

CardioLux™ HDL

Targeted HDL function and cardiovascular support



Healthy HDL-cholesterol isn't correlated with healthy HDL function

For decades, HDL-cholesterol (HDL-C) has been considered cardioprotective, but studies in top-tier journals demonstrate higher HDL-C measures don't always translate to better cardiovascular health.¹⁻⁷ Research reveals the HDL particle is more complicated than previously thought, and measuring HDL-cholesterol gives almost no indication on how well the HDL particles function.⁸ HDL function is now becoming the clinical focus in proactive cardiovascular health. The Metagenics science team continues to lead in cardiovascular health through expert collaboration, developing a patent-pending formula for targeted support of HDL function.*

HDL function is foundational to heart health

High-density lipoprotein (HDL) particles are critical for reverse cholesterol transport, the normal physiological process of returning cholesterol from the blood and vasculature to the liver for removal or recycling. HDL particles also support antioxidant preservation and endothelial health.⁸ The paraoxonase protein (PON) is an HDL-associated protein that protects against oxidative stress, an important factor to cardiovascular health.⁸ The patent-pending CardioLux HDL formula is targeted to maintain the integrity of PON and other critical components of the HDL particle to maintain healthy function.*

Clinical applications for CardioLux HDL:

HDL function is independent of HDL-C, and advanced lipid testing can help identify patients who would benefit most from supplemental nutritional support.⁸ Well-functioning HDL particles help maintain the health of blood vessels and positively influence the immune system.*⁸

Mechanisms of action

Pomegranate, lycopene, and quercetin promote the expression and activity of PON.⁹⁻¹⁶ Emerging preclinical research demonstrates lycopene and pomegranate polyphenols provide targeted support for the expression and activity of enzymes involved in the transport of cholesterol to HDL, which supports reverse cholesterol transport.*¹⁷⁻²⁴

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.



Mark Houston, MD

Metagenics created CardioLux HDL in partnership with Mark Houston, MD. Dr. Houston is a leader in personalized and precision integrative cardiovascular medicine. He is the primary investigator on numerous journal publications, serves an editorial role for multiple medical journals, and is the author of several cardiovascular reference texts. In addition, Dr. Houston continues

to treat patients, teach, and mentor doctors in the field of cardiology. His innovation and guidance have been invaluable to the scientists at Metagenics.

Serving Size: 2 capsules

Servings per container: 60

Amount Per Serving:

Vitamin E.....	134 mg
(as d-alpha tocopheryl succinate)	
Quercetin	500 mg
Pomegranate polyphenols (Pomella).....	434 mg
Whole Fruit Extract* [standardized to 200 mg gallic acid equivalent (GAE)and 125 mg punicalagins]	
Lycopene	10 mg

Other Ingredients: Capsule (hydroxypropylmethylcellulose), microcrystalline cellulose, magnesium stearate (vegetable), and silica.

Directions: Take two capsules twice daily with food or as directed by your healthcare practitioner.

This product is non-GMO, gluten-free, and vegetarian.

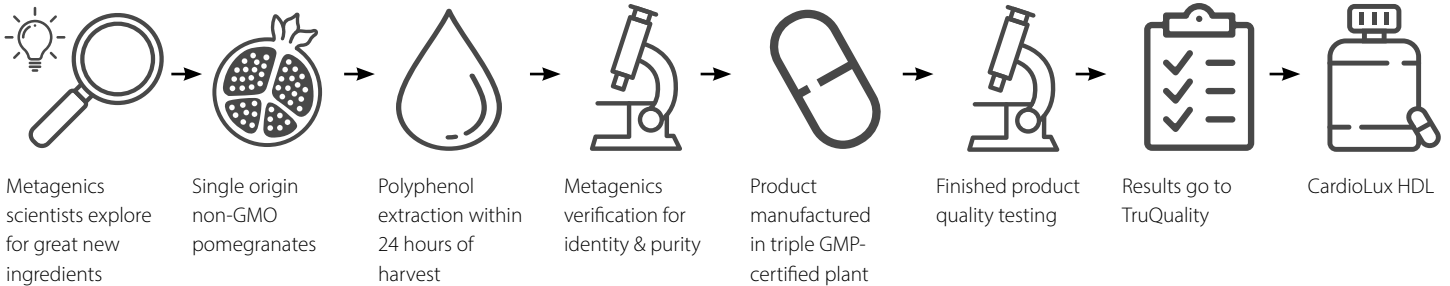
Tamper Evident: Do not use if safety seal is missing or broken.

Storage: Keep tightly closed in a cool, dry place.



TruQuality: The confidence you deserve

The story of Pomella® is just one example of the purity and quality you can expect from Metagenics. We document our ingredients through TruQuality™, an innovative transparency program that provides full access to the data from third-party analytical tests performed on each lot. From heavy metal and glyphosate testing to active ingredient potency, we have laid it all on the table so that you know exactly what is inside each of our bottles.



Complementary products

- **Inflavonoid Intensive Care®:** Highly bioavailable curcumin and xanthohumol with boswellia and ginger
- **OmegaGenics® EPA-DHA 1000:** Helps support cardiovascular, musculoskeletal, and immune system health*
- **Kaprex® AI:** Selective kinase response modulators for immune function*

➤ Talk to your healthcare practitioner about CardioLux™ HDL or visit info.metagenics.com/cardiolum-hdl

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References:

1. Haase CL et al. *J Clin Endocrinol Metab.* 2012;97(2):E248-E256.
2. Voight BF et al. *Lancet.* 2012;380(9841):572-580.
3. Haase CL et al. *Diabetes.* 2015;64(9):3328-3333.
4. Vitali C et al. *Curr Cardiol Rep.* 2017;19(12):132.
5. Madsen CM et al. *Eur Heart J.* 2017;38:2478-2486.
6. Hamer M et al. *Arterioscler Thromb Vasc Biol.* 2018;38(3):669-672.
7. Lincoff AM et al. *N Engl J Med.* 2017;376(20):1933-1942.
8. Chiesa ST et al. *Cardiovasc Drugs Ther.* 2019;33(2):207-219.
9. Millar C et al. *Adv Nutr.* 2017;8(2):226-239.
10. Fuhrman B et al. *Nutrition.* 2010;26(4):359-366.
11. Rock W et al. *J Agric Food Chem.* 2018;56(18):8704-8713.
12. Khateeb J et al. *Atherosclerosis.* 2010;208(1):119-125.
13. Costa L et al. *Neurochem Res.* 2013;38(9):1809-1818.
14. Boesch-Saadatmandi D et al. *J Physiol Pharmacol.* 2010;62(1):131.
15. Gong M et al. *Biochem Biophys Res Commun.* 2009;379(4):1001-1004.
16. Wade L et al. *Atherosclerosis.* 2013;226(2):392-397.
17. Palozza P et al. *J Nutr Biochem.* 2011;22(10):971-978.
18. Yang CM et al. *J Nutr Biochem.* 2012;23(1):8-17.
19. Yang CM et al. *J Nutr Biochem.* 2012;23(9):1155-1162.
20. Rom O et al. *Chem Biol Interact.* 2016;259(Pt B):394-400.
21. Zhao S et al. *Food Funct.* 2016;7(7):3201-3210.
22. Verghese M et al. *J Biol Sci.* 2008;8(2):268-277.
23. Rosenblat M et al. *Atherosclerosis.* 2010;212(1):86-92.
24. Kaplan M et al. *J Nutr.* 2001;131(8):2082-2089.