

NITRIC OXIDE

Living Longer and Healthier
with this Miracle Molecule



BOB WEEKS

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Bob Weeks

Nitric Oxide. Living Longer and Healthier with
This Miracle Molecule.

Bob Weeks

Published by Bob Weeks

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PREFACE



Bob Weeks

Every human body relies on a remarkable molecule known as Nitric Oxide (NO). This molecule is essential for healthy blood pressure and overall good cardiovascular health, our energy levels, and even our body's aging process. With the evolution of science and our understanding of how Nitric Oxide operates, we've now developed a product that can naturally and efficiently enhance and sustain the wonderful effects of NO production in the blood - the product is called *Nitric Oxide Plus*.

This guide is not just an introduction to this ground-breaking product; it is a deep dive into the wonders of the human body, the untapped potential of natural compounds, and the promise of a healthier, more vibrant future. As we journey together through these pages, you'll discover the meticulous research spanning over 30 years that birthed *Nitric Oxide Plus*, understand the unique synergy of its ingredients, and most importantly, unlock

the secrets to harnessing its benefits for a transformative health experience for YOU!

As you embark on this journey with *Nitric Oxide Plus*, remember that it's more than just a supplement. It's a commitment to better health, a promise of increased vitality, and a step towards a brighter, more energetic future.

Adopting a new health regimen can be both exciting and daunting. You know very well that making a real change in life requires commitment and perseverance. You need to have important reasons to really make changes stick and reap the ongoing benefits of those changes. Keep the reasons for improving your health in front of you - keep your mind clear on the "why" and perhaps even write them down and re-read them often.

*To your better health, increased vitality,
and a brighter, more energetic future...*

Bob Weeks

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- Prevent, halt and reverse cardiovascular disease, anti-age the body and stop free radical damage to the body and vessels.



INTRODUCTION

Unlocking the Power of Nitric Oxide: A Journey to Optimal Health!



Firstly, the *Nitric Oxide Plus* formula isn't just a blend of beneficial ingredients; it's a recipe refined by decades of research. This research, conducted by leading experts and world-renowned institutions, ensures that every

ingredient and its ratio is optimized for maximum benefit.

Because there is an intricate biological symphony performing within our bodies, each molecule, each cell plays a role.

Some are conductors, setting the pace; some are lead players, capturing attention; and some are silent heroes, harmonizing and balancing the performance. Among these, Nitric Oxide, “NO”, stands out as a silent maestro. Its influence, while not always in the spotlight, is pivotal in maintaining healthy blood pressure and overall good cardiovascular health, regulating our energy levels, and modulating the relentless hands of time that dictate the aging process.

Since, Nitric Oxide is so vital, we want to help it and its name to become more understood, more common, and a well known household name like so many other health buzzwords?

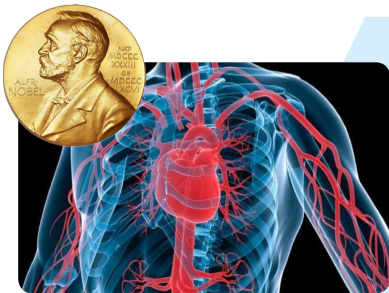
Our understanding of the Nitric Oxide molecule has evolved considerably over the past few decades. The inception of *Nitric Oxide Plus* wasn't an overnight success. It represents more than 30 years of rigorous research and trials. Top minds from world-renowned universities have poured their expertise into understanding Nitric Oxide's role and how best to supplement its natural production. Their unwavering commitment has birthed a product that stands unmatched in its category.

And, while the effects of Nitric Oxide have been essential to our well-being for millennia, our comprehension and ability to harness its benefits are relatively recent. Thanks to modern scientific advancements, we have reached a pinnacle: we can now formulate a product designed to not only complement our natural Nitric Oxide production but to amplify it! Everyone needs to know about and take advantage of the most powerful Nitric Oxide booster in the world today! Introducing *Nitric Oxide Plus*.

So, now, as we said earlier, let's take a deep dive into the wonders of the human body, the untapped potential of natural compounds, and the promise of a healthier, more vibrant future for YOU!

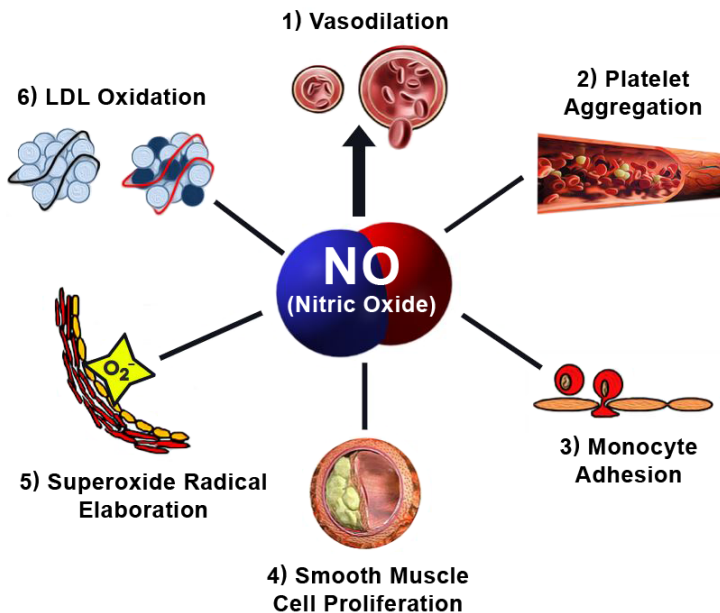
By the end of this guide, you will better understand the profound role Nitric Oxide plays in your life, and the immense potential that *Nitric Oxide Plus* holds for you - and your loved ones too! Let us embark on this enlightening journey to optimal health and well-being together.

Welcome to the future of wellness!



DISCOVERY: Nitric Oxide (NO) is created systemically by an organ in the body from L-Arginine, which is made from protein rich foods.

This scientific discovery received the 1998 Nobel Prize in Medicine due to the fact that NO is recognized as an extremely important contributor to good health and longevity.



Nitric Oxide - is an endogenous (produced by cells inside the organism such as the endothelium) protector of the vessel wall. Nitric Oxide is produced by the endothelium (inner wall of all your vessels) as a protector of the vessel walls. Nitric Oxide also is responsible to repair the problems of the vessels, which includes returning them to a supple state and preventing the build-up of plaque.

Vasodilation - Nitric Oxide increases the area of the vessel and as such increases the flow of blood to the crucial organs such as the heart.

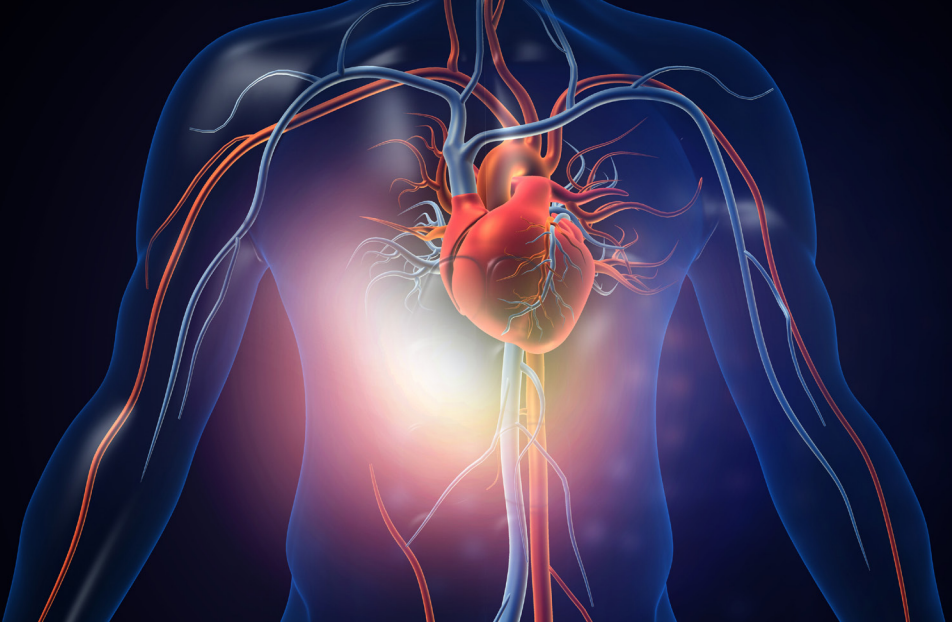
Platelet Aggregation - Nitric Oxide breaks up the aggregation (accumulation of blood platelets) and thereby keeps the vessel clean

Monocyte Adhesion - Nitric Oxide prevents monocyte adhesion. The monocyte is created in the bone marrow and enters the blood and migrates into connective tissue where it forms into a macrophage to cause inflammation. Thus, inflammation pushes the diseases of the heart and blood vessels to get worse with time – nitric oxide blocks inflammation by inhibiting monocyte adhesion and thereby stops the progression of cardiovascular disease.

Smooth muscle cell proliferation - Nitric Oxide blocks smooth muscle cell proliferation (growth). Proliferation of these cells makes the artery get narrower, so that less blood can flow to the organs. By reducing this mechanism, nitric oxide helps keep the arteries wide open.

Superoxide radical elaboration - Nitric Oxide protects against this process of damage to the body. Superoxide radicals contribute to the development of many diseases and to the aging process because of oxidative stress, which damages cells and organ function.

LDL Oxidation - Nitric Oxide reduces the oxidation of the bad cholesterol. Oxidation otherwise makes the bad cholesterol get even more aggressive in the blood vessels.



CHAPTER 1

Understanding Nitric Oxide and Its Significance

Every orchestra has a maestro, every story its protagonist, and every system its linchpin. In the expansive realm of molecular biology that exists within our bodies, Nitric Oxide takes center stage as one of the most pivotal molecules, even though its presence is subtle and its actions multifaceted.

WHAT IS NITRIC OXIDE?

At its core, Nitric Oxide, commonly denoted as “NO”, is a simple molecule made of one nitrogen atom and one oxygen

atom. Despite its simplicity, its influence on the human body is vast and multifarious. As a gaseous signaling molecule, “NO” communicates between cells, playing a pivotal role in various physiological processes.

THE CARDIOVASCULAR MAESTRO

One of the primary and most recognized roles of Nitric Oxide lies in its contribution to cardiovascular health. It acts as a vasodilator, meaning it signals the blood vessels to relax and expand. This process reduces resistance to blood flow, thus assisting in maintaining optimal blood pressure levels. When blood can flow freely, nutrients and oxygen are more efficiently delivered throughout the body, enhancing overall vitality and energy.

ENERGIZING THE BODY

NO doesn't stop at enhancing blood circulation. It also plays an instrumental role in mitochondrial respiration – the process through which our cells generate energy. By influencing the mitochondria, the powerhouses of our cells, Nitric Oxide helps optimize energy production, ensuring we feel invigorated and active.

AGING GRACEFULLY WITH NITRIC OXIDE

The aging process is complex and governed by numerous factors. While age brings wisdom and experience, it also ushers in a decline in certain physiological functions. Research has highlighted that as we age, our body's ability to produce Nitric Oxide wanes. This decrease has been linked to various age-related ailments, especially those concerning cardiovascular health. Understanding and addressing this decline is paramount to aging with vigor and vitality.

A DELICATE BALANCE: PRODUCTION AND DIMINISHMENT

Like all good things, our body's production of Nitric Oxide is finite and can be influenced by various factors. Scientific research shows that lifestyle choices, environmental stressors, and, very importantly, the natural aging process - all lead to reduced NO synthesis. Without adequate Nitric Oxide in the blood, our cardiovascular system can be left vulnerable, and our energy levels can suffer. Recognizing this delicate balance is the first step toward proactive health management.

As we journey deeper into the world of Nitric Oxide, it becomes evident that this molecule, though modest in structure, plays an incredibly influential role in our overall well-being. Its impact on cardiovascular health, energy production, and aging underscores its vital significance in the tapestry of human biology.

MOVING FORWARD

In the upcoming chapters, we will delve into the groundbreaking product *Nitric Oxide Plus*, crafted to harness the power of Nitric Oxide and enhance its benefits for optimal health.





CHAPTER 2

Nitric Oxide Plus – The Ultimate Solution

Our bodies are marvels of nature, and as we have stated - there's an intricate biological symphony performing within our bodies, and the truth is that, sometimes the players need support to function at their peak. This is where the power of scientific research and innovation shines. Enter *Nitric Oxide Plus*—a result of decades of dedication and the synergy of nature's best with cutting-edge science.

A LEGACY OF RESEARCH AND INNOVATION

We want to repeat with deep gratitude, that the inception of *Nitric Oxide Plus* wasn't an overnight success. It represents more than 30 years of rigorous research and trials. Top minds from world-renowned universities have poured their expertise into understanding Nitric Oxide's role and how best to supplement its natural production. Their unwavering commitment has birthed a product that stands unmatched in its category – *Nitric Oxide Plus*.

THE UNPARALLELED FORMULATION

Most supplements on the market might promise enhanced Nitric Oxide production, but what sets *Nitric Oxide Plus* apart is its unique formulation. It's not just about the ingredients but their ratios and how they interact. This 3rd generation product showcases the pinnacle of this research, with each ingredient purposefully chosen and meticulously balanced.

ARGININE AND CITRULLINE: THE HEART OF THE MATTER

Arguably the most vital components in the *Nitric Oxide Plus* formulation are L-Arginine and L-Citrulline. While both of these amino acids are precursors to Nitric Oxide, it's their precise ratio that ensures sustained and efficient NO production. This balance isn't mere guesswork; it's the result of years of increased understanding of the biochemistry of Nitric Oxide synthesis.

BEYOND TYPICAL BENEFITS

While *Nitric Oxide Plus* primarily works to enhance Nitric Oxide production in the blood, its benefits don't stop there. Its formulation addresses a range of health areas from improved nutrient absorption

to cardiovascular well-being (including High Blood Pressure) to energy optimization. Boosting Nitric Oxide production by 800% to 1,200% more than most products, *Nitric Oxide Plus* truly offers a whole host of unparalleled advantages to its users.



