



Longvida® is a patented award-winning brand, which contains the natural antioxidant curcumin, optimized with a lipid formulation for maximum bioavailability. Longvida® supplies significant levels of free (not glucuronidated or inactivated) curcumin and has extensive research showing multiple benefits, primarily on cognitive health.



PRODUCT PROFILE SHEET

It is not about how much curcumin is consumed, it is about how much is absorbed into the bloodstream, and what it does when it reaches target tissues.

Longvida® Optimized Curcumin®, using patented SLCP™ formulation, was developed by neuroscientists to deliver systemic free curcumin to the brain and target tissues. Longvida® is supported by traceability and sustainability initiatives and has won numerous awards for innovation in nutritional science.



Product Advantages

- ✓ **Cognitive Curcumin of Choice**
11+ human clinical publications demonstrating the role of Longvida® in cognitive health
- ✓ **Patented lipid formulation**
Developed by UCLA neuroscientists
- ✓ **Clinically shown to cross the blood brain barrier (BBB)**
- ✓ **67+ publications**
Including 29 human studies, pre-clinicals and review papers
- ✓ **Improved cognitive function and mood just in 1 hour**
- ✓ **Clinically proven Bioavailability**
95x more bioavailable than standard 95% curcumin extract using AUC, 67x using Cmax and 285x using AUC normalized. 24-hour circulation.(Ref 1)
- ✓ **Small Daily Dose**
Clinically substantiated at 400mg/day
- ✓ **Reliable and Repeatable**
5 clinical studies in healthy middle-aged adults at 400mg exhibiting positive results supporting cognitive health
- ✓ **Safe**
Multiple studies supporting safety. Self-GRAS
- ✓ **Stomach-Friendly**
No reports of gastrointestinal irritation, as high amounts of Curcuma longa are no longer needed
- ✓ **Award-Winning**
Winner NutraIngredients USA Awards 2019, Finalist Nutraingredients EU Awards 2018, Winner Nutraingredients EU Awards 2015
- ✓ **Sustainable and Traceable**

Research

Bioavailability

Longvida® has scientifically demonstrated to be 67-285 times more bioavailable, depending on cMAX, AUC, and AUC Normalized calculations, than standard 95% curcumin.

Longvida® offers therapeutic levels of free (not deactivated/metabolized or glucuronidated) curcumin, and has been clinically substantiated for blood brain barrier and blood retinal barrier permeability.^{1,7}



Cognitive Functions and Healthy Aging Support

Longvida® promotes healthy brain aging associated with memory, mood, focus, and energy, including support against oxidative stress, AGE formation, and free radicals. In several human trials at different dosages, Longvida® has shown the ability to bind to brain aging-related aggregates (i.e. amyloid-beta).^{4, 5, 7}

- **Small dosage: only 400mg per day**

Longvida® is effective, supporting nervous system function with small dosages: One small, single daily dose of Longvida® (400mg) offered significant health benefits in just 30 days.² A trial on Longvida® showed people reported cognitive function improvement using low-dose Longvida®.⁶

Furthermore, Longvida® was shown to impact exercise recovery and target sports nutrition through positive improvements to key inflammatory biomarkers for functional support at 400mg per day.⁸

- **Brain function improvements just 1 hour after treatment**

The winning research of the year (Nutraceuticals Awards, 2015) "Effect of curcumin on cognitive function and mood in healthy older humans" (Swinburne University, 2014) indicated that, just one hour after treatment with a single 400mg dose of Longvida®, healthy older participants showed superior performance over placebo on validated tasks relating to attention and working memory.

In addition, a 28-day supplementation improved measures of calmness, contentedness and fatigue versus placebo.⁶ The same group of researchers have recently published (2020) a partial replication study, further establishing Longvida as the Cognitive Curcumin of Choice™ and supporting the positive results in cognition and mood first recognized in the ground-breaking study in 2014.

The new study, also conducted at Swinburne University (double-blind, placebo-controlled, parallel-groups) was a partial replication study evaluating similar effects of improved working memory and reduced fatigue and stress reactivity in a healthy older cohort at 4 and 12 weeks with Longvida® supplementation.

Eighty healthy men and women (aged 50-80 years) were randomized to receive 400mg of Longvida® daily (containing 80mg of curcumin), or a matching placebo. As with the previous study, Longvida® (400mg/day) administration resulted in significant improvements to working memory and reductions in fatigue.

