Advanced Nutrients

A complete multi formula with the additional healthy aging nutrients NR, resveratrol, bilberry, and more*



Nicotinamide Riboside Resveratrol Quercetin Phytosome 

What it is

Advanced Nutrients goes beyond the high-quality vitamins and minerals contained in Basic Nutrients 2/Day – with a focus on additional nutrients and botanicals that contribute to healthy aging and eye health.* Advanced Nutrients combines high quality, active-tissue ready vitamins with highly absorbable chelated minerals, plus:

- / Nicotinamide riboside
- / Bilberry

/ Resveratrol

/ Quercetin phytosome

/ Lutein

/ Astaxanthin

/ Zeaxanthin

/ Lycopene

Why take a multi

Due to the state of the current food supply and because very few Americans eat the recommended five daily servings of health-giving fruits and vegetables, nutrition experts agree that a multi-vitamin/mineral supplement should be taken daily. Even the *Journal of the American Medical Association* – not usually known as a supporter of nutritional supplements – agrees that everyone should be taking a multi-vitamin/mineral supplement (JAMA 2002;287:3127-3129).

What makes ours different

The keystone of every nutritional product line is a multi-vitamin/mineral supplement. At Thorne, we believe this is the starting point for every individual's supplementation needs and that a multi-vitamin/mineral product should contain all of the essential nutrients. We also believe that by using the purest, most absorbable raw materials – without adding any unnecessary additives and preservatives – every individual's outcome will be optimized.

Key benefits

- / Aging boomers
- / Anyone living in a particularly toxic environment
- / Anyone needing extra antioxidant support individuals with chronic health issues, for example*

Science behind Advanced Nutrients

How do these additional nutrients support healthy aging?*

It begins with the care and feeding of the mitochondria

At the center of all cellular metabolic activity are the mitochondria, which, when properly fed and stimulated, direct their metabolic activity toward the use of nutrients as fuel. Natural compounds that increase the activity of the sirtuin enzymes (SIRT 1 and SIRT 3), by improving mitochondrial function, promote and help maintain blood sugar balance, insulin sensitivity, liver function, healthy blood pressure, and vascular health.* The best researched of these compounds, resveratrol and quercetin, both demonstrate potent activation of these healthy-aging sirtuin enzymes.^{1,2*}

Resveratrol

Resveratrol mimics the effect of calorie restriction and has shown promise in clinical studies by modulating the effects of several age-related conditions.* Resveratrol appears to work by activating specific genes that up-regulate the healthy-aging sirtuins, which in turn act as cellular switches that support mitochondrial function and increase the number of mitochondria in each cell.^{1,2*} An increase in cellular mitochondria results in more efficient energy production within the cell and possibly relates to more efficient fat metabolism and increased longevity.*

Resveratrol might support healthy cardiovascular aging*

Resveratrol is considered by some researchers to be the molecule in red wine that explains the "French Paradox," an epidemiological observation that the French, who eat more saturated fat and consume more alcohol than citizens of many other countries, have a lower risk of cardiovascular disease. Resveratrol's support of the body's normal inflammatory response and its health-promoting effects in blood vessels might partly explain this phenomenon.*

Quercetin

Like resveratrol, quercetin also enhances SIRT1 activity.1,2* In addition, quercetin has a positive effect on resveratrol metabolism.* Research has shown quercetin not only slows the breakdown of resveratrol in the body, it also acts as a potent antioxidant and is synergistic with the activities of resveratrol.^{3-5*} The quercetin in Advanced Nutients is provided in phytosome form – it's bound to a phospholipid – to enhance its absorption.*

What about NAD+?

Although the importance of sirtuins cannot be over-emphasized, adequate amounts of intracellular NAD+ (nicotinamide adenine dinucleotide) must be present for the sirtuins to function optimally. Therefore, increasing gene transcription, and thus the activity, of the sirtuin enzymes can only help to a certain degree without adequate levels of NAD+ – a coenzyme found in all living cells. The amount of NAD+ in the body declines naturally with aging, with a corresponding decrease in certain enzymatic activities.⁶

What can increase NAD levels?

Enter nicotinamide riboside (NR), a naturally-occurring vitamin B3 analog, which directly stimulates NAD+ production for use by the sirtuins and other enzymes, as well as for mitochondrial energy (ATP) production.* NR supports multiple functions of the mitochondria, helping to regulate cellular aging and energy production, and providing positive support for metabolic syndrome.*

Support for healthy vision

Bilberry

Bilberry has a long history of use for ocular support.* The anthocyanoside flavonoids in bilberry have a particular affinity for the connective tissues in the eye, providing support for the integrity of the retina and cornea.^{7*} Research also supports its use for dry eye issues.⁸

Lutein and zeaxanthin

And then there are lutein and zeaxanthin – important carotenoids from the marigold flower. But did you know they are also important pigments found in the macula – the yellow spot in the retina? A significant body of research suggests the importance of these pigments in supporting the macula. While the ocular benefits of lutein and zeaxanthin have long been known, recent research points to the potential for these important pigments to also benefit brain health and cognition in the elderly. 10*

Additional antioxidant support

Astaxanthin

Astaxanthin – a carotenoid with strong antioxidant potential* – is a reddish-orange pigment found in algae that gives salmon and cooked shellfish, who feed on the algae, their red-orange color.

Astaxanthin has been shown to have a positive effect on the health of aging skin.^{11*}

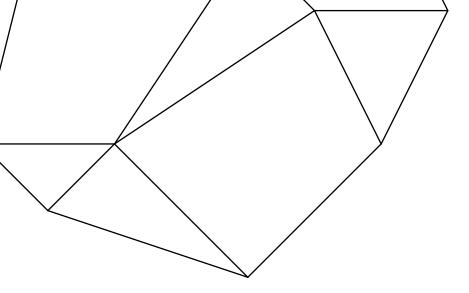
Lycopene

Lycopene – not to be outdone by astaxanthin – it provides the characteristic red-orange color of tomatoes, which is the primary natural source for this antioxidant carotenoid.* Lycopene has been studied for its potential support of both cardiovascular and prostate health.^{12*}

References

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Advanced Nutrients

SUPPLEMENT FACTS Serving Size: Eight Capsules Servings Per Container: 30					
Eight Capsules Contain: %DV		Eight Capsules Contain:		%DV	
Vitamin A (375 mcg from Beta Carotene and			Magnesium (as Albion® DiMagnesium Malate)†††	250 mg	60%
750 mcg as Palmitate)	1.125 mg	125%	Zinc (as TRAACS® Zinc Bisglycinate Chelate)††††	15 mg	136%
Vitamin C (as Ascorbic Acid)	850 mg	944%	Selenium (as L-Selenomethionine) 200		3649
Vitamin D (as Vitamin D3) (2,000 IU)	50 mcg	250%	Copper (as TRAACS® Copper		
Vitamin E (200 IU as d-Alpha Tocopherol	47.4	0070/	Bisglycinate Chelate)††††	1.5 mg	167%
from Mixed Tocopherols)	134 mg	893%	Manganese (as TRAACS® Manganese		
Vitamin K (50 mcg as Vitamin K1			Bisglycinate Chelate)††††	6 mg	2619
and 50 mcg as Vitamin K2 as MK-7)	100 mcg	83%	Chromium (as TRAACS® Chromium Nicotinate		
Thiamin (as Thiamin HCI)	40 mg	3,333%	Glycinate Chelate)††††	200 mcg	571%
Riboflavin (as Riboflavin 5'-Phosphate Sodium)	10 mg	769%	Quercetin Phytosome (Sophora japonica extract (flower) / Phospholipid complex from Sunflower) 100 mg		
Vitamin B6 (as Pyridoxal 5'-Phosphate)	10 mg	588%			
Folate (1 mg as L-5-Methyltetrahydrofolate†			Bilberry extract (fruit) (Vaccinium myrtillus)†††††	80 mg	
from L-5-Methyltetrahydrofolic Acid,			Nicotinamide Riboside Hydrogen Malate	45 mg	
Glucosamine Salt	1.7 mg DFE	425%	Trans-Resveratrol 25 mg		
Vitamin B12 (as Methylcobalamin)	450 mcg	18,750%	Mixed Carotenoids (1 mg as Lutein, 1 mg as Astaxanthin, 1 mg as Zeaxanthin, and 1 mg as Lycopene) 4 mg		
Biotin	400 mcg	1,333%			
Pantothenic Acid (as Calcium Pantothenate)	450 mg	9,000%			
Choline (as Choline Citrate)	35 mg	6%	Boron (as Bororganic™ Boron Glycinate Complex)††††††	3 mg	
Calcium (as DimaCal® DiCalcium Malate)††	250 mg	19%	*Daily Value (DV) not established.		
lodine (as Potassium Iodide)	225 mcg	150%	, , , , , , , , , , , , , , , , , , , ,		

Other Ingredients

 $\label{thm:condition} \mbox{Hypromellose (derived from cellulose) capsule, Microcrystalline Cellulose, Calcium Laurate, Silicon Dioxide.}$

Suggested Use

Take 4-8 capsules daily or as recommended by your health-care practitioner.

If pregnant, consult your health-care practitioner before using this product. $\label{eq:pregnant}$

†This product uses Gnosis S.p.A.'s L-5-Methyltetrahydrofolic Acid, Glucosamine Salt (Quatrefolic®). Quatrefolic is a registered trademark of Gnosis S.p.A. †This product uses Albion's DimaCal® DiCalcium Malate. DimaCal is a registered trademark of Albion International, Inc. ††This product uses Albion® DiMagnesium Malate. Albion is a registered trademark of Albion International, Inc. ††This product uses Albion's TRAACS® Chromium Nicotinate Glycinate Chelate, Copper Bisglycinate Chelate, Manganese Bisglycinate Chelate, and Zinc Bisglycinate Chelate. TRAACS is a registered trademark of Albion International, Inc. ††††This product uses Indena S.p.A.'s biliberry extract (Mirtoselect®). Mirtoselect is a registered trademark of Indena S.p.A. †††††This product uses Albion's Bororganic™ Boron Glycinate Complex. Bororganic is a trademark of Albion International, Inc.

SKU	Unit Count	Benefits	Features
VMX	240 Capsules	Foundational Eye Health* Healthy Aging*	Gluten Free

