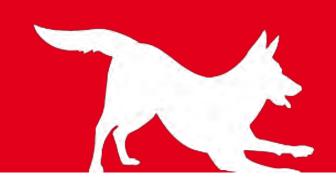


Senior Pet Club



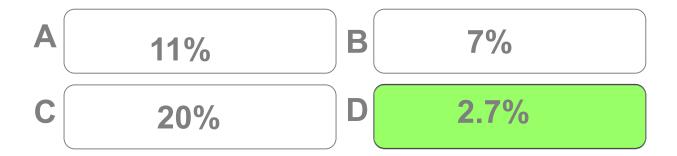
Nutritional Trivia quiz!







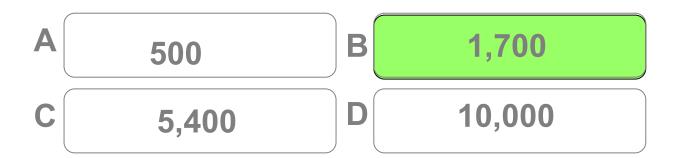
What % of a large dogs bodyweight is made up of intestines?







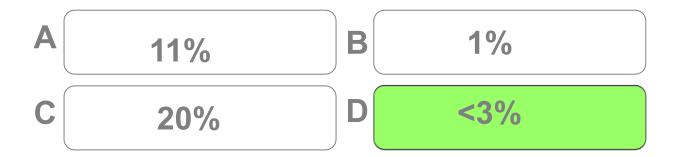
A human has approximately 9000 taste buds...how many does a dog have?







What % of a cat's bodyweight is made up of intestines?







A human has 2-10 million olfactory cells; how many does a dog have?

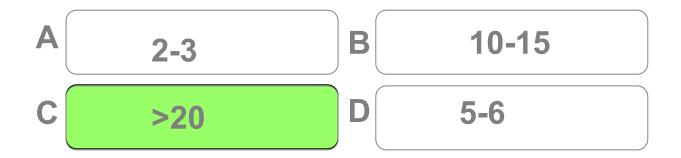
A 10-20 million B 50-70 million

C 100-150 million D 80-220+ million





How many meals would a cat eat per day, given the choice?







Why does pet food contain fat?

A Palatability

B For transport of fat soluble vitamins

C It's a great energy source

All of the above



Which of the following is the most digestible protein source?

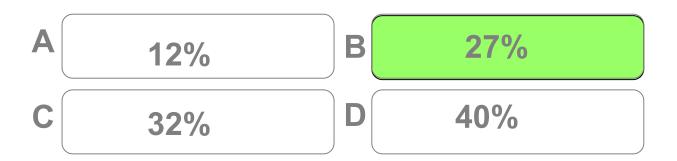
A Soy Protein B Chicken

C Wheat Gluten D Pork





➤ Based on a 2010 study, what percentage of dogs die from cancer?

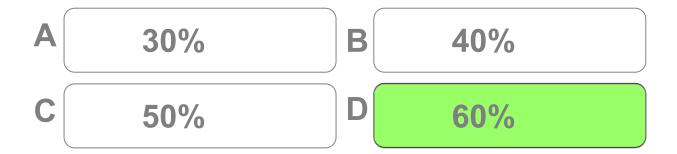


VJ Adams, KM Evans, J Sampson and JLN Wood (2010). Methods and mortality results of a health survey of purebred dogs in the UK. Journal of Small Animal Practice 51, 512–524





Approximately what % of an adult dogs body is water?







What is a good source of the antioxidant lycopene?







According to a UK study of over 4000 cats, what is associated with living longer?



J Feline Med Surg. 2015 Feb;17(2):125-33. doi: 10.1177/1098612X14536176. Epub 2014 Jun 12. Longevity and mortality of cats attending primary care veterinary practices in England. O'Neill DG1, Church DB2, McGreevy PD3, Thomson PC3, Brodbelt DC4





What do free radicals do?

They organise protest marches

B They damage DNA

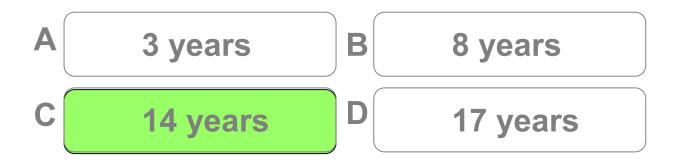
C Break down food

They make food taste better





What is the average life expectancy of a crossbreed cat in the UK?







From a study of more than 15,000 dogs, which breed has the longest life expectancy?

Breed	Median Age
Welsh Corgi Cardigan Lakeland terrier Toy poodle Yorkshire terrier	16 .5 15 .46 14 .63 12 .67

VJ Adams, KM Evans, J Sampson and JLN Wood (2010). Methods and mortality results of a health survey of purebred dogs in the UK. Journal of Small Animal Practice 51, 512–524



Ageing definition:



- A complex biological process
- A progressive loss of capacity to
 - maintain homeostasis
 - respond to diseases or environmental factors.

Ageing is not a disease but a physical evolution



In veterinary practice



Only 10 to 20% of senior animals are seen by vets

Cat owners often express a belief that cats "do not need medical care".