Nitric Oxide Plus powder.

A PLEDGE OF PURITY AND QUALITY

Every bottle of *Nitric Oxide Plus* is not just a product but a promise. A promise of purity, with no added fillers

or harmful additives. A promise of quality, ensuring that every ingredient is of the highest grade, and a promise of efficacy derived from the countless hours of research and trials it represents.

Nitric Oxide Plus stands as a testament to human innovation's capability when directed at enhancing natural processes. By understanding and harnessing Nitric Oxide's power, this product offers a doorway to better health, energy, and vitality.

MOVING FORWARD

As we progress in this guide, we'll delve deeper into each ingredient, unlocking their individual potential and their combined might in the *Nitric Oxide Plus* formulation.





CHAPTER 3

The Power Ingredients

Nature, in its vastness, offers us an array of compounds that can work wonders for our health. In the unique formulation of *Nitric Oxide Plus*, we have harnessed some of these powerful components, synergizing them in a way that maximizes their potential. Let's delve into the essence of each ingredient and understand the role it plays.

INGREDIENTS: L-ARGININE AND L-CITRULLINE: THE DYNAMIC DUO



These two amino acids are the backbone of the *Nitric Oxide Plus* formula. Together, they fuel the body's Nitric Oxide production.

- L-Arginine: Directly converted into Nitric Oxide within our cells, it plays a primary role in expanding blood vessels, improving blood flow, and offering overall cardiovascular support.
- L-Citrulline: A precursor to L-Arginine, its inclusion ensures a steady and prolonged supply of material for Nitric Oxide production, ensuring a sustained release rather than a short-lived spike.

INGREDIENT: BEET JUICE POWDER: THE CIRCULATORY ENHANCER



Rich in dietary nitrates, beet juice powder aids in the production of Nitric Oxide. As these nitrates are converted into Nitric Oxide, they further complement the efforts of L-Arginine and L-Citrulline, making for an effective three-pronged approach to boost NO levels.

**INGREDIENTS:
HAWTHORN BERRY
AND CRANBERRY JUICE
POWDER – NATURE’S
CARDIAC CARETAKERS**



Both these ingredients, sourced from nature’s bounty, play a unique role in heart health.

- Hawthorn Berry Extract: Traditionally used for various heart-related issues, it helps improve blood flow, reduce blood pressure, and offers antioxidant properties.
- Cranberry Juice Powder: Known for its rich vitamin and antioxidant content, it assists in reducing the risk of chronic diseases and promotes overall cardiovascular health.

**INGREDIENTS:
VITAMINS – THE
ESSENTIAL COFACTORS
FOR HEALTH**



Each vitamin in the *Nitric Oxide Plus* formula has a distinctive role:

- Vitamin C: Most importantly Vitamin C stops and reverses atherosclerosis and calcified plaque buildup. Humans are the only species that do not make Vitamin C naturally, and we must take it in with food or nutraceuticals. When our level of Vitamin C goes down there are over 100 diseases we can get, and cardiovascular disease is one of them. It also is an

antioxidant that supports the immune system, aids in collagen production, and works in synergy with other ingredients to promote cardiovascular health.

- Vitamin K2: Essential for bone health, it also prevents calcium deposits in the arteries, ensuring smoother blood flow.
- Vitamin B6 & Folic Acid: These vitamins work in tandem to break down homocysteine, an amino acid that can be harmful to blood vessels at high levels.
- Vitamin D3: Beyond its role in bone health, it's crucial for cardiovascular function and immunity.



INGREDIENTS: COQ-10 AND RESVERATROL: MOLECULES OF YOUTH AND VIGOR

CoQ-10: Found in every cell, it plays a key role in energy production and acts as a potent antioxidant, protecting our cells from damage. Since CoQ10 production decreases with age, adults of every age could benefit from more of it. CoQ10 has been shown to have several benefits such as:



- Improving heart health
- Regulating blood sugar

- Assisting in the prevention and treatment of cancer
- Reducing the frequency of migraines
- Reducing oxidative damage that leads to muscle fatigue, skin damage, and brain and lung diseases. In a long-term study, people living with moderate to severe heart failure who took daily CoQ10 supplements showed a reduced risk of having their first major adverse cardiovascular event.
- Resveratrol: Often associated with the health benefits of red wine, this compound extends cell life, acts as an antioxidant, and supports heart health. It is 1 of very few supplements that can stop the shortening of telomeres (inside your cells), which has been researched as an aging issue.

INGREDIENT:
MAGNESIUM: THE
CELLULAR CATALYST

An essential mineral involved in over 300 enzymatic reactions in our body. From energy

production to nerve function, magnesium is indispensable. In the context of *Nitric Oxide Plus*, it supports heart rhythm and aids in the proper function of other ingredients.



Every ingredient in *Nitric Oxide Plus* has been meticulously chosen for its benefits and synergistic potential. Together, they form a formidable team, geared towards boosting Nitric Oxide production, enhancing energy, and offering a holistic approach to health.

MOVING FORWARD

As we delve deeper in subsequent chapters, we'll explore the science behind this synergy and how to best harness its power.



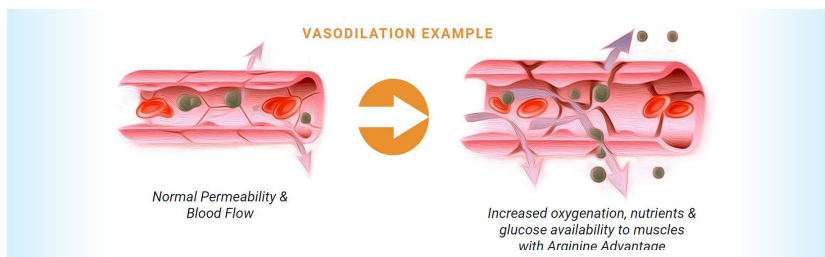
CHAPTER 4

The Science Behind *Nitric Oxide Plus*

At the crossroads of nature's wonders and human innovation lies *Nitric Oxide Plus*. Each serving is a culmination of decades of research, rigorous trials, and a deep understanding of the human body's biochemistry. In this chapter, we'll unravel the scientific foundations that underpin this revolutionary supplement.

THE ROLE OF NITRIC OXIDE IN THE BODY

Nitric Oxide (NO) is more than just a molecule; it's a signaling agent, which means Nitric Oxide tells the body's vessels to clean up and do their job. This communication between cells plays a crucial role in a myriad of physiological processes. From vasodilation (expanding blood vessels) to neurotransmission (brain cell communication), NO's versatility is unmatched - it's correctly referred to the "Miracle Molecule".



AN INTRICATE BALANCE: ARGININE AND CITRULLINE

The balance between L-Arginine and L-Citrulline, both amino acids, isn't arbitrary. While L-Arginine directly produces Nitric Oxide, its efficacy can diminish if provided in excess.

Enter L-Citrulline

L-Citrulline, found mainly in watermelon, is not as directly involved in nitric oxide production as L-Arginine. Here's why it's important and necessary.

The magic happens when L-Citrulline is ingested. Our kidneys convert L-Citrulline into L-Arginine, which, as we already know, is a direct precursor to nitric oxide. This conversion

process indirectly boosts the levels of L-Arginine in our blood, subsequently leading to increased NO production.

Why Not Just Take L-Arginine Directly?

The answer lies in bioavailability and absorption rates. When taken as a supplement, L-Arginine is quickly absorbed and metabolized in the liver, which doesn't always lead to significant increases in blood levels of the amino acid. On the other hand, L-Citrulline bypasses this immediate metabolism, resulting in a more substantial and prolonged increase in blood levels of L-Arginine than supplementing with L-Arginine directly.

The Synergy

Given this, many researchers and health professionals believe in the synergistic benefits of supplementing with both. By doing so the following occurs:

- **Immediate Boost:** L-Arginine provides a direct and immediate precursor for nitric oxide production.
- **Sustained Release:** L-Citrulline offers a more prolonged and steady increase in blood L-Arginine levels, ensuring consistent NO production over time.

This balance of consistent Nitric Oxide production in the blood, is the result of understanding the enzymatic pathways and regulatory mechanisms of our cells. Most importantly studies show that Nitric Oxide, if in the body's system consistently provides great health benefits.

At the 60 day point of consistent and balanced Nitric Oxide production in the blood - the production of Nitric Oxide doubles. This is why our products are taken twice per day, 12 hours

apart, and why we are 800% to 1200% better than other arginine products, especially those with only 1 dose per day.

DIETARY NITRATES: BEET JUICE POWDER’S CONTRIBUTION

The inclusion of beet juice powder isn’t just for its rich nutrient content. Beets are a natural source of dietary arginine, which our body can convert into Nitric Oxide. This process provides an auxiliary pathway to boost NO levels, complementing the Arginine-Citrulline duo.

ANTIOXIDANT POWERHOUSES: COMBATTING CELLULAR STRESS

Oxidative stress is a major culprit behind cellular aging and various diseases. Ingredients like Vitamin C, Resveratrol, and CoQ-10 serve as antioxidants. They neutralize harmful free radicals, protecting cells and enhancing the longevity of Nitric Oxide in the bloodstream.

HEART HEALTH AND BEYOND

While *Nitric Oxide Plus* is designed to boost NO production, its benefits extend beyond. Hawthorn berry and cranberry juice powder, backed by traditional and contemporary research, offer cardiovascular benefits, for improving blood flow to reducing arterial plaque.

EVIDENCE-BASED APPROACH: WORLD-RENOWNED RESEARCH

As we stated earlier, the *Nitric Oxide Plus* formula isn’t just a blend of beneficial ingredients; it’s a recipe refined by decades of

research. This research, conducted by leading experts and world-renowned institutions, ensures that every ingredient and its ratio is optimized for maximum benefit.

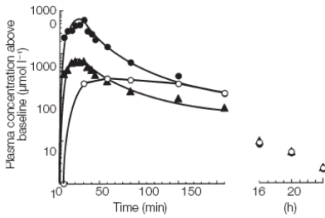
CONSISTENT EFFICACY: 24/7 NITRIC OXIDE

Production

For many bodily processes, consistency is key. The *Nitric Oxide Plus* formula is designed to ensure that Nitric Oxide is present in the system around the clock. This consistent availability ensures that the benefits, from blood pressure regulation to energy optimization, are sustained throughout the day.

In the realm of health supplements, *Nitric Oxide Plus* stands out not just because of its benefits, but due to the rigorous science that supports it. Each ingredient, every ratio, and the overall formulation are evidence-backed, ensuring that users are getting a product that's both safe and effective.

L-arginine – its short half-life leads to variable effects in humans (first generation = L-arginine only)



**L-arginine-induced vasodilation in healthy humans:
pharmacokinetic-pharmacodynamic relationship**
Stefanie M. Bode-Böger, Rainer H. Böger, Andrea Galland, Dimitrios Tsikas & Jürgen C. Frolich
Institut of Clinical Pharmacology, Medical School, Hannover, Germany

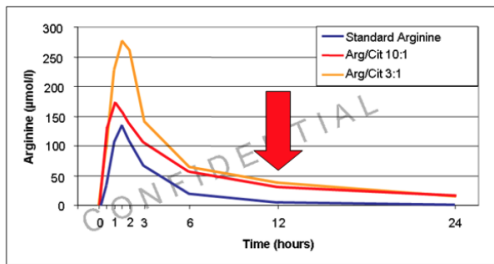
Br J Clin Pharmacol 1998; 46: 489–497

„The vascular effects of L-arginine are closely correlated with its plasma concentrations.
[...] Terminal elimination half-life for L-arginine was calculated as 59.6 ± 9.1 min and
 79.5 ± 9.3 min after intravenous and oral administration, respectively.“

... roughly speaking, duration of effect was one hour

Third-Generation L-arginine supplements – Prolonged half-life supports sustained effects

Prolongation of the half-life of L-arginine by adding L-citrulline



Source: R.H. Böger, data on file

Standard L-arginine
Arginine/citrulline 3:1

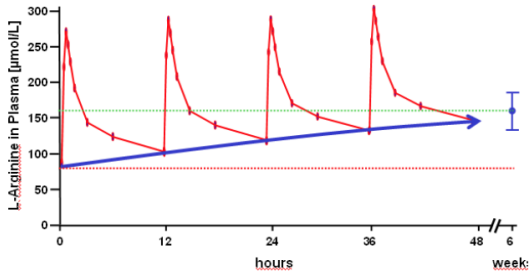
Half-life \approx 2 hours
Half-life \approx 12 hours

Third Generation L-arginine supplements

This schematic shows that after 6 weeks the Nitric Oxide levels double with taking 2 doses per day!!!

Advantage of combined L-arginine plus L-citrulline

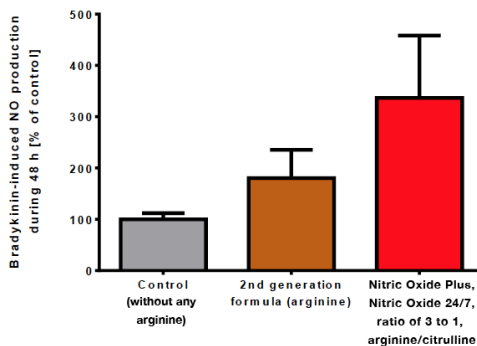
Longer half-life of L-arginine blood levels enables twice daily administration and results in build-up of L-arginine levels



Source: R.H. Böger, data on file

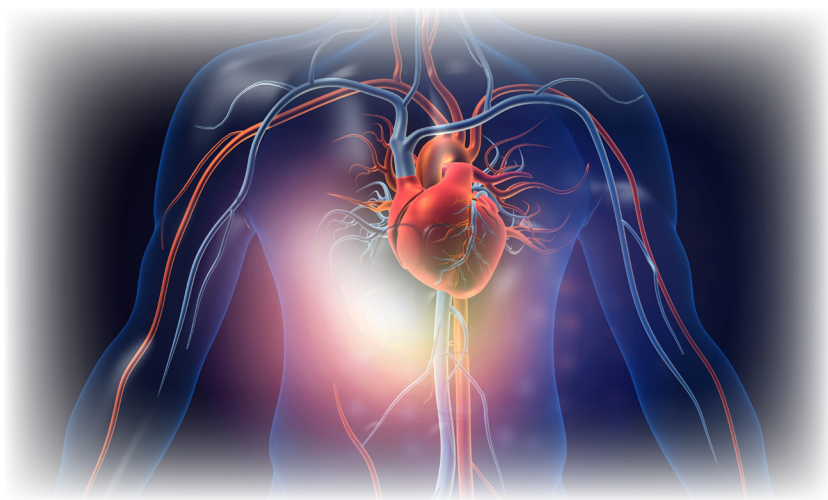
Third generation L-arginine: Nitric Oxide Plus

In summary: Nitric Oxide Plus 24/7 has a superior effect on increasing the production of biologically active NO



MOVING FORWARD

Now, let's take a careful look into many of the health benefits *Nitric Oxide Plus* provides – we encourage you to ponder and really grasp why *Nitric Oxide Plus* is so important for you as you pro actively build your own fortress of well-being and a life marked by vigor, health, and vitality!





