

# COMPARISON OF NMN PURITY AND STRENGTH OF 4LIFE TRANSFER FACTOR AGEPRO AND OTHER RETAIL NMN-CONTAINING PRODUCTS

Technical White Paper

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A recent scientific publication reported on the purity of NMN in eighteen products on the dietary supplement marketplace.<sup>1</sup> The study utilized high-performance liquid chromatography coupled with mass spectrometry, the gold standard in quality testing, to determine the amounts on NMN in the various retail products. The results demonstrated significant discrepancies in the NMN levels listed on the labels, including several of the products showing no detectable levels – see Figure 1. The conclusion of the study calls for stricter quality assurance in the dietary supplement industry.

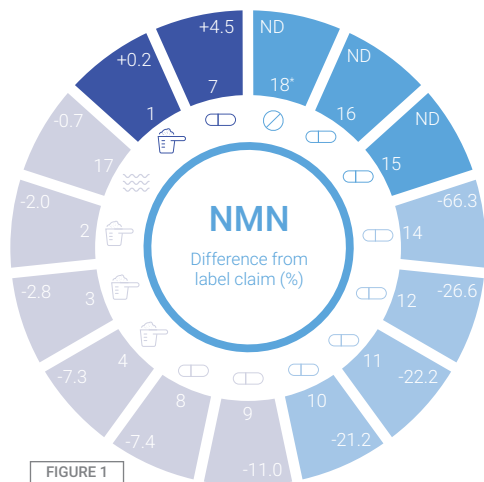


FIGURE 1

4Life has been a leader for over 25 years in implementing the strictest quality standards within the dietary supplement industry. An example of 4Life's commitment to those standards was recently reported from an independent audit from

NSF of our GMP facilities, which includes a thorough inspection of the manufacturing and quality testing procedures employed by 4Life.<sup>2</sup>

The aforementioned publication offers an opportunity to evaluate 4Life's quality testing protocols for the determination of NMN purity and strength in Transfer Factor AgePro. That testing starts at the raw ingredient level, where each lot of NMN is independently tested for purity, amongst the many other tests needed to approve this ingredient. Subsequently, NMN is tested for strength after blending and encapsulation into the AgePro formula. This testing, as well as hundreds of other quality tests must all pass before AgePro is available to 4Life customers and affiliates.

At the time of this publication, seven different lots of NMN have been received at 4Life and four batches of AgePro have been manufactured. At the raw ingredient level, NMN has been 3rd-party tested and determined to have a purity greater than 99%. Testing for the NMN label claim in AgePro is a measure of the manufacturing process, considering variabilities in blending, encapsulation, and the stability of NMN in the formula. Because of these variables, additional NMN is formulated into AgePro to ensure it

meets label claim throughout the shelf-life of the product. This testing determined a 104% NMN strength in AgePro.



These results underscore 4Life's commitment to high standards to ensure our customers and affiliates from around the world receive the highest quality products. In fact, that is why 4Life offers the **Certified 4Life Transfer Factor Guarantee on every 4Life product.**

<sup>1</sup> Sandalova, E., Li, H., Guan, L. et al. Testing the amount of nicotinamide mononucleotide and urolithin A as compared to the label claim. *GeroScience* (2024).

<sup>2</sup> <https://www.4life.com/corp/news/details/4life-manufacturing-quality-receive-a-grade/5186>