	Average visit times per year to Vets
Dogs	2,3
Cats	1,1





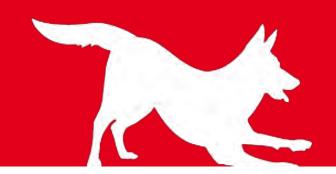
- the signs of illness are often difficult to detect
- cats are perceived to be self-sufficient.







So let's start with cats...









Problems associated with ageing...







Impaired Mobility



Affects **34%** of cats older than 7 y-o.

Affects 90% of cats older than 12 y-o

Radiographic evidence of degenerative joint disease in geriatric cats: 100 cases (1994–1997)

- Suggestive signs:
 - altered mobility
 - decreased grooming
 - lameness
 - signs of pain
 - aggressiveness...
- Objective signs (X-ray)

Elizabeth M. Hardie, DVM, PhD, DACVS; Simon C. Roe, DVM, DACVS; Fonda R. Martin







Problems associated with ageing...

IMPAIRED MOBILITY

COGNITIVE DECLINE



Cognitive signs



Affects 28% of cats older than 12 y-o Affects 50% of cats older than 15 y-o

(Gunn Moore, 2007, Landsberg 2010)

Spatial disorientation

Vocalization



Sleep/Wake rhythm changes

Change in social interaction

More sensitive to stress





Problems associated with ageing...

IMPAIRED MOBILITY



SARCOPENIA



Sarcopenia



Amyotrophy and Fibrosis

Loss of mass and strength



Reduced physical activity

Musculoskeletal weakness



Sarcopenia



- Loss of muscle mass and strength
- Muscle condition evaluation : visual examination and palpation of:
 - head
 - scapulae
 - thoracic and lumbar vertebra
 - pelvic bones

Microscopical view of muscle





SARCOPENIA

Amyotrophy and muscular fibrosis. Replacement of muscle fiber with fat.



Problems associated with ageing...

IMPAIRED MOBILITY

COGNITIVE DECLINE

SARCOPENIA

RENAL DISEASE



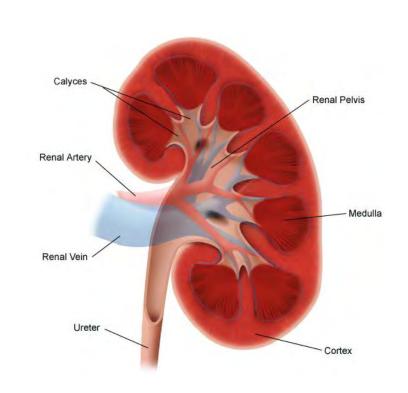
Chronic Renal Failure



Affects **24-26**% of cats older than 10 y-o. Affects **33**% of cats older than 12 y-o

■ kidney function deteriorates

- Irreversible loss of functioning nephrons
- Multifactor causes
- Insidious and progressive





Problems associated with ageing...

IMPAIRED MOBILITY

COGNITIVE DECLINE

HYPERTENSION

SARCOPENIA

HYPERTHYROIDISM

RENAL DISEASE

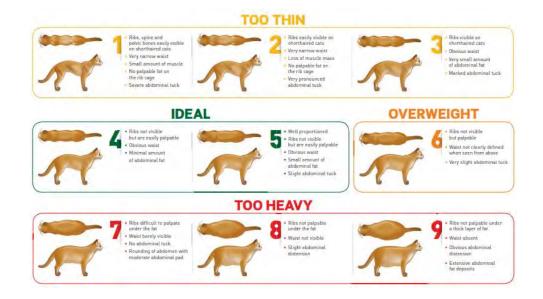
WEIGHT LOSS





Weight loss

Body condition score is important to assess



Middle-aged cats have a tendency to be overweight Senior cats often become underweight with low Body Condition Score



Weight loss





1/3 of cats older than 12 years of age may have a decreased ability to digest fat

1/4 of cats older than 14 years of age may have a decreased ability to digest protein

•

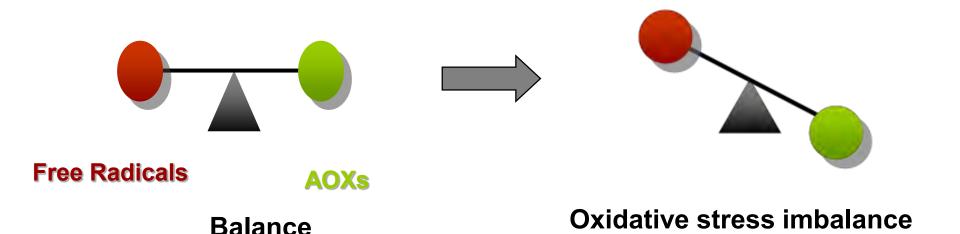
Vet Clin North Am Small Anim Pract. 2005 May;35(3):713-42. Nutrition for aging cats and dogs and the importance of body condition. Laflamme.



Antioxidant defences decline



The production of free radicals exceeds the organism's antioxidant capacities.

