EVIDENCE BASED LONGEVITY

The Supplement Grade Reference

110 supplements, each graded A to D on human randomized trials. Grades as of November 2026.

Grade A	Grade B	Grade C	Grade D
0	21	65	24

No supplement on this list holds a Grade A today.

What the letters mean

A, Replicated. Replicated randomized human trials showing benefit on a qualifying endpoint.

B, Supported. At least one well-designed human randomized trial showing a meaningful effect, supported by further trials rather than standing alone.

C, Limited. Human randomized evidence exists but is thin: small trials, mixed results, a single positive trial nobody has independently repeated, or a replication that failed.

D, Not shown. No human RCT demonstrates benefit.

The letter applies to the outcome named beside it, at the form and dose the trials used. A supplement can hold a different letter for a different outcome; each name links to its full record, with every trial cited.

Grade	Supplement	What the letter rests on	Outcome type
B	**Amla (Indian Gooseberry, Emblica officinalis)**	Lipid profile (LDL, triglycerides)	Surrogate biomarker
B	**Ashwagandha (standardized root extract)**	Cortisol and stress or anxiety scores in stressed adults	Surrogate biomarker
B	**Berberine HCl**	HbA1c, fasting glucose and LDL cholesterol in type 2 diabetes and dyslipidemia	Surrogate biomarker
B	**Beta-Alanine**	High-intensity exercise capacity	Measured function
B	**Boswellia serrata**	Osteoarthritis pain and function	Self-report
B	**Cinnamon (Cassia / Ceylon)**	Fasting glucose and HbA1c	Surrogate biomarker
B	**Coenzyme Q10 (CoQ10)**	Chronic heart failure events, including hospitalization, as an adjunct to standard therapy	Hard clinical endpoint
B	**Collagen Peptides**	Activity-related joint pain in athletes and active adults	Self-report
B	**Creatine Monohydrate**	Muscle strength with resistance training in older adults	Measured function
B	**EGCG (Epigallocatechin Gallate / Green Tea Extract)**	LDL cholesterol	Surrogate biomarker
B	**Fenugreek (Trigonella foenum-graecum)**	Glycemic markers (blood sugar)	Surrogate biomarker
B	**Ginkgo Biloba (EGb 761)**	Cognitive symptoms in mild to moderate dementia	Measured function
B	**Hyaluronic Acid (Oral)**	Skin hydration, elasticity and wrinkle depth in adults	Surrogate biomarker
B	**Inositol (Myo-inositol)**	PCOS metabolic and reproductive measures	Surrogate biomarker
B	**Melatonin**	Sleep onset timing in delayed sleep phase disorder	Measured function
B	**Nattokinase**	Resting blood pressure	Surrogate biomarker
B	**Omega-3, high-dose EPA (icosapent ethyl, 4 g)**	Major adverse cardiovascular events, high-dose icosapent ethyl	Hard clinical endpoint
B	**Saffron (Crocus sativus)**	Depression symptom scales	Blinded clinician rating
B	**Vitamin C (ascorbic acid)**	Common-cold duration with daily supplementation	Self-report
B	**Vitamin D3**	Fracture prevention, vitamin D3 with calcium, older adults living in institutions	Hard clinical endpoint