These results support the hypothesis that Longvida® supports mood and cognition in older, cognitively intact people.⁹

Cognitive clinical facts at 400mg/day:

- **75% increase** in plasma catalase supporting antioxidant activity against oxidative stress.²

- **15% reduction** in tension-anxiety at 4 weeks with a sustained 17% reduction at 12 weeks in healthy adults.^{9,12,13}
- **31% increase** in spacial memory & learning, which is centred in the hippocampus, the first part of the brain impacted by cognitive decline.^{9,12,13}
- **53% reduction** in anger-hostility at 4 weeks and 64% at 12 weeks, supporting mental wellbeing & improved mood.^{9,12,13}
- **15% average reduction** in fatigue in healthy older adults, suggesting significant improvements in overall mood.^{9,12,13}
- **25% improvement** in working memory compared to placebo in healthy adults.^{9,12,13}

Reduced inflammatory and muscle damage biomarkers

In February 2016, a study conducted by researchers at the University of North Texas was published on Longvida®'s ability to reduce inflammatory and muscle damage biomarkers following oral supplementation.

After exercise induced muscle damage, subjects showed significantly smaller increases in key inflammatory biomarkers with administration of 400mg/day of Longvida® versus placebo.⁸

Vascular Endothelial health

A study by researchers at the University of Colorado -Boulder, showed that oral supplementation of Longvida® improves endothelial-dependent dilation (EDD) in middle aged and older adults mediated, in part, by an increase in nitric oxide bioavailability.¹⁰

Joint Support

An independent double-blind, placebo-controlled, human clinical trial demonstrated that oral administration of Longvida® (400mg twice a day) was found to be effective and safe in alleviating symptoms in patients suffering from knee osteoarthritis when administered for 90 days.¹¹

This also supports flexible dosing opportunities with a twice daily dose and confirms the safety of Longvida®.

Joint health synergy with Longvida®, WokVel™ and Pomella®

Known for its 5-lipoxygenase (5-LOX) inhibition activity, *Boswellia serrata* has been used traditionally as a joint comfort solution supporting improved mobility, comfort, joint integrity, and healthy joint aging.

Curcuma longa is well known for its established cyclooxygenase-2 (COX-2) inhibition activity and favorable benefits promoting healthy joints, supporting improved antioxidant capacity, joint comfort, functionality, and healthy joint aging. Adequate management of both the 5-LOX and COX-2 pathways offers a dual



mechanistic approach joint comfort and functionality with clinically supported evidence for fast-acting, long-lasting benefits. Furthermore, Pomella® Pomegranate Extract, paired with Longvida® Curcumin Extract and WokVel™ may contribute to cartilage regeneration and lubrication via hyaluronic acid, adding additional support to healthy joints.

Curcumin and Metabolic Health

A systematic review of 11 clinical trials revealed that curcumin may help improve metabolic syndrome risk factors, including body mass index, glycemia, lipid profiles (reducing triglycerides and increasing HDL-C), adiponectin, and levels of inflammatory markers¹⁴. Results from a specific study¹⁵ on Longvida® demonstrated its potential to support vascular endothelial function in middle-aged and older adults. Another systematic review revealed curcumin's anti-diabetic effects which are attributed to its ability to reduce oxidative stress and inflammation. They also suggested that Curcumin may significantly lower fasting blood glucose, glycated hemoglobin (HbA1c), and body mass index¹⁶.

Manufacturing Process

The SLCP™ "Solid Lipid Curcumin Particle" formulation is a safe, natural composition that promotes absorption of free curcumin into the bloodstream and various organs. Longvida®'s SLCP™ composition is precisely set in a way that protects the curcumin from the harsh environment of the stomach, offering efficacious amounts of free curcumin at easily managed daily doses. SLCP™ delivers free curcumin by meeting the critical requirements of permeability, solubility, and stability.

Sustainability



At Verdure Sciences®, sustainability is a core value integrated in every step of their supply chain.

Verdugration®: Their flagship initiative, driving eco-conscious, traceable, and certifiable plant-based practices globally.

Verdure Cares®: A key part of their mission, Verdure Sciences® is committed to responsible relationships with employees, communities and business partners.

Verdure's Sustainable Turmeric Program Highlights (benefits 441 farmers across 902 acres):

- **Enhanced Soil & Crop Performance:** Soil enrichment with natural minerals and booster mixes, strategic crop rotation, improved curcumin content for better yields and resilience.

- **Farmer Support & Sustainable Practices:** Ongoing training, manual weed management, improved post-harvest processing to maintain quality and share best practices.

