

Protocol—Cognitive Decline

Assessment		
Health History	<input type="checkbox"/> Family history <input type="checkbox"/> Input/concern from family member or caretaker <input type="checkbox"/> Cardiovascular disease or risk factors <input type="checkbox"/> Diabetes <input type="checkbox"/> Alcohol misuse <input type="checkbox"/> SAD diet <input type="checkbox"/> Weight gain/overweight/obesity	
Symptoms	<input type="checkbox"/> Memory concerns <input type="checkbox"/> Changes in thinking skills (decision making, complex tasks) <input type="checkbox"/> Depression and anxiety	
Physical Signs	<input type="checkbox"/> Hypertension <input type="checkbox"/> BIA/anthropometrics <input type="checkbox"/> Neurological exam (balance, eye movement, reflexes)	
Labs	<input type="checkbox"/> Serum: fasting glucose and insulin or 2-hour glucose challenge test <input type="checkbox"/> CBC <input type="checkbox"/> Inflammatory makers (hs-CRP, homocysteine, fibrinogen, methylmalonic acid, interleukin 6 and tumor necrosis factor- α) <input type="checkbox"/> Serum B ₁₂ <input type="checkbox"/> RBC magnesium <input type="checkbox"/> 25-Hydroxyvitamin D	<input type="checkbox"/> Genetic testing: APOE, APP, PSEN-1 and 2, MTHFR, HLA-DR and -DQ status <input type="checkbox"/> LFTs (ALT/GGT) <input type="checkbox"/> Thyroid panel <input type="checkbox"/> Omega-3 index <input type="checkbox"/> Oxidative stress markers (GSH, GSSG, SOD, lipid peroxidation) <input type="checkbox"/> Lipid panel (TC, TG, LDL-p, HDL) <input type="checkbox"/> MRI or CT <input type="checkbox"/> PET scan (amyloid protein)
Other Assessments	<input type="checkbox"/> Mini-Nutritional Assessment (mMNA) <input type="checkbox"/> Cognitive processing speed; Symbol Digit Modalities Test (SDMT) <input type="checkbox"/> Verbal episodic memory; East Boston Memory test (EBMT) <input type="checkbox"/> Working memory; Digit Span Backwards (DSB) <input type="checkbox"/> Mini-Mental State Examination (MMSE)	
Rx/OTC Directions	<input type="checkbox"/> Metformin <input type="checkbox"/> Diuretics <input type="checkbox"/> Calcium channel blockers/ACE inhibitors <input type="checkbox"/> Statins <input type="checkbox"/> Antidepressants and/or anti-anxiety medications	

Assessment cont.

Notes:

Recommendations

Focus	Nutritional & Lifestyle Recommendations	Notes
Nutrition	<input type="checkbox"/> Improve dietary quality and quantity <input type="checkbox"/> Focus on low GI, high fiber <input type="checkbox"/> Emphasize omega-3 fatty acid (FA) intake <input type="checkbox"/> Phytonutrient rich <input type="checkbox"/> Calorie restriction/intermittent fasting <input type="checkbox"/> Consider ketogenic approach	
Lifestyle	<input type="checkbox"/> Weight management <input type="checkbox"/> Smoking cessation support <input type="checkbox"/> Reduce alcohol consumption <input type="checkbox"/> Strength, aerobic, and postural balance exercises <input type="checkbox"/> Cognitive training and social activities	
Foundational Nutrients and Nutritional Bioactives	<input type="checkbox"/> <i>Bacopa monnieri</i> ¹⁻⁷ <input type="checkbox"/> Curcumin ^{8,9} <input type="checkbox"/> Huperzine A ¹⁰⁻¹⁴ <input type="checkbox"/> Omega-3 FA ¹⁵⁻³³ <input type="checkbox"/> Phosphatidylserine ^{32,33} <input type="checkbox"/> Vitamin D ₃ ^{34,35} <input type="checkbox"/> DHEA ³⁶⁻⁴³ <input type="checkbox"/> Melatonin ^{44,45} <input type="checkbox"/> Acetyl-L-carnitine ⁴⁶⁻⁵¹ <input type="checkbox"/> Vitamin B ₁₂ , folate, vitamin B ₆ ⁵²⁻⁵⁶ <input type="checkbox"/> <i>Ginkgo biloba</i> ⁵⁷⁻⁶² <input type="checkbox"/> Zinc ^{63,64} <input type="checkbox"/> Phytonutrients (including carotenoids, polyphenols, and flavonoids) ⁶⁵⁻⁷¹ <input type="checkbox"/> Antioxidants (including vitamins A, C, and E) ⁷²⁻⁷⁶ <input type="checkbox"/> <i>Withania somnifera</i> ^{77,78}	

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