CHAPTER 5

The Benefits of Continuous Nitric Oxide Production

While the episodic spikes of certain molecules can be beneficial, Nitric Oxide thrives on continuity. Its constant presence ensures that our body remains in an optimal state, benefiting from its vast array of physiological effects. This chapter delves deep into the importance of continuous Nitric Oxide production and the myriad benefits it confers.

THE HEARTBEAT OF CARDIOVASCULAR HEALTH

The heart, with its ceaseless rhythm, requires constant support. Continuous Nitric Oxide production ensures that our blood vessels remain dilated, blood flows freely, and nutrients are efficiently delivered to every corner of our body. The result? Reduced risk of cardiovascular diseases and improved heart health.

ENERGY, STAMINA, AND VITALITY

Our body's energy currency, ATP (Adenosine Triphosphate, cellular, energy-carrying molecule found in the cells of all living things.) ATP captures chemical energy obtained from the breakdown of food molecules and releases it to fuel other cellular processes.

Cells require chemical energy for three general types of tasks: to drive metabolic reactions that would not occur automatically; to transport needed substances across membranes; and to do mechanical work, such as moving muscles. ATP is not a storage molecule for chemical energy; that is the job of carbohydrates, such as glycogen, and fats. When energy is needed by the cell, it is converted from storage molecules into ATP. ATP then serves as a shuttle, delivering energy to places within the cell where energy-consuming activities are taking place. ATP relies heavily on efficient blood flow for its distribution. With consistent Nitric Oxide levels, our cells are adequately supplied with oxygen and nutrients, ensuring that we remain energized, active, and ready to tackle life's challenges.

COGNITIVE CLARITY AND NEUROPROTECTION

Beyond muscles and vessels, Nitric Oxide plays a pivotal role in our brain. By promoting blood flow to neural pathways, it

supports cognitive function, memory, and mood. Moreover, its neuroprotective qualities can combat age-related cognitive decline, ensuring that our minds remain sharp and agile.

REINFORCING IMMUNE DEFENSES

A less acknowledged, yet vital, role of Nitric Oxide lies in its ability to modulate the immune system. By promoting healthy blood flow, it aids in the swift transport of immune cells to sites of infection or injury, bolstering our body's defenses.

THE SHIELD AGAINST AGE-RELATED DECLINE

Ageing is an inevitable process, but how we age lies partly in our hands. Continuous Nitric Oxide production combats some of the primary culprits of ageing, from oxidative stress to reduced blood flow. This not only ensures that we remain physically agile but also protects our organs and tissues from age-induced wear and tear.

ENHANCING ATHLETIC PERFORMANCE

For the fitness enthusiasts and athletes, Nitric Oxide offers an edge. Its ability to improve blood flow translates to better exercise performance, faster recovery, and reduced fatigue. This makes *Nitric Oxide Plus* a favored companion for those aiming to push their physical boundaries.

SETTING THE FOUNDATION FOR HOLISTIC HEALTH

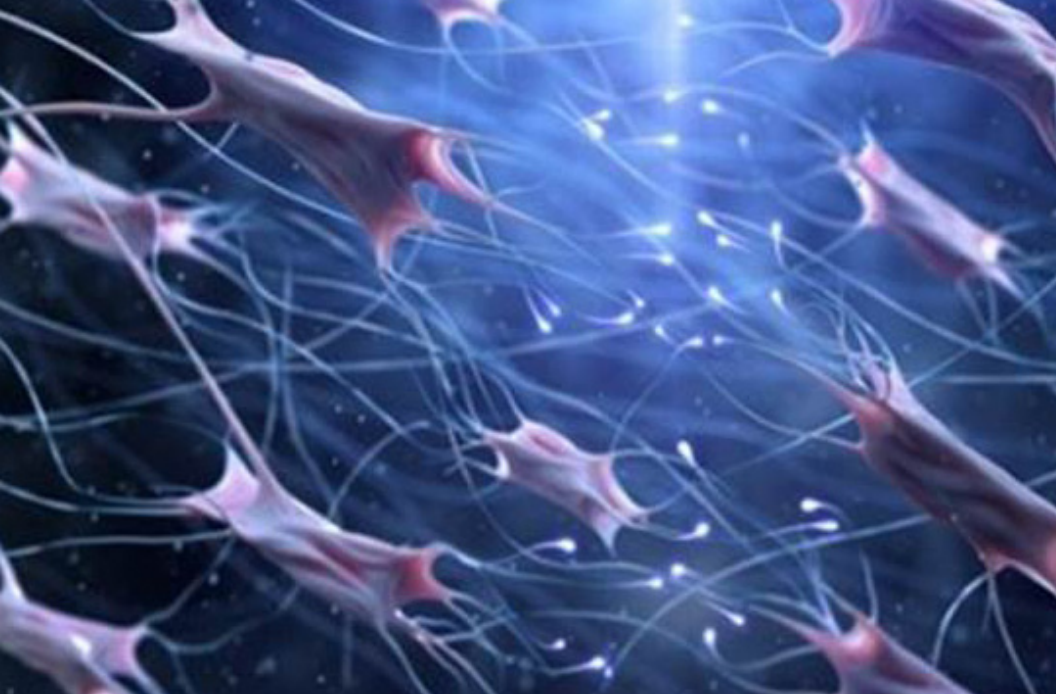
In essence, the continuous production of Nitric Oxide sets a robust foundation for overall health. Whether it's cardiovascular health, healthy blood pressure levels, energy levels, aging, bone health, hormonal balance, or even digestive efficiency, (the list

of benefits could go on and on) a body well-supplied with Nitric Oxide functions like a well-oiled machine, paving the way for holistic well-being.

The beauty of Nitric Oxide lies not just in its array of benefits, but also lies in the need for its consistent presence. By ensuring our bodies are perpetually bathed in its goodness, we can hope for a life marked by vigor, health, and vitality.

MOVING FORWARD

As we proceed, we're going to now explore how to seamlessly integrate *Nitric Oxide Plus* into daily life, making the dream of continuous Nitric Oxide production in your body a tangible reality for you.



CHAPTER 6

Nitric Oxide and Mitochondria

The New Science of Aging and the Quest for Immortality

“Why We Die”- by Venki Ramakrishnan - A Nobel Laurate

So, you say, and I hear it all the time, “ I do not need to take arginine products anymore and Nitric Oxide is no longer needed. I have solved my health problem. “I have taken it for 1 year or two”. In truth your conditions will just return, and I see that all the time with past customers returning. This discussion is not about this

issue. This discussion is about the reason we die. The science is solid, and I want to tell you something very important and useful.

In the book “Why We Die” researcher and scientist Venki Ramakrishnan outlines in detail what causes death. It is all about Mitochondria health. We have 100 trillion cells in our body and in each cell, there are hundreds and in some cases thousands of motors that operate on carbohydrates in their furnace to produce energy for our body. And just like a coal burning furnace that produces heat used in energy and has a byproduct called slag, that must be dealt with. In the case of the Mitochondria, this byproduct must be cleaned out every day and it is routine.

The health of the Mitochondria is affected by our genes and our DNA. As we age the DNA is not capable in keeping up with the process of replicating the cells every 90 days, except for bone cells and organ cells which replicate longer than every 90 days. And remember by the age of 50 our Normal Nitric Oxide level is down about 85% and seriously reducing every year. The DNA was not prepared to deal with human age beyond 35 years of age and as such it does not make Nitric Oxide sufficiently to take care of the mitochondria damage and death. So, because of that we die younger than we should. Thanks to our arginine products they make the maximum Nitric Oxide to deal with the mitochondria issue and why we die younger than we need to.

There is a question that the damage to Mitochondria is bad for the cell and accelerates aging, but it is very difficult to clean out the precise sources of damage. Some of them acquire serious errors in their DNA. There are still lots of healthy mitochondria to keep the cell working. However, at some point, a threshold is reached where there are simply too many defective mitochondria in the

cell. This causes so many problems that they overwhelm the good mitochondria. This causes serious problems for the cell. The cells are not replicated normally, and this is how we age. This analysis is very simplistic, but accurate.

On top of this replication problem the neurons with aging mitochondria are less able to use the recycling pathways to clear defective proteins and organelles, all of which expend energy. As a result, we become more prone to dementia with age.

For all these reasons, maintaining healthy mitochondria is a key to good health. Calory restriction is helpful for cell health. Also, exercise has shown to help as well, but not a lot of exercise, just consistent exercise.

This is the most exciting part of the research and discussion. It turns out that there are thousands of studies in how Nitric Oxide affects the mitochondria health. I am going to just recite two of the Abstracts and other research which are based on the science. It is most interesting that scientist and the pharmaceutical industry are desperately trying to find a pill to do what Nitric Oxide has been proven to do. The following research was found searching the web. It is supported by NIH, Pub Med and multiple researchers, scientists and major institutions. .

1. NO (Nitric oxide) or its derivatives (reactive nitrogen species: RNS) have three types of actions on mitochondria: 1) reversible inhibition of mitochondrial respiration at cytochrome oxidase by NO, and irreversible inhibition at multiple sites by RNS; 2) stimulation of mitochondrial production of superoxide, hydrogen peroxide, and peroxynitrite by NO; and 3) induction of mitochondrial permeability transition (MPT) by RNS. Similarly

there are three main roles of mitochondria in NO-induced cell death: a) NO inhibition of respiration can induce necrosis (or excitotoxicity in neurons) and inhibit apoptosis if glycolysis is insufficient to compensate, b) RNS- or oxidant-induced signal transduction or DNA damage may activate the mitochondrial pathway to apoptosis, and c) RNS-induced MPT may induce apoptosis or necrosis.

2. Nitric oxide (NO) and its derivatives (reactive nitrogen species) have multiple effects on mitochondria that impact on cell physiology and cell death. Mitochondria may produce and consume NO and NO stimulates mitochondrial biogenesis, apparently via cGMP upregulation of transcriptional factors. NO inhibits mitochondrial respiration via: (A) an acute and reversible inhibition of cytochrome oxidase by NO in competition with O₂, and (B) irreversible inhibition of multiple sites by reactive nitrogen species. NO is a potent vasodilator (via cGMP), increasing O₂ and respiratory substrate supply to mitochondria. NO stimulates reactive oxygen and nitrogen species production from mitochondria via respiratory inhibition, reaction with ubiquinol and reaction with O₂ in the membrane. NO can induce apoptosis, mainly via oxidative stress. NO induces necrosis, mainly via energy depletion. Reactive nitrogen species activation of the mitochondrial permeability transition pore may cause apoptosis or necrosis. NO may protect against mitochondria-mediated cell death by multiple mechanisms. Ref Guy C Brown 1/12/2024 published in both NIH and Pub Med
3. During apoptosis, mitochondria — the powerhouses in a cell — undergo a process called widespread mitochondrial outer membrane permeabilization (MOMP). MOMP releases mtDNA into the cytosol (the liquid inside the cell), triggering

a series of changes that cause the cell to die and be cleared by the immune system. Feb 29, 2024

4. Mitochondrial DNA (mtDNA) is released in senescent cells and activates cellular changes that lead to inflammation and dysfunction associated with age-related disorders, according to an NIA-funded study. When mtDNA leakage is blocked in aged mice, signs of inflammation are reduced, bone health improves, and overall frailty lessens. The findings, published in *Nature*, provide new insights into the processes that drive cellular senescence and suggest that therapies targeting these processes may support healthy aging in humans.
5. Old and damaged cells self-destruct through a programmed cell death called apoptosis. During apoptosis, mitochondria — the powerhouses in a cell — undergo a process called widespread mitochondrial outer membrane permeabilization (MOMP). MOMP releases mtDNA into the cytosol (the liquid inside the cell), triggering a series of changes that cause the cell to die and be cleared by the immune system.
6. As a person ages, the immune system weakens, and aging cells may escape apoptosis and accumulate in the body. These senescent cells cease dividing, and instead of dying like other aged cells, they have detrimental effects on nearby cells and tissues through the secretion of factors that are known collectively as the senescence-associated secretory phenotype (SASP). The SASP triggers inflammation and cellular changes that contribute to the aging process. To search for potential therapies, a research team led by scientists at the Mayo Clinic examined the role of mitochondria in senescence and the SASP.

