

# MIRIKEĽ NOOO

NMN (Beta-Nicotinamide Mononucleotide)
With Blueberry Extract

Provides NAD+ Support\*

Supports Cellular Health\*

Supports Healthy Brain Function\*



# Why you are aging?

- Excessive free radicals and over oxidation
- Accumulation of harmful substances in the body
- Decline of organ function
- Cell damages caused by the immune system
- Slow metabolism
- Genetic aging



# Physiological manifestations of aging

- Increased white hair, saggy skin,
   appearance of wrinkles and spots, loose teeth.
- Degradation of major sensory organs, decreases of hearing and vision ability, and sense of touch and taste.
- Aging of internal organs with reduced metabolism and osteoporosis.





No one can be immune to the unstoppable process of aging.

But, we are taking every possible effort on the road of anti-aging to put off the speed of aging.





# Anti-aging

An area that human beings never stop exploring

#### Harvard Medical School

In December, 2013, Mr. David Sinclair, Director of Biological Aging Research Center of Harvard University and professor of Harvard Medical School, published a paper in the world's authoritative scientific journal "Cell" that:

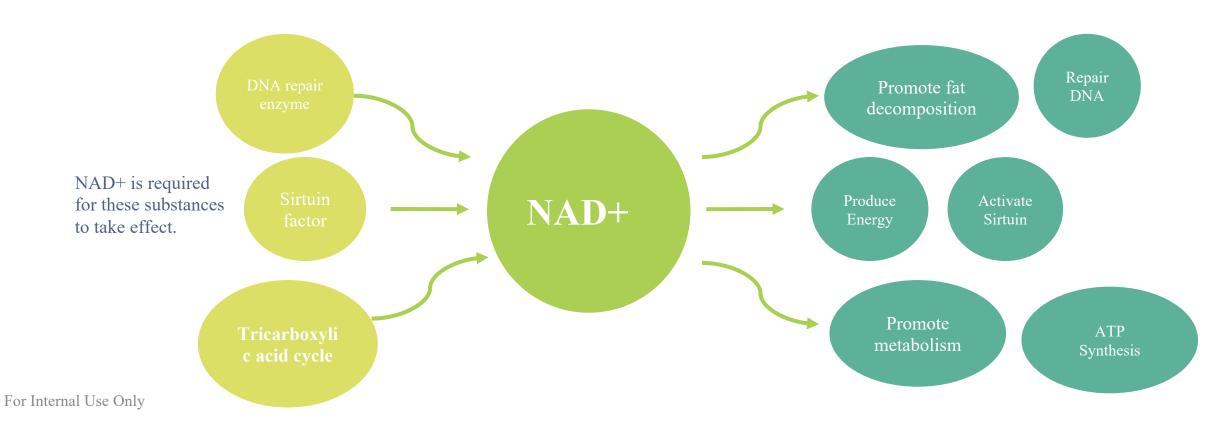
- NAD+ (Nicotinamide Adenine Dinucleotide) is an essential component of the Sirtuin reaction (longevity protein)
- The supplementation of NMN, the precursor of NAD+, can improve almost all aging symptoms in mammals and effectively delay aging.



### What is NAD+

NAD+ (Coenzyme I), the full name of Nicotinamide Adenine Dinucleotide, is a coenzyme found in each of our living cells, and an indispensable coenzyme component of hundreds of enzyme proteins in the human body, dominating hundreds of life activities in the body.

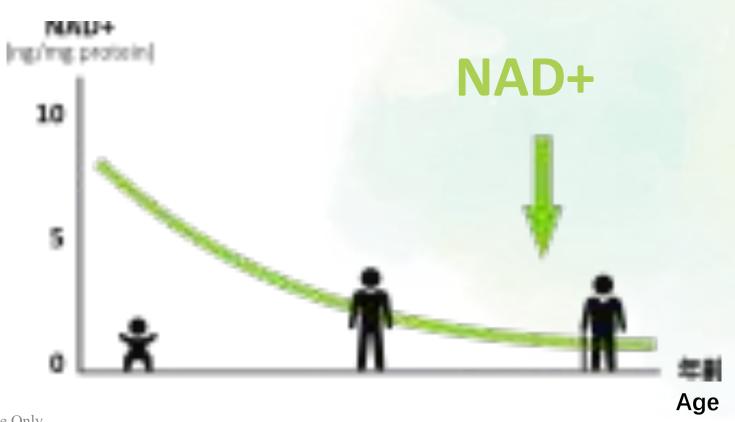
Simply saying, NAD+ is an essential for energy production, promotion of metabolism and decomposition.



