

# Senolyte™

## Next Gen NAD+ Boosters

For Cellular Health & Longevity



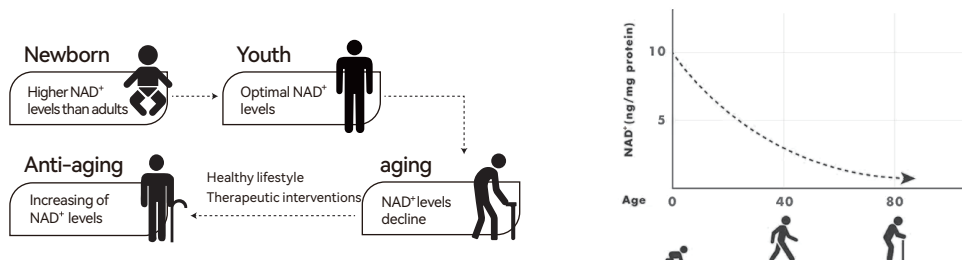
# What is NAD<sup>+</sup> ?

NAD<sup>+</sup> is a vital coenzyme that acts like a spark plug for your cells. It directly fuels cellular energy production and supports critical maintenance functions, including DNA repair and cellular signaling.



## Why is NAD<sup>+</sup> related to aging?

Age-related decline in NAD<sup>+</sup> is driven by its increased consumption and chronic inflammation. This depletion disrupts cellular energy metabolism and repair functions, which ultimately leads to tissue dysfunction and diseases of aging.



## What are NAD<sup>+</sup> boosters?

As direct oral intake of NAD<sup>+</sup> faces considerable bioavailability challenges, recent researches focus on precursors like NMN and NR, which are readily absorbed and converted into NAD<sup>+</sup> by your cells.

## What can Senolyte™ offer?

Senolyte™ features premium NAD<sup>+</sup> boosters like NMN and revolutionary compounds like NRAKG, all developed with cutting-edge science. We are dedicated to advancing healthy aging through rigorous research that validates product efficacy.

# Senolyte™ NRAKG

Senolyte™ NRAKG is a non-patent-infringement NR salt, produced via a proprietary synthesis process that integrates Nicotinamide Riboside (NR) and α-Ketoglutarate (AKG) into a defined molecular entity. Unlike a simple physical blend, this defined molecular form demonstrates greater activation of SIRT1 and AMPK-related pathways. These properties support its application as a functional ingredient for mitochondrial health and longevity related formulations.

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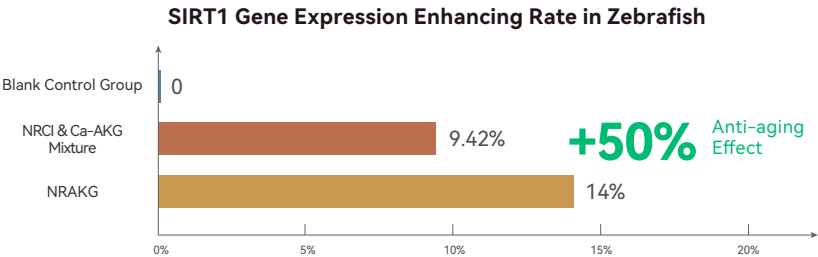
Dual-functional NR Salt
- +

Patent-pending Innovation
- +

Preclinically Verified Longevity Benefits

## Enhancement of SIRT1 Gene Expression in Zebrafish

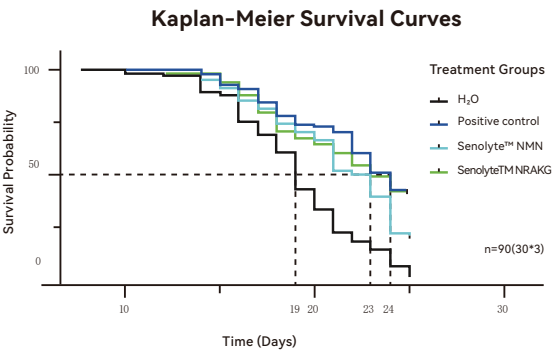
Sirt1 gene serves to repair DNA and regulate genes for metabolism. The Sirt1 gene expression enhancing rate of NRAKG sample in zebrafish was 14%, representing approximately 50% greater upregulation compared with an equimolar mixture of NRCl& Ca-AKG, at the test concentration of 0.025g/L.



**Conclusion:** These results indicate that Senolyte™ NRAKG more effectively activates Sirt1-related pathways than a simple NR and AKG blend, supporting its potential application in healthy aging and metabolic products.

## Lifespan-extending Effect of Senolyte™ NRAKG

Kaplan–Meier survival analysis was used to calculate median lifespan of Caenorhabditis Elegans across the following groups: vehicle control, positive control, Senolyte™ NRAKG and NMN.



**Table 1: P-Values Between Groups (Log-Rank test)**

| P(Log-Rank test) |                  |                  |                 |
|------------------|------------------|------------------|-----------------|
|                  | H <sub>2</sub> O | Positive control | Senolyte™ NRAKG |
| Positive control | <0.0001****      |                  |                 |
| Senolyte™ NRAKG  | <0.0001****      | 0.6167           |                 |
| Senolyte™ NMN    | <0.0001****      | <0.0003***       | 0.0056**        |

p < 0.05 is considered statistically significant

Statistical significance is indicated by asterisks:  
\* p <0.05, \*\* p <0.01, \*\*\* p <0.001, \*\*\*\* p <0.0001

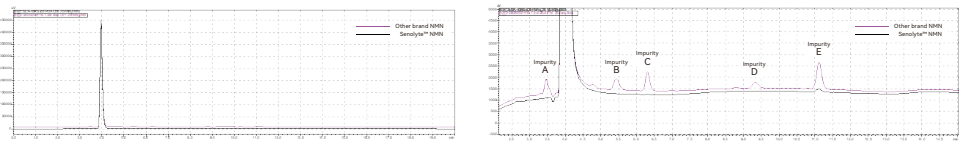
**Conclusion:** These findings suggest that Senolyte™ NRAKG is a robust longevity supporting compound. It outperforms NMN and shows efficacy comparable to the positive control, with no statistical difference observed.