7. Examining normal and senescent cells under a microscope, the researchers observed mtDNA in the cytosol of senescent cells. They suspected that this mtDNA leaked through pores in the mitochondrial membrane created by the MOMP-associated proteins Bak and Bax. To test this hypothesis, these pore proteins were genetically deleted in cells in mice and senescence was induced with radiation exposure. In the absence of Bak and Bax, markers of inflammation and gene activity associated with the SASP were reduced. This finding indicates that mtDNA release, a component of apoptosis, also occurs in senescence. Moreover, this process, named miMOMP, drives the SASP — the most damaging feature of senescence.
8. To determine if blocking miMOMP could suppress the SASP, senescent cells were exposed to two different drugs known to disrupt Bax function and prevent mitochondrial pore formation. Both prevented mtDNA release and the SASP in senescent cells. To explore miMOMP inhibition as a potential therapy, old mice were treated with one of the compounds for three months. The treatment reduced brain inflammation and improved musculoskeletal health, including better coordination, grip strength, and bone density as compared to untreated mice of the same age. These findings suggest miMOMP inhibition as a potential therapeutic target to help combat the aging effects of cellular senescence.
9. This study provides new insights into the role of mitochondria in driving cellular senescence and age-related changes in human cells and mice. Further research is needed to examine these processes in humans. Additionally, this study suggests that inhibition of mtDNA release in senescent cells may be an

effective therapeutic strategy to slow age-related conditions, such as brain inflammation, and improve musculoskeletal health.

This research was supported in part by NIA grants AG068048, AG062413, AG073084, AG062099, AG068182-01, AG071861-01, AG073084, AG076515, AG079754, AG061875, AG070391, AG071861, AG79754, and AG068635.

Reference: Victorelli S, et al. Apoptotic stress causes mtDNA release during senescence and drives the SASP. *Nature*. 2023;622(7983):627-636. doi: 10.1038/s41586-023-06621-4.

The latest science on the longevity of life, the quest for immortality and why we die. Nitric Oxide and our Mitochondria, the DNA keys to living longer.

There has been groundbreaking scientific research on why we die. We die because of the failure of our DNA to manage life and death of our mitochondria (the power plants of our energy). In the eBook on Nitric Oxide there is a complete science dissertation on the health and life of the mitochondria from Nitric Oxide. Each cell in our body has hundreds to thousands of Mitochondria power plants. Each plant makes energy from carbohydrates.

The mitochondria energy power plants must be cleaned up (eliminated from our body) after the power generation and must stay healthy during its life for the power generation and for the replication process of each cell, all 100 trillion of which most replicate every 90 days. Our DNA is in charge of keeping them healthy and cleaning up, and as we age the process becomes less efficient and as more and more damaged and dead mitochondria

accumulate, it overwhelms the cell health and that causes our loss of energy, health and eventual death.

The great news is that there is a mountain of science that supports Nitric Oxide as the white knight in this process. Nitric Oxide keeps the mitochondria healthy and helps with the DNA's job by keeping the DNA healthy and from being damaged (from Nitric Oxide at maximum levels in our body due to Cardio and Heart Wellness's science based products) and in this healthy state the cleaning up process is continually successful (taking the residue out of our body). Think of a coal fired power plant, it produces energy from heat and there is a byproduct that must be taken care of, called slag. That same system must be dealt with in our body, if it is not working that adds to our poor health and death. This comes from the new science of aging and the quest for immortality.

We are at the forefront of Nitric Oxide information. Everybody now has a solid reason to take it for life. Read the complete dissertation of research and science in the new eBook on Nitric Oxide. This is the answer to why we do not need to die unhealthy and young. And most importantly how to overcome early death and at the same time much better health. This is all based on the latest science.

MOVING FORWARD

Making *Nitric Oxide Plus* and other healthful habits a daily part of your life could improve your life in truly dramatic ways. You could be adding years to your life. Next, we continue discussing how and why this is possible.



CHAPTER 7

Nitric Oxide - Aging and Your Health

SUBJECT: Nitric Oxide and Anti-Aging as provided by 3rd generation *Nitric Oxide Plus* product comprising latest scientific findings. *Nitric Oxide Plus* which is more than 800% to 1200% more powerful in Nitric Oxide production than any arginine product on the market. This is science based and much more, read on!!

It's hard to argue with the old adage that aging is better than the alternative, but at the same time, aging is even better when we have our health. There are things we can do to improve the odds of that happening, and the sooner we start the better.

There isn't a moment when we aren't aging: The process begins at conception.

With that idea in mind, we should be laying a foundation for healthy aging as early as possible. Unfortunately, most of us wait until a health problem surfaces before we start thinking about exercise, diet, and other lifestyle choices that can help keep us healthy. At that point, we're often forced to treat health problems rather than prevent them.

The Underlying Causes of Aging and Cardiovascular Disease

So, what exactly causes unwanted symptoms of aging as the years progress?

Currently, researchers believe the process can be traced to four tiny things that can have a huge impact on our bodies.

1. Aging of our chromosomes: The ends of our chromosomes — twisted strands of our DNA — are protected by small sections called telomeres. Think of the telomeres as the plastic tips on our shoelaces that protect the laces from fraying. As time goes by, the sections shorten, leaving the chromosomes more vulnerable and putting us at greater risk of age-related diseases.
2. Aging of our mitochondria: Known as the “powerhouse” of the cell, mitochondria provide the critical energy our cells need to do their jobs. We have over 100 trillion cells, and each cell can have over 1,000 little energy motors called mitochondria. They more and more stop functioning properly with advancing age. Dysfunction of mitochondria can be linked to numerous health and age-related problems

including, but not limited to, dementia, cardiovascular disease, stroke, autoimmune diseases, and even tumors.

3. Inflammation: Not just many diseases, but virtually all chronic diseases are caused by inflammation. Arthritis, arthrosis, chronic bowel disease, chronic kidney disease, chronic heart diseases like atherosclerosis, heart failure, and high blood pressure, they all share one thing: Inflammation is a major cause of their progression over time. Therefore, it is fair to say that preventing inflammation is crucial for “healthy aging”.
4. Aging of our blood vessels’ Nitric Oxide production: Nitric Oxide (NO) is a protective molecule that is being constantly produced in the arteries. NO keeps the arteries flexible, keeps their inner surface clean and smooth, and allows the arteries to adjust blood flow to the tissues’ needs. For example, during physical exercise blood flow to the muscles is increased by NO and reduced in the inner organs.

Aging of the arteries’ NO production is accelerated by ADMA, a pro-atherogenic molecule that is also made in our body, and that causes plaque buildup in the arteries. This name ADMA comes from asymmetric dimethylarginine. Patrick Vallance and his London co-workers first noted the interference of asymmetric dimethylarginine (ADMA) with NO production in the arteries in the early 1990s. Today biochemical and clinical research continues into the role of ADMA which is one major cause of cardiovascular disease, diabetes mellitus, erectile dysfunction, and certain forms of kidney disease. Dr. Rainer Boger, MD of the University of Hamburg, Germany and Dr. John P. Cook, PhD of the Stanford University both are professors of medicine - they

researched ADMA for years. That research is part and parcel to this book.

The conditions listed here are the results of ADMA inhibiting NO production:

1. LDL oxidation and atherosclerosis (plaque buildup)
2. Vasoconstriction and vasospasm
3. Platelet aggregation and thrombosis
4. Superoxide radical formation
5. Smooth muscle cell proliferation
6. Monocyte adhesion and inflammation

Nitric Oxide Plus (NO) to the Rescue:

While it's easy to feel we're powerless to do anything about the inner workings of our bodies at such a miniscule level, there are things we can do to help protect healthy function. Most people know that nutrition, rest, and exercise all play roles in promoting health and reducing the risk of age-related illnesses. But few are aware that we have another resource to help us age gracefully: Nitric Oxide (NO).

Protecting and Reversing Cardiovascular Disease:

Nitric Oxide is one of the most important molecules in the body and specifically so in the blood circulation. Nitric oxide (NO) was discovered in the 1980s, and the scientists who made this discovery were awarded the Nobel Prize in Medicine and Physiology in 1998; because, by that time, it had become clear that NO is a unique protector of cardiovascular health. A multitude of cardiovascular diseases arises from lack of nitric

oxide (NO). Hypertension, atherosclerosis with heart attack and stroke, and chronic heart failure are the most obvious ones.

However, other ailments may also result from it, like loss of memory, asthma, and organ dysfunction of the liver, kidneys, intestines, penis and more. ADMA blocks the formation of the protective molecule NO in the arteries – this block can be overcome by L-Arginine. However, the formula of the L-Arginine supplement is most important, because the ratio of L-Arginine to L-citrulline is the secret to sustained production of nitric oxide. It took over 20 years of scientific research to accumulate this knowledge. You must have Nitric Oxide 24-7 to have it be effective, and a specific ratio of L-Arginine to L-citrulline that is used for *Nitric Oxide Plus* is optimal in maintaining NO at healthy levels 24-7.

Nitric Oxide Plus not only comprises research into this optimal L-Arginine-to-L-citrulline ratio, but this product has come up scientifically with a unique, new formulation representing the first “Third-Generation” L-Arginine supplement.

We have continued our research efforts during many years and built a new formula that allows us to address all four reasons why there may be too little NO in the body. The unique combination of L-Arginine plus L-citrulline and a proprietary blend of natural, herbal extracts with scientifically-proven efficacy is currently being brought to market.

This whole new Third Scientific Generation of L-Arginine is going to revolutionize the market for cardiovascular and heart disease prevention and repair. No other product even comes close to doing what *Nitric Oxide Plus* can do.

Our new, scientifically-proven formula can:

1. Enhance NO production by adding L-Arginine plus L-citrulline in a proper, optimized ratio.
2. Increase the power of the biological effects that second-generation L-Arginine supplements have on Nitric Oxide (NO).
3. Enhance the gene expression of the enzyme that makes NO (NO synthase).
4. Reduce the inhibitory effects of oxygen radicals on NO.

With this broad spectrum of high-power biological activity, it is a unique L-Arginine formula. It is the only product that has been scientifically proven to address all four causes for NO deficiency – and, at the same time it is more than twice as effective in Nitric Oxide production as any other product on the market. All other products on the market cannot address the last two issues (3) & (4), which is the reason they are less effective.

Your destructive ADMA molecule will be neutralized with *Nitric Oxide Plus*'s powerful Nitric Oxide production.

We have a blood test to evaluate the offset. Everybody's ADMA is different; it is largely genetic – inherited from your parents, and also affected by an unhealthy lifestyle (high fat, high blood pressure, little exercise). Once you know the ADMA in your body, then and only then will you know if you need to offset the damage it causes in order to be disease free. The test will tell you that because it tells you your ADMA blood level and your L-Arginine blood level – at the same time. Your anti-aging and cardiovascular disease is a function of your Nitric Oxide level, and your Nitric Oxide level depends on your ADMA (must be low) and your L-Arginine (must be high).

Arginine can only turn into Nitric Oxide in your blood because of the organ endothelium in your blood vessels. That discovery is why the Nobel Prize for medicine was awarded in 1998. There are products promoting Nitric Oxide production in the mouth, which is totally non scientific or not proven to be available in the blood.

Nitric Oxide Plus is the only L-arginine supplement (Except for *Cardio Wellness* and *Heart Wellness*) that was designed specifically to increase Nitric Oxide for protecting the heart and blood vessels AND to reduce inflammatory oxygen radicals.

Here is what *Nitric Oxide Plus* can do for you:

Protecting Chromosomes: Remember those telomeres that help keep our chromosomes intact? It turns out there's an enzyme — telomerase — that protects the telomeres and extends their lifespan. Even better news: Nitric Oxide (NO) is the signaling molecule that regulates telomerase activity. In other words, NO boosts your body's natural mechanisms for keeping chromosome protection intact *Nitric Oxide Plus* helps in every way to protect and increase your telomeres. With good life style choices, along with resveratrol, L-Arginine, L-citrulline and Co-Q10 you can stay ahead of the curve and slow down the aging process.

All these ingredients and many more are in *Nitric Oxide Plus*.

Extending Battery Life: While dysfunctional mitochondria are linked to many age-related diseases, Nitric Oxide can stimulate the production of new healthy mitochondria. By promoting the development of new, properly functioning mitochondria with Nitric Oxide, we keep our cells running efficiently and effectively

and, most importantly, allow them to replicate themselves in a healthy and vibrant manner.

Reinvigorating Stem Cells: Stem cells offer tremendous regenerative power — both in medicine and in the everyday renewing of our body’s tissue and organs. It’s no surprise to learn that Nitric Oxide plays a role in the signaling that tells our body both to create new stem cells (called “proliferation”) and to transform stem cells into whatever specialized cells our body’s need at the time (called “differentiation”).

A study, built on previous work in stem cell research, was recently published in the journal *Proceedings of the National Academy of Sciences (PNAS)*: It shows that Nitric Oxide (NO) signaling plays a very important role in the differentiation of mouse and human embryonic stem cells into other kinds of cells.

Reducing Inflammation and Slowing down Inflammatory Diseases: Oxygen radicals are massively being generated by activated inflammatory cells. They serve to kill bacteria and viruses when infection is present. However, even without infection, chronic inflammation goes along with chronic diseases like arthritis, arthrosis, chronic bowel disease, chronic kidney disease, chronic heart diseases like atherosclerosis, heart failure, and high blood pressure. *Nitric Oxide Plus* is the only L-Arginine supplement that was designed specifically to increase Nitric Oxide for protecting the heart and blood vessels AND to reduce inflammatory oxygen radicals.

The Essence of the Issue:

While none of us particularly look forward to aging, we do have an ally. Nitric Oxide can help us remain healthy enough to enjoy

the later chapters of our life. By the time we get to 60 years of age and do nothing against aging, we are producing only a fraction of the Nitric Oxide that we were producing at 20 years of age. But with *Nitric Oxide Plus* we can increase Nitric Oxide production to more than 400% - that is proven by scientific data.

Want to make sure you maintain adequate Nitric Oxide levels? Give yourself a daily Nitric Oxide boost with *Nitric Oxide Plus*.

The science was predominantly provided by the research of Dr. Rainer Böger, MD, 28 years of arginine research. Some of the discussion has come from major universities' research on telomeres and stem cells and researchers of Nitric Oxide.

MOVING FORWARD

In the next chapter, we'll discuss the science of how Nitric Oxide helps with Testosterone levels and ED plus even more.



CHAPTER 8

NITRIC OXIDE AND TESTOSTERONE

The solution to erectile dysfunction (ED) and the curbing of many diseases.

