

# Functional Cognitive Health for Dogs and Cats

A Longevity-Focused Worksheet by Dr. Kevin Toman, The Longevity Vet



## FOUNDATION

# Why Cognitive Health Belongs in Functional Medicine

Brain aging is rarely sudden. In most pets, metabolic strain, inflammation, pain, sleep disruption, and sensory loss start shifting the brain months to years before a family realizes "something is off." This gradual decline means we have a window of opportunity—if we know what to look for and when to intervene.

Functional Health takes a different approach by asking three critical questions: What is changing before severe confusion appears? Which drivers are modifiable right now? What's the next best test so we don't waste months guessing?



### Important Safety Note

This worksheet is decision support—not a diagnosis. If your pet is unsafe, rapidly worsening, or having seizures, skip the worksheet and escalate to emergency veterinary care immediately.

# Confirm It's "Cognitive-Like" and Not a Look-Alike

Before we assume cognitive decline, we need to rule out other conditions that can masquerade as brain aging. Circle any changes you've noticed in your pet, even if they seem mild or intermittent:

## Spatial Confusion

- Disorientation (stuck in corners, staring at walls)
- Aimless pacing or wandering
- Getting "lost" in familiar spaces

## Behavioral Changes

- New anxiety, clinginess, or agitation
- Less interest in play, family, or routine
- New irritability or mood shifts

## Sleep & Vocalization

- Sleep-wake reversal (up at night, sleeping all day)
- New vocalization, especially at night
- Restlessness during usual rest times

## Daily Function

- House soiling or litter box accidents
- Reduced grooming (particularly in cats)
- Changes in eating or drinking patterns

If none of these apply, consider exploring a different worksheet first—such as pain/mobility, metabolic health, or general senior screening.

# Baseline Medical Screen: The Minimum That Prevents Years of Guessing

Many conditions convincingly mimic cognitive decline. Kidney disease, liver dysfunction, thyroid imbalance, hypertension, infection, anemia, and electrolyte shifts can all present as "brain fog" or confusion. Even certain medications can cause sedation or mental dullness.

Ask your veterinarian for this essential baseline panel:

- Complete Blood Count (CBC) and Chemistry Panel
- Urinalysis to assess kidney function and rule out infection
- Blood pressure measurement (hypertension is common and underdiagnosed)
- Thyroid testing, especially in dogs
- Review of all current medications and supplements

This baseline isn't optional—it's the foundation that allows everything else to make sense.



# Pain, Sensory Screen & Home Tracking



## Pain Assessment

Chronic pain accelerates cognitive decline and alters behavior. Evaluate for arthritis, spinal discomfort, and dental pain. Even subtle pain can manifest as confusion, irritability, or withdrawal.



## Sensory Evaluation

Vision and hearing loss are common in seniors and often go unnoticed. When pets can't see or hear well, they become anxious, disoriented, and less engaged—all of which look like dementia.



## Home Tracking

Your observations are diagnostic gold. Track sleep patterns, accidents (time and frequency), triggers, activity level, appetite, and thirst for 7–14 days. Video clips of concerning behaviors help immensely.

📌 **Pro Tip:** If you want the fastest, cleanest baseline plan, start with the Functional Health Foundations (Start Here) worksheet and then return to this cognitive-focused guide.

# What the Patterns Mean: Decoding Your Pet's Symptoms

This is where most pet parents get stuck—so we make the diagnostic "forks in the road" obvious. Match your pet's symptoms to these common patterns:



## Pattern A: Night Pacing + Vocalization + Sleep Reversal

**Most common drivers:** Pain (arthritis, dental, spine), anxiety with disrupted circadian rhythm, hypertension, or early cognitive dysfunction. Don't jump to "dementia" first—rule out pain and blood pressure early.



## Pattern B: Sudden Onset or Rapid Decline (Days to Weeks)

**Red flags include:** Seizures, head tilt, circling, falling, one-sided weakness, sudden blindness, or very rapid personality change. **This pattern requires urgent veterinary evaluation** and often imaging to rule out stroke, tumor, or inflammation.



## Pattern C: Mental Slowness + Weight Gain + Low Energy

**Often points toward:** Metabolic dysfunction, thyroid issues (especially dogs), or chronic inflammation limiting movement. Brain support works best when whole-body drivers are addressed first.



