

ENDUR-ACIN®

Extended Release

SmartMatrix™ Niacin (Nicotinic Acid)



Heart +
Cholesterol Health*

What Is It?*

ENDUR-ACIN® SmartMatrix™ Niacin is an extended-release dietary supplement featuring SmartMatrix™ tablet technology. Each tablet dissolves slowly over 6 to 8 hours for a gradual release of nicotinic acid at the preferred rate to support blood cholesterol and lipid balance and help eliminate the nuisance “niacin skin flush” and digestive upset common with regular immediate-release formulas.

Product Availability

Bottle Size(s):

- 250 mg – 200 tablets
- 500 mg – 100, 200 tablets
- 750 mg – 200 tablets

How Does It Work?*

Researchers attribute the ability of nicotinic acid to modulate cholesterol and lipid metabolism primarily to its action on liver cells (hepatocytes) and, to a lesser extent, on fat cells (adipocytes). In liver cells, nicotinic acid has been shown to inhibit the enzyme diacylglycerol O-acyltransferase 2 (DGAT2), an action that supports normal triglyceride production and cholesterol metabolism.¹ On fat cells, nicotinic acid has been shown to bind to hydroxycarboxylic acid receptor 2 (HCA2), an action that inhibits the release of free fatty acids into the bloodstream.²

Directions: As a dietary supplement for adults, take one (1) to four (4) tablets, twice daily, with food, Use only as directed by your healthcare professional.

Supplement Facts

Serving Size 1 Tablet

Amount Per Tablet	% Daily Value
Niacin (as nicotinic acid)	250 mg 1563%

Directions: As a dietary supplement for adults, take one (1) to two (2) tablets, twice daily, with food, Use only as directed by your healthcare professional.

Supplement Facts

Serving Size 1 Tablet

Amount Per Tablet	% Daily Value
Niacin (as nicotinic acid)	500 mg 3125%

Directions: As a dietary supplement for adults, take one (1) tablet, twice daily, with food, Use only as directed by your healthcare professional.

Supplement Facts

Serving Size 1 Tablet

Amount Per Tablet	% Daily Value
Niacin (as nicotinic acid)	750 mg 4688%

Other Ingredients: Vegetable wax (rice bran and/or carnauba), stearic acid (vegetable), magnesium stearate (vegetable), and silica.

This information is for healthcare professionals only to inform patient treatment and is not intended for consumer use.

*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.

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Preferred dissolution rate

Dissolution data confirm ENDUR-ACIN® has the preferred dissolution profile to support optimal cholesterol and lipid balance.⁵ The primary absorption of nicotinic acid is during the first 2–3 hours after dosing with absorption essentially complete by 6 hours.⁶

Research Highlights*

Backed by a robust research portfolio

The efficacy, safety and tolerance of ENDUR-ACIN® has been evaluated in 24 studies—including 17 clinical trials. This award-winning cardiovascular support supplement has been shown to be well tolerated and clinically effective for supporting cholesterol and lipid balance, either alone or as a complement to other interventions.³

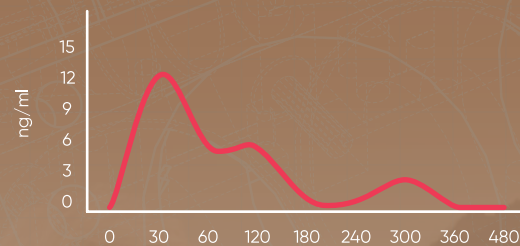
ENDUR-ACIN® Research Portfolio

- 17 **Clinical Trials** (Cholesterol & Lipid Balance)
- 4 **Analytical Studies** (Pharmacokinetic, Dissolution, Free Nicotinic Acid, Cost Analysis)
- 1 **Systematic Review**
- 1 **Post-Hoc Analysis** (Cholesterol & Lipid Balance)
- 1 **Case Series** (Healthy Aging Protocol)

ENDUR-ACIN® dosages of 1,500 to 2,000 mg/day, taken for 8 to 38 weeks, have been shown to be well tolerated and effective for cholesterol and lipid balance, especially in older adults.^{3,4}

Note: Extended-release and immediate-release products are not interchangeable. The average therapeutic dosage of Endur-Acin® (1,000 to 2,000 mg/day) for cholesterol and lipid support is about half the dosage of immediate-release nicotinic acid (3,000 mg/day) and typically does not exceed 2,000 mg/day.

Mean Serum Level of Nicotinic Acid (Endur-Acin® 500-mg Dose)



Preferred dissolution rate

In clinical trials of ENDUR-ACIN®, the dropout rate due to side effects such as skin flushing, digestive upset, itching, and other minor reactions was very low—about 4%—which supports its excellent tolerability.

The Evolution of Niacin Formulations: Balancing Efficacy, Safety, and Patient Tolerability

Early niacin studies used immediate-release formulas, causing frequent flushing and high dropout rates. Later sustained-release versions reduced flushing but increased liver toxicity. Safer extended-release options like ENDUR-ACIN® Wax Matrix Niacin have since replaced them and current dosage guidelines are every 12 hours or once daily to maximize benefits and minimize side effects.

SmartMatrix™ and ENDUR-ACIN® is a trademark of Innovite, Inc.

References

1. Ganji SH, et al. J Lipid Res. 2004;45(10):1835-1845.
2. Lukasova M, et al. Trends Pharmacol Sci. 2011;32(12):700-707.
3. Dunatchik AP, et al. J Clin Lipidol. 2012;6(2):121-31.
4. Keenan JM, et al. J Am Geriatr Soc. 1992;40(1):12-18.
5. Poon IO, et al. Am J Health Syst Pharm. 2006;63(21):2128-34.
6. Keenan JM. J Clin Lipidol. 2013;7(1):14-23.

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