Men over 65 should have a testosterone level of around 300–450 nanograms per deciliter (ng/dL), according to ProMD Health.

However, testosterone levels below 300 affect 3 out of 10 men over 80 years old. The average testosterone level for an 80-year-old man is around 13 nanomoles per liter (nmol/L), or 350–400 ng/dL. Testosterone levels decline with age, but not as dramatically as with age. For example, the average testosterone level for a 40-year-old is 16 nmol/L, or 450–500 ng/dL.

This is the testosterone level report for Robert Weeks (Bob), age 82, from a test conducted on August 15, 2023. Before I share the test results, let me provide some context. When I was 40, I experienced low testosterone levels and received shots to increase them. Given this history, the results of my recent test were astonishing not only to me but also to two doctors I consulted—my cardiologist and my general practitioner, Dr. LeeAnn Klemetson at Pioneer Medical in Draper, Utah.

The test results showed a testosterone level of 896 ng/dl, which is exceptionally high for someone my age. The results are included at the end of this discussion. There is only one factor that could account for this unusually high level: 14 years of consistently taking arginine and Citrulline in the scientifically recommended amounts. This regimen follows the protocols researched and developed by Dr. Rainer Boger, designed to maximize the benefits of arginine products.

The following total and free T range indicates the downwards trend as men age.

Reference Ranges for Total and Free Testosterone Levels

Vermeulen, A. (1996). Declining Androgens with Age: An Overview. In Vermeulen, A. & Oddens, & B.J. (Eds.), *Androgens and the Aging Male* (pp. 3-14). New York: Parthenon Publishing.

Age	Total Testosterone Average (ng/dl)	Free Testosterone Average (pg/ml)
25 – 34	616	123
35 – 44	667	103
45 – 54	606	91
55 – 64	562	83
65 – 74	523	69
75 – 84	470	60
85 – 100	376	54

It's natural to experience fluctuations in your libido, especially as you age.

- Your lifestyle, current medications, and stress can all affect your sex drive. But testosterone — the hormone that boosts sexual desire, sperm production, bone density, and muscle mass — could also play a part (1Trusted Source, 2, 3Trusted Source, 4Trusted Source, 5Trusted Source).

- As a result of declining testosterone, you might have less interest in sex or notice changes in your sexual performance. Either of these effects may impact your sexual relationships and overall mental and physical well-being.
- If you'd like to address unwanted changes in your libido or sex life, you might consider ways to promote testosterone production, such as testosterone therapy or natural boosters and supplements (6Trusted Source).

The Role of NO in Male Reproduction

Nitric Oxide and Sperm

- NO seems to play a major role in the regulation of sperm motility, hyperactivation, capacitation, and fertilization (86). Sperm capacitation—a very complex physiological process in which sperm undergoes a series of physiological and morphological changes, and finally obtains the ability to fertilize—is the premise of fertilization, which is affected by many factors, including NO.
- Regarding sperm capacitation, NOS has been reported to be expressed in the acrosome and tail of human and mouse spermatozoa. Some researchers hypothesized that low concentrations of NO can improve sperm capacitation. The effect of NO on sperm motility is related to its concentration. Studies have shown that low NO concentrations can promote sperm motility (85), whereas high NO concentrations can inhibit sperm motility (87). The regulatory effect of NO on sperm was not only related to the NO concentration but also to the exposure time. Other studies have shown that NO has no effect on sperm motility or acrosomal response rates. Previous

studies have shown that acrylamide induces the activation and release of bovine sperm from oviduct epithelial cells and that acrylamide acts through NO. Arachidonic acid ethanolamide is an endocannabinoid receptor. Activation of the cannabinoid receptor increases NO levels and stimulates sperm capacitation or release in the fallopian tube bank (88).

- In terms of motility, stimulation of NO synthesis triggered an immediate decrease in sperm motility, but only at the beginning of the incubation period. After this period, the motility was restored. When sperms were cultured without NO, it was observed that all or part of the motility characteristics of all sperms were reduced, resulting in sperm fixation. Sperm motility is closely related to ATP, and the reduced respiration of sperm also affects sperm motility. The significant inhibition of sperm motility is unlikely to be due to the inhibition of ATP activity, thus reducing the intracellular ATP concentration. Besides, studies have shown that H₂O₂ may be involved in this effect.
- For diseases, the increased activity of NOS and the increased tyrosine nitration may be related to the pathogenesis of idiopathic asthenospermia, and the regulation of NO regarding sperm depends not only on the concentration of NO, but also on the time of exposure, which is beneficial to sperm motility. A 1997 study showed that the addition of synthetic inhibitors of NO could effectively reduce NO toxicity to sperms. Moreover, studies have shown that leptin has a certain effect on sperm motility: leptin can influence the survival of pig sperm; leptin in the hypothalamus-pituitary level affects reproductive function and is also involved in the regulation of some peripheral functions; and leptin-treated

male gametes can increase the NO content, triggering the acrosome reaction (89). NO is also associated with certain diseases. For example, in patients with varicocele, the iNOS subtype induces high NO production in varicocele, which can cause decreased sperm motility and even infertility (90).

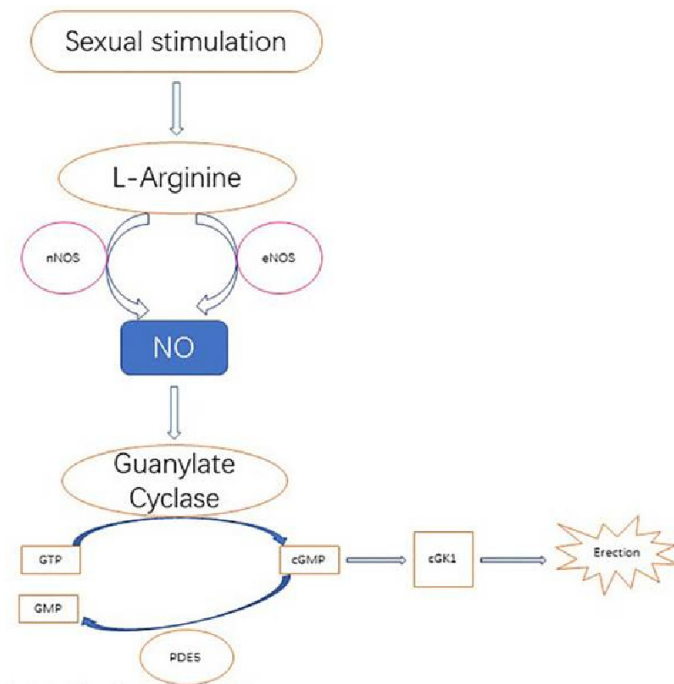
Regulation of Male Reproductive Tissues by NO

- NOS is widely found in Leydig cells, Sertoli cells, spermatocytes, neuronal plexus in the adventitia of arterioles, immature sperm head, vascular endothelial cells, and smooth muscle cells, indicating that NO/NOS can maintain the tension of testicular arterioles, regulate testosterone secretion, and affect sperm development. Moreover, the *in vitro* culture of interstitial cells or seminiferous tubules showed that NOS was also expressed in interstitial cells and blood vessels, indicating that the testis itself can produce NO (91). Besides, the concentration of NO can determine the sperm level. The NO-CGMP pathway is activated in testicular cells, which may participate in regulating testicular functions, such as spermatogenesis and steroid production.
- Pankaj and Chandra found that injection of 5-hydroxytryptamine and L-dopamine at 8 h intervals inhibited the activity of reproductive tissues and significantly decreased the concentration of nitrate-nitrite and NO in reproductive tissues, whereas the opposite results were observed at 12 h intervals (92). However, the concentration of nitric acid-nitrite in the reproductive tissues increased after reinjection of SNP at 8 h intervals; the result was the opposite after injection of L-NAME at 12 h intervals, indicating that the lack of changes in activity *in vivo* could affect the function of reproductive tissues. Experimental studies found

that NO content, NOS activity, and pathological scores of the contralateral testis in the unilateral testicular torsion group were all increased to different degrees, and NO content was positively correlated with pathological score, indicating that the higher the NO concentration, the greater the tissue injury. The injury may result from the formation of more toxic ONOO-, by the combination of NO with oxygen-free radicals on the torsional side, which may damage the contralateral testicular tissue. Alternatively, it may act on the contralateral testicular tissue by accumulating proinflammatory transmitters of NO, excessively dilating blood vessels, and inducing apoptosis (93). Simultaneously, the above-mentioned injury can induce further NOS activation to synthesize NO and cause greater damage, indicating that the effect of NO on reproductive tissues is dose-dependent.

- NO can inhibit testosterone secretion. Therefore, NO may regulate the endocrine function of testosterone through a paracrine mechanism. The expression of nNOS is influenced by testosterone levels in males. In addition, the two-concentration hypothesis of NO states that low concentrations of NO promote cancer, while high concentrations prevent cancer. Although prostate cancer is a hormone-driven malignancy, research has shifted from epithelial cells that respond to androgens to focus on NO therapy, tumor microenvironment, and inflammation. NO has been reported to inhibit androgen receptor activity. This may prevent prostate growth, but low levels of NO can in turn select for anti-circumcision prostate cells, producing an aggressive cancer phenotype. At high levels, nitro stress caused by NO overproduction can prevent prostate tumors (94)

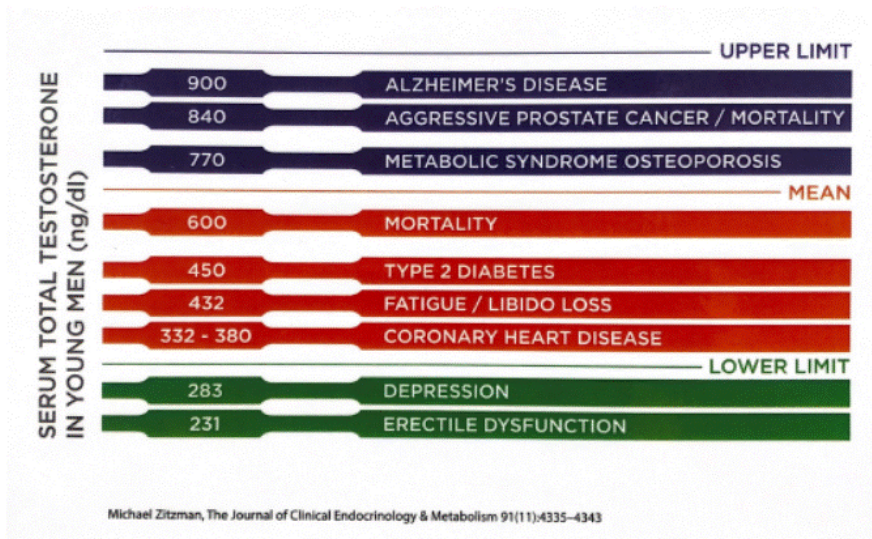
- Importantly, NO plays an important role in the biology of the penis, especially for penile erection. Studies have found that NO causes muscle smooth muscle relaxation, which is the basis of an erection. In this process, NO synthase subtypes have different roles. nNOS initiates erectile response, eNOS promotes maximum erectile response, and iNOS inhibition may lead to penile oxidative stress, suggesting that iNOS may actually promote the protective mechanism of fibrosis and abnormal wound healing. The nitric oxide signaling pathway regulating penile erection is shown in figure below.



Nitric oxide is derived from its precursor L-Arginine and is primarily localized to the nerves and endothelium through the catalysis of neuronal NOS (nNOS) and endothelial NOS (eNOS)

following upstream stimulation, respectively. Nitric oxide diffuses to local smooth muscle cells, where it activates guanosine cyclase.

This hormone testosterone serum chart demonstrates what diseases are protected if the testosterone levels are as shown in this chart. So any of the diseases listed below the various levels are also protected.



Normal Testosterone Levels

The “normal” or healthy level of testosterone in the bloodstream varies widely, depending on thyroid function, protein status, and other factors.

According to recent guidelines from the American Urological Association (AUA), a testosterone level of at least 300 nanograms per deciliter (ng/dL) is normal for a man. A man with a testosterone level below 300 ng/dL should be diagnosed with low testosterone.

For women ages 19 and up, normal testosterone levels range from 15 to 70 ng/dL.

Testosterone levels reach their peak around age 18 or 19 before declining throughout the remainder of adulthood.



“I solved my ED problem with *Nitric Oxide Plus* and you can too!” – David Livingston

Nitric Oxide Plus is a very viable treatment for erectile dysfunction (ED). Science has discovered that more nitric oxide inside the blood vessel walls increase the ability for a sustained erection. Erectile dysfunction (ED) is the inability to get or keep an erection firm enough to have sexual intercourse. Some people may assume ED increases with age. The fact is that impotence and the inability to maintain an erection are not always age-related. Aging doesn't necessarily mean you're doomed to develop ED indefinitely. Age can raise the risk for ED, but there are ways to treat it. *Nitric Oxide Plus* is the first step in treating ED.

Conventional erectile dysfunction (ED) treatments include Viagra, Levitra and Cialis. They relax the muscles of the penis and increase blood circulation. However, these medicines only address Erectile Dysfunction on a symptomatic level and do precious little to address the main root causes of it. The person using these drugs may experience side-effects like headaches, dizziness and even become dependent on them.

Nitric Oxide Plus is an advanced natural product helping Erectile Dysfunction (ED)

This unique natural remedy that is science based works by addressing the physical root causing Erectile Dysfunction. L-Arginine, L-citrulline, Resveratrol, Vitamins D, K2, are all supplements that helps the cardiovascular system produce normal Erections by increasing the nitric oxide in your blood vessel walls.