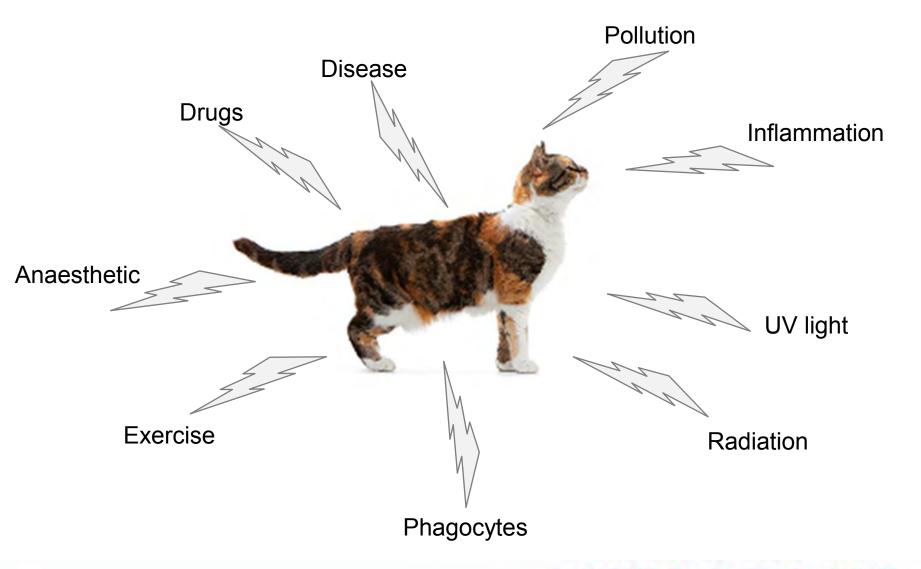


Laflamme DP, 2005. Nutrition for Aging Cats and Dogs and the Importance of Body Condition. Vet Clin Small Anim 35 (2005) 713–742.

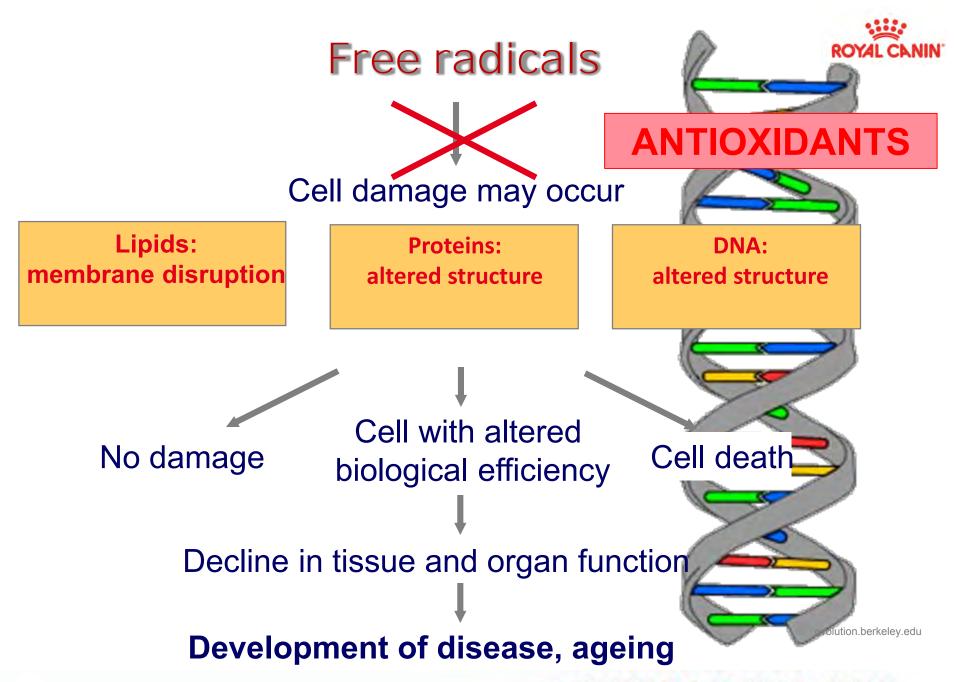
Harman D. Role of free radicals in aging and disease. Ann NY Acad Sci 1992;673:126-41.



Sources of Free Radicals









Ouestions to ask owners of older cats

Does he climb less?

Does she seem confused?

Does she stay in the garden?

Has he lost weight recently?

Does she wander at night?

Has he become more vocal?

Is she more withdrawn lately?



Are there any signs of ageing?

























Rer

ROYAL CANIN



Solutions - Stage 1 products







Fibre blend limits spontaneous consumption & energy intake



















- Moderate Phosphorus
- Antioxidant complex
- Glucosamine & Chondroitin
- Combination of highly digestible proteins and prebiotics
- Phosphatidylserines
 - supports brain cell membrane





