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Case Studies

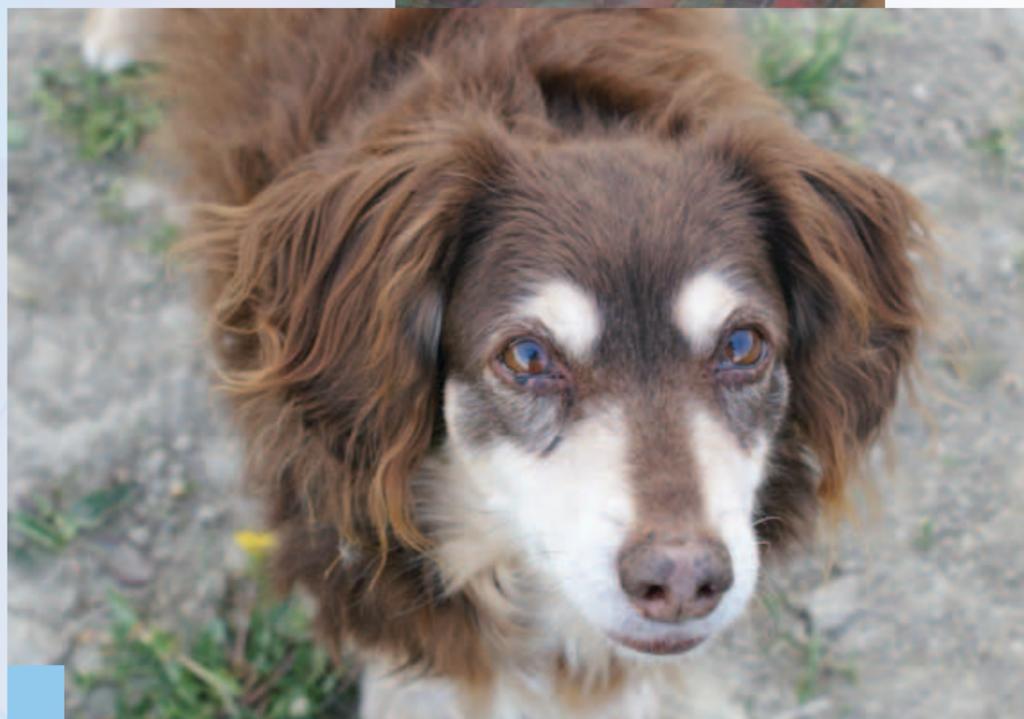
The nutritional effectiveness of
PRO PLAN® Senior Original 7+



Case Studies

The following 5 case studies describe the nutritional management of senior dogs, showing various signs of canine cognitive dysfunction syndrome (CDS), with PRO PLAN® Senior Original 7+.

Despite varying signs and clinical history, the 5 cases presented all showed different levels of behavioural improvement on changing their diet to PRO PLAN® Senior Original 7+.



Case Studies

Fripouille, Orlan and Centaure

Presented by Dr. Autier-Derian DVM - PhD Ethology, Welfare and Behavioural Specialist and Canine Behaviorist Yannick Thoulon.

Dr. Autier Derian evaluated 3 dogs displaying signs associated with CDS, who were trialled nutritionally on PRO PLAN® Senior Original 7+. In addition to a generalised medical examination, the selected dogs were carefully assessed for changes in DISHA¹ - disorientation, interaction, soiling, sleep, and activity.

Assessments were made before changing the diet, and a fortnight after the change. Two of the dogs (Fripouille and Orlan) participated regularly in physical and mental stimulation activities for elderly dogs offered by a dog trainer. In these 2 dogs, cognitive ability was also assessed using 4 specific tests:

Test 1 Responsiveness. When the dog is at rest, the trainer calls the dog in an encouraging way. The dog's response is noted.

Test 2 Exploratory activity. The trainer shows the dog a ball and then hides it in another room, out of sight of the dog. The dog's inclination to search for the object is noted.

Test 3 The owner offers the dog a new game and shows it how to access a hidden treat reward. The dog's response to the owner's clues is noted (see photo).

Test 4 The trainer places another, likewise unfamiliar game in front of the dog and moves away (see photo). The dog's motivation to explore the new object and get the treat rewards hidden inside it is noted.



Case Study

Fripouille, a 9-year-old female Jack Russell-fox terrier cross

Case History and differential diagnosis

Fripouille, a 9-year-old female Jack Russell-fox terrier cross, weighing 10 kg had been taken by her owner to physical and mental stimulation activities for elderly dogs for the previous 5 months. Despite the owner's strong motivation, it was difficult to get Fripouille interested in the activities offered.

The examination on the first day showed superficial pyoderma, linked to a proliferation of *Malassezia* and flea allergy dermatitis (FAD). According to her owner and her attending veterinary surgeon, Fripouille had had chronic dermatitis for several years. Blood tests (assessing kidneys, liver and thyroid gland functions) were normal.

On the behavioural side, her owner complained about the loss of certain behaviour patterns over the last year.

Reported behavioural changes:

- Changes in social interaction with other dogs and people
- Decreased desire to explore new surroundings
- Night-time urinary incontinence
- Loss of appetite
- No interest in the tests offered by the dog trainer

Follow up

After 15 days, Fripouille state of health showed little change; her owner had not been able to consult her attending veterinary surgeon to deal with the skin lesions. The change in diet had been completed over a 4 days transition. Her owner however, noted significant changes in behaviour.

The improvements included:

- Renewed interest in other dogs and humans, both familiar and strangers
- Recovered play signals that the owner had not seen for several years
- Improved response to commands
- Less time resting
- Increased attention span
- Improved appetite despite being a fussy eater

The dog trainer reported that the dog was much more motivated with regard to the exercises offered at the weekly dog trainer sessions, especially the agility exercises. The results of tests 1 to 4 (shown above) were all moving in this direction: increased attention span, better response to the clues provided by the owner and longer exploration time.

“The dog trainer reported that the dog was much more motivated with regard to the exercises offered at the weekly dog trainer sessions, especially the agility exercises.”



Signs covered by the acronym DISHA¹
- Disorientation in the home or garden (D)
- Changes in social interaction with human family members (I)
- Changes in the sleep-wake cycle (S)
- Loss of house training (H)
- Altered activity levels (A)

Lansberg, G. 2005. Therapeutic Agents for the Treatment of Cognitive Dysfunction Syndrome in Senior Dogs. Progress in Neuro-Psychopharmacology and Biological Psychiatry 29: 471-479.

Case Study

Orlan, an 11-year-old male boxer-bull terrier cross

Case History and differential diagnosis

During the first physical examination Orlan, an 11-year-old male boxer-bull terrier cross, weighing 40 kg, showed generalised osteoarthritis and obvious cognitive problems. To try to treat his osteoarthritis, Orlan had received NSAIDs and nutritional supplements for 18 months previously but this did not seem to offer much relief. Blood tests were normal but his behaviour had changed.

Reported behavioural changes:

- Changes in social interaction with other animals and people
- Changes in sleep-wake cycle
- Decreased desire to explore new surroundings

His scores in tests 1 to 4 (above) ranged from 0 to 1. The dog trainer, who had known Orlan for several years, noticed that his learning abilities had decreased over the last few months, although neither his sight nor his hearing seemed to be impaired. Despite the owners' best attentions and medical care, his physical and mental state had declined over the previous 4 months.



“ A very marked improvement was noted in his coat, which changed from very dull and dry to shiny and silky, encouraging both his owners and strangers to stroke him. ”

Follow up

During the first check-up 15 days after the change to PRO PLAN® Senior Original 7+ most behaviour patterns remained unchanged, as did the scores in the cognitive tests conducted by the dog trainer. Orlan was experiencing significant pain from the osteoarthritis, which was clear during manipulation. During subsequent visits, the animal's general state of health had deteriorated due to the onset of liver failure. The owners noted that Orlan had become more and more indifferent to his environment, both at home and outdoors, unless directly prompted. However, there was some significant changes.

The improvements included:

- Reappearance of the desire to play
- Less time resting
- Improved response to commands
- Coat changed from very dull and dry to shiny and silky
- Slight increase of attention span

Case Study

Centaure, a 14-year-old German shorthaired pointer-griffon cross

Case History and differential diagnosis

Centaure, a 14-year-old German shorthaired pointer-griffon cross, weighing 28 kg, had been under the supervision of a veterinary behaviourist for 18 months for destructive behaviour while his owners were out. This behaviour had disappeared after starting treatment with psychotropic drugs combined with behavioural therapy. Three attempts had been made to phase out the medication, but each time the undesirable behaviour had reappeared after the first reduction in dose.

On initial examination, the dog was found to be suffering from bilateral cataracts, tooth pain and osteoarthritis, which were being treated with NSAIDs, given on average for 10 days a month. The dog had received treatment with fluoxetine for 18 months due to a previous history of destructive behaviour when his owners were out. This behaviour had not improved despite several attempts by attending veterinary surgeons using different medications. The owners refused to consider withdrawing the psychotropic drug because three previous attempts to reduce the dose had led to the reappearance of the destructive behaviour. Centaure appeared to be emotionally stable. The evaluation revealed reduced responsiveness to noise over the last 3 months and decreased motivation to go out for walks.

Follow up

After 15 days on the PRO PLAN® Senior Original 7+ diet, both owners agreed that behaviour patterns that had previously disappeared had now returned. In addition, everyone that knew him noticed that Centaure was much livelier.

The improvements included:

- Reappearance of welcome barks
- Improved interaction with owners (asked for strokes again)
- Less time resting

Despite these encouraging behavioural changes, his owners still refused to consider withdrawing the psychotropic drug.

At the consultation conducted 45 days after the change in diet, behavioural improvements were confirmed. Moreover, his owners noted that the dog was reacting more rapidly to commands and that his coat had greatly improved. Against all expectations, the owners themselves suggested reducing the psychotropic drug, with a view to phasing it out altogether. This drug was withdrawn over a six-week period.

To this day, his owners have not had any more problems with destructive behaviour while they are out. Despite his osteoarthritis, the dog is livelier, gets up more often and whines less when standing up. His owners are delighted at the renewed interest shown by their dog. It is likely that the change in diet helped with the withdrawal of the medication, which had not previously been possible.

“ Despite his osteoarthritis, the dog is livelier and gets up more often. His owners are delighted at the renewed interest shown by their dog. ”