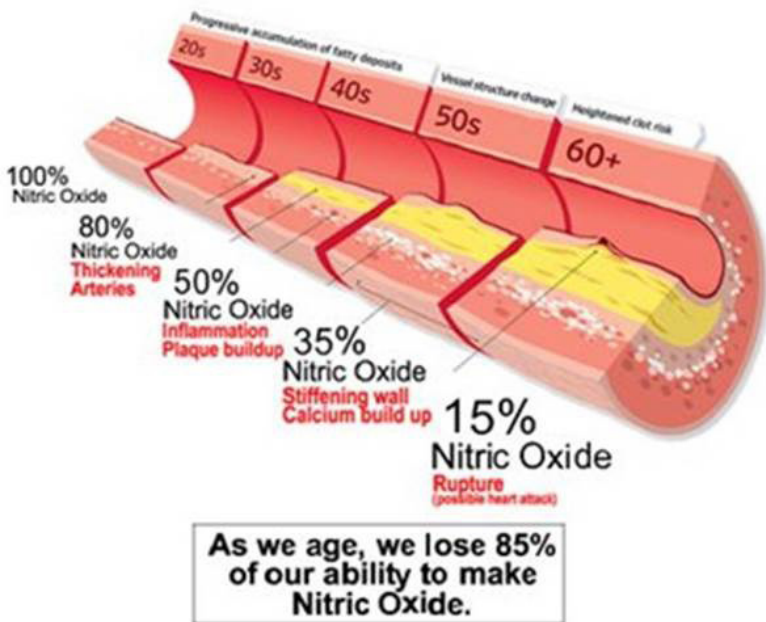
Nitric Oxide Plus is science based and improves your sexual performance by:

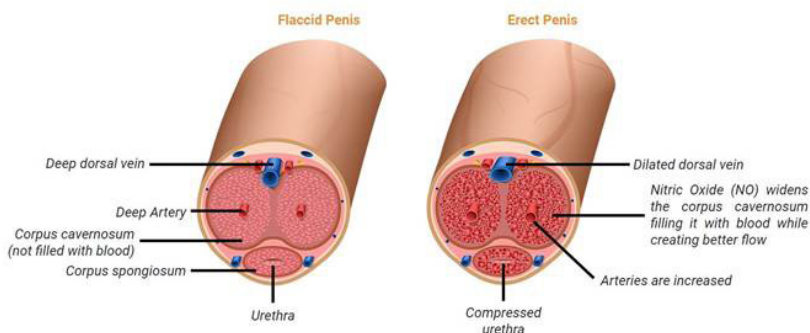
- Induces normal erection by increasing the blood flow throughout the body.
- *Nitric Oxide Plus* helps restore a normal reproductive system by solving the issues causing the physical problems.
- *Nitric Oxide Plus* helps penile erection by creating more nitric oxide by dilating blood vessels.
- *Nitric Oxide Plus* can relieve emotional stress by maintaining the erection.
- *Nitric Oxide Plus* clears energy channels and blood flow issues associated with ED

Nitric Oxide Plus ingredients were selected by Dr. Böger from his 28 years of research studying L-Arginine/L-citrulline.

There is no reason to live with ED today. *Nitric Oxide Plus* effects the sexual response the same way as Viagra, but without the side effects (such as stopping the production of Nitric Oxide which is the principal cause of cardiovascular disease).

Please look at this illustration on nitric oxide production as we age. *Nitric Oxide Plus* cleans the blood vessels and produces more Nitric Oxide that brings the system back to a younger age.





Discussion written by Dr. Rainer Boger, MD on Erectile Dysfunction (ED)

Nitric Oxide and Erectile Dysfunction (ED)

Nitric Oxide Plus (3rd Generation) is a very viable treatment for erectile dysfunction (ED). Science has discovered that more Nitric Oxide (NO) inside the blood vessel walls increase the ability for a sustained erection. Erectile Dysfunction (ED) is the inability to get or keep an erection firm enough to have sexual intercourse. Some people may assume ED increases with age. The fact is that impotence and the inability to maintain an erection are not always age-related. Aging doesn't necessarily mean you're doomed to develop ED indefinitely. Age can raise the risk for ED, but there are ways to treat it. *Nitric Oxide Plus* (3rd Generation) is the first step in treating ED.

Conventional erectile dysfunction treatments include Viagra, Levitra and Cialis. They relax the muscles of the penis and increase blood circulation. However, these medicines only address Erectile Dysfunction on a symptomatic level and do little to address the main root causes of it. The person using these drugs may experience side-effects like headaches, dizziness and urination burning.

***Nitric Oxide Plus* - An advanced 100%, all natural product helping Erectile Dysfunction (ED) by creating Nitric Oxide.**

This unique natural remedy that is science-based works by addressing the physical root causing of Erectile Dysfunction. The *Nitric Oxide Plus* (3rd Generation) ingredients of L-Arginine, L-citrulline, Resveratrol, are all supplements that helps the cardiovascular system produce normal erections by increasing the body's Nitric Oxide production.

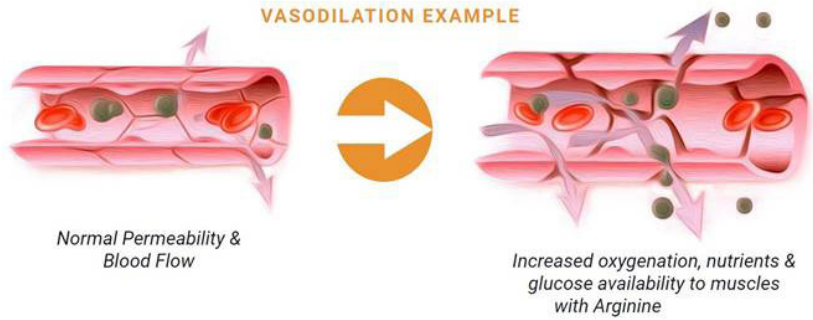
Backed by 30 years of Science *Nitric Oxide Plus* improves your sexual performance by:

Inducing normal sustained penile erections by increasing the blood flow (vasodilation) throughout the body which in turn dilates the blood vessels. Restore a normal reproductive system by solving the issues causing the physical problems.

There is no reason to live with ED today. *Nitric Oxide Plus* (3rd Generation) effects the sexual response differently than Viagra. Viagra has side effects and it enhances the nitric oxide (NO) production that the body is currently making. *Nitric Oxide Plus* works for men with erectile dysfunction (ED) by increasing and creating nitric oxide production and blood flow to the penis so you can obtain and keep an erection sustainable enough for sex.

Note: The problem doesn't solve with 1 dosage, however, if you take 2 scoops a day and continue to for several weeks you are one step closer to producing more nitric oxide in your body and decreasing the effects of ED. Typically results are seen after 60-90 days of continued use.

Please look at this illustration on nitric oxide production. *Nitric Oxide Plus* cleans the blood vessels and produces more nitric oxide that brings the system back to a younger more youthful self. Testosterone increase is the long distance aid along with Nitric Oxide and vessel repair and cleaning.



This shows the vessel difference before arginine and after, the blood flow almost doubles after taking arginine.

Accession #: 23084731060		CLIA ID:46D0981635	
Lab: LabCorp		Client Info.:43043571	
Patient: Weeks, Robert		Pioneer Comprehensive Medical	
Pat. Chart No.: WEEKS0006		(801) 576-1086	
DOB: 01/24/1942		12433 S Fort Street	
Age: 81 Yr(s) 7 Month(s)		Draper, UT 840209363	
Sex: Male			
Ordering Phys: Klemetson, LeeAnn			
Hemoglobin A1c			
Hemoglobin A1c		5.5 (%)	4.8-5.6 01
Note:	Prediabetes: 5.7 - 6.4 Diabetes: >6.4 Glycemic control for adults with diabetes: <7.0		
Lipid Panel			
Cholesterol, Total		184 (mg/dL)	100-199 01
Triglycerides		133 (mg/dL)	0-149 01
HDL Cholesterol		47 (mg/dL)	>39 01
Vldl Cholesterol Cal		24 (mg/dL)	5-40 01
Ldl Chol Calc (nih)		H 113 (mg/dL)	0-99 01
Comment:	Canceled 01		
Psa Total+% Free			
Prostate Specific Ag, Serum		0.4 (ng/mL)	0.0-4.0 01
Note:	Roche ECLIA methodology. According to the American Urological Association, Serum PSA should decrease and remain at undetectable levels after radical prostatectomy. The AUA defines biochemical recurrence as an initial PSA value 0.2 ng/mL or greater followed by a subsequent confirmatory PSA value 0.2 ng/mL or greater. Values obtained with different assay methods or kits cannot be used interchangeably. Results cannot be interpreted as absolute evidence of the presence or absence of malignant disease.		
Psa, Free		0.17 (ng/mL)	N/A 01
Note:	Roche ECLIA methodology.		
% Free Psa		42.5 (%)	Not Estab. 01
Note:	The table below lists the probability of prostate cancer for men with non-suspicious DRE results and total PSA between 4 and 10 ng/mL, by patient age (Catalona et al. JAMA 1998, 279:1542).		
	% Free PSA	50-64 yr	65-75 yr
	0.00-10.00%	56%	55%
	10.01-15.00%	24%	33%
	15.01-20.00%	17%	23%
	20.01-25.00%	10%	20%
	>25.00%	5%	9%
Please note:	Catalona et al did not make specific recommendations regarding the use of percent free PSA for any other population of men.		
Testosterone, free And Total			
Testosterone, Serum		896 (ng/dL)	284-916 01
Note:	Adult male reference interval is based on a population of healthy nonobese males (BMI <30) between 19 and 39 years old. Travison, et al. JCEM 2017,102;1161-1173. PMID: 28324103.		
Free Testosterone(direct)		10.5 (pg/mL)	6.6-18.1 02
TSH			
TSH		2.860 (uIU/mL)	0.450-4.500 01
Performing Laboratory Information:			
01 Labcorp Phoenix 5005 S 40th Street Ste 1200 Phoenix AZ 850402969 MD Collum Earle MD 8007889743			

See above: The circled test results of Robert Weeks dated 2023 - his testosterone level of 896 is way above normal for his age.

MOVING FORWARD

Next, we discuss REAL RESULTS and how they are best achieved by making healthy habits.



CHAPTER 9

Integrating *Nitric Oxide Plus* into Your Daily Life

Adopting a new health regimen can be both exciting and daunting. You know very well that making a real change in life requires commitment and perseverance. You need to have important reasons to really make changes stick and reap the ongoing benefits of those changes. Keep the reasons for improving your health in front of you - keep your

mind clear on the “why” and perhaps even write them down and re-read them often.

So, let’s talk about:

- How you use the product correctly. (9.1)
- The best practices to ensure optimal benefits. (9.2–9.3)
- Seamlessly incorporating *Nitric Oxide Plus* into your daily routine (9.4)
- Setting the stage for improved health, energy, and vitality. (9.5)

UNDERSTANDING THE DOSAGE

Each tub of *Nitric Oxide Plus* comes packed with 60 servings, precisely calculated for a 30-day supply. With its powdered form, the product ensures easy absorption, and each 5.1g scoop is an effective blend of all the ingredients we’ve discussed.

STARTING YOUR DAY RIGHT

Begin your day with *Nitric Oxide Plus*. Take 1 scoop with 12-16 ounces of water as you wake up in the morning. This will not only jump-start your Nitric Oxide production but also prepare your body for the day ahead, optimizing blood flow, energy levels, and cognitive functions from the get-go.

THE MID-DAY BOOST

Approximately 12 (10 to 14 hours) hours after your morning dose, it’s time for a rejuvenating mid-day boost. Mix another scoop with 12-16 ounces of water. This ensures that the benefits of Nitric Oxide continue throughout the day, supporting your cardiovascular health, energy levels, and cognitive clarity.

BEST PRACTICES FOR CONSUMPTION

Stay Consistent: Like any supplement, consistency is key. Make it a daily ritual, integrating it into your morning and mid-day routines.

SETTING THE STAGE FOR YOUR IMPROVED HEALTH

Stay Hydrated: The recommended mixture with 12-16 ounces of water not only aids in the easy dissolution of the powder but also ensures that you remain hydrated— another essential aspect of overall health.

Shake Well: Ensure that the powder is fully dissolved in the water. A thorough mix ensures even distribution of the ingredients in each serving.

STORE WISELY

Ensure that the tub is stored in a cool, dry place, away from direct sunlight. Proper storage ensures that the potency of the ingredients remains intact.

REAL-LIFE TESTIMONIALS

Khristopher W. 67:

“For the past 4 years, *Nitric Oxide Plus* has been a key part of my wellness routine. At 67, I’ve consistently seen my blood pressure hover around healthy readings. With the addition of *Nitric Oxide Plus*, my numbers have been more towards the 115 to 110 over 75 to 72 range. Interestingly, while my pulse remains in its usual lower 60’s, I genuinely sense the support of this product, especially during my cardio workouts. Living a medication-free life, paired with a nutritious diet and active lifestyle, I truly believe

in the added benefits that *Nitric Oxide Plus* brings to my health regimen. If you're committed to your well-being, I'd suggest giving this product a consideration."

Walter B. 73:

"For over nine years, I've incorporated *Nitric Oxide Plus* and Bob Weeks Arginine products into my wellness journey, and I'm thrilled with the journey so far. Post-2008, after facing some heart-related challenges, I was determined to reevaluate my lifestyle choices. I revamped my diet, committed to a regular gym routine, and dedicated myself to daily walks. Today, at 73, I'm 20 Kgs lighter and consistently ace my annual stress tests. Around 2011, I added Arginine to my regimen. Over the years, I've noticed a significant improvement in my calcium score. So much so, that after a recent test, the lab called me back for a retest, thinking there might've been an error due to the marked change in my results! Through personal reflection, I believe my holistic approach—comprising weight loss, dietary shift, and incorporating Arginine—has contributed to these results. If you're concerned about arteriosclerosis or calcium buildup, I'd suggest looking into the benefits of Arginine. Grateful for my renewed health. Cheers!"

Roseanne E.:

"I've been a loyal user of *Nitric Oxide Plus* for several years and the results? Astounding! After undergoing a Calcium Scoring CT scan, the results came back with ZERO CALCIUM IN MY ARTERIES. My cardiologist was so impressed that he saw no need for statins in my regimen. Personally, I've never been a fan of statins due to their side effects. Seeing the benefits, I've also introduced my husband, who has had a history with stints, to *Nitric Oxide Plus*. Any potential benefit this product can offer

him is a boon. If you're considering a change for the better, this just might be your answer!"

