

SUSTAINED RELEASE

RIAGEV[®]-SR[™]

D-RIBOSE & NIACINAMIDE

Promotes healthy aging and NAD⁺ cellular energy



WHAT IS IT?

RiaGev[®]-SR[™] is an advanced delivery form of RiaGev, a proprietary blend of D-ribose and niacinamide (also known as nicotinamide). Formulated to mimic food digestion, the sustained-release vegetable wax-matrix tablet releases nutrients in a slow, steady manner over 5 to 7 hours for optimal absorption and tissue retention.

HOW DOES IT WORK?

The RiaGev blend is specifically formulated to overcome the challenges of nicotinamide riboside, which is reported to degrade in the gut or is metabolized in the liver, resulting in low bioavailability in other tissues.¹ By contrast, RiaGev increases the body's production of nicotinamide adenine dinucleotide (NAD⁺) by directly entering the salvage pathway,² the primary source of NAD⁺ for most tissues in the body.

Required by all cells, NAD⁺ acts as an essential cofactor and substrate for numerous biological processes including energy production, mitochondrial function, DNA repair, gene expression, calcium-dependent secondary messenger signaling and immunoregulatory roles.

In disease states and with advancing age, NAD⁺ production declines. This action is attributed to the inability of cells to synthesize enough NAD⁺ and/or the need for a higher level of NAD⁺ to meet metabolic demands.^{3,4}

WHO CAN BENEFIT?

For adults seeking nutritional support for healthy aging, including improved energy, cognitive function, antioxidant defense, and stress management.

PRODUCT AVAILABILITY

Bottle Size(s):
90 tablets

PRACTITIONER DISTRIBUTION

■ Online dispensaries pending.



Supplement Facts

Serving Size 1 Tablet

Amount Per Serving		% DV
Total Carbohydrate	Less than 1 g	<1%**
Total Sugars	Less than 1 g	
Niacin (as niacinamide)	160 mg	1000%
d-Ribose	600 mg	*

* Daily Value not established.

**Percent Daily Values are based on a 2,000 calorie diet.

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

Directions: Take one (1) to three (3) tablets daily with food or drink, or as directed by your healthcare professional. Do not exceed recommended dose without consulting a physician.

1. Mehmehl M, et al. *Nutrients*. 2020;12(6):1616.
2. Pharmacodynamics Study Summary of RiaGev. Bioenergy Life Science, Inc. Data on file.
3. Xie N, et al. *Signal Transduct Target Ther*. 2020;5(1):227.
4. McReynolds MR, et al. *Exp Gerontol*. 2020;134:110888.

RESEARCH HIGHLIGHTS

RiaGev improves NAD⁺ production & other healthy aging parameters

One randomized, triple-blind, placebo-controlled, crossover study⁵ indicates RiaGev (1,520 mg, twice daily) for 7 days significantly improves NAD⁺ production and related healthy aging parameters in healthy adults.

For this pilot study, researchers enrolled 18 healthy men and women, aged 35 to 65 years, who were normal weight or overweight (but not obese). Age-related health issues and high stress is common in this age range. Supplementing with RiaGev improved numerous outcome measures, including the following:

- **Improved NAD metabolome.*** Compared to placebo, RiaGev significantly ($P < .05$) increased blood levels of NAD⁺ and NADP⁺ and showed a trending increase ($P > .08$) in the NADPH level. NADH was not measured due to sample degradation during storage/shipping.
- **Increased antioxidant and energy production.** Compared to placebo, RiaGev significantly ($P < .05$) increased blood levels of total glutathione and high energy phosphates (ATP + ADP).
- **Glycemic control.** Compared to placebo, RiaGev significantly ($P < .05$) reduced post-prandial blood glucose with no significant change in insulin secretion, suggesting improved insulin sensitivity.
- **Improved stress response.** RiaGev significantly ($P < .05$) reduced the waking salivary cortisol level, suggesting an improved stress response. Placebo had no effect.
- **Improved overall wellbeing.** Compared to placebo, RiaGev significantly ($P < .05$) improved feelings of physical fatigue, mental concentration and motivation as measured by the validated CIS questionnaire.[†]
- **Safe and well tolerated.** No clinically relevant adverse events or changes in clinical chemistry or hematology were reported with RiaGev supplementation.

A longer-term study⁶ designed to simulate everyday lifestyles reveals similar findings. This study involved 27 healthy, middle-aged men and women who continued typical daily activities while supplementing with RiaGev for 28 days. Key findings include:

- **Improved NAD⁺ production.** RiaGev (1,520 mg), either once or twice daily, for 28 days increased NAD⁺ blood levels beyond the 7-day period used in the pilot study

described above. Results indicate twice daily dosing significantly ($P < .001$) increased NAD⁺ after 1 week (113%) and after 4 weeks (127%) compared to baseline. By contrast, once daily dosing increased NAD⁺ to 113% after 2 weeks, or twice as long. This time-course difference is attributed to the cumulative effect of RiaGev on NAD⁺ production (i.e., a loading period).

- **Glycemic control.** RiaGev steadily lowered the glycated serum protein level, reaching a significant ($P < .05$) reduction after 4 weeks. In addition, RiaGev attenuated the post-prandial rise in blood glucose without any change in insulin level. These findings suggest potential therapeutic value for glycemic control.
- **Improved stress response.** Compared to baseline, RiaGev led to a slight reduction and steadily lower level of waking salivary cortisol, indicating potential therapeutic value for stress management.
- **Improved overall wellbeing.** RiaGev improved subjective measures of physical fatigue, mental concentration, motivation, and physical activity as measured by the validated CIS questionnaire.[†]
- **Safe and well tolerated.** No significant changes in key blood parameters, including liver and kidney function parameters, were reported with RiaGev supplementation.

Preclinical dose-response data⁶ reveal RiaGev is effective in amounts as low as 760 mg, once daily, informing the following suggested dosing protocol:

- **For loading or acute treatment:**
1,520 mg, twice daily for at least 7 days
- **For NAD⁺ production and energy:**
760 mg, twice daily for at least 14 days
- **For long-term NAD⁺ rejuvenation:**
760 mg, once daily

Together, these findings indicate RiaGev (760 to 3,040 mg/day) is safe, well tolerated and offers therapeutic benefits for healthy aging.

The RiaGev-SR tablet delivery form adds sustained release technology for superior stability with no “dose dumping” to optimize absorption and tissue retention of this highly effective blend of niacinamide and D-ribose.

5. Xue Y, et al. *Nutrients*. 2022;14(11):2219.

6. RiaGev White Paper 2022. Bioenergy Life Science, Inc.

* The NAD⁺ metabolome includes NAD⁺, NADH, NADP⁺ and NADPH.

† The CIS (Checklist Individual Strength) questionnaire is a validated questionnaire for healthy working people that assesses physical fatigue, concentration, motivation, and physical activity.

RiaGev® is a registered trademark of Bioenergy Life Science, Inc. Protected by International Patent WO2019217935A1. U.S. patents pending.