Solutions - Stage 2 products













Higher fat content : greater energy density

4087 kCal/kg



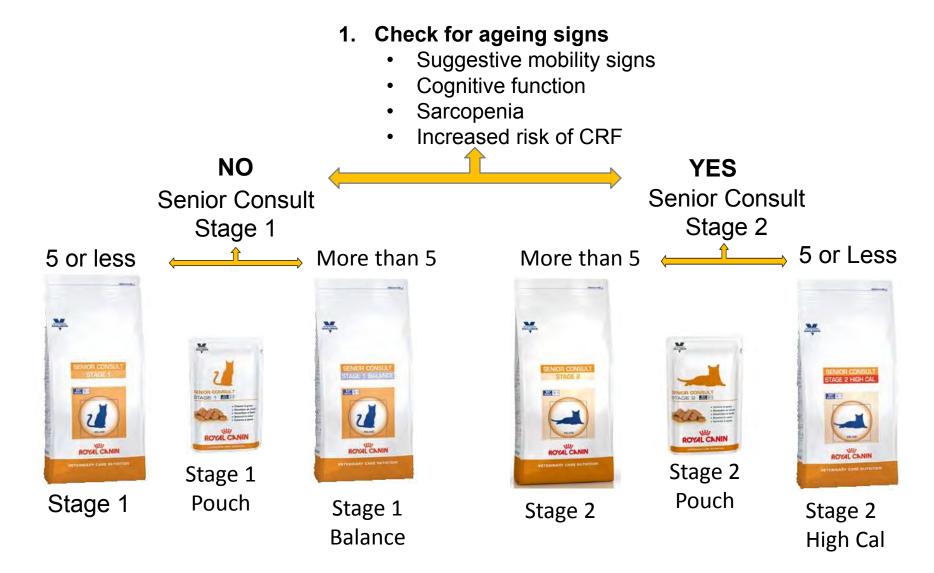


- Low phosphorus
- **Mobility complex with Green Lipped Mussel**
- **Antioxidant complex**
 - & Lycopene
- **Phosphatidylserines PLUS L-tryptophan**



A Review: Decision Tree







Now let's look at older dogs...





What changes do we see as dogs get older?

- Tend to slow down with age
 - Can suffer with mobility problems
- More likely to gain weight
- Sense of smell reduces
- Liver and kidney function can deteriorate
- > Can suffer a decline in muscle: fat ratio
 - sarcopenia
- Can experience brain health and behaviour issues
 - Disorientation and confusion
 - Snappishness and intolerance
 - Anxiety/fearfulness



How do we address those changes?









Brain Health - Royal Canin's approach





Brain Health



Neurotransmitter turn-over declines L-tryptophan enrichment



<u>Landsberg G, 2006</u>. Therapeutic Options for Cognitive Decline in Senior Pets. Journal of the American Animal Hospital Association 42:407-413 (2006) <u>Cotman CW et al, 2002</u>. Brain aging in the canine: a diet enriched in antioxidants reduces cognitive dysfunction. Neurobiology of Ageeing, Volume 23, Issue 5, Pages 809-818 (September 2002)

<u>De Napoli JS et al, 2000</u>. Effect of dietary protein content and tryptophan supplementation on dominance aggression, territorial aggression, and hyperactivity in dogs. Journal of the American Veterinary Medical Association August 15, 2000, Vol. 217, No. 4, Pages 504-50



Antioxidant cocktail: to help support healthy brain ageing



BUT also totally relevant to maintaining the vitality of the other organs as well!

 Vitamin C
 200 mg/kg

 Vitamin E
 600 mg/kg

 Lutein
 5 mg/kg

 Taurine
 0.35%

 WALTHAM PATENT 00/44375

Lycopene

10 ppm

Head E, 2008. Neuropathology in ageing dogs.

Vet Clin North Am Small Anim Pract 1, no. 38 (january) 167

A carotenoid from the tomato family

Grape & Green Tea polyphenols

Mandel SA, 2005. Multifunctional Activities of Green tea Catechins in Neuroprotection.

Neurosignals. Vol.14, No. 1-2, 2005



Muscle Support - Royal Canin's approach ROYAL CANIN'







Leucine maintain muscle mass during ageing



Branched Chain Amino Acids increase lean body mass



Leucine increases protein synthesis in skeletal muscle

Anthony JC, Reiter AK, Anthony TG, Crozier SJ, Lang CH, MacLean DA, et al. Orally administered leucine enhances protein synthesis in skeletal muscle of diabetic rats in the absence of increases in 4E-BP1 or S6K1 phosphorylation. Diabetes. 51(4):928-36, 2002.

<u>Gallagher P</u>, Richmond S, Dudley K, Prewitt M, Gandy N, Kudrna B, et al. Interaction of resistance exercise and BCAA supplementation on Akt and p70 s6 kinase phosphorylation in human skeletal muscle. FASEB J. 21:895.10, 2007 [Abstract].



Senior Consult





- L-tryptophan to support neurotransmitter turnover in ageing brains
- Phosphatidylserine a brain cell structural phospholipid
- Antioxidants targeted at brain health (lycopene)
- branched chain amino acids to support the problems associated with muscle wastage in older animals





> The Mature range...

SENIOR CONSULT











Common ailments that Royal Canin diets help to support...



- Joint issues Mobility
- Chronic Renal Failure (CRF) Renal
- ➤ Heart Disease Cardiac
- Liver Disease Hepatic
- Cancer Recovery/Convalescence
- ➤ Anorexia Recovery/Convalescence
- Diabetes Mellitus Diabetic
- > Stress Calm