# Senolyte™ NMN

$\beta$ -Nicotinamide Mononucleotide (NMN) is a direct  $NAD^+$  precursor that supports cellular energy metabolism and healthy longevity. Senolyte™ NMN, produced via a proprietary biosynthetic process, offers  $\geq 99\%$  purity, excellent stability, and powder forms with multiple bulk density options. Third-party studies confirm it extends lifespan in *C. elegans* models, matching a positive control and validating its role as a reliable  $NAD^+$  booster.

- +  $\geq 99\%$  Purity (HPLC-verified)
- + Bio-synthetic Production Process
- + Preclinically Verified Longevity Benefits

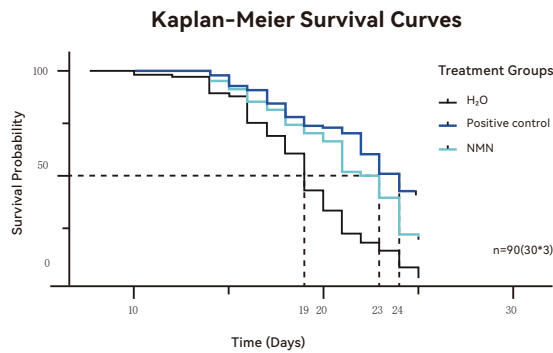
## High Purity Confirmed by HPLC Chromatogram Comparison



**Conclusion:** HPLC chromatogram analysis confirms the high purity of Senolyte™ NMN, with no detectable impurities commonly associated with raw material contaminants or inefficient manufacturing processes.

## Lifespan-extending Effect of Senolyte™ NMN

Kaplan–Meier survival analysis was performed to calculate median lifespan of *Caenorhabditis Elegans* across the following groups: vehicle control ( $H_2O$ ), positive control, and Senolyte™ NMN.



**Table 1: P-Values Between Groups (Log-Rank test)**

| P(Log-Rank test) |             |                  |
|------------------|-------------|------------------|
|                  | $H_2O$      | Positive control |
| Positive control | <0.0001**** |                  |
| NMN              | <0.0001**** | <0.0003***       |

$p < 0.05$  is considered statistically significant

Statistical significance is indicated by asterisks:  
\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ , \*\*\*\*  $p < 0.0001$

**Conclusion:** These findings support Senolyte™ NMN as a promising longevity supporting ingredient demonstrating significant lifespan extension over the control and approaching the efficacy of established benchmark compounds in a validated preclinical model.

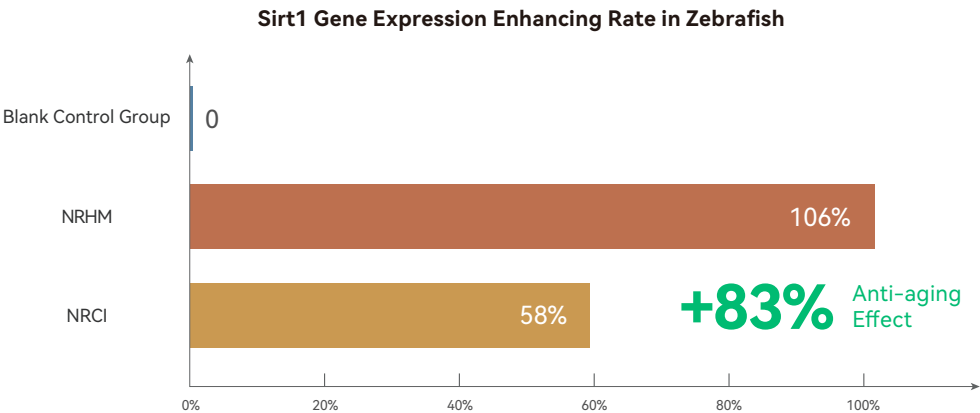
# Senolyte™ NRHM

The future of longevity depends not only on what you take, but also on its form. Nicotinamide Riboside Hydrogen Malate (NRHM) is a next-generation NAD<sup>+</sup>precursor that crystallizes NR with malate. This crystalline structure ensures consistent dissolution, more reliable gastrointestinal absorption, and higher bioavailability than non-crystalline forms. Senolyte™ NRHM is produced via a clean salt-formation process using food-grade L-malate—a non-solvent, non-fermentation method that delivers exceptional purity. The combination of NR and malate sustains energy, supports physical performance, and promotes long-term vitality by empowering the body’s natural renewal processes.

- + Clean Salt-formation
- + High Purity And Assay
- + Proven Optimal Efficacy

## Enhancement of SIRT1 Gene Expression in Zebrafish

Comparison of In vivo Study on NRHM and NRCl shows that the anti-aging effect of **NRHM** was 83% better than that of **NRCl**.



**Conclusion:** Both NRHM and NRCl significantly enhanced Sirt1 gene expression in zebrafish, demonstrating significant anti-aging efficacy. The anti-aging effect of NRHM was significantly ( $p<0.05$ ) stronger approximately 83% better than that of NRCl, suggesting that NRHM is a more effective anti-aging ingredient compared to NRCl.

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