Dr. Karen Overall ¹⁵

Advantages of Socialization Classes for Kittens: ^{17, 18, 19}

Kiitty Classes Saves Lives!

- Cats must be vet checked before enrolling – support, in fact, of twice a year visits ²⁰
- They are desensitized to the carrier
- Desensitized to travel
- Desensitized to strange people, species (canines)

- Learn about proper care – which may enhance health, such as clipping nails, brushing their coats and brushing teeth
 - Prevent behavior problems, before they occur
 - Understand what is normal cat behavior
 - Subtle Signs of Illness^{21, 24}
 - Feline Heartworm^{22, 23, 25, 26}
 - Provides a resource should problems occur later
- To boost confidence, and just plain fun for kittens and for people

“Having an activated prey drive is a requirement for all cats,”
Pam Johnson-Bennett¹⁶

This is ‘normal’ feline behavior -^{27, 28}

Importance of carrier desensitization/transport⁵²

Behavioral/Environmental Enrichment:^{15, 29, 30, 31, 45, 52, 53}

- Alleviate boredom
- Brain exercise
- Exercise / Burning calories
- Prevent behavior problems
- Assist in dealing with behavior problems if they do occur
- Enjoyment / fun
- Slows onset cognitive changes

A clear link between lack of enrichment and stress, various health problems in cats including cystitis.³¹

A link between stress and health –

A link between offering all this to your cat and enhancing the bond

It turns out that the eagerness to work for food and a preference to problem solve has been studied, though not very much specifically for dogs or cats. Studies do indicate that rats, Grizzly bears and other animals actually will choose to work for their meal over a “free meal.” This phenomenon, called contrafreeloading, does contradict the basic tenant that animals are hard-wired to expend the least possible energy for meals to enhance odds of survival. While there isn’t specific data regarding contrafreeloading in dogs and cats – much less senior pets; it appears to be a very real phenomenon for many individuals.^{55, 56}

Every House Should Have:^{15, 29, 30, 31}

- High places where cat is allowed
- Scratching post
- Window ledge (not only high – but view outdoors)
- A cozy place (a box, tunnel)
- Room with a view, place(s) to watch the outside world

Enrichment needs evolve as cats age,^{52, 53}

Toy Story:^{29, 30, 32, 45, 52, 53}

- Rotate toys
- Understand the kind of toys your cat likes
- Re-define toys – an empty box can be a toy
- More ideas: Empty box, bottle caps, corks, aluminum foil ball, walnut in bathub, ping pong ball.

Novel snacks, particularly in the summer a frozen treat (catsicle) ⁵⁴

Once a day with an interactive toy (with fabric, feathers, Cat Dancer) – that’s the stress busting prescription – ³²
Feliway, catnip, valerian root, etc.

- Laser light (pro’s and con’s) ¹⁵
- Various other toys, balls, mice toys, etc. ^{3, 53}

Food Games – feed from Play’n Treat Balls, Scent Games ⁵³.

Cats are not Anti-Social, Aloof: In fact, they are social ^{33, 34, 35}

Other furry friends....¼ of cat owners have a dog; ¼ of dog owners have a cat ...living with another cat, or another pet. ^{36, 37, 40, 44}

Training Cats: A Cat’s Mind is a Terrible Thing to Waste: ^{38, 39, 41, 42, 43, 53}

- Harness Training
- Tricks
- Agility

If a cat goes outdoors – protected – great...but then –for certain, protection also against parasites: Heartworm, flea protection. ⁵⁰

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At least 30 to 40 per cent of pets are overweight; 25 per cent obese – ^{6, 7}

- Change in metabolism
- Significant health issues

All dogs were bred to do something....

Dogs do need to have a job ^{27, 34}:

On average, a dog spends 15 minutes per day eating....there must be more to life ¹²

Stimulants ³⁴

- Visual -Scent Discrimination -Auditory

Still the most bonding thing you can do with a dog....a leash walk! ³⁵

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Insufficient stimulus can cause: Hyperactivity, destructive chewing, acral lick dermatitis, attention-seeking behaviors, contribute to compulsive disorders, separation anxiety, bad habits in the backyard and certain forms of aggression, and plain old boredom. Dying brain cells. ^{12, 17, 27, 28, 29, 34}

The choices of how a dog plays, where a dog plays, what toys the dog plays with may be dependent on age, breed and personal preference. Young dogs prefer (require) oral toys and the opportunity to explore environment. Terriers enjoy digging up toys; a Retriever may simply want to walk around with a toy in his mouth. A herding breed dog may enjoy interactive play, 'herding' a Frisbee disc. ^{17, 34}

Predictability of toys and time they are left to play has benefits, but so do changes and surprises, if from as a puppy a dog developed that elasticity. ^{13, 19, 34}

Ideas:

- Feed all meals from age and "talent" appropriate treat dispensing balls.
- Read the Paper: Scattering food under newspaper. Turned over boxes Closed boxes with a hole.
- Divide portions of dog's meal in containers or Kong toys or Busy Buddy toys and located around the house, "Sniffing for Supper."

- Placing novel scents in the environment: Rabbit, scented scents from sporting goods stores. Novel herbs, spices and colognes.
- Wading pool for a dog.
- Digging pit in the yard.
- A popsicle of Gatorade, low salt bullion or chicken broth (perhaps with kibble inside or a dog treat or carrot stick). Frozen melon balls.
- Unused washed plastic milk cartons – put some kibble inside, dog rolls it and kibble falls out.
- Training sessions
- Take a dog for walks in new places for new sights and smells.
- Rotates indoor and/or outdoor toys, and encourage play
- Novel walks to new and different places, offers new and different sensations and experiences.
- Doggy door (which critters can't walk into, and can lock if coyotes, snakes are an issue)
- Learning new tricks

Chews toys, in particular, can: ^{13, 18, 34}

- Offer Dental benefits
- Learn appropriate mouthing behavior as puppies
- Used as a training technique, offering an alternative activity when the family is eating, etc.
- Learn what is 'theirs' to chew on
- Explore their environment via their mouths
- Offers a sense of enjoyment – dogs enjoy chewing ie: a sense of well being

Companionship: Dogs Are Pack Animals

We know dogs living with canine companions may be more active ¹³

Dogs do best with canines to interact, socialize with, as well as with people ^{15, 16}
 Another cat, even a pet parrot is helpful. Of course, if you get a parrot – it's the parrot who may be in charge.

Other pets such as hamsters, gerbils, Guinea pigs – the challenge is to insure their safety and anxiety thresholds.

Even seeing another dog housed in cages showed that they responded more than toys alone offered. ^{14, 15}

Living with pets can solve some problems, be careful not to create new ones. ²⁶

Impact on Aging:

Cognitive enrichment early in life appears to protect against development of age-associated cognitive decline and dementia. ^{19, 31, 32}

In one study at the University of California-Davis, 62% of 11- to 16-year-old dogs showed signs in at least one category of CDS. ^{22, 23} In a pet owner survey, nearly half of dogs age 8 and older showed at least one sign associated with CDS. ²⁴

Watch for DISHA ^{20, 30, 31, 32}
DISHA

- Disorientation
- Interactions with humans and other pets have changed
- Sleep-wake cycle changes
- House soiling
- Altered activity levels

- Additionally: Deafness, Anxiety^{20, 30, 31,32}

Diet: Hills BD, or diet for joint problems since pain can cause other changes in pets.

Although the cause of cognitive dysfunction is unknown, autopsies reveal that the brains of old dogs are often clogged with globs of nerve-damaging beta-amyloid plaques similar to those found in the brains of people with Alzheimer's disease. ²¹

Treatment may include: Diet (antioxidant fortification), Enrichment . ^{19, 34} 'You can teach an old dog new tricks:' - - - Stimulating environments suggests improved learning due to induced changes in brain cellular structure which may help to actually grow new neurons when otherwise they would not, and increase existing neurons to injury. Would dogs with stimulated environments learn new tasks? They did – but did best with nutritional supplementation as well. ¹⁹

Having a job may help. And physical benefits of enrichment assist in mobility, and may offer some defense against worsening cognition. ¹⁹

Motor learning (as opposed to mere motor activity) may increase synapse formation in the cerebellar cortex in rats. ¹⁹

An enrichment outlet is good, and may lesson anxiety ²¹

Treating with Anipryl earlier may be helpful. ²⁵ [Anipryl®](#) is the veterinary trade name for a drug called selegiline hydrochloride, also known as L-deprenyl. It is used in humans for treatment of Parkinson's Disease, Alzheimer's Disease, and Cushing's Disease. The drug is approved by the FDA for use in dogs for treatment of Pituitary Dependent Hyperadrenocorticism (PDH) also known as [Cushing's Disease](#) and [Canine Cognitive Dysfunction](#)

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