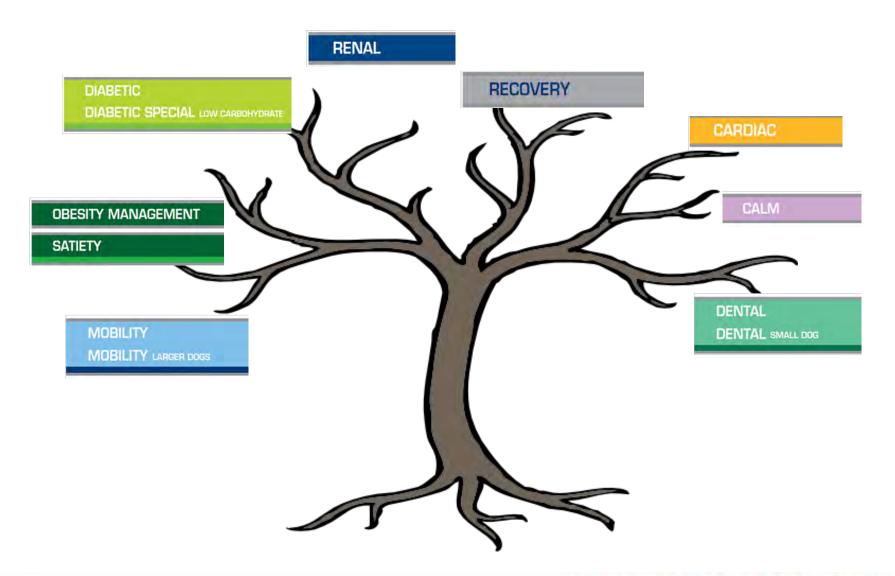
Seting up a Senior Clinic







The Senior Clinic Tree







What is a senior clinic?

- Senior clinics provide
 - general health care advice
 - frequent check ups
- The age of the pet attending the clinic will vary depending on breed of animal.
- It provides owners with someone they can talk to







Why run a special Clinic?

- Genuine owner fears of PTS
- 'Don't like to bother the vet'
- Worry about cost of a consul



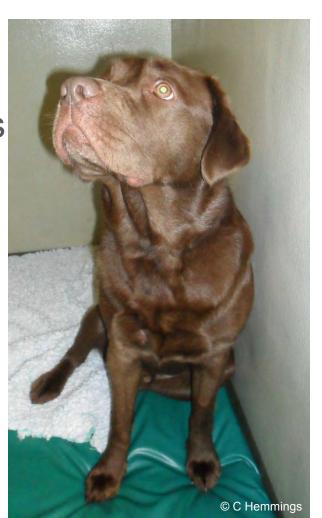
Owners don't consider their pet to be old!



Who should come to the Senior Pet Clinic?



- Older pets!
- ➤ Last 1/3rd of pet's life
 - average lifespan dogs & cats is 13 years
 - 40% of all dogs
 - 3 million dogs
- > 28% of all cats
 - 2 million cats





First steps

Getting clients for the clinic

> Referral by the veterinary surgeon

Waiting/consulting room displays

➤ Local newspaper advertisement

Practice newsletter

> Practice website



The clinic itself: Equipment required



- Senior pet questionnaire
- Information on suitable diets
- Information on local hydrotherapy centres
- Information on joint supplements
- Senior packs
- Dipstick and a refractometer for urinalysis
- A blood analysis machine or an external laboratory that your practice uses
- Blood pressure machine/ Doppler
- A veterinary surgeon!



Common diseases in ageing cats



Hypertension

Visible signs

Few signs: Blindness due to retinal detachment
Haemorrhage in the eye, Seizures,
Disorientation

Diagnostic

Exam of cat's heart, Blood pressure (Doppler)
In a quiet room (allow the cat to acclimate
during 5-10 minutes)

Fundic examination, Blood and urine samples



Common diseases in ageing cats



Hyperthyroidism

Visible signs

Behavioral changes, Weight loss

Increased appetite, Rough, unkempt coat
Vomiting, Diarrhoea, Increased drinking

Diagnostic

Thyroid gland palpation Blood sample: T4 level



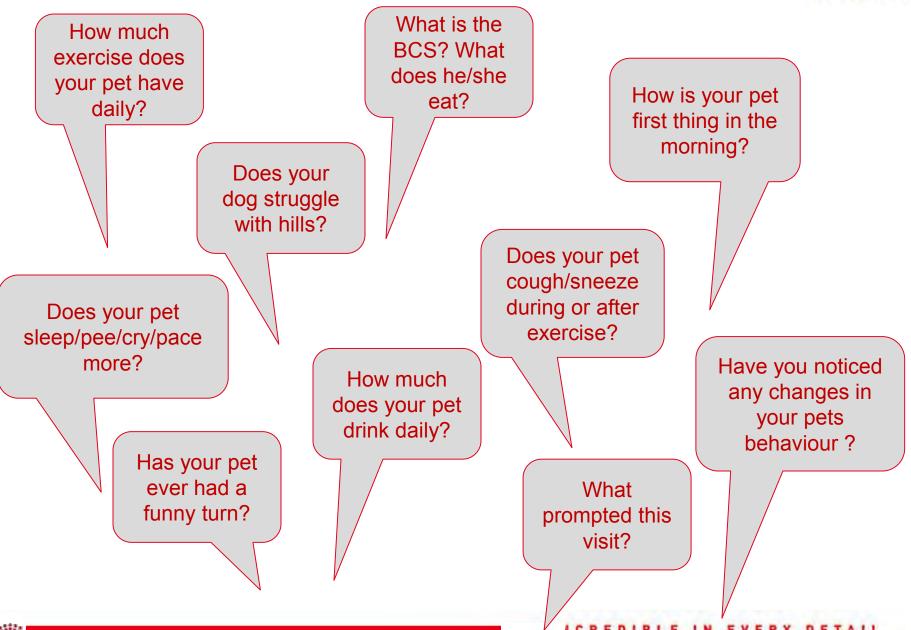


What to include in your questionnaire

- Feeding habits
- Weight gain/ loss
- Exercise regime
- Behavioural changes
- Current treatment/existing conditions
- Obvious issues prompting the appointment
- End of life care?