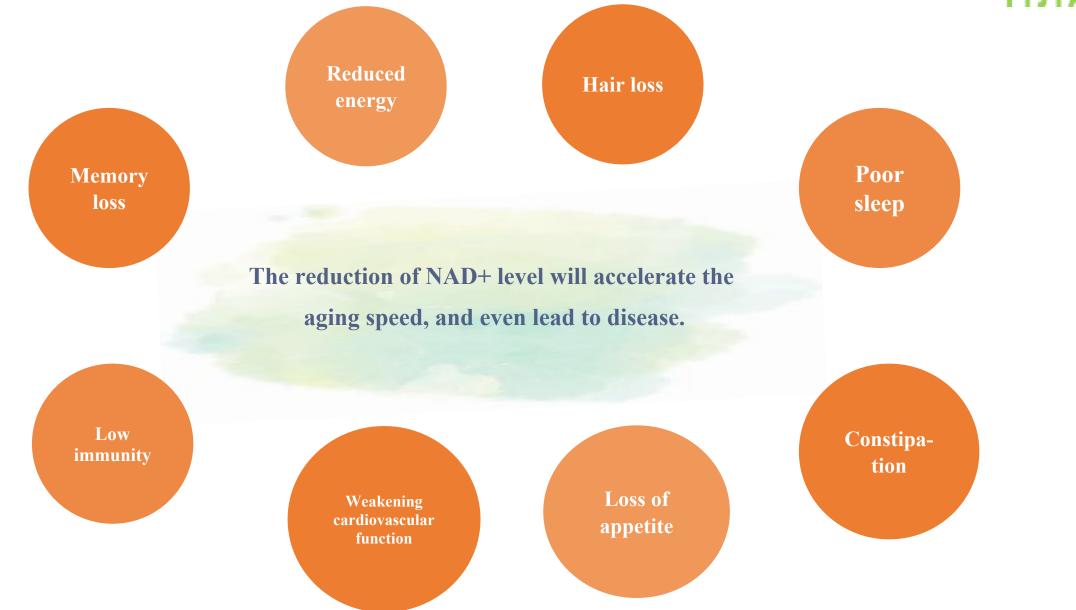


#### **But some scientists pointed out:**

The level of NAD+ decreases with age, leading to functional degradation of mitochondrion-the biological energy "Dynamo", which will finally cause aging.







# Why not supplement NAD+ directly?

With relatively large molecule, it is difficult for NAD+, if directly supplemented by oral administration, to penetrate the cell membrane into the cell to produce any effect on the body. Therefore, products available on the market that claim themselves as direct supplements can produce very little effects on the human body.

That's why we find a new path of supplementing it's precursor to promote the NAD+ level.

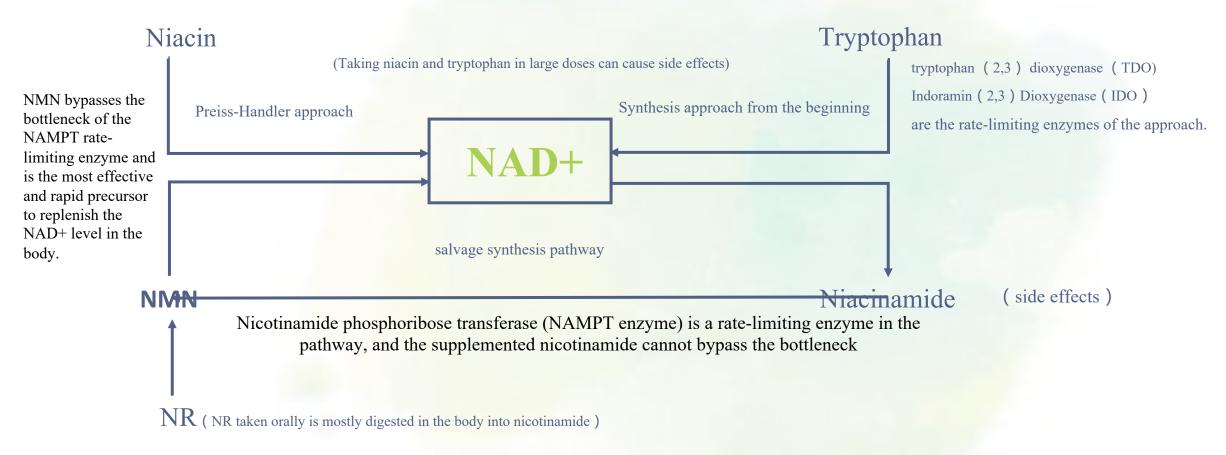






Supplement four types of precursors of the metabolic cycles of NAD+:

Niacin, Tryptophan, Nicotinamide, and NMN/ Niacinamide Ribose (NR). Among them, taking NMN is an effective way to supplement NAD+.