Grade	Supplement	What the letter rests on	Outcome type
B	**Zinc**	Common-cold duration in adults	Self-report
C	**5-HTP (5-Hydroxytryptophan)**	Depressive symptoms	Self-report
C	**Acetyl-L-Carnitine (ALCAR)**	Cognition in mild cognitive impairment and mild Alzheimer's disease	Measured function
C	**Akkermansia muciniphila**	Weight regain after diet-induced weight loss, adults with overweight or obesity	Surrogate biomarker
C	**Alpha Lipoic Acid (ALA / R-ALA)**	Symptoms of diabetic peripheral neuropathy	Self-report
C	**Alpha-GPC (L-Alpha-Glycerylphosphorylcholine)**	Cognitive scores in diagnosed mild cognitive impairment, Alzheimer's disease or diabetes with cognitive decline	Measured function
C	**Astaxanthin**	Skin moisture and elasticity	Surrogate biomarker
C	**Beetroot / Dietary Nitrate**	Blood pressure in hypertension	Surrogate biomarker
C	**Benfotiamine**	Diabetic neuropathy measures	Self-report
C	**Bitter Melon (Momordica charantia)**	Glycemic markers	Surrogate biomarker
C	**Boswellia + Celery Seed Extract (RestorCel)**	Knee osteoarthritis pain and stiffness	Self-report
C	**Bovine Colostrum**	Intestinal permeability	Surrogate biomarker
C	**Carnosine**	Glycemic markers in prediabetes or type 2 diabetes	Surrogate biomarker
C	**Choline**	Offspring cognitive and developmental measures	Measured function
C	**Chondroitin Sulfate**	Osteoarthritis pain and function, chondroitin as generally sold	Self-report
C	**Chromium (Picolinate)**	Glycemic markers	Surrogate biomarker
C	**Citicoline (CDP-Choline)**	Memory and behavior in chronic cerebral disorders of the elderly	Measured function
C	**Cordyceps (Cordyceps sinensis / militaris)**	Exercise performance	Measured function
C	**Curcumin (Turmeric Extract)**	Systemic inflammatory markers (hs-CRP, IL-6)	Surrogate biomarker
C	**DIM (Diindolylmethane)**	Hormone-metabolism	Surrogate biomarker
C	**Ergothioneine (L-Ergothioneine)**	Verbal learning in mild cognitive impairment	Measured function
C	**Exogenous Ketones (Ketone Esters and Salts)**	Blood glucose after a meal or glucose drink	Surrogate biomarker
C	**Fucoidan**	Glycated serum protein, inflammatory markers and vaccine antibody response	Surrogate biomarker
C	**GABA (Gamma-Aminobutyric Acid)**	Sleep quality, mood and heart-rate variability	Surrogate biomarker
C	**Glucosamine Sulfate**	Knee osteoarthritis joint-space narrowing and symptoms	Self-report
C	**Glutathione (Oral)**	Glutathione-status and oxidative-stress markers	Surrogate biomarker
C	**Glycine**	Next-day fatigue after experimental sleep restriction	Self-report
C	**GlyNAC (Glycine + N-Acetylcysteine)**	Glutathione, oxidative stress and aging markers in older adults (originating group's trial)	Surrogate biomarker
C	**Gymnema sylvestre**	Glycemic markers	Surrogate biomarker
C	**Hesperidin**	Endothelial markers	Surrogate biomarker
C	**HMB (Beta-Hydroxy Beta-Methylbutyrate)**	Muscle mass and handgrip strength in adults with diagnosed sarcopenia	Measured function
C	**L-Citrulline**	Blood pressure in adults	Surrogate biomarker
C	**L-Tyrosine**	Working memory and reaction measures during acute cold or combat stress	Measured function
C	**Lactoferrin**	Respiratory and systemic symptom scores in healthy adults	Self-report
C	**Lion's Mane Mushroom**	Cognitive test scores in older adults with mild cognitive impairment	Measured function
C	**Lithium (Low-Dose / Microdose)**	Cognitive decline in mild cognitive impairment and Alzheimer's disease	Measured function

Grade	Supplement	What the letter rests on	Outcome type
C	**Magnesium**	Sleep quality in primary insomnia (older adults)	Surrogate biomarker
C	**Methylene Blue (low-dose)**	Memory retrieval and contextual memory after a single oral dose of about 260 mg	Measured function
C	**Milk Thistle (Silymarin)**	Liver enzymes and NAFLD/NASH markers	Surrogate biomarker
C	**MitoQ (Mitoquinone Mesylate)**	Brachial artery flow-mediated dilation in older adults	Surrogate biomarker
C	**Montmorency Tart Cherry**	Sleep quality and duration, and recovery of muscle strength after exercise	Measured function
C	**NAC (N-Acetyl Cysteine)**	Symptoms in schizophrenia, as an adjunct to antipsychotic treatment	Blinded clinician rating
C	**NMN (Nicotinamide Mononucleotide)**	Muscle insulin sensitivity in prediabetic postmenopausal women	Surrogate biomarker
C	**NR (Nicotinamide Riboside)**	Six-minute walk distance in peripheral artery disease	Measured function
C	**Padma Basic (Tibetan multi-herb formula)**	Pain-free and maximum walking distance in intermittent claudication	Measured function
C	**Panax Ginseng**	Erectile function in mild to moderate erectile dysfunction, Korean red ginseng	Self-report
C	**Pentadecanoic Acid (C15:0, fatty15)**	LDL cholesterol and liver enzymes	Surrogate biomarker
C	**Phosphatidylserine (PS)**	Memory and cognition in older adults, bovine-cortex phosphatidylserine (no longer sold)	Measured function
C	**PQQ (Pyrroloquinoline Quinone)**	Cognitive test performance in middle-aged and older adults	Measured function
C	**Probiotics**	Prevention of antibiotic-associated C. difficile diarrhea (people taking antibiotics who are not immunocompromised)	Surrogate biomarker
C	**Quercetin**	Blood pressure at 500 mg/day or more	Surrogate biomarker
C	**Red Yeast Rice (Monacolin K)**	Secondary prevention after myocardial infarction, one standardized extract	Hard clinical endpoint
C	**Reishi (Ganoderma lucidum)**	Immune cell measures as an adjunct to cancer treatment	Surrogate biomarker
C	**Resveratrol (Trans-Resveratrol)**	Metabolic markers in obese men	Surrogate biomarker
C	**Rhodiola Rosea**	Fatigue	Self-report
C	**SAM-e (S-adenosyl-L-methionine)**	Major depressive disorder, SAM-e as monotherapy	Blinded clinician rating
C	**Selenium (Selenomethionine)**	Autoimmune thyroiditis (TPO antibodies)	Surrogate biomarker
C	**Sermorelin (GHRH 1-29)**	Growth hormone and IGF-1 response in older adults	Surrogate biomarker
C	**Sulforaphane (Broccoli Sprout Extract)**	Glucose control and insulin resistance in type 2 diabetes	Surrogate biomarker
C	**Taurine**	Endothelial and inflammatory markers in type 2 diabetes	Measured function
C	**TMG (Trimethylglycine / Betaine)**	Plasma homocysteine	Surrogate biomarker
C	**Tongkat Ali (Eurycoma longifolia)**	Total testosterone in men with low testosterone	Surrogate biomarker
C	**Turkey Tail (Trametes versicolor / PSK)**	Overall survival after curative resection of colorectal or gastric cancer, PSK added to chemotherapy	Hard clinical endpoint
C	**Urolithin A**	Muscle endurance, strength and mitochondrial markers	Measured function
C	**Vitamin K2 (MK-7 / Menaquinone-7)**	Arterial stiffness and coronary artery calcification	Surrogate biomarker
C	**WGP Beta-1,3/1,6-D-Glucan**	Incidence and duration of upper respiratory tract infections	Self-report
D	**2-HOBA (2-Hydroxybenzylamine)**	Tested and harm found	Hard clinical endpoint
D	**Apigenin**	No human randomized trial	Surrogate biomarker
D	**Arterosil HP (Rhamnan Sulfate)**	No human randomized trial on vascular outcomes	Surrogate biomarker
D	**Beta-Carotene (supplemental)**	Tested and harm found	Hard clinical endpoint
D	**Boron**	Tested and no benefit shown	Surrogate biomarker
D	**BPC-157 (Body Protection Compound 157)**	No human randomized trial result published	Measured function