The clinic itself: the content of the clinic

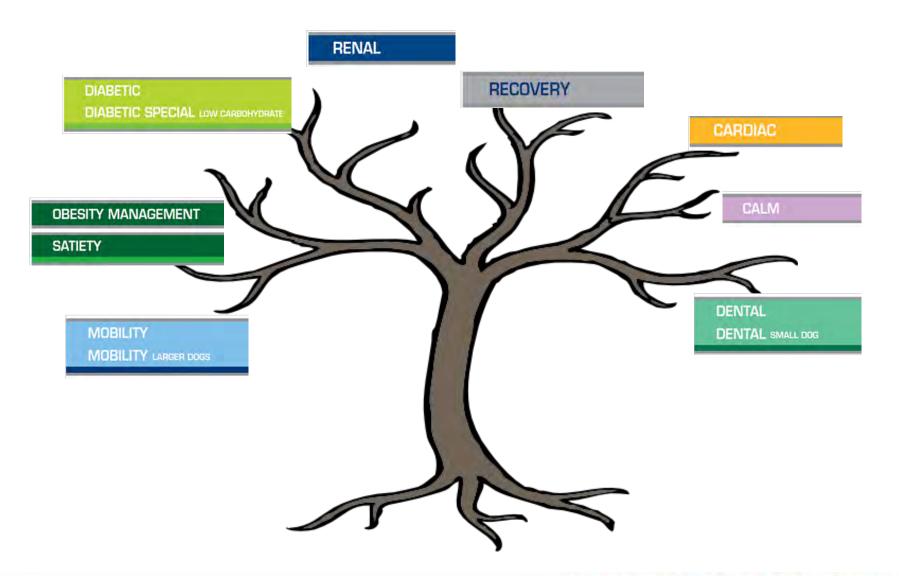


- Allow 30-60 minutes for 1st visit
- Weight of animal
 - Is there any weight loss or gain
 - What is the BCS and general condition of animal
- Take a history from owners
 - Post a questionnaire out <u>before appointment</u>
- General clinical exam (top to tail!)
- Mini neurological exam
- Urine analysis
- Blood pressure
- Blood analysis



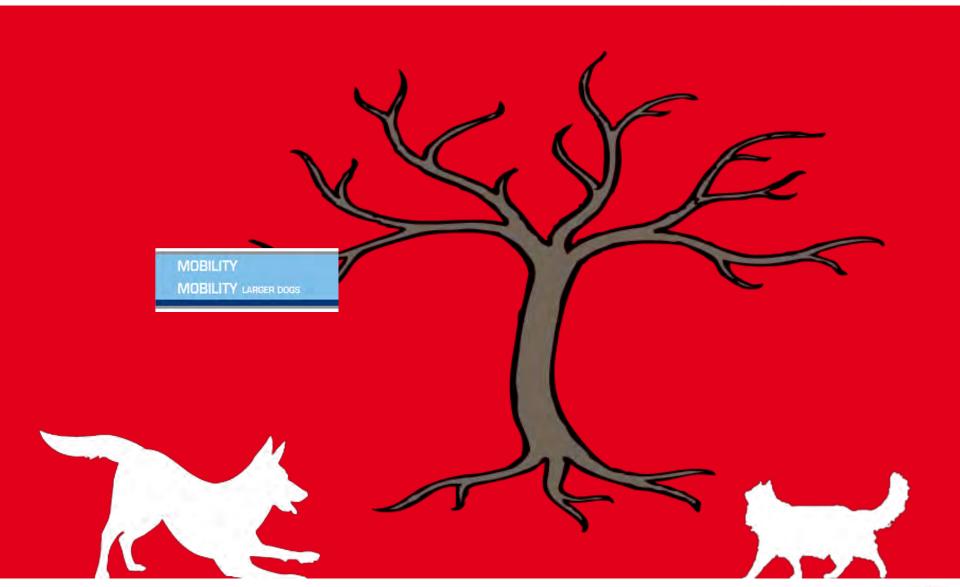


The Senior Clinic Tree











Questions to ask...

Have you noticed any limping?

Does he have difficulty jumping into the car?

Is there reluctance to groom?

Is he repeatedly licking a joint?

Does he seem depressed or withdrawn?

Does she grumble when you handle her?

Has he slowed down on walks?

Does he sleep in a different place or position?

Does she have trouble climbing stairs?

Is he reluctant to go for walks?



Starting out





- Diagnosis (by vet)
- Comfort score (with nurse)
- Interventions
- Discuss options and recommendations...







What are the options?

- NSAID's (Non-Steroidal Anti-Inflammatory
 - Drugs)
- Steroids
- Weight loss
- Lifestyle changes
- Hydrotherapy
- Acupuncture
- Neutraceuticals





Name & address "Roly" Smith, Larksmead, Cove, Hants Breed and age - 9 year old Yellow Labrador Comfort Score Card Date 01/01/2004 14/01/2004 28/01/2004 12/02/2004 26/02/2004 13/02/2004 13/03/2004 Pain++ Χ Χ Χ Χ Χ Χ Χ No pain Reduce NSAID's to NSAID's, 50mg 1 bid + 50mg am & Treatment Chrondro-25mg pm Cut Reduce Keep on out chrondro-NSAID's to NSAID 25mg protective 1 25mg bid bid Ditto Ditto Ditto protectives bid Overweight -Keep on Now Comments 300g Obesity Stick to three Switch to completely Mobility Diet -+ 3 Mobility Mobilty Tabs on diet - likes reduce by Mobility Diet

Week One - Discussed Hydrotherapy. Advised to get baby gate on stairs to stop Roly climbing. Advise little & Often exercise Notes Week Four - Doing well, improvements seen. Has booked swimming sessions.

