



nanoscoping



nNUTRITION

High-performance water-soluble actives

HIGH PERFORMANCE MAINTENANCE ACTIVES



NUTRITIONAL LINE

Active ingredients for
high-performance supplements.

Innovation & efficiency



Biocompatible and biodegradable ingredients



Green technology, free from polluting solvents



Not tested on animals



Better absorption and bioavailability



Optimized Effect



Greater product stability and performance

NanoScoping is a Brazilian biotechnology company specializing in the development of innovative, high-quality ingredients for the nutrition and supplements sector. With an **ISO 9001:2015** quality management system, we combine technical expertise and cutting-edge technology to offer safe, effective, and sustainable solutions.

With the **nNutrition** line, we introduce water-soluble and biocompatible ingredients designed to optimize nutrient absorption and bioavailability. Our exclusive **AcquaSolvion®** technology enables the stabilization of essential actives in liquid formulations, ensuring greater stability, homogeneity, and ease of use in dietary supplements.

Our commitment to excellence is also reflected in our product certifications: **Vegan and Halal**, ensuring compliance with the highest global market standards. Additionally, all nNutrition ingredients are safe and biocompatible, fully meeting the requirements of national and international regulatory bodies.



AcquaSolvion®

AcquaSolvion® is NanoScoping's exclusive technology that redefines the standards of solubility, protection, and nutrient absorption. We have developed an innovative solution that significantly enhances the solubility of active ingredients while protecting them from degradation in the gastrointestinal tract (GI), ensuring greater stability and effectiveness. With an advanced controlled and prolonged release system, The **AcquaSolvion®** technology allows nutrients to be absorbed more efficiently at the target site.

Additionally, our technology allows the transformation of lipophilic actives previously limited by low solubility into highly soluble liquid forms, expanding their applications in dietary supplements. The result is a superior supplementation experience, with optimized absorption, improved nutritional performance, and real benefits for health and performance. With **AcquaSolvion®**, we turn innovation into effective and differentiated solutions for the nutrition market.



SOLUBILITY
ABSORPTION
BIOAVAILABILITY
EFFICIENCY
STABILITY



USAGE RECOMMENDATIONS

Products developed with our **AcquaSolvion®** technology are highly versatile and can be used in various formats to meet your specific needs. We recommend applications in drops, syrups, oral solutions, shots, oral sprays, gummies, and edible gels, offering convenience and ease of consumption.



Spray



Solution



Candy



Syrup



Gel

nADEK NUTRITION



