## **EPURINA** Institute

Advancing Science for Pet Health

## COGNITIVE DYSFUNCTION SYNDROME EVALUATION TOOL

Cognitive Dysfunction Syndrome (CDS) is an irreversible degeneration of the brain similar to Alzheimer's disease in humans, characterized by progressive cognitive impairment beyond that expected to occur with aging. CDS has a slow onset, can be difficult to manage and affects an estimated 14% of dogs 8 years and older.

#### What Is **DISHAA**?

In order for a dog to be diagnosed with CDS, owners must observe their dog exhibiting specific behaviors. The DISHAA Tool helps owners identify these behaviors, enabling veterinarians and owners to work together to assess a dog's mental acuity.

DISORIENTATION	<ul> <li>Gets stuck, difficulty getting around objects, goes to hinge side of door</li> <li>Stares blankly at walls, floor, or into space</li> <li>Does not recognize familiar people/familiar pets</li> <li>Gets lost in home or yard</li> <li>Less reactive to visual (sights) or auditory (sounds) stimuli</li> </ul>
SOCIAL INTERACTIONS	<ul> <li>More irritable/fearful/aggressive with visitors, family or other animals</li> <li>Decreased interest in approaching, greeting or affection/petting</li> </ul>
SLEEP/WAKE CYCLES	<ul> <li>Pacing/restless/sleeps less/waking at night</li> <li>Vocalization at night</li> </ul>
HOUSESOILING, LEARNING AND MEMORY	<ul> <li>Less able to learn new tasks or respond to previously learned commands/name/work</li> <li>Indoor soiling of urine or stool/decreased signaling to go out</li> <li>Difficulty getting dog's attention/increased distraction/decreased focus</li> </ul>
ΑCΤΙVΙΤΥ	<ul> <li>Decrease in exploration or play with toys, family members, other pets</li> <li>Increased activity, including aimless pacing or wandering</li> <li>Repetitive behaviors, e.g., circling/chewing/licking/stargazing</li> </ul>
	<ul> <li>Increased anxiety when separated from owners</li> <li>More reactive/fearful to visual (sights) or auditory (sounds) stimuli</li> <li>Increased fear of places/locations (e.g., new environments/going outdoors)</li> </ul>

<sup>1</sup>Salvin, HE, McGreevy, PD, Sachdev, PS, & Valenzuela, MJ (2010). Underdiagnosis of canine cognitive dysfunction: a cross-sectional survey of older companion dogs. Veterinary Journal (London, England : 1997), 184(3), 277–81. doi:10.1016/j.tvjl.2009.11.007

# **PURINA** Institute

Advancing Science for Pet Health

### COGNITIVE DYSFUNCTION SYNDROME ASSESSMENT TOOL

Cognitive Dysfunction Syndrome (CDS) is an irreversible degeneration of the brain similar to Alzheimer's disease in humans, characterized by progressive cognitive impairment beyond that expected to occur with aging. CDS has a slow onset, can be difficult to manage and affects an estimated 14% of dogs 8 years and older.

### What is **DISHAA**?

Date:

DISHAA is a tool to help you and your veterinarian assess the mental acuity of your dog, and for your veterinarian to potentially diagnose Cognitive Dysfunction Syndrome (CDS).



ANXIETY

Owner's name:	Pet's name:	
Age:	Gender: □Male □Female	Neutered/Spayed: □No □Yes
Breed:	Weight:	
BCS (Body Condition Score 1-9):	Current Diet:	

Medications and Dosage Frequency:

Please complete this canine senior pet cognitive assessment. If you've noticed changes in multiple behavioral categories, be sure to talk to your veterinarian today about the health of your pet's aging brain.

#### **BEHAVIORAL SIGNS**

Identify signs that have arisen or progressed since 8 years of age and older.

Score as 0=none, 1=mild, 2=moderate, 3=severe

Score

DISORIENTATION	
Gets stuck, difficulty getting around objects, goes to hinge side of door	
Stares blankly at walls, floor, or into space	
Does not recognize familiar people/familiar pets	
Gets lost in home or yard	
Less reactive to visual (sights) or auditory (sounds) stimuli	

Please complete assessment on other side.

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#### COGNITIVE DYSFUNCTION SYNDROME ASSESSMENT TOOL CONTINUED



BEHAVIORAL SIGNS	
Identify signs that have arisen or progressed since 8 years of age and older. Score as 0=none, 1=mild, 2=moderate, 3=severe	Score
SOCIAL INTERACTIONS	
More irritable/fearful/aggressive with visitors, family or other animals	
Decreased interest in approaching, greeting or affection/petting	
SLEEP/WAKE CYCLES	
Pacing/restless/sleeps less/waking at night	
Vocalization at night	
HOUSESOILING, LEARNING AND MEMORY	
Less able to learn new tasks or respond to previously learned commands/name/work	
Indoor soiling of urine or stool /decreased signaling to go out	
Difficulty getting dog's attention/increased distraction/decreased focus	
ACTIVITY	
Decrease in exploration or play with toys, family members, other pets	
Increased activity including aimless pacing or wandering	
Repetitive behaviors, e.g., circling chewing licking stargazing	
ANXIETY	
Increased anxiety when separated from owners	
More reactive/fearful to visual (sights) or auditory (sounds) stimuli	
Increased fear of places/locations (e.g., new environments/going outdoors)	
<b>TOTAL</b> (BE SURE TO CARRY OVER THE SCORES FROM FRONT SIDE OF SHEET)	

Once this form is completed, your veterinarian will determine the cause of these signs through a physical examination and recommended diagnostic tests. However, even if your senior pet is experiencing multiple health issues associated with aging, there may be some degree of CDS.

A score of 4-15 is consistent with mild, 16-33 is moderate, and >33 is severe CDS.