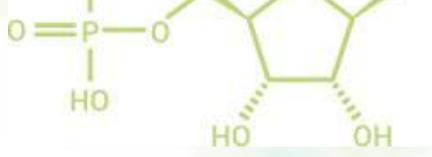
The balance of NAD+ content is sustained in these three independent pathways. And the salvage synthesis pathway serves as the main source of NAD+ in the body, which accounts for 85% of the body's total NAD+ content.



### What is NMN?

NMN (beta-nicotinamide mononucleotide) is a compound existing naturally in the human body and food. As a precursor molecule of NAD+, it is converted to NAD+ by a series of chemical reactions to perform its physiological functions.

NAD+ can be found in every living cell. It is not only necessary to support life, but is also recognized as the key to sustaining youth. It helps to convert nutrients in the body into cellular energy and the sirtuin, which is conducive to cell health.

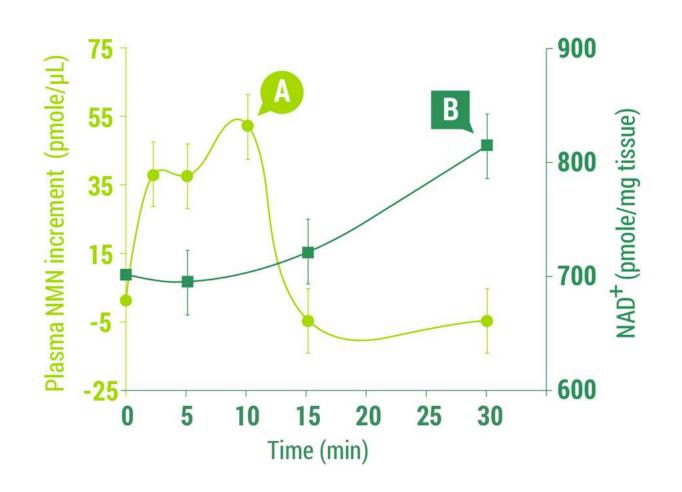




# NMN, an effective way of supplementing NAD+.

A:NMN can enter the blood stream 10 minutes after oral administration.

B:The NMN molecule can easily cross the cell membrane into the cell. It improves the NAD+ level of the human body in about 30 minutes.





# NMN, a safe and effective ingredient without side effects

- As an intrinsic substance in the human body, NMN can be found in many foods and has no harm or side effects to the human bod.
- In December 2016, Cell Metabolism, one of the most authoritative scientific journals in the world, published a paper indicating that NMN can be rapidly converted to NAD+ in vivo after oral administration, and some related experiments had proved that no side effects have been found after 12 months of oral administration of NMN.



Many laboratories of several scientific research institutions have successively launched detailed evaluation of NMN's anti-aging effects.









Harvard University

Washington University (St. Louis)

Keio University

The research results have been successively published in international academic journals such as "Science", "Nature" and "Cell" since the second half of 2016, which confirmed that NMN, the precursor of NAD+, can significantly reverse the atrophy and degradation of mammalian body functions caused by aging. Taking NMN orally can extend human life span by over 30%.