PRECAUTIONS AND CONSIDERATIONS

As with any supplement:

- Consult with a healthcare professional if you're pregnant, nursing, taking medication, or have a medical condition.
- Pay attention to your body. While *Nitric Oxide Plus* is formulated for maximum benefits and minimal side effects, it's essential to monitor how your body reacts, especially during the first few days. We know that every body is different. Starting out with a reduced dose and working up to a full dose is an option. The key is to get started and make healthy progress. If you have questions please feel free to call us - we are happy to give you guidance.
- Diet and Lifestyle: Remember, while *Nitric Oxide Plus* is a potent tool, a balanced lifestyle with a healthy diet, regular exercise, and adequate sleep will amplify its benefits.

As you embark on this journey with *Nitric Oxide Plus*, remember that it's more than just a supplement. It's a commitment to better health, a promise of increased vitality, and a step towards a brighter, more energetic future.

MOVING FORWARD

In the final chapter, we'll wrap up our exploration, offering final thoughts on this revolutionary product and its place in the broader spectrum of health and well-being.



CHAPTER 10

Concluding Thoughts

Our journey through the intricacies of Nitric Oxide and our revolutionary *Nitric Oxide Plus* product is both enlightening and promising! As we conclude this guide, let's reflect on the over arching narrative, the potential of consistent Nitric Oxide production in the blood, and the promise of a future with optimal health and vitality is more and more, stronger and stronger inside our grasp.

THE POWER OF NITRIC OXIDE

We began with a molecule - simple in its composition yet profoundly impactful in its function. Nitric Oxide, the silent maestro of our bodily symphony, orchestrates a myriad of processes, from cardiovascular health to cognitive clarity. Its role in our overall well-being is undeniable, and harnessing its power is not just beneficial—it's transformative.

THE *NITRIC OXIDE PLUS* PROMISE

Through meticulous research and a deep understanding of human physiology, *Nitric Oxide Plus* emerged as a beacon of hope and health. Its formulation, refined over decades, offers a potent blend of nature's wonders and scientific innovation. Each scoop, each serving, is a testament to our commitment to better health and a brighter future.

Most people stop taking arginine products before the two year mark. There is a dramatic difference in your total overall health when you have taken this product passed the two year mark and into many years – all your organs function at peak level and your energy stays at peak as well.

BEYOND THE SUPPLEMENT

While *Nitric Oxide Plus* stands as a formidable tool in our health arsenal, it's essential to recognize its place within a broader health regimen. A balanced diet, regular physical activity, mental well-being practices, and routine health check-ups together create a holistic health paradigm. *Nitric Oxide Plus* enhances this paradigm, supercharging each facet of our well-being.

A LIFELONG COMMITMENT

Optimal health isn't a destination—it's a journey. The commitment to better health, increased vitality, and holistic well-being is a lifelong endeavor. With tools like *Nitric Oxide Plus*, this journey becomes not just feasible but also enjoyable, marked by milestones of achievements, vitality, and vigor.

EMBRACING THE FUTURE

As we step into a future marked by uncertainties, one thing remains clear: our health is our most valuable asset. By understanding our bodies, by harnessing the power of molecules like Nitric Oxide, and by adopting products like *Nitric Oxide Plus*, we're not just reacting to health challenges—we're proactively building a fortress of well-being.

Thank you for joining me on this enlightening exploration. May the knowledge you've gained serve as a foundation for a life filled with health, happiness, and boundless energy. Here's to a future brimming with possibilities and a commitment to embracing the best version of ourselves.



POST SCRIPT

How to know what Nitric Oxide Supplements are right for you?

Upon delving into the world of Nitric Oxide, a common question arises: “How can I decide which Nitric Oxide supplement to take?” With over a decade of experience in both selling and being tutored by Dr. Rainer Boger, MD, I confidently believe I can provide guidance based on rigorous research supported by the National Institute of Health (NIH). Dr. Boger, with 30 years of dedicated research in arginine/Nitric Oxide and cardiovascular disease, holds a prominent position, consistently ranked #1 or in the top 15 by Expertscape.com. In the sea of more than 500 Nitric Oxide products on Amazon. I promise you I can make

the decision simple, even if I am prejudiced. Science is not prejudiced and I do not believe in alternative facts.

Products that make Nitric Oxide can come from two main sources;

- A. Arginine-Rich Foods: Arginine is a precursor to Nitric Oxide, and while numerous foods can supply arginine, the sheer quantity required (5000 mg daily for optimal Nitric Oxide production) makes it impractical and calorically excessive. Dr. Boger’s insights emphasize the financial and caloric burdens of obtaining sufficient arginine, with NIH-backed studies affirming that 90% of Nitric Oxide must be synthesized from arginine. The Nobel Prize in Medicine (1998) further solidifies arginine’s pivotal role in Nitric Oxide production.
- B. Nitrates from Foods: Nitrates, which convert to Nitrites, offer an alternative pathway for Nitric Oxide synthesis. However, this method can only produce a fraction (7.5-8.5%) of the required Nitric Oxide. Beetroot powder, extract, or beets, and spinach contribute to this process. Notably, many products boast 500 mg of nitrates, yet, considering the best-case scenario of 1.5% nitrate concentration in beetroot, they only yield 7.5-8.5 mg of nitrate per gram, falling significantly short of the body’s Nitric Oxide needs.

A 180-pound person would need at least 450 mg of nitrates from beetroot extract. The leading pre-workout has 500 mg of beetroot extract and claims that this is the ideal amount to increase nitric oxide, but this couldn’t be further from the truth! Actually, you would need 60 times the amount of nitrates in the leading pre-workout per serving to benefit from nitric oxide. Let me put this into

perspective: how much beetroot extract does it take to equal 450 mg of nitrates (the amount needed to benefit from nitric oxide)?

- 500 mg
- 1,000 mg
- 30,000 mg (30 grams)

If you picked 3, then you are correct. You would need to consume 30,000 mg (30 grams) of beetroot extract to get 450 mg of naturally occurring nitrates. 30 grams is a lot of beetroot extract for the stomach! For anyone brave enough to stomach 30 grams of beetroot extract daily, be prepared for your urine to turn purple/red in color while consuming it. Don't get misled by unethical companies or experts trying to sell you on the media hype about the benefits of nitric oxide from beetroot extract when their products only contain a fraction of the amount cited in studies.

This table describes how many calories of each food you would have to consume to achieve Nitric Oxide at the level needed by science assessment and Dr Boger's research.

The table below highlights the L-Arginine content in various foods, such as nuts, seafood, and beef. However, these foods often come with high-calorie counts. To meet the recommended daily intake of 6g of L-Arginine solely through these sources would surpass half of your daily caloric limit. Take edam cheese, for instance; consuming 582 grams covers your daily arginine needs but exceeds your daily caloric allowance. In essence, relying on regular foods to attain sufficient L-Arginine becomes impractical, especially when compared to the convenience of a dietary supplement like *Nitric Oxide Plus*. Notably, the recommended

twice-a-day 3g dose of *Nitric Oxide Plus* equates to just about 30 calories, allowing your dietary flexibility. While a healthy diet forms the cornerstone of aging well, a vegetarian diet alone falls short in supplying the necessary L-Arginine levels required for optimal health in later years.

Food	L-Arginine (mg/100g)	Grams needed to have a supply of 6g L-Arginine/day	Kcal/100g	Total kcal/day
Pumpkin Seeds	5,353	112	446	500
Peanuts	3,460	173	567	981
Almonds	2,750	218	576	1,256
Pine Nuts	2,413	249	673	1,676
Lentils	2,240	268	116	311
Hazel Nuts	2,030	296	628	1,859
Prawns	1,740	345	87	300
Beef Steak	1,540	390	250	975
Chicken Breast	1,350	444	165	733
Salmon	1,330	450	188	846
Edam Cheese	1,030	582	357	2,078
Buckwheat	970	619	343	2,123
Eggs	840	715	155	1,107

Also, how much you would have to spend/month!! Cost/month of each item- pumpkin seeds \$65, peanuts \$35, Raw almonds \$94(4 lbs/day), pine nuts \$485, lentils \$36, hazel nuts \$240,

shrimp \$244 (.63lbs/day), beef steak \$253 (3/4lb/day), chicken breast \$107(3/4 lbs/day), salmon \$297(1lb/day), edam cheese \$381(1.6lbs/day), buck wheat \$122, eggs \$157 (12 eggs/day)

Retail Cost/month *Nitric Oxide Plus* \$69.95 (\$2.30/day), Cardio wellness \$84.95(\$2.66/day), Heart Wellness \$89.95 and calories are 30 per day, not 311 to 2000 calories/day and average of all those foods,1000 cal/day.

Dr. Rainer Boger's research on L-Arginine and L-citrulline.

According to Dr. Boger, for individuals experiencing normal aging, the body can absorb approximately 5000 mg daily in two doses, 12 hours apart, of arginine. The critical aspect here is that arginine alone has a half-life of 2 hours, providing about 4 hours of arginine production. However, when Citrulline is combined with arginine at a 3:1 ratio, the production of Nitric Oxide extends to about 12 hours. With a second dose, you can achieve 24 hours of Nitric Oxide production from your vessels. Then after 8 weeks of continuous dosing the Nitric Oxide doubles and that is how we are 800% to 1200% more than almost all products in Nitric Oxide Production.

The vessels generate Nitric Oxide from the endothelium, a one-cell-thick organ that spans 80,000 miles of your vessels. Discovered in 1988, its significance led to a Nobel Prize in medicine by 1998, acknowledging Nitric Oxide as a signaling molecule. This implies that Nitric Oxide actively addresses health issues: repairing damaged endothelium, supplying mitochondria with energy, and optimizing the health of each organ. Choosing an effective product involves ensuring it meets the following criteria:

- (A) a combination of at least 5000 mg arginine/Citrulline
- (B) a ratio of at least 3:1
- (C) inclusion of beetroot powder or extract
- (D) a minimum of 40 mg to 120 mgs of Resveratrol per day for countering free radical damage caused by arginine
- (E) at least 1000 mg of Vitamin C daily for clearing calcified plaque, and
- (F) at least 1600 IU of vitamin D3 and 300 mcg of vitamin K2 (mk7) daily for blood thinning and optimal calcium distribution.

If your choice is missing any of these ingredients and amounts, you are fooling yourself. There is a company selling 450 mgs of 5 products, one of them is Citrulline and no arginine for \$39.95/30 doses. They have a test strip that is for testing your Nitric Oxide level in your mouth. This is completely deceptive. There is no test for your Nitric Oxide level in your blood and that is where the test must be. They also sell beet powder gummies for \$39.95/60 gummies. This has 1.5 mgs of arginine in each gummy. They also sell beetroot powder at 500 mgs/day for \$39.95 (according to Beta Vulgaris , (also known as the ultimate in beet quality), you would need 30,000 mgs/day, not 450 as Super Beets promotes and they sell according to Amazon 10,000 jars /month) and this does not have enough nitrates to make at most 10% of your need for Nitric Oxide. You still need the 90% from arginine. They sell \$200,000,000 of this product made with Citrulline per year and \$25,000,000 of these worthless gummies per year. They also sell \$36,000,000/year of Beet powder. They even claim studies, which would mean for what? This proves the old adage that you can fool some (or a lot) of the people all the time.

NITRIC OXIDE PLUS

Nitric Oxide Plus stands out as the premier nitric oxide supplement, meeting all the essential requirements for optimal Nitric Oxide production as outlined by scientific experts. Formulated to ensure a consistent supply of Nitric Oxide 24-7, this supplement adheres to the research-backed combination of arginine and Citrulline, maintaining a crucial 3 to 1 ratio. Additionally, it incorporates beetroot powder to contribute to Nitric Oxide synthesis. With an inclusion of 40 mg of Resveratrol for combating free radical damage, 1000 mg of Vitamin C for arterial health, and a robust blend of 1600 IU's of Vitamin D3 and 300 mcg of Vitamin K2 (mk7) for blood thinning and calcium regulation, *Nitric Oxide Plus* provides a comprehensive solution for sustained Nitric Oxide support, setting it apart as the optimal choice for promoting cardiovascular well-being.

Nitric Oxide Plus will compete with the many other products that produce nitric oxide but is by far the best option when compared side by side with other nitric oxide supplements in terms of price and production and will produce 800% more Nitric Oxide based on Dr Boger's science. Almost all products promote 1 scoop per day and the wrong ratio of arginine/Citrulline. And that is just the beginning of the differences.

Conclusion

In conclusion, my unwavering endorsement of *Nitric Oxide Plus* may seem biased, but it stems from a genuine frustration with the lack of transparency and efficacy in other nitric oxide supplements available on the market. After years of experimenting with various products, I discovered that achieving noticeable results often required exorbitant doses and significant

financial investment (6x the recommended dosage and \$300+ per month cost to get those benefits). Recognizing a pervasive issue within the industry, where companies capitalize on the hype surrounding nitric oxide without delivering substantial results, I took it upon myself to develop a solution. *Nitric Oxide Plus* is not just a product; it is a manifestation of my commitment to offering the highest quality, scientifically formulated supplement. Mindful of the tarnished reputation of many nutraceuticals, I infused this creation with a wealth of firsthand knowledge, addressing the pitfalls that contribute to negative perceptions in the industry. Through *Nitric Oxide Plus*, I aspire to genuinely impact lives by sharing the wealth of information and experience I've accumulated over the years, encapsulated in the essence of Cardio and Heart Wellness.

This is the final PostScript of our eBook. I hope you enjoyed reading it!

