

As we age our cells become more senescent thus promoting more inflammation and oxidative stress in other words deterioration and then our genetic frailties and epigenetic expressions kick in and our telomeres due to these oxidative factors shorten and we age. As one of my teachers once said, “we are all being recycled at different rates”. There are proactive steps you can take now to hopefully avert more chronic disease later and promote healthy longevity. Dr. Hale, AP

Are You Ready for GeroScience? Baby Boomer’s and Gen-X’er’s pay attention.

Searching for Longevity in a Bottle

Lifespan has increased to be replaced with chronic disease.

Dr. Hale, on a personal note I went from being perfectly health at age 50-55, no pain, no inflammation and no illness but in my 60’s I suppose epigenetics and aging kicked in and I have had more increasing chronic health problems than one person should. Especially a person who has practiced natural medicine all his life. So, pay attention, what I am about to share may help you to avoid many of the pitfalls of aging.

Asian Scientist Journal (Aug. 15, 2018) – ‘Tick, tock,’ goes the clock, and with each passing second, **vitality silently slips away**. The slow trace of wrinkles over smooth and supple skin, the nefarious creep of aches and pains in the muscles and joints, the ominous appearance of lesions and lumps—these are some of the **typical symptoms** that surface as one grows old. Like tiny trickles that coalesce to become a stream, then a surging river that bursts a dam, **these health issues accumulate** until thought is muddled, breath becomes labored, strength fails and pulse wanes.

Taking the long view of aging, it might be said that we have overcome early mortality to be rewarded with chronic disease. Since the start of the 19th century, life expectancy at birth around the world has more than doubled, and currently stands at approximately 70 years. Yet, these gains represent victories against premature death, not the delay of aging. **Many people now live long enough to experience cancer, cardiovascular disease and neurological decline.** ¹

Not much talk about prevention as we have learned with COVID

“Most of what we do in medicine is sick care. We don’t do very good prevention. We wait until people get sick, then we spend a lot of time and effort trying to treat those diseases that come with age,” said Professor Brian Kennedy, director of the Center for Healthy Aging at the Yong Loo Lin School of Medicine, National University of Singapore. **“This is a prediction, but I’m going out on a limb to say this: I think it’s going to be easier to slow aging than to treat aging-related diseases.”** ²

The Longevity Diet. What the Okinawans have taught us “hara hachi bu”

Decades of research has shown that diet is a major contributor to the longevity of Okinawans—**they consume 11 percent fewer calories than would normally be required to maintain body weight**, based on calculations of basal metabolic rate. In other words, **they run on a long-term energy deficit**, not for a lack of food, but simply by force of cultural habit, known as hara hachi bu - **“to eat until you are 80 percent full.”**

¹ “Longevity In A Bottle | Asian Scientist Magazine | Science, Technology and Medical News Updates from Asia,” accessed July 26, 2019, <https://www.asianscientist.com/2018/08/print/nmn-metformin-longevity-pill/>.

² “Longevity In A Bottle | Asian Scientist Magazine | Science, Technology and Medical News Updates from Asia.”

The molecular switch – how caloric restriction works

Is there a molecular switch that could be flipped to allow you to live to 100? As it turns out, one such potential switch has been found in a family of proteins known as **sirtuins**.

What are sirtuins?

Sirtuins are nicotinamide adenine dinucleotide (NAD)-dependent deacetylases, are believed to be one of the important modifiers for lifespan,” said Professor Hiroshi Itoh, vice chairman of the Center for Supercentenarian Medical Research at Keio University, Japan.

Put simply, **sirtuins activate or silence gene expression relating to fat and glucose metabolism upon binding NAD, a naturally occurring substance in cells. Elevating NAD levels in the body is possible by taking its precursor, nicotinamide mononucleotide (NMN), orally.** (Orally means this is available as a supplement you can take every day!)

The clinical application of basic aging research is now on the horizon worldwide

In the U.S. the TAME trial found that diabetic patients taking Metformin outlived even their healthy counterparts.