# Authoritative researches on NMN show:

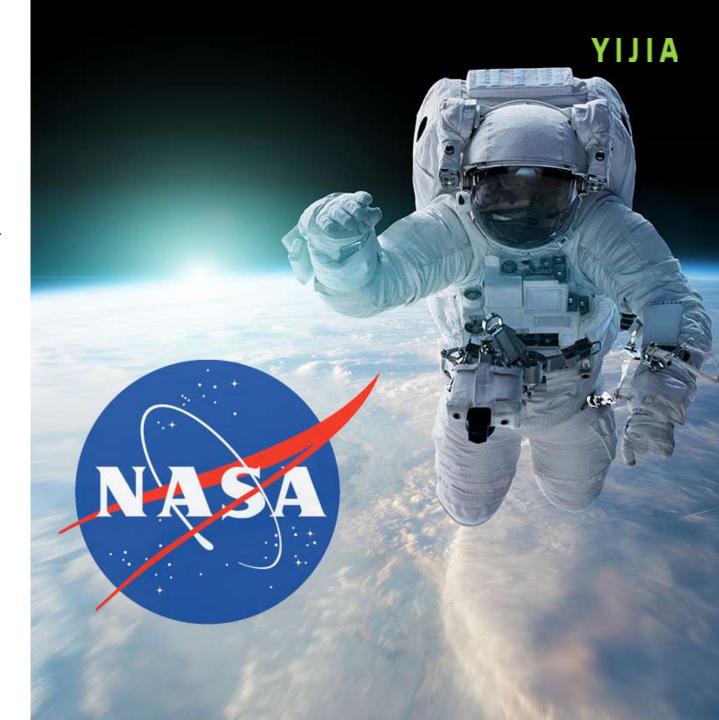
Test report of Prof. David Sinclair of Harvard University showed that his physiological age reversed from 57 to 31.4 years old after 3 months of oral administration of NMN.



# NMN efficacy approved by NASA.

High-energy particle radiation in space will cause 5% of cell death and significant aging of astronauts and will lead to 100% of cancer development. NMN, however, is expected to be the key to addressing this challenge.

NASA began research in 2017 on applying it to protect astronauts from cosmic rays.





On February 19, 2019, a Japanese pharmaceutical company released an interim report of clinical research on the benefit of long-term (24 weeks) oral administration of NMN for humans, the world's first clinical prove that sirtuin appears and many types of growth hormones increase after oral intake of NMN. It is expected to treat, improve, and recover various senile diseases (such as common disease of the elderly, cancer, and dementia).

TOKYO--(BUSINESS WIRE)--Feb 19, 2019--Shinkowa Pharmaceutical Co., Ltd. (main office: Chuo-ku, Tokyo, Japan; CEO: Megumi Tanaka) has confirmed for the first time in the world, thanks to the interim report of clinical research on oral intake (24 weeks) of NMN ( $\beta$ -nicotinamide mononucleotide) carried out by an academic research institute, the appearance of sirtuin 1 (longevity gene 1) and the increase of many types of growth hormones.

After confirming the appearance of this sirtuin 1 (longevity gene 1), Shinkowa Pharmaceutical has decided to start the next round of clinical research in collaboration with academic research institutions.

AP NEWS Screenshot



In March 2019, researchers at the Baylor College of Medicine in the United States found that maintaining the length of "telomere" and reducing DNA damage may support the regenerative capacity of cells and tissues, which thereby achieves the effects of disease treatment and wellness improvement.

Experiments have shown that NMN can stabilize telomeres and improve liver fibrosis with other effect of protecting DNA from damage.

## **Cell Metabolism**



Available online 28 March 2019

In Press, Corrected Proof 3

Article

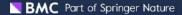
Telomere Dysfunction Induces Sirtuin Repression that Drives Telomere-Dependent Disease

Globally recognized Journal (Cell Metabolism)

On December 10, 2019, a study unlocked a new feature of NMN that it can "alleviate hangover and protect the liver".

Scientists have also found that NMN can lift the NAD+ level to accelerate the catabolism of alcohol, thus realizing fast sobering up.







#### Human Genomics

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Primary research | Open Access | Published: 10 December 2019

#### Investigating RNA expression profiles altered by nicotinamide mononucleotide therapy in a chronic model of alcoholic liver disease

Mohammed A. Assiri, Hadi R. Ali, John O. Marentette, Youngho Yun, Juan Liu, Matthew D. Hirschey, Laura M. Saba, Peter S. Harris & Kristofer S. Fritz

Human Genomics 13, Article number: 65 (2019) Cite this article

723 Accesses | 83 Altmetric | Metrics

#### Abstract

#### Background

Chronic alcohol consumption is a significant cause of liver disease worldwide. Several biochemical mechanisms have been linked to the initiation and progression of alcoholic liver disease (ALD) such as oxidative stress, inflammation, and metabolic dysregulation, including the disruption of NAD+/NADH. Indeed, an ethanol-mediated reduction in hepatic NAD+ levels is thought to be one factor underlying ethanolinduced steatosis, oxidative stress, steatohepatitis, insulin resistance, and inhibition of gluconeogenesis. Therefore, we applied a NAD+ boosting supplement to investigate alterations in the pathogenesis of early-stage ALD.