Ditto

29.8

from Tabs

29.5

20g/day

29.6

29.4

Week Eight - Doing great! Discuss reduction of medication.

per day

31.2kg

Tabs/day

32ka

Ditto

30.2kg





Weight matters



Obesity causes mobility problems

Images: Uni of Liverpool Weight Management Referral Clinic

20% overweight

Sullivan 9y NM

British blue

Lifestyle changes...





- Controlled exercise little and often
 - 10 minutes four times a day is better than one

long walk

- Belly Sling
- Ramp for car
- Stair-gate

- going up and down steps further damages joints







Neutraceuticals...

Many different supplements available...





















400g WET









MOBILITY



GREEN-LIPPED MUSSEL









MOBILITY

TABS



90g/30tabs

- Palatable tab for dogs & cats
- GLM supplement
- One tab per 10kg (up to 4) daily
- Half a tab per cat
- 9 kcals per tab
- *Can be used as training reward

*Combine with other clinical diets



When to use Diet vs Tabs



- Any patient with reduced mobility
- Healthy older dogs
- Large breeds
- Older dogs
- Pre or post orthopaedic surgery
- Pre-disposed breeds





- Whilst on a weight-loss program
- As a reward/treat
 - Especially for older dogs
- For all old cats
- If already on another clinical diet







Other therapies...

- Hydrotherapy
- Physiotherapy
- Acupuncture
- Homeopathy













How do I start?

- Talk to clients collecting medication
- Make leaflets
- Notice boards
 - collect quotes from clients
- Mail outs
- Launch evening
 - guest speakers?
 - nibbles/special offers?
- Word of mouth









Content...

- General demeanour
- Body Condition Score
- > Fill in Comfort Score
- Give PRACTICAL advice
- Any other concerns
 - Remember they may be senior and/or have concurrent conditions







MOBILITY MOBILITY LARGER DOGS

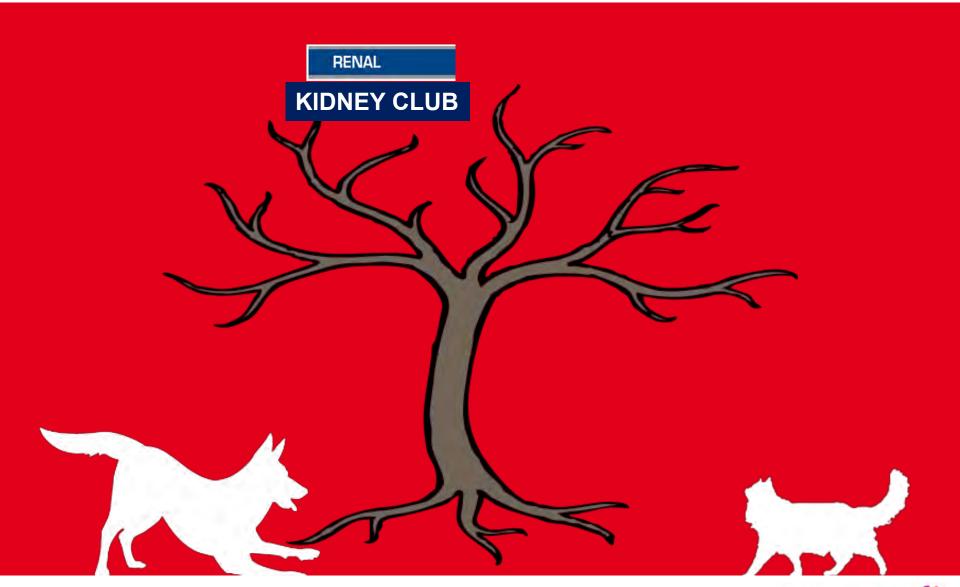


Protocol

- See every two weeks
- Increase time between visits to 6-8 weeks
- > Possibly reduce NSAID's after 6 weeks
 - Working with vet
- Check weight maintenance
- Continue comfort scoring
- Great for client bonding...







RENAL



What to cover...

Explanation of the renal cycle

3. This results in excess Ca AND P in the body



2.Parathyroid (PTH)
hormone causes
Calcium to be drawn
from bones to
maintain Ca:P ratio



1. Reduced Kidney function increases Phosphorus in body

4. When the damaged kidney attempts to filter the Ca and P, more damage is caused



5. And so the cycle continues...

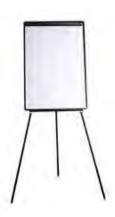


What to cover





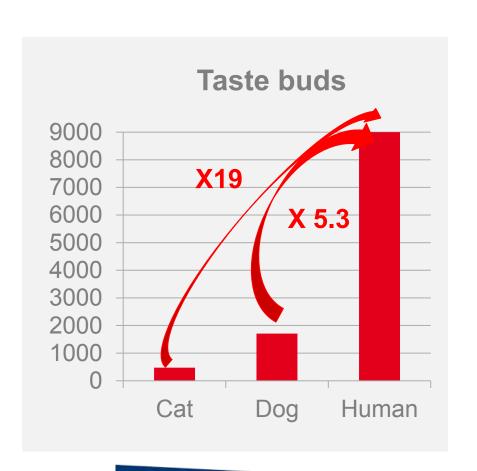
- Explanation of treatment plan
 - Clarify understanding following vet consult
- Answer any questions or concerns
- Introduce Renal diet
 - Effective transition from normal food
 - Advice on how to keep cats interested