Product Safety

In clinical studies, Longvida® has demonstrated a positive safety profile across a wide range of doses, from 200mg up to 20grams per day.^{5,17}

In pre-clinical studies, Longvida® has demonstrated no signs of acute toxicity at doses exceeding 2000mg/kg—equivalent to more than 100 times the typical recommended dose.¹⁸

Product Range

Longvida® is available as a raw material and finished product solution

Ingredient	Active Content	Grade	Mesh Size
Longvida	Min 23% Curcuminoids	Granular Powder	NLT 80% thru 20 mesh NMT 30% thru 100 mesh
Longvida (Sunflower Lecithin)*	Min 23% Curcuminoids	Granular Powder	NLT 80% thru 20 mesh NMT 30% thru 100 mesh

Finished Products:

Longvida Capsules: Contains 400mg Longvida® Optimized Curcumin® (offered in bulk – 10,000 capsules)

Product Applications

Longvida® can be used in tablets and capsules.

Product Dosage

Clinically substantiated, standard dose of 400mg/day.
Flexible dosing opportunities according to the application.

About



With headquarters in Noblesville, IN, USA, Verdure Sciences® is a supplier of plant-based, botanical ingredients with an emphasis on intrinsic synergies and clinically backed, tangible health applications. Longvida Optimized Curcumin® is a registered trademark of Verdure Sciences.



References

1. Gota et al. (2010) Safety and pharmacokinetics of a solid lipid curcumin particle formulation in patients and healthy volunteers.
2. Disilvestro et al. (2012) Diverse effects of a low-dose supplement of lipidated curcumin (as Longvida®) in healthy middle-aged people.
3. Verdure Sciences et al. Science and Selected Resources: Longvida®. Accessed marketing.vs-corp.com/longvida-science, March 2018
4. Rafii MS et al. (2015) The biomarker initiative DSBi pilot: Proof of concept for deep phenotyping of biomarkers.
5. Frost S et al. (2014) Retinal amyloid fluorescence imaging predicts cerebral amyloid burden and Alzheimer's disease. *Alz Dement*. 10(4):P234-P235.
6. Cox KH et al. (2015) Investigation of the effects of solid lipid curcumin on cognition and mood in a healthy older population. doi:10.1177/0269881114552744
7. Koronyo Y et al. (2017) Retinal amyloid pathology and proof-of-concept imaging trial. doi:10.1172/jci.insight.93621
8. McFarlin et al. (2016) Reduced inflammatory and muscle damage biomarkers following oral supplementation with bioavailable curcumin. doi:10.1016/j.bbact.2016.02
9. Cox KHM et al. (2020) Further evidence of benefits to mood and working memory from lipidated curcumin (Longvida) in healthy older people: A 12-week, double-blind, placebo-controlled, partial replication study. *Nutrients*. doi: 10.3390/nu12061678
10. Santos-Parker JR et al. (2017) Curcumin supplementation improves vascular endothelial function in healthy middle-aged and older adults by increasing nitric oxide bioavailability and reducing oxidative stress.
11. Gupte PA et al. (2019) Evaluation of the efficacy and safety of capsule Longvida® Optimized Curcumin (solid lipid curcumin particles) in knee: A pilot clinical study. doi: 10.2147/JIR.S205390.
12. Scholey A et al. Poster in: 13th European Nutr Conf: European Perspect (FENS), Dublin, Ireland. 2019: P3-01-02.
13. Scholey A et al. *Current Dev Nutr*. Poster. 2019 Jun. 3(1): nzz052.0R32-05-19. doi: 10.1093/cdn/nzz052.0R32-05-19.
14. Lucas Fornari Laurindo et al. (2021) Curcuma longa and curcumin on metabolic syndrome: a systematic review. *LCM Longhua Chinese Medicine Vol 4*.
15. Santos-Parker et al. (2015) biomarkers of aging and age-associated disease curcumin supplementation improves vascular endothelial function in middle-aged and older adults. doi.org/10.1093/geront/gnv554.01.
16. Ledyane Taynara Marton et al. (2021). The Effects of Curcumin on Diabetes Mellitus: A Systematic Review. doi:10.3389/fendo.2021.669448.
17. Dumitrascu et al. (2020) Sectoral segmentation of retinal amyloid imaging in subjects with cognitive decline. doi: 10.1002/dad2.12109.
18. Dadhaniya et al. (2011) Safety assessment of a solid lipid curcumin particle preparation: Acute and subchronic toxicity studies. doi:10.1016/j.fct.2011.05.001