Screenshot of online article



# Why do we need to NMN?

Although there are trace amounts of NMN in many foods, the effect of supplementing NMN through food is minimal.

Food Type	Name	mg/100g Food
Vegetable	Green Soy Bean	0.47–1.88
	Broccoli	0.25–1.12
	Cucumber Seed	0.56
	Cucumber Peel	0.65
	Cabbage	0.0-0.90
Fruit	Avocado	0.36–1.60
	Tomato	0.26-0.30
Fungus	Mushroom	0.0–1.01
Meat	Beef (raw)	0.06-0.42
Seafood	Shrimp	0.22

Food NMN Content



According to the FDA equivalence Principle, it is recommended that an adult weighing 70KG takes 600mg of NMN daily can reduce the agerelated physiological decline. Taking green soybean that has the highest NMN content as an example, 100g of it contains 1.88mg of NMN. 32kg of green soybean needs to be consumed daily for a man to supplement the same amount of NMN. What's more, absorption and conversion rate of food supplement must be taken into consideration, that the beans may not be completely absorbed and transformed into what we need.



If you want to "Say no to Aging, it won't make any difference by supplementing NMN through foods. That's why it is necessary to intake NMN via nutritional supplements to support body condition, support metabolism, sleep and health.



# MIRIKEĽ NN9000

# NMN (Beta-Nicotinamide Mononucleotide) With Blueberry Extract

The compound formula containing blueberry extract coupled with world's leading enzyme catalysis technology to effectively increase the NAD+ level, support cell metabolism and healthy brain function, resist free radicals and delay aging.





## Specially added blueberry extract



### The highly recognized blueberry

- p Blueberry is renowned as "the edible cosmetics" in Europe;
- p Listed as "one of the top five healthy food for human" by UNFAO;
  - p "The No. 1 anti-oxidant among vegetables and fruits";
    - p Reputed as the "Fruit of Eyes";
    - p Highly nutritional, know as "Golden Berry";
    - p Listed as the "Top Ten Healthy Foods" by WHO;
- American Time Magazine: "Blueberries may contain more anti-oxidants than any other fruit or vegetable."

## Super Antioxidant-

### Anthocyanin

Blueberries are rich in beneficial substances like anthocyanins, multivitations, and minerals.

Anthocyanins are natural free radical scavengers. Researches have verified that it is the most effective antioxidant found by human. The antioxidant properties of anthocyanins are 50 times higher than vitamin E and 20 times than Vitamin C.

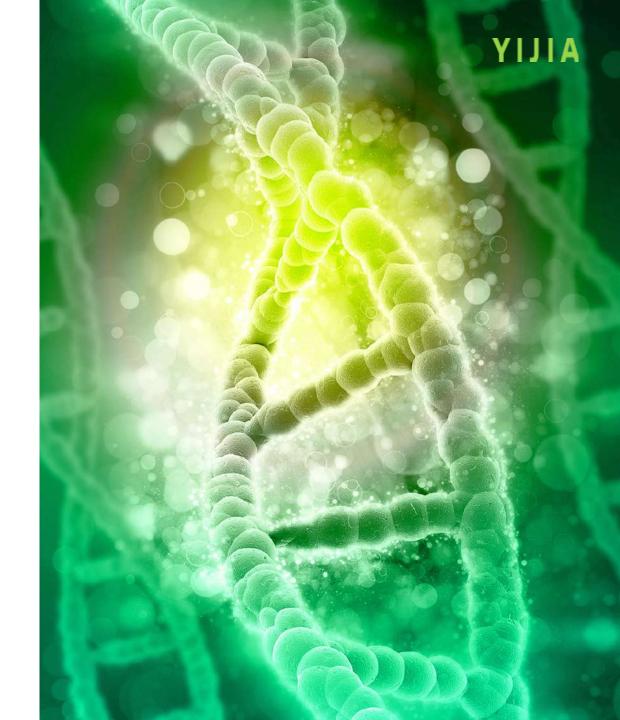


Blueberry extract works synergistically with NMN to maintain absorption rate, helping reduce irritation and enhance absorption efficiency.

<sup>\*</sup>This product is not intended to diagnose, treat, cure or prevent any disease. These statements have not been evaluated by the Food and Drug Administration.

### Technological Revolution: Global leading enzymatic catalysis technology

Compared with traditional chemical synthesis methods, the bio-enzyme technology gets rid of severe reaction conditions such as high temperature and high pressure to significantly cut down the occurrence of by-products. It improves the efficiency of synthesis, and reduces harsh environmental requirements for industrial production.