The **NMN trial** in Japan states: A trial involving healthy Japanese men has shown for the first time that a single dose of nicotinamide mononucleotide (NMN) is **safe for consumption** and is effectively metabolized by the body. ... **Administration of NMN has been shown to mitigate ageing-related dysfunctions. Apr 8, 2020**

The World is getting older

The average human lifespan worldwide has increased, leading to a massive increase in people with age-related diseases, such as cancer, cardiovascular disease, type 2 diabetes, high blood pressure (hypertension), and macular degeneration.

NMN Safety -NMN Is a Vitamin B3 analogue

Clinical trial tests NMN in humans

The Keio University School of Medicine research team tested the effect of oral administration of NMN in people. To do so, they provided 100, 200, and 500 mg NMN capsules to 10 healthy men.

These participants had to fast for one night prior to consuming the NMN capsules the following morning at 9:00 AM. Following taking the oral doses of NMN, the men were only allowed to consume water for the ensuing five hours until they underwent physiological examinations.

The results show that the participants tolerated NMN well at each dosage. They didn’t present with gastrointestinal issues or changes to heart rate, blood pressure, oxygen saturation, or body temperature. When Irie and colleagues took a look at the neurological system, they couldn’t identify any

significant changes following NMN consumption. There were no changes to the sleep quality of the participants.

Laboratory analysis of blood and urine indicate no changes before and after NMN consumption, except for blood bilirubin, creatinine, chloride, and glucose levels. Nevertheless, these changes were within normal ranges.

The evidence from the study indicates single, oral administration up to 500 mg is safe. “The oral administration of NMN was found to be feasible, implicating a potential therapeutic strategy to mitigate aging-related disorders in humans,” proposed Irie and colleagues.

Conclusion

The intervention with natural compounds, such as NMN or NR (another niacin precursor to NAD+ can be a promising strategy, and enthusiasm is now growing in this field of geroscience. There is an **emerging clinical field** of aging research, which is increasingly relevant for heavily aging societies around the world, including Japan and I must also say my home State of Florida. I have greatly seen an increase of people with walkers in recent years...including myself. ³

My product recommendation: ResveraCel by Thorne Research Labs

60 tablets \$48 (1 months' supply) Dosage: 2 a day

Use this link to order directly from Thorne and purchase ongoing any of their products or give us a call at iPlanet Health (561-337-9435) or visit www.iplanethealth.com

<https://thor.ne/RkqK9> - this link will take you to the ResveraCel page where you can buy.

Key Ingredients in ResveraCel

- Betaine Anhydrous
- Nicotinamide Riboside
- Resveratrol
- Quercetin Phytosome

ResveraCel® Details

ResveraCel is Reformulated! What's New?

Thorne's reformulated ResveraCel contains **an all-new form of nicotinamide riboside (NR) that is exclusive to Thorne**. Thorne's proprietary NR, as nicotinamide riboside hydrogen malate, is bound to

³ "Longevity In A Bottle," Asian Scientist Magazine, August 15, 2018, <https://www.asianscientist.com/2018/08/print/nmn-metformin-longevity-pill/>.

hydrogen malate salt. Because this salt has a heavier material weight than the NR salt used in the previous ResveraCel formula and because the NR increased, we have also increased the amount of betaine in the formula.

About ResveraCel

Aging is a fact for every baby boomer and Gen-X'er. Although no supplement truly has “anti-aging” properties, ResveraCel comes close because it supports cellular repair, up-regulates the sirtuin proteins, enhances NAD+ production, and benefits the cellular energy production that takes place in the mitochondria – thus supporting the process of healthy aging.

Adding ResveraCel to your daily supplement regimen can make a positive impact on aging and support good health as you get older.

Benefits of Thorne's ResveraCel:

- Supports healthy cellular aging*
- Natural activator of the sirtuin proteins, an important class of protein enzymes that act as cellular switches to up-regulate numerous positive functions associated with aging*
- Helps clean the body of old cells, by assisting with the elimination of aging cells (inactive, senescent)*
- Supports optimal mitochondrial number, structure, and function*
- Supports healthy methylation*
- Enhances cellular energy production*
- Promotes healthy metabolism as you age*
- Benefits healthy blood sugar and insulin sensitivity*
- Supports fat metabolism in the liver*

Take an inside look at the intelligent ingredients in ResveraCel and their beneficial impacts on healthy aging:

Nicotinamide Riboside Hydrogen Malate (NR)

NAD+ – nicotinamide adenine dinucleotide – is an important coenzyme found in every cell that plays an integral role in multiple body functions. Because the body's natural level of NAD+ begins to decline significantly with age, it can lead to adverse effects of aging and age-related conditions. **As a direct precursor to NAD+, NR efficiently stimulates the production of NAD+, which:**

- Promotes multiple aspects of healthy aging*
- Supports cellular repair processes*
- Protects against DNA damage and oxidative stress*
- Promotes exercise efficiency, helping to support health and fitness goals*
- Helps maintain an optimal state of health*
- Promotes the number and health of the mitochondria in cells, benefiting mitochondrial metabolism*
- Supports normal circadian rhythm function*

Resveratrol

Resveratrol, a natural substance found in, among other things, red wine, has shown promise in clinical studies by modulating the effects of several age-related conditions, including:

- Supporting the body's normal inflammatory response and its health-promoting effect on blood vessels*
- Activating a special class of protein enzymes called sirtuins that act as cellular switches by up-regulating numerous positive functions, including cellular aging, inflammatory response, detoxification, stress resistance, fat and glucose metabolism, circadian rhythm, and mitochondrial biogenesis*
- The sirtuin proteins support the formation of new mitochondria in the cells, which results in more efficient cellular energy production and possibly increased longevity*

Quercetin Phytosome

Senescence is the natural process in which aging cells stop dividing, but do not die. The over-accumulation of senescent cells is associated with biological aging and various age-related disorders. Quercetin is at the forefront of healthy aging because:

- Quercetin is one of only two nutrients that have been studied for its ability to reduce cellular senescence*

- Quercetin partners with resveratrol in the quest for healthy aging because it slows the breakdown of resveratrol in the body, allowing resveratrol more time to do its job*
- Quercetin up-regulates the sirtuin proteins, which are associated with healthy cellular aging and improved weight-related metabolic factors*

Betaine

To achieve NR's optimal benefit, it is important to support the body's methylation processes. Betaine is a premiere methyl donor because:

- Betaine (also called trimethylglycine) is a superior nutrient for donating its methyl groups – compounds that help produce healthy DNA, neurotransmitters, and cellular energy*
- In female athletes, research indicates that betaine promotes lean body composition by helping to reduce body fat without negatively affecting muscle mass*
- Betaine supports the body's ability to engage in higher volume exercise – increased repetitions and weight load in male athletes and improved high volume work capacity in female athletes*

The vitamin B3 family contains nicotinic acid and its derivatives. The terms "nicotinic acid," "niacin," and "vitamin B3" can be used interchangeably. The derivatives of nicotinic acid include niacinamide (also called nicotinamide), nicotinamide riboside (NR), and nicotinamide mononucleotide (NMN). Each B3 vitamer is a precursor to NAD⁺, a substance necessary for cellular energy production. NAD⁺ is also sold as a dietary supplement.



"To every stage of life, there is a remedy"

-anonymous

The Wellness Journey

The mountains are high but the 'new ground' is fertile after the weeds, roots, and rocks are cleared. It requires hard work in the early morning. The furrows are long and the blade of the hoe is put to the task. The needs of the garden of Self must be tended. The weeds of self must be pulled or the new seedlings will not have room to thrive. The gifts of Nature, sunlight, dew, rain and the circadian rhythms of life are required to nourish. The wind teaches us the nature of change and the need the need to be flexible, relax and let go. Many blessings are our daily gifts but our senses must be attuned lest we miss the blessing. The journey to greater wellness demands our highest and best. The reward is beyond our present understanding. Dr. Hale

“.....the process, being integral, accepts our nature such as it stands organized by our past evolution and without rejecting anything essential compels all to undergo a divine change.”

—Sri Aurobindo

“There are only two ways to live your life: as though nothing is a miracle, or as though everything is a miracle.”

— ALBERT EINSTEIN

"Whatever you can do or dream you can, begin it now.

Boldness has genius, power, and magic in it.”

(attributed to Goethe)

Dr. Hale

Make 2022 a year to remember for all the right reasons!