Bob Weeks

Founder of Cardio and Heart Wellness

bob@cardioandheartwellness.com

www.cardioandheartwellness.com

TESTIMONIES ARE IN THE WEBSITE- CLICK THIS LINK TO GO DIRECTLY TO THEM-

This is the link to testimonies:

<https://cardioandheartwellness.com/testimonials/>

This is Bob Weeks story link:

<https://cardioandheartwellness.com/bob-weeks-story/>

Bob Weeks Climbing 8,000 ft in 2 miles at 81 years of age “Hana Hawaii 4/12/23”. Click on this link to read all about it: https://cardioandheartwellness.com/wonderful-hawaiian_experience

Testimony of Greg S. my litigating attorney in Riverside California. I knew of Greg’s family from Murray high school where I graduated, and they are great people. He had bought some jars about 12 months ago. He came to my daughter’s wedding 4 months ago. His wife and my daughter Joanna were friends from high school. At the wedding we were standing in a circle with some of my friends and one of them asked how the product was going? Greg had never said anything to me before this day. He piped up and said it was great and proceeded to pitch it with his testimony. I was shocked because he had never said anything before. Then out of the blue about a week ago he sent this testimony to me. Over the years I have had 100’s of testimonies sent to me. Most people do not send in testimonies. They like to tell me but prefer to talk, not write. If you have a testimony send it to me.

Testimony of Greg S.

I am in my early 40s and have been taking *Nitric Oxide Plus* for about a year. For me, nothing I have done or taken has helped

me feel so energetic. I am a trial attorney and often work 12 to 16 hours a day. In addition, I teach a class at a local University, I coach my kid's little league team, and I constantly train for and compete in Spartan races and triathlon's. On top of that, I take little to no caffeine because I don't like the way it makes me feel. Before *Nitric Oxide Plus*, at the end of each day, I would crash and at the end of each week, I would feel totally exhausted. I then started taking *Nitric Oxide Plus* every day. Since then, my morning routine starts at 4:00 a.m. and I'm up with no problems. I work out twice a day. I seem to stay focused at work and I'm present with my kids at night helping with homework and baseball practice. In short, I live how I want to and I can't imagine not taking this product. I have always been healthy and active and I don't often go to the doctor's so I don't have tests results or blood samples to say exactly what *Nitric Oxide Plus* has done to me – I just know how great I feel.

– Greg S, California 11-8-23

Supplement Facts

Serving Size: 6 grams (1 scoop)

Serving Per Container (60) 30-day Supply

	Amount Per Serving	% Daily Value
Vitamin C (Ascorbic Acid)	500 mg	555%
Vitamin D3 (Cholecalciferol)	20 mcg (800 IU)	100%
Vitamin K2 (Menaquinone)	150 mcg	333%
Vitamin B6 (Pyridoxine HCL)	4 mg	200%
Folic Acid (Folate)	800 mcg	50%
Magnesium (Citrate)	30 mg	7.5%

Proprietary Blend 3,250 mg **

L-Arginine, L-Citrulline, Taurine, Beet Juice Powder, Hawthorn Berry Extract, Cranberry Juice Powder, CoQ-10, Resveratrol.

In a base of: Citric Acid, Malic Acid, Natural and Artificial Strawberry Cream Flavors, Sucralose (or Stevia), Silica, Magnesium Stearate, Potassium Chloride, Sodium Chloride.

**Daily value not established. See more info at CardioAndHeartWellness.com.

89 RESEARCH VERIFIED, BENEFITS OF L-ARGININE

Prevent, halt and reverse cardiovascular disease, anti-age the body and stop free radical damage to the body and vessels.

As we age, our Nitric Oxide producing system breaks down and we produce less and less Nitric Oxide (NO). This breakdown is a risk to our health and well-being.

Nitric Oxide Plus, Cardio Wellness, and Heart Wellness are scientifically formulated, all natural supplements, made from L-Arginine and other nutraceuticals. These formulas are designed to naturally increase Nitric Oxide production in the blood and are based on the scientific research shown here as well as the more than 29 years of further study and analysis by Dr. Rainer Boger, MD. (Researcher, Scientist, Professor of Medicine)

We've created 3 unique, potent and all natural formulas to improve cardiovascular health as well as many other health needs.



The therapeutic benefits of L-Arginine producing Nitric Oxide have been validated by thousands of scientific studies. Let's take a look at them here...

(The following report, which is backed up by incredible scientific research, shows the many health benefits of L-Arginine in the human

body. Herewith, are 89 different arginine health benefits from thousands of studies over many years along with their scientific references).

L-Arginine is a semi-essential amino acid produced in the liver and found in protein rich foods like fish and red meat. Medical research performed by Dr. Rainer Boger, MD, a 29-year cardiovascular disease researcher, has established that taking 2 doses of 6,000 mgs of Arginine/Citrulline each day about 12 hours apart, produces at least 4 times, and as much as 8 times more Nitric Oxide than any other product on the market.

Dr. Boger has derived many scientific discussions from these studies and from his own research. He has published over 100 peer reviewed scientific studies on Arginine and Cardiovascular Disease. He is the #1 researcher in the world on this subject. Go to www.cardioandheartwellness.com to learn more.

Here are the 89, Research Verified, Benefits of L-Arginine

Aging Process

1) L-Arginine inhibits one of the primary mechanisms of the aging process (it inhibits the process of cross-linking). 2) L-Arginine increases the release of the human growth hormone (HGH) (also known as the anti-aging hormone) from the pituitary gland.

Cardiovascular System

3) L-Arginine improves blood circulation, improves exercise capacity and facilitates vasodilation in angina patients.

4) L-Arginine helps to prevent atherosclerosis and reduces the severity of existing atherosclerosis. 5) L-Arginine inhibits the adhesion of monocytes to the endothelium (an underlying event in the course of atherosclerosis). 6) L-Arginine improves blood circulation (by stimulating the production of nitric oxide, an endogenous neurotransmitter that helps to prevent vasoconstriction and which initiates vasodilation by relaxing the smooth muscle cells of the blood vessels). 7) L-Arginine helps to prevent abnormal blood clotting (by stimulating the production of plasmin and by increasing vasodilation). 8) L-Arginine helps to prevent free radical induced damage to the lining of blood vessels (by enhancing the production of nitric oxide in blood vessels). 9) L-Arginine significantly increases stroke volume and cardiac output (without effect on heartbeat rate) in congestive heart failure patients. It also increases vasodilation (leading to increased blood circulation) in congestive heart failure patients. 10) L-Arginine reverses consequences of coronary heart disease. 11) L-Arginine lowers blood pressure in some hypertension patients (by facilitating the body's production of nitric oxide (NO) and by inhibiting the angiotensin converting enzyme (ACE)). 12) L-Arginine reverses adverse effects of high blood pressure. 13) L-Arginine decreases high blood pressure. 14) L-Arginine reduces pulmonary blood pressure and improves blood circulation in pulmonary hypertension patients. 15) L-Arginine increases walking distance in intermittent claudication patients. 16) L-Arginine restores normal endothelial function in hypercholesterolemia. 17) L-Arginine improves walking distance in peripheral vascular disease. 18) L-Arginine improves outcome after bypass surgery. 19) L-Arginine reduces blood clots and strokes. 20) L-Arginine helps prevent restenosis after angioplasty and bypass. 21) L-Arginine may give protection against damaging

effects of heart attack. 22) L-Arginine improves endothelial dysfunction in chronic heart failure patients. 23) L-Arginine improves peripheral vascular disease.

Digestive System

24) L-Arginine deficiency can cause constipation. L-Arginine supplementation may decrease the incidence of gallstones. L-Arginine reduces intestinal permeability (due to L-Arginine's role in the production of nitric oxide). 25) L-Arginine alleviates many cases of ulcerative colitis (by promoting the healing of the ulcers that occur in the colon of ulcerative colitis patients). 26) L-Arginine may improve irritable bowel syndrome (IBS). 27) L-Arginine reduces ulcers. 28) L-Arginine helps prevent post surgical damage after intestinal manipulation. 29) L-Arginine improves the outcome in sepsis patients.

Excretory System

30) L-Arginine alleviates the pain and discomfort associated with interstitial cystitis. 31) L-Arginine significantly improves the function of the kidneys and helps to prevent age-related degradation of the kidneys.

Immune System

32) L-Arginine helps to prevent bacterial & viral diseases in persons with suppressed immune systems. 33) L-Arginine blocks the formation of some forms of cancer (L-Arginine inhibits the cellular replication of 24 different types of cancer in animals). 34) L-Arginine boosts the ability of the immune system to fight breast cancer. 35) L-Arginine lowers tumor protein synthesis

and tumor growth rate in liver cancer. 36) L-Arginine inhibits the further growth of some types of sarcomas. One of the means by which L-Arginine counteracts cancer is by reducing the activity of ornithine decarboxylase, an enzyme that is associated with some types of cancer. *CAUTION: L-Arginine is also speculated to exacerbate some types of cancer, however this is just a theory. 37) L-Arginine improves the outcome of cancer treatment. 38) L-Arginine (in non-excessive quantities) stimulates numerous aspects of the immune system. 39) L-Arginine stimulates the production of helper T-cells. 40) L-Arginine stimulates activity and production of lymphocytes by the thymus gland. 41) L-Arginine increases the activity (cytotoxicity) of NK lymphocytes. 42) L-Arginine stimulates the production of T-lymphocytes within the thymus and makes them more active and effective. 43) L-Arginine increases the size of the thymus, stimulates the production of lymphocytes by the thymus and restores the production of thymic hormones to youthful levels. 44) L-Arginine helps to counteract inflammation. 45) L-Arginine accelerates the ability of the immune system to recover from surgery. 46) L-Arginine improves sickle cell disease.

Metabolism

47) Alkalosis can occur as a result of L-Arginine deficiency. 48) L-Arginine exerts antioxidant effects that scavenge superoxide free radicals. 49) L-Arginine lowers total serum cholesterol levels. 50) L-Arginine lowers serum low-density lipoprotein (LDL) levels. 51) L-Arginine inhibits the process of cross-linking. 52) L-Arginine reduces insulin resistance and improves blood sugar disposal in diabetes type 2 patients. 53) L-Arginine reduces insulin resistance. 54) L-Arginine improves diabetes and reverses damage caused by diabetes. 55) L-Arginine may prevent diabetes. 56) L-Arginine

increases oxygen uptake in the lungs in persons with hypoxia (due to its role in the production of nitric oxide, which improves blood circulation via vasodilation). 57) L-Arginine increases oxygen uptake in the lungs in persons with altitude sickness (due to its role in the production of nitric oxide, which in turn improves blood circulation via vasodilation). 58) L-Arginine improves asthma. 59) L-Arginine helps to detoxify the liver and alleviates cirrhosis. Liver malfunction can occur as a result of L-Arginine deficiency. 60) L-Arginine lowers elevated serum triglyceride levels. 61) L-Arginine alleviates obesity and facilitates weight loss (by stimulating the release of human growth hormone (HGH) from the pituitary gland).

Musculoskeletal System

62) L-Arginine facilitates the healing of fractures. 63) L-Arginine facilitates muscle growth (by inhibiting muscle loss) and is required for the transport of the nitrogen used in muscle metabolism. 64) Muscle weakness can occur as a result of L-Arginine deficiency. 65) L-Arginine may prevent and alleviate osteoporosis (by stimulating the release of human growth hormone (HGH) which is an important mediator of bone formation and bone turnover; it also stimulates nitric oxide synthesis which is a potent inhibitor of the osteoclasts that cause the resorption of bone). 66) As a precursor for nitric oxide production, L-Arginine causes the relaxation of smooth muscle. 67) L-Arginine improves muscle performance. 68) L-Arginine improves glucose uptake into muscle cells.

Nervous System

69) L-Arginine may be useful for the treatment of Alzheimer's disease (due to its ability to repair damaged axons by increasing

polyamines levels). 70) L-Arginine is essential for the regeneration of damaged axons of neurons (its role appears to be as an agent for degrading proteins that have been damaged through axon injury). 71) L-Arginine facilitates the potentiation of long-term memory (by stimulating the production of nitric oxide (NO) - a neurotransmitter responsible for the potentiation (storage) of long-term memory. 72) L-Arginine improves memory and cognitive functions. 73) L-Arginine improves pituitary responsiveness and modulates hormonal control.

Sexual System

74) L-Arginine alleviates male impotence (by stimulating the production of nitric oxide, the endogenous chemical that stimulates erections in males). 75) L-Arginine is used to effectively treat erectile dysfunction by increasing nitric oxide production in the corpus cavernosum, the spongy tissue of the penis. L-Arginine alleviates male infertility by improving sperm count and sperm motility (due to its involvement in the manufacture of endogenous spermidine). 76) L-Arginine enhances libido (male and female). 77) L-Arginine enhances (female) sexual performance - due to its role in the production of nitric oxide in the clitoris (nitric oxide facilitates female orgasm in the clitoris). 78) L-Arginine improves (male) sexual performance by providing nitrogen to the nitric oxide (NO) molecule that is integral to the achievement of erections - L-Arginine produces erections that are bigger, harder and more frequent. It also increases male sexual endurance, i.e. erections that last for a longer period of time. 79) L-Arginine improves sperm count and sperm motility. 80) L-Arginine may improve prostate function. L-Arginine deficiency can cause atrophy of the testicles of the testes.

Skin/Hair

81) Hair loss (especially male pattern baldness) can occur as a result of L-Arginine deficiency. 82) L-Arginine concentrates in the skin. L-Arginine (applied topically) increases the level of vascular endothelial growth factor in the skin. 83) L-Arginine stimulates the proliferation of fibroblasts (skin cells). 84) L-Arginine is essential for and accelerates the healing of wounds (by stimulating the release of human growth hormone (HGH), stimulating the production of collagen and by stimulating the proliferation of fibroblasts). 85) L-Arginine accelerates the healing of burns. 86) L-Arginine dramatically accelerates the healing of wounds in people who have undergone surgery. 87) L-Arginine decreases post-operative infection and length of hospital stay. 88) L-Arginine improves scleroderma.

Safety

89) L-Arginine has been shown to be safe in the above studies as well as thousands of others. L-Arginine has been used safely in humans for the past 30 years.

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