## From Europe Bottle cap with desiccant

- Simple structure
- Good moisture resistance
- High safety





# MIRIKEL NOOO Main functions







<sup>\*</sup>This product is not intended to diagnose, treat, cure or prevent any disease. These statements have not been evaluated by the Food and Drug Administration.

• Safe and reliable: the products select plant ingredients that have been used by human for a long time.

- Natural and harmless: no addition of any artificial chemicals and hormones, securing zero adverse effects on human endocrine balance.
- Proprietary compound formula: a formula confirmed after a large numbers of experiments. The synergy of the ingredients is for superior to the one with single ingredient.

### Quality Guarantee



**GMP** Certificate



US FDA Certificate





HACCP Certificate



HALAL Certificate





#### **Specification:**

60 Capsules Net Weight: 1.06oz (30.18g)

#### **Each NMN capsule contains:**

150mg NMN (Beta-nicotinamide mononucleotide)

#### **Recommended Usage:**

Take with warn water, two capsules per serving, two times daily.









# 1. The new formula of MIRIKEL NMN9000 includes blueberry extract, what are the differences with pure NMN?

Blueberry extract is rich in anthocyanins, vitamins and minerals that are beneficial to the body. As a natural free radical scavenger, it has been proved that anthocyanins are the most effective antioxidant found by human as of today. The bioavailability of the substance to the human body reaches as high as 100%. The ingredient can be detected from the blood after 10 minutes of intake. It works synergistically with NMN to support the absorption rate of the body, which reduces irritation and enhances absorption efficiency.

## 2. What age group is MIRIKEL NMN9000 suitable for? Should I take it before meals or after meals?

Suitable Groups: It is suitable for all adults, especially the groups in sub-health states, the middle-aged and the elderly.

Usage: It is feasible for both before and after meals. It is recommended to take it after meals to avoid gastrointestinal discomfort and the occurrence of hypotension and hypoglycemia.







# 3. Since NAD+ engages in the body's metabolism at all levels, why do we need to add blueberry extract?

NMN is an effective molecule to improve NAD+ level in the body. The compound formula with blueberry extract is better than the one with single ingredient. With nutrition doubled, the scientific ratio of its active ingredients ensures a more balanced nutrition provision to support various physiological functions.

# 4. As NAD+ will be transformed into NADH after being absorbed by the human body, will it bring any change to mitochondria? And will it be inherited to baby?

The oxidized form NAD+ and the Reduced form NADH are transferrable with each other to sustain normal operation of the body while mitochondria remain unaffected. We supplement NMN to repair the damaged mitochondria and DNA inside them, and thus the energy produced within the body increases as well. There is no worry about inheritance as DNAs in cells are undergoing continuous replication. There might be some errors during the replication, but they can be corrected by the body itself. NMN can support the self-correction ability of the human body that decreases with age.







# 5. Is it excessive to supplement NMN, Black Cumin Oil, Ganoderma lucidum Spore Powder, Bluti, Probiotics, Balance Five and QualiTen? How to arrange them properly?

First of all, all the nutritional supplements released by the company must go through scientific evaluation to be suitable for taking together. It provides sufficient energy for daily consumption of the human body to support a healthy metabolism of cells.

Time Arrangement: Balance Five, for instance, can be taken as breakfast, and we can have DigeZ probiotics 30 minutes later after breakfast. A cup of QualiTen, a botanical drink rich in Coenzyme Q10, in the morning will nourish your skin for better facial contour. It would be better to have NMN, Black Cumin Seed Oil, and Ganoderma lucidum after lunch, and to have a sachet of Bluti in the afternoon, and there is no need to be anxious about overdose if taking as recommended.

#### 6. Is it excessive to take 4-6 capsules daily? Will there be any side effect?

No side effects have been found up to now. There will be phenomena that some people may get too much internal heat of the body or dizziness, so it is suggested to take as recommended of two capsules per serving, twice a day to meet your daily needs.







#### 7. Who are not recommended to take NMN9000?

It is not recommended for the youth and children since their cells can receive sufficient energy. As for pregnant and breastfeeding women and sick patients, please consult a doctor before taking it.

#### 8. Is it suitable for cancer patients to take it?

In face of the complexity of cancer patients, it is recommended for them to consult a doctor before taking NMN9000, a dietary supplement health care product that supports sleep quality, physical strength and physiological functions.





Unlock the door of longevity,

To enjoy your extraordinary life.

