

NEW CELLULAR HEALTH & LONGEVITY

# NR Longevity™

WITH NIAGEN® NICOTINAMIDE RIBOSIDE; DECREASES THE EFFECTS OF CELLULAR AGING†

NR Longevity™ targets biological processes that decline with age.

Nicotinamide riboside (NR), resveratrol and sulforaphane promote healthy aging by replenishing NAD+, enhancing mitochondrial function and providing antioxidant support.‡



Decreases the effects of cellular aging<sup>†</sup>



Helps to replenish NAD+<sup>†</sup>



Enhances mitochondrial function<sup>†</sup>

## What is Nicotinamide riboside (NR)?

Nicotinamide riboside (NR) is a form of vitamin B3 that acts as a precursor of nicotinamide adenine dinucleotide (NAD+), which plays a critical role in cellular energy production.<sup>2-4</sup>

Supplementing with NR enhances NAD+ levels, supporting the function of NAD+ dependent enzymes that maintain cellular energy production and repair. NR has been clinically shown to increase NAD+ levels in as little as 2 weeks.<sup>2</sup>

## Why is NAD+ important for cellular health?

NAD+ activates enzymes in the sirtuin family, the master switches of metabolism and regulators of aging. Notably, NAD+ activates SIRT1, an epigenetic switch that regulates metabolism and supports mitochondrial biogenesis, cellular energy production and cellular longevity.<sup>5,6</sup> Higher NAD+ levels are associated with healthy mitochondrial function.<sup>7,8</sup> Conversely, cellular NAD+ levels decline with age, and can decrease by up to 50% over the adult lifespan.<sup>7-11</sup>



Aging is associated with a decline in mitochondrial function and increased oxidative stress. NR Longevity™ targets both of these cellular hallmarks by supporting mitochondrial biogenesis and antioxidant gene expression.‡

†This statement has not been evaluated by the Food & Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

