



Dear patient owner, Does your elderly dog show certain behavioral changes such as confusion, disorientation, incontinence or failure to recognize familiar people? These can be harmless and part of the normal aging process, but in severe cases they can also affect the dogs' quality of life.

Various studies have already shown that diet and the use of nutritional supplements have an influence on general brain health and on the course of age-related behavioral changes.

We would like to learn more about what food or supplements you, as the owner, feed your old dog and why you chose to do so. In addition, we would like to find out if you have noticed any effect of the supplements on your dog. This will help us to treat patients with age-related behavioural changes in the future.

We are very grateful that you are interested in taking part in our survey. This will take approximately 15-20 minutes to complete.

**If you have any questions or comments, please feel free to email me
(julia.patricia.haake@tiho-hannover.de).**

Section A: Language

A1. Choose a language:

Section B: Owner information

B1. In which country do you and your dog live?

Abkhazia	<input type="checkbox"/>
Afghanistan	<input type="checkbox"/>
Egypt	<input type="checkbox"/>
Albania	<input type="checkbox"/>
Algeria	<input type="checkbox"/>
Andorra	<input type="checkbox"/>
Angola	<input type="checkbox"/>
Anguilla	<input type="checkbox"/>
Antarctica	<input type="checkbox"/>
America (United States)	<input type="checkbox"/>
Equatorial Guinea	<input type="checkbox"/>
Argentina	<input type="checkbox"/>
Arctic	<input type="checkbox"/>
Armenia	<input type="checkbox"/>
Aruba	<input type="checkbox"/>
Azerbaijan	<input type="checkbox"/>
Ethiopia	<input type="checkbox"/>
Australia	<input type="checkbox"/>
Azores	<input type="checkbox"/>
Bahamas	<input type="checkbox"/>
Bahrain	<input type="checkbox"/>
Bangladesh	<input type="checkbox"/>
Barbados	<input type="checkbox"/>
Belarus	<input type="checkbox"/>
Belgium	<input type="checkbox"/>
Belize	<input type="checkbox"/>
Benin	<input type="checkbox"/>
Bhutan	<input type="checkbox"/>
Bolivia	<input type="checkbox"/>



Section C: Patient information

C1. What breed is your dog?

If your dog breed is not mentioned, please select "Other" and name it here.

If your dog is a mixed breed, please select "Mixed breed".

Mixed breed	<input type="checkbox"/>
Airedale Terrier	<input type="checkbox"/>
Akita Inu	<input type="checkbox"/>
American Staffordshire Terrier	<input type="checkbox"/>
Australian Sheperd	<input type="checkbox"/>
Basset Hound	<input type="checkbox"/>
Beagle	<input type="checkbox"/>
Bearded Collie	<input type="checkbox"/>
Berger de Brie (Briard)	<input type="checkbox"/>
St. Bernard	<input type="checkbox"/>
Bernese Mountain Dog	<input type="checkbox"/>
Bichon Frise	<input type="checkbox"/>
Dogue de Bordeaux	<input type="checkbox"/>
Border Collie	<input type="checkbox"/>
Boston Terrier	<input type="checkbox"/>
Bouviere des Flandres	<input type="checkbox"/>
Cairn Terrier	<input type="checkbox"/>
Cavalier King Charles Spaniel	<input type="checkbox"/>
Chihuahua	<input type="checkbox"/>
Chinese Crested	<input type="checkbox"/>
Collie (long haired)	<input type="checkbox"/>
Welsh Corgi Pembroke	<input type="checkbox"/>
Dachshund	<input type="checkbox"/>
Dalmatian	<input type="checkbox"/>
German Boxer	<input type="checkbox"/>
Great Dane	<input type="checkbox"/>



C2. How old is your dog in years and months?

If unknown, please estimate approximate age.

Years

--	--	--	--	--	--	--	--	--	--

Months

--	--	--	--	--	--	--	--	--	--

C3. What is your dogs weight in kilograms?

--	--	--	--	--	--	--	--	--	--

C4. What is your dogs sex?

male intact

☐

male neutered

☐

female intact

☐

female neutered

☐

C5. Does your dog currently have any chronic diseases? If yes, which ones?

None

☐

Heart disease

☐

Osteoarthritis

☐

Kidney disease

☐

Liver disease

☐

Urinary tract disease

☐

Diabetes mellitus

☐

Cushing's disease

☐

Thyroid disease

☐

Addison's disease

☐

Other

☐

Other

--

C6. Is your dog currently on any prescribed medication?