Grade	Supplement	What the letter rests on	Outcome type
D	**Bromelain**	Tested and no benefit shown	Self-report
D	**C60 (Carbon-60 / Buckminsterfullerene)**	No human randomized trial of oral C60	Hard clinical endpoint
D	**Calcium Alpha-Ketoglutarate (Ca-AKG)**	No human randomized trial on an aging outcome	Surrogate biomarker
D	**Fisetin**	No human randomized trial as a senolytic	Hard clinical endpoint
D	**Folic Acid (supplemental, 1 mg/day)**	Tested and no benefit shown	Hard clinical endpoint
D	**Geranylgeraniol (GG)**	No human randomized trial	Self-report
D	**Luteolin**	No human randomized trial of luteolin alone for the graded olfactory use	Measured function
D	**NAD+ (Direct Oral Supplementation)**	No human randomized trial on any health outcome	Hard clinical endpoint
D	**Niacin (extended-release, for lipids)**	Tested and no benefit shown	Hard clinical endpoint
D	**PectaSol Modified Citrus Pectin (MCP)**	PSA kinetics in non-metastatic biochemically relapsed prostate cancer	Surrogate biomarker
D	**Piperlongumine**	No human randomized trial	Hard clinical endpoint
D	**Procyanidin C1 (PCC1)**	No human randomized trial	Hard clinical endpoint
D	**Pterostilbene**	Tested and harm found	Surrogate biomarker
D	**Serrapeptase (Serratiopeptidase)**	Systemic inflammation, cardiovascular or longevity use	Surrogate biomarker
D	**Spermidine**	Aging, longevity, mortality	Hard clinical endpoint
D	**Trehalose**	Tested and no benefit shown	Surrogate biomarker
D	**Vascanox HP (Nitric Oxide / Noxa24)**	No human randomized trial	Surrogate biomarker
D	**Vitamin E (supplemental alpha-tocopherol)**	Tested and harm found	Hard clinical endpoint

Grades move

Every letter here can change when a new trial is published or when a closer reading finds the trials did not test what was claimed. Each change is logged with its reason and the trial behind it at evidencebasedlongevity.co/whats-new.

One email a month lists every grade EBL moved. It is free, needs no account, and the only thing the signup sends is an email address. Sign up at evidencebasedlongevity.co/whats-new.

Edited by Arnold Sandlow, D.C., ABAAHP Diplomate, Former Founding Full Professor of Anti-Aging Studies, and main author of the chapter "Enhancing Adrenal Function" in the Pain Management textbook, 6th edition.

No grade on EBL is paid for. EBL takes no commission on any graded supplement.

Educational use only. Not medical advice. This list states what the trials show, and nothing more.

Letters match the EBL grade dataset (CC BY-NC 4.0), doi.org/10.5281/zenodo.24017034.