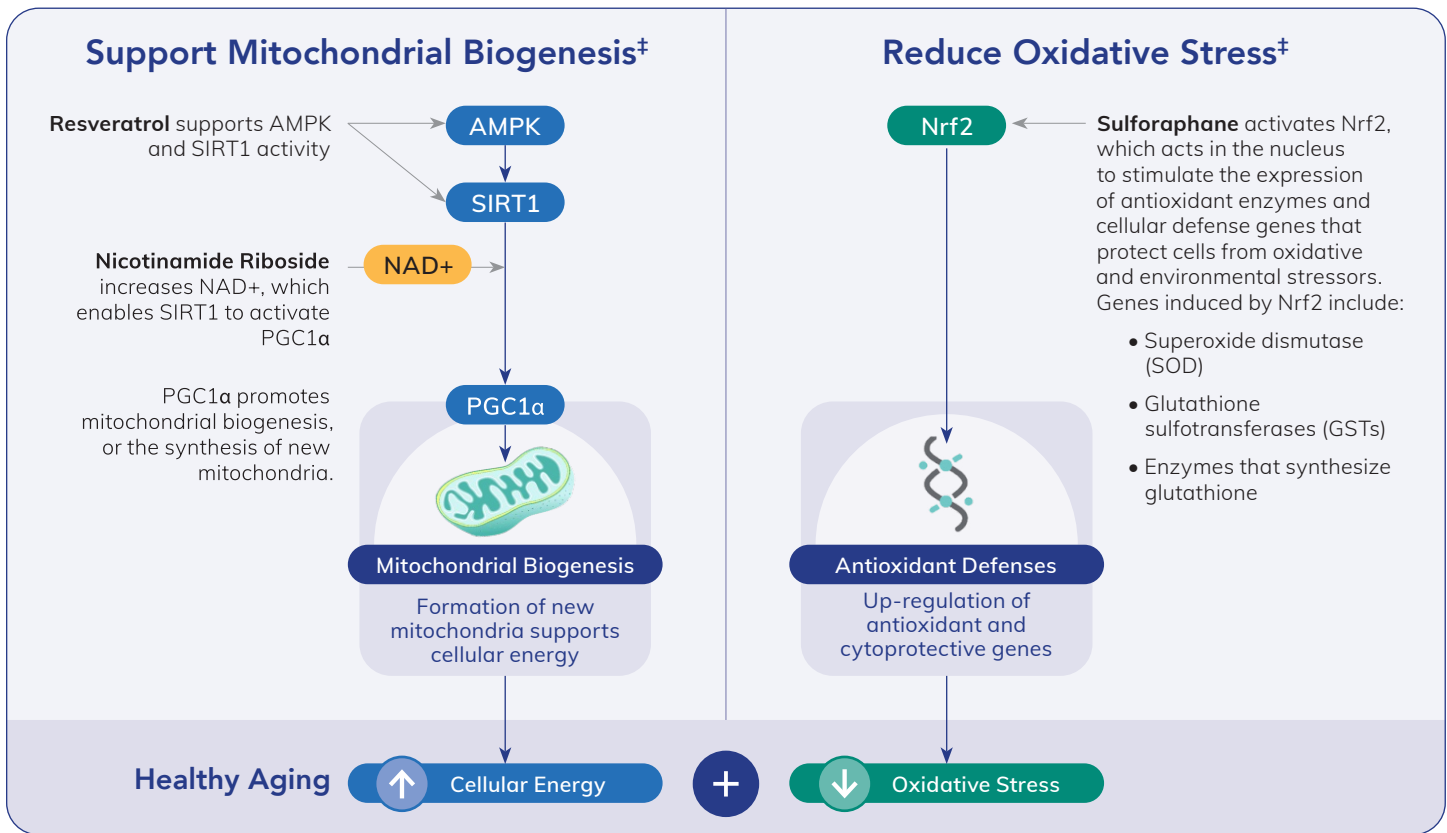


800.753.2277 | PureEncapsulationsPro.com

Pure Encapsulations is a registered trademark.

**pure**  
encapsulations®

# Targeting the Mitochondrial and Oxidative Hallmarks of Aging at the Cellular Level†



Mitochondria are essential to energy production in cells, and their quantity decreases with aging. **AMP kinase (AMPK)**, an enzyme activated by healthy lifestyle habits such as exercise and caloric restriction, increases levels of **NAD<sup>+</sup>**, which decline with age.

**Nicotinamide riboside (NR)** supplementation also increases NAD<sup>+</sup> levels. NAD<sup>+</sup> enables sirtuin 1 (SIRT1) to activate PGC1alpha, the master inducer of mitochondrial biogenesis (formation of new mitochondria).

**Sulforaphane** activates **Nrf2**, a transcription factor that promotes the genetic expression of a wide range of antioxidant proteins, such as superoxide dismutase (SOD) and glutathione biosynthetic enzymes, which help to protect cells from oxidative stress.

## Supplement Facts

**2 capsules, 1-2 times daily, with or between meals.**

**Two (size 00) capsules contain:**

Nicotinamide riboside chloride (NR)	300 mg
Broccoli ( <i>Brassica oleracea italica</i> ) sprout concentrate (whole plant)	200 mg
(standardized to contain 800 mcg sulforaphane)	
Trans-resveratrol	150 mg

Other ingredients: vegetarian capsule (cellulose, water), hypoallergenic plant fiber (cellulose), organic rice extract blend (organic rice bran extract, organic rice hulls, organic gum arabic, organic sunflower oil)

Niagen® is the trademark of Chromadex, Inc.

Patents: [www.chromadex.com/patents](http://www.chromadex.com/patents)

Cellular Health & Longevity



NON  
GMO

V

VEG

NR Longevity™

Quantity

Order  
Code

60

NRL6

## REFERENCES

1. Ghanim H, Sia CL, Abuaysheh S, et al. *J Clin Endocrinol Metab.* 2010 Sep;95(9):E1-8.
2. Conze D, Brenner C, Kruger CL. *Sci Rep.* 2019 Jul 5;9(1):9772.
3. Trammell SA, Schmidt MS, Weidemann BJ, et al. *Nat Commun.* 2016 Oct 10;7:12948.
4. Covarrubias AJ, Perrone R, Grozio A, Verdin E. *Nat Rev Mol Cell Biol.* 2021 Feb;22(2):119-141.
5. Chen C, Zhou M, Ge Y, Wang X. *Mech Ageing Dev.* 2020 Apr;187:111215.
6. Tang BL. *Mol Cells.* 2016 Feb;39(2):87-95.
7. Janssens GE, Grevendonk L, Perez RZ, et al. *Nat Aging.* 2022 Mar;2(3):254-263.
8. Chu X, Raju RP. *Metabolism.* 2022; Jan;126:154923.
9. Clement J, Wong M, Poljak A, et al. *Rejuvenation Res.* 2019 Apr;22(2):121-130.
10. McReynolds MR, Chellappa K, Baur JA. *Exp Gerontol.* 2020 Feb 22;134:110888.
11. Bratic A, Larsson NG. *J Clin Invest.* 2013 Mar;123(3):951-7.

†Visit [PureEncapsulations.com](http://PureEncapsulations.com) for more information on our GMO Policy.



Certified Gluten-Free by the Gluten-Free Certification Organization, [gluten.org](http://gluten.org)



800.753.2277 | [PureEncapsulationsPro.com](http://PureEncapsulationsPro.com)

Pure Encapsulations is a registered trademark.

**pure**  
encapsulations®

‡This statement has not been evaluated by the Food & Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.