Yes - Routine medications such as deworming and vaccinations

☐

Yes - medication to support brain health

☐



C11. Is your dog currently in any pain? (e.g. joint pain, back pain, etc.)

Yes ☐

No ☐

I don't know ☐

Prefer not to say ☐

C12. Does your dog have health insurance?

Yes ☐

No ☐

I don't know ☐

C13. Do you use dietary supplements yourself?

Yes - for a specific reason ☐

Yes - for my general health ☐

No ☐

Prefer not to say ☐

C14. Is your dog currently receiving dietary supplements?

Yes - for a specific reason ☐

Yes - for his general health ☐

No ☐

Prefer not to say ☐

C15. Have you noticed any changes in your dog since giving supplements?

If yes, please describe them.

No ☐

Yes ☐

C16. How long has your dog been receiving dietary supplements?

Years

Comment



Months

Comment

Section D: Medical history

D1. Has your dog been diagnosed with cognitive dysfunction syndrome ("dementia") by a veterinarian?

Yes

☐

No

☐

D2. Which veterinarian diagnosed your dog with cognitive dysfunction syndrome?

The family vet

☐

The family vet and a neurology specialist

☐

Other

☐

Other

D3. Has your veterinarian performed a general examination on your dog (listening to his heart, palpation, taking temperature, etc.) and determined an underlying cause for his current symptoms?

Yes

☐

No

☐

D4. Has a veterinarian performed blood or urine tests on your dog that found an underlying cause for his current symptoms?

Yes

☐

No

☐

D5. Which of the following tests did your veterinarian perform to diagnose your dog's age-related behavioral changes?

Blood tests

☐

Urine tests

☐

Neurological examination

☐

MRI scan of the brain

☐



CT scan of the brain ☐

Cerebrospinal fluid (CSF) analysis ☐

I'm not sure which tests were performed ☐

None ☐

Other ☐

Other

D6. What was the diagnosis for your dogs symptoms?

Cognitive dysfunction syndrome ☐

Other ☐

Other

Section E: CADES dementia scale

Please state which behavior you have observed in your dog and how often this occurred. Assign points according to the following scheme, which will be summed up in a total score at the end.

Frequency:

Abnormal behaviour of the dog was...

0 points – never observed 2 points – observed at least once in the last 6 months 3 points – observed at least once per month 4 points – observed 2–4 times per month 5 points – observed several times a week.

E1. Spatial orientation: How often have you observed the following behavior in your dog?

	0 - never	2 - at least once in the last 6 months	3 - at least once per month	4 - 2 to 4 times per month	5 - several times a week
Disorientation in a familiar environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Failure to recognise familiar people and animals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Abnormal response to familiar objects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aimlessly wandering (restlessness during the day)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced ability to do a previously learned task	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



E2. Social interaction: Have you observed the following behavior in your dog?

	0 - never	2 - at least once in the last 6 months	3 - at least once per month	4 - 2 to 4 times per month	5 - several times a week
Changes in interaction between human and dog/dog and other dog (playing, petting)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes in individual behaviour of the dog (exploration behaviour, play, performance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Response to commands and ability to learn new tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Irritability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expression of aggression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

E3. Sleep-wake-cycles: Have you observed the following behavior in your dog?

	0 - never	2 - at least once in the last 6 months	3 - at least once per month	4 - 2 to 4 times per month	5 - several times a week
Abnormal behaviour during the night (wandering, vocalisation, restlessness)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Switching between insomnia and excessive sleeping	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

E4. House soiling: Have you observed the following behavior in your dog?

	0 - never	2 - at least once in the last 6 months	3 - at least once per month	4 - 2 to 4 times per month	5 - several times a week
Eliminating at home at random locations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eliminating in its kennel or sleeping area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes in signalisation for elimination activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eliminating indoors after a recent walk outside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eliminating at uncommon locations outside (e.g. grass, concrete)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Section F: DISHAA dementia scale

Please list any behavioral abnormalities in your dog that have occurred since the age of 8 or later, or have developed or worsened since then.

Rate these abnormalities according to their severity and assign points. (Score: 0= never, 1= once a month, 2= once a week, 3= almost everyday).

F1. Disorientation: Have you observed the following behavior in your dog?

	0 - never	1 - once a month	2 - once a week	3 - almost everyday
Stares intently where there is nothing visible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does not remember its way back home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gets stuck behind objects or furniture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stays on the wrong side of the door	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does not respond to certain stimuli to which it used to respond (for example, doorbell)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does not give any signal when it wants to go out	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

F2. Sleep-wake-cycles: Have you observed the following behavior in your dog?

	0 - never	1 - once a month	2 - once a week	3 - almost everyday
Walks during the night (without an obvious reason), when it did not used to do this	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vocalises (barks, whines) during the night (without an obvious reason), when it did not use to do this	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

F3. Social interaction: Have you observed the following behavior in your dog?

	0 - never	1 - once a month	2 - once a week	3 - almost everyday
Does not recognise familiar people	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does not recognise familiar animals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shows more signs of fear or aggression towards people and/or other dogs than it used to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

F4. House soiling, learning and memory: Have you observed the following behavior in your dog?

	0 - never	1 - once a month	2 - once a week	3 - almost everyday
Urines and/or defecates in new (inappropriate) places (when it did not use to do it)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Finds it difficult to respond to previously learned commands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



F5. Activity: Have you observed the following behavior in your dog?

	0 - never	1 - once a month	2 - once a week	3 - almost everyday
Is less active or playful than it used to be	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shows repetitive behaviours (chases own tail, snaps at 'invisible' flies, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walks without obvious purpose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

F6. Anxiety: Have you observed the following behavior in your dog?

	0 - never	1 - once a month	2 - once a week	3 - almost everyday
Shows more signs of anxiety when separated from its owners than before (main signs of anxiety are shaking, shivering or trembling, excessive salivation, restlessness/agitation/pacing, whining, loss of appetite)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section G: CCDR and C-BARQ dementia scale

G1. How often does your dog exhibit the following behavior? Please select the applicable answer for each item:

	Never	Once a month	Once a week	Once a day	More than once a day
How often does your dog pace up and down, walk in circles and/or wander with no direction or purpose?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often does your dog stare blankly at the walls or floor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often does your dog get stuck behind objects and is unable to get around?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often does your dog fail to recognise familiar people or pets?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often does your dog walk into walls or doors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
How often does your dog walk away while, or avoid, being patted?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

G2. Please rate your dog according to the following question:

	How often does your dog have difficulty finding food dropped on the floor?
Never	<input type="checkbox"/>
1-30% of the time	<input type="checkbox"/>
31-60% of the time	<input type="checkbox"/>
61-99% of the time	<input type="checkbox"/>
Always	<input type="checkbox"/>



G3. Compared to 6 months ago, does your dog exhibit the following behaviors? Please select the correct answer for each item:

	Much less	Slightly less	The same	Slightly more	Much more
Does your dog now pace up and down, walk in circles and/or wander with no direction or purpose?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does your dog now stare blankly at the walls or floor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does your dog urinate or defecate in an area it has previously kept clean (if your dog has never house-soiled, tick 'the same')?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does your dog have difficulty finding food dropped on the floor?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does your dog fail to recognise familiar people or pets?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What is the amount of time your dog spends active now?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

G4. Please evaluate the following situations based on how likely your dog would respond with tense or fearful behavior.

Please select the most appropriate answer for each item:

	Never	Rarely	Sometimes	Usually	Always
When an unknown man approaches your home while you are not present.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When an unknown woman approaches your home while you are not present.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When an unknown child approaches your home while you are not present.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When an unknown person visits you in your home.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

G5. Please evaluate the following situations based on how likely your dog would respond with tense or fearful behavior.

Please select the most appropriate answer for each item:

	Never	Rarely	Sometimes	Usually	Always
In response to sudden or loud noises (e.g. thunder, vacuum cleaner, car backfire, road drills, objects being dropped, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With heavy traffic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In response to strange or unfamiliar objects on or near the sidewalk (e.g. plastic trash bags, leaves, litter, flags flapping, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
During a thunderstorm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When first exposed to unfamiliar situations (e.g. first car trip, first time in elevator, first visit to veterinarian, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In response to wind or wind-blown moving objects.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



G6. How often does your dog do the following?

Please select the correct answer for each item:

	Never	Rarely	Sometimes	Usually	Always
Comes immediately when called if not on leash.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obeys immediately to the command "sit".	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Obeys immediately to the command "Stay."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brings or tries to bring sticks, balls, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seems to participate in or listen carefully to everything you do or say.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is slow to respond to an instruction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is slow at learning new tricks or skills.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is easily distracted by interesting sights, sounds, or scents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

G7. Does your dog react fearfully or insecurely to the following situation?

Please select the applicable answer for each item:

	Never	Rarely	Sometimes	Usually	Always
When the dog is examined or treated by a veterinarian.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When having nails clipped by a household member.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When groomed or bathed by a household member.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

G8. Does your dog react fearfully or insecurely to the following situation?

Please select the applicable answer for each item:

	Never	Rarely	Sometimes	Usually	Always
When approached by a similar sized or larger unknown dog.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When an unknown dog of smaller size approaches.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section H: Treatment of age-related behavioral changes

H1. Has your dog EVER received any of the following medications for age-related behavioral changes (including those you are no longer using)?

Selegiline ("Selgian", "Anipryl", "Eldepryl", "L-Deprenyl", "Zelapar"...)	<input type="checkbox"/>
Propentofylline ("Karsivan", "PropentoTab", "Canergy", "Vivitonin",...)	<input type="checkbox"/>
Diazepam ("Valium",...)	<input type="checkbox"/>



Memantine ☐

Apoaequorin ("Neutricks", "Prevagen", ...) ☐

None ☐

Other ☐

Other

H2. Is your dog CURRENTLY receiving any of the following medications to treat age-related behavioral changes?

Selegiline ("Selgian", "Anipryl", "Eldepryl", "L-Deprenyl", "Zelapar", ...) ☐

Propentofylline ("Karsivan", "PropentoTab", "Canergy", "Vivitonin", ...) ☐

Diazepam ("Valium", ...) ☐

Memantine ☐

S-adenosyl-l-methionine ("SAME") ☐

Phosphatidylserine ☐

Apoaequorin ("Neutricks", "Prevagen", ...) ☐

None ☐

Other ☐

Other

[illegible]

H5.

Does your dog experience any side effects from the medication against age-related behavioral changes ?

If your dog has not shown any of these side effects, please check none of these or "Not present".

Please indicate both the severity and frequency of side effects.

Please check all that apply.

	Mild	Moderate	Severe
Vomiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diarrhoea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disorientation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confusion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aggression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Repetitive movements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced appetite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dizziness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not present	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



H6.

Does your dog experience any side effects from the medication against age-related behavioral changes ?

If your dog has not shown any of these side effects, please check none of these or "Not present".

Please indicate both the severity and frequency of side effects.

Please check all that apply.

	Rarely	Monthly	Weekly
Vomiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diarrhoea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disorientation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Confusion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aggression	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Repetitive movements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced appetite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dizziness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not present	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section I: Diet

I1. What type of food do you currently feed you dog?

Please tick all that apply.

Wet food	<input type="checkbox"/>
Dry food (complete diet)	<input type="checkbox"/>
Dry food (Mixer)	<input type="checkbox"/>
Home cooked diet	<input type="checkbox"/>
Raw food diet	<input type="checkbox"/>
Vegetarian or vegan diet	<input type="checkbox"/>



Other

☐

Other

- I2. What protein and carbohydrate sources do you use in your dogs home-cooked diet? What are their proportions in the daily ration?**

EXAMPLE - Here's how you might describe your dog's food composition:

Protein: chicken, 200g per day Carbohydrates: potato, 150g per day

If you add any other ingredients to your dog's ration (e.g. oils, eggs, etc.), you will have the opportunity to indicate this later.

Proteins (e.g. chicken, beef, etc.):

--	--	--	--	--	--	--	--	--	--

Carbohydrates (e.g. potato, rice, etc.):

--	--	--	--	--	--	--	--	--	--

- I3. If you are currently feeding your dog a therapeutic, prescription or veterinary food, please list the name and brand:**

Hills Prescription Diet b/d dog food

☐

Hills Prescription Diet j/d dog food

☐

Purina Pro Plan NeuroCare dog food

☐

I do not feed my dog therapeutic/prescription diet

☐

Other

☐

Other

- I4. How often do you feed your dog?**

Once a day

☐

Twice a day

☐

Three times a day

☐

More than three times a day

☐

Ad libitum (free feeding, food left out)

☐

I5. How did you establish your current feeding routine?

- On the advice from my veterinarian ☐
- On the advice of the breeder/animal shelter ☐
- On the advice of another owner ☐
- Frim information on the pet food packaging ☐
- From published information in books/magazines ☐
- From published information online ☐
- Other ☐

Other

I6. Where do you usually buy your pet food?

- Supermarket ☐
- Online ☐
- Veterinary practice ☐
- Pet shop ☐
- Other ☐

Other

I7. Do you feed your dog snacks or treats?

- More than once a day ☐
- Once a day ☐
- A few times a week ☐
- A few times a month ☐
- Less than once a month ☐
- Never ☐



I8. Have you changed your dog's diet since the diagnosis of cognitive dysfunction/age-related behavioral changes?

If yes, please specify what changes were made and why you made these changes on the right.

No - My dog's diet has not been changed since the diagnosis of cognitive dysfunction

☐

Yes - I have changed my dog's diet since the diagnosis of cognitive dysfunction

☐

I9. What food were you feeding your dog prior to the diagnosis of cognitive dysfunction syndrome or age-related behavioral changes?

Please also name the product below.

Wet food

☐

Dry food (complete diet)

☐

Dry food (Mixer)

☐

Home cooked diet

☐

Raw food diet

☐

Vegetarian or vegan diet

☐

Name of product:

☐

Name of product:



I10. How would you rate your dogs physical condition?

Please tick one of the pictures below:

(The picture from WSAVA Nutrition Comittee was edited.)

Explanation:

1 - Ribs, lumbar vertebrae, pelvic bones clearly recognizable, no body fat, clearly reduced muscle mass

2 - Ribs, lumbar vertebrae, pelvic bones easily recognizable or palpable, no body fat, slightly reduced muscle mass

3 - Ribs palpable under light layer of fat, waist visible from above, abdominal line retracted

4 - Ribs difficult to palpate under thick layer of fat, no waist visible, abdominal line possibly not retracted

5 - fat deposits on rib cage, back area, base of tail, abdominal distension visible, abdominal line not retracted

1	<input type="checkbox"/>
2	<input type="checkbox"/>
3	<input type="checkbox"/>
4	<input type="checkbox"/>
5	<input type="checkbox"/>

I11. On average, how long do you exercise your dog per day (walks, etc.)?

less than 1 hour	<input type="checkbox"/>
1-3 hours	<input type="checkbox"/>
more than 3 hours	<input type="checkbox"/>

I12. Does your dog have access to food sources other than your provided food and treats?

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>



Section J: Use of dietary supplements

J1. Do you use dietary supplements to help manage your dogs age-related behavioral changes?

Yes, I currently use supplements

☐

No, I have never used supplements

☐

No, but I used to use supplements

☐

Section K: Owners who have never used supplements in their dogs diet

K1. Please indicate why you have decided not to use dietary supplements to treat your dogs age-related behavioral changes.

I do not believe dietary supplements have a beneficial effect on dogs with age-related behavioural changes

☐

I was not aware that nutritional supplements could be used to manage age-related behavioural changes

☐

There is no scientific evidence for dietary supplements having a beneficial effect on dogs with age-related behavioural changes

☐

I am afraid that dietary supplements will harm my dog

☐

I am uncomfortable using nutritional supplements without consulting a veterinarian

☐

My veterinarian has advised me not to use nutritional supplements for my dog's age-related behavioural changes

☐

The cost of supplements to treat my dog's age-related behavioural changes is too high in the long run

☐

Other

☐

Other

K2. Would you ever start giving your dog dietary supplements to manage their age-related behavioral changes?

If yes, please indicate the factors that would lead you to start feeding your dog nutritional supplements on the right.

No

☐

Yes

☐



Section L: Owners who used supplements in the past

L1. Why did you decide to stop dietary supplementation as additional management for your dog's age-related behavioral changes?

I do not believe that it had a beneficial effect ☐

There was no scientific evidence for it having a positive effect ☐

I was afraid it would harm my dog ☐

I felt uncomfortable using the supplement without the advice of a veterinarian ☐

The cost was too high in the long run ☐

My dog refused to take the supplement ☐

The supplement had a negative impact on my dog's health ☐

My dog had side effects after taking the supplement ☐

Other ☐

Other

L2. Did you discuss the use of dietary supplements with your veterinarian?

Yes ☐

No ☐

Prefer not to say ☐

L3. Would you ever give your dog supplements to manage his age-related behavioral changes again?

If yes, please indicate the factors that would cause you to feed your dog nutritional supplements on the right.

No ☐

Yes ☐



Section M: Owners who currently use supplements in their dogs diet or have used them in the past

Note:

If you used to give your dog dietary supplements in the past but have now stopped, please complete the following questions retrospectively.

M1. Where did you first hear about nutritional supplements as additional management options for age-related behavioral changes?

From my veterinarian ☐

From breeder/animal shelter ☐

From another owner (directly) ☐

From an online support group for owners ☐

From published information in books/magazines ☐

From information published online (e.g. articles, papers) ☐

From seeing the products available at a pet shop or online ☐

Other ☐

Other

M2. Why did you decide to feed supplements to treat your dog's age-related behavioral changes?

Please explain briefly.

M3. What combination supplements do you give your dog as additional treatment for his age-related behavioral changes?

Aktivait ☐

Senilife ☐

Denamarin ☐

None ☐

Other ☐

Other

[illegible]



If you are feeding other supplements, please list them:

--

M6.

What dosage of nutritional supplements is your dog currently receiving to treat his cognitive dysfunction/age-related behavioral changes?

Please copy the information on the bottles or packages of all dietary supplements, including the name of the product, strength, dosage, and frequency. Start with the most recent supplement first.

EXAMPLE - Here's how you might describe your dogs dietary supplement: Medication: MCT oil, 2x daily, 5 ml.

Supplement 1									
Supplement 2									
Supplement 3									
Supplement 4									
Supplement 5									
Supplement 6									
Supplement 7									

M7. Where do you buy or did you usually buy your supplements? Please check all that apply:

Supermarket ☐

Online ☐

Veterinary clinic ☐

Pet store ☐

Veterinary practitioner ☐

I cook myself ☐



--

How did you decide where to buy the supplements?

From published
information on
the Internet (e.g.
articles/papers)

The diagram consists of two horizontal rows of squares. The top row is labeled 'A' and the bottom row is labeled 'B'. Each row contains six squares, and the squares in each row are connected by dashed lines. The squares in row A are connected to the squares in row B by dashed lines, forming a grid-like structure.

Does or has your dog had any side effects from the supplement and if so, how severe were they?

If your dog has not shown any side effects, please check "not present".

Please check ALL that apply. Please indicate the severity of the side effects. If it is useful, please also indicate the frequency of the side effects.

	Mild	Moderate	Severe
Increased appetite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weight gain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drinking more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drinating more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sleeps more than before	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wobbly/uncoordinated when walking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restlessness/pacing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Itching or skin rash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vomiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diarrhoea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not present	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

M10.

Does or has your dog had any side effects from the supplement and if so, how severe were they?

If your dog has not shown any side effects, please check "not present".

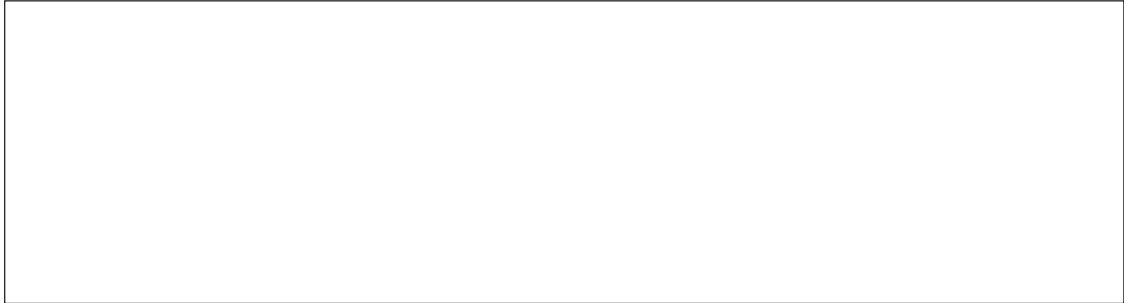
Please check ALL that apply. Please indicate the severity of the side effects. If it is useful, please also indicate the frequency of the side effects.

	Rarely	Once a month	Once a week
Increased appetite	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Weight gain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drinking more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drinating more	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sleeps more than before	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wobbly/uncoordinated when walking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restlessness/pacing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Itching or skin rash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vomiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diarrhoea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not present	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

M11. Would you recommend the use of supplements to other owners of dogs with age-related behavioral changes?

If yes, which supplements would you recommend? Please indicate them on the right.

No	<input type="checkbox"/>
I don't know	<input type="checkbox"/>
Yes	<input type="checkbox"/>



Thank you for your help!

**If you have questions or comments, please feel free to contact me
(julia.patricia.haake@tiho-hannover.de).**