## Pattern D: Increased Accidents + Confusion

**Could indicate:** Cognitive decline, urinary tract infection, kidney disease, diabetes, arthritis preventing normal posture, or litter box aversion in cats. Don't assume cognition—get urinalysis and pain assessment first.



# What Cognitive Dysfunction Really Is

Cognitive Dysfunction Syndrome (CDS) is progressive brain aging driven by specific biological processes. Understanding these mechanisms helps us intervene more effectively.

## The Core Drivers

- Chronic inflammation and oxidative stress damaging brain cells
- Mitochondrial decline reducing cellular energy production
- Decreased glucose utilization in brain tissue
- Disrupted neurotransmitter signaling and sleep regulation
- Accumulation of abnormal proteins (similar to human dementia)

Functional Health cares less about labels and more about: **What's driving the decline—and what can we change now.**

This reframe matters because it shifts us from passive acceptance ("it's just old age") to active intervention. Many of these drivers are modifiable with the right approach, caught early enough.



# Next Best Step: Monitor, Support, or Escalate

Choose the most appropriate next step for your pet based on their current presentation and your comfort level with managing their care.



## Monitor with Intention

**Appropriate when:** Changes are mild, stable, and slow; baseline labs and blood pressure are normal; no red flags or sudden decline present.

**Your plan:** Track symptoms monthly, recheck labs and blood pressure every 6–12 months (sooner if trends shift), maintain awareness without overreacting.



## Add Targeted Support

**Appropriate when:** Mild-to-moderate cognitive changes exist, sleep disruption or anxiety present, pain or inflammation identified, or reduced engagement noted.

**High-yield interventions:** Pain control first (mobility equals brain fuel), omega-3 fatty acids (EPA/DHA) for foundational anti-inflammatory support, curcumin for inflammation signaling, MCTs when appropriate for alternative brain fuel, and daily enrichment activities.



## Escalate Care

**Escalate to specialist consultation when:** Multiple body systems involved, sleep reversal persists, prescription options being considered, or integrated plan with monitoring schedule needed.

**Escalate to comprehensive protocol when:** Cognitive signs are part of broader aging picture requiring ongoing oversight, adjustments, and tracking—not just one-time advice.



# Targeted Support Strategies: Sequencing Matters

## Pain Control First

Mobility equals brain fuel. Address arthritis, dental pain, and spinal discomfort before adding brain-specific supplements. A pet in pain can't engage, sleep well, or think clearly.

## Alternative Brain Fuel

Medium-chain triglycerides (MCTs) can provide an alternative energy source when glucose utilization declines—but timing and appropriateness matter.

1

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## Anti-Inflammatory Foundation

Omega-3 fatty acids (EPA/DHA) provide foundational brain anti-inflammatory support. Curcumin and targeted supplements address systemic inflammation signaling.

## Daily Enrichment

Short training sessions, sniff walks, puzzle feeders, and play bursts keep the brain engaged. Routine plus environmental cues (nightlights, consistent schedule) reduce confusion.

❏ **A Note on CBD:** Consider CBD primarily for anxiety, sleep disruption, and pain management—not as a dementia "treatment" per se. Always use vetted products and monitor for sedation. Liver enzyme monitoring may be appropriate with long-term use.

# Quick Start Decision Guide & Vet Communication

## Not Sure Where to Start?

- **General uncertainty:** Start with the Foundations Worksheet
- **Cognitive changes + pain/mobility decline:** Use Arthritis/Mobility Worksheet alongside this Cognitive Worksheet
- **Cognitive changes + weight/metabolic concerns:** Begin with Metabolic Health Worksheet
- **Cognitive changes in senior pet:** Start with Senior Screening Worksheet
- **Rapid decline or neurologic red flags:** Urgent veterinary evaluation needed immediately

Remember: Brain health is whole-body health. Cognitive support works best when metabolic, inflammatory, pain, and sensory drivers are addressed systematically—not in isolation.

## What to Ask Your Veterinarian

Copy and paste this checklist to guide your conversation:

1. "Can we run CBC, chemistry panel, urinalysis, and measure blood pressure?"
2. "Can we screen for pain sources like arthritis or dental disease that could be driving these behaviors?"
3. "If labs come back normal, what's our plan for cognitive support and follow-up timing?"
4. "At what point would imaging or neurology referral be appropriate for my pet?"