Pets taste vs Human







Taste receptors:

- Bitter
- Sweet
- Acid
- Salt
- Umami

→ Gustation is more developed in humans



Renal Range











Content





- Explanation of treatment plan
 - Clarify understanding following vet consult
- Answer any questions or concerns
- Introduce Renal diet
 - Effective transition from normal food
 - Advice on how to keep cats interested
- Discuss hydration
 - tips on how to improve water intake
- Weight, BCS, BP



Follow up





- 2 weeks after initial
- > Then once a month
 - More frequently if owner worried









Content of follow ups...













Patients name:								Clie	Clients name:							
Date:									Bre	ed:			Age:			
Sex: Blood results:										Wei	Weight:			BC5:		
										Urir	Urinalysis:					
BP:				1					H	1	ī		P			
Week No.		1	3	7.	11	15	19	23	27	31	35	39	43			
Weight chart kg	5 4 3 2									7						
Week No.		1	3	7	11	15	19	23	27	-31	35	39	43			
Diet:																
Medication:							Z	J								
Date of next appoint	ment:						5-	KC	Nurse:							

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Content of follow up...





Discuss...

- Oral hygiene
- Appetite
- BCS/weight
 - Mark on chart
- Blood pressure
 - Mark on chart
- Cognitive function

Procedures...

Vet may specify which bloods/urinalysis needs to be done



RENAL



Take home pack

- Caring for...leaflet on Renal diet
 - Plus one of each pouch and small bag dry
 - RC loyalty card
- Literature on meds
 - Renalzin, Fortekor etc
- Crib sheet with info discussed including
 - Next appointment date
 - Next appointment plan
 - Practice contact details



The Senior Clinic itself: Closing the clinic



- Form an exercise program tailor made to each patient.
- Provide information on alternative therapies if you feel they could be of benefit – check with veterinary surgeon
- Give practical solutions
- Give owner advice on what to monitor at home
 - Water intake
 - Changes in behaviour
 - Appetite
- Make next appointment
- Sure you are encouraging and rewarding owners











senior pet clinic assessment

Health checks at home

Your Ret Health Counsellor can show you how to perform these checks as home. Check your pet regularly at home and contact the surgery if you have any concerns.

	What to book for
Eyes	Check for presence of excessive discharge in the corner of the eye Check that the surface of the eye is clear and not cleudy Watch for charges in ability to see properly
Ears	Check that there is no discharge or odour coming from the ear cene! Examine the ear flags for presence of wounds or swelling. Clean the ear as advised by your veterinery practice.
Teeth	Check teeth and mouth for dental decay, accumulation of farter, inflammation of the gums and offensive breath Clean teeth as advised by your veterinary practice.
Skin and coat	Check for evidence of excessive scratching and the presence of abrasions Look for areas of thickened skin and hair toos, particlearly enound the elbows and hocks Check for lumps and humps
Mammery glands	Check for presence of lumps and bumps. Check for presence of milk / discharge.
Genital organs	Check females for the presence of a discharge from the valva and for signs of abrasions or inflammation Check makes for signs of wounds and note size of testicles
Paws and claws	Check for wounds, cracks, cysts between the toes and nail bed infections Check length of nails, not longetting the dow claws
Urine	+ Check for any difficulty in urmating Note frequency
Faeces	Check for any difficulty in defaccating Note consistency and colour Note frequency

senior pet clinic assessment

Date of assessment	
Owner's details	
Name	
Address	
Tetephone number Mabile	
Pet's details	
Name	Dog Cat
Breed	
Date of Birth Neutered? Yes No	Male Female
Body condition scare Current weight	Ideal weight
Current diet	
Current medications	
	100
	400







Royal Chum Looking after Your older dog ELENCE CONBUT

IELPING YOUR CLIENTS LOOK AFTER OLDER PETS

Helping your clients Older in years, but young in spirit look after their older pets

As you probably know, the life expectancy of dogs and cats in the UK is increasing, just as it is for humans. It is estimated that 50% of cats are currently officially



A greater understanding of the nutritional needs of companion animals and the availability of prepared, balanced diets are contributory factors to longer life expectancy in our pets.

Advances in veterinary medicine and surgery have enabled the profession to successfully diagnose and treat a greater range of conditions. The growth of preventative health programmes which detect problems at an early stage, allowing treatment to start sooner, has also contributed to longer life expectancies and a better quality of life in later

DETAIL

aception about our Senior Clinics

divetportal.royalcanin.co.uk



Online Library News

Vet Practice Portal



Conclusion



- Remember the benefits of running clinics to the client, the patient, the practice and to you
- Make sure you are organised and well prepared
- Ensure you give support to your clients
- Enjoy making the seniors comfortable, it can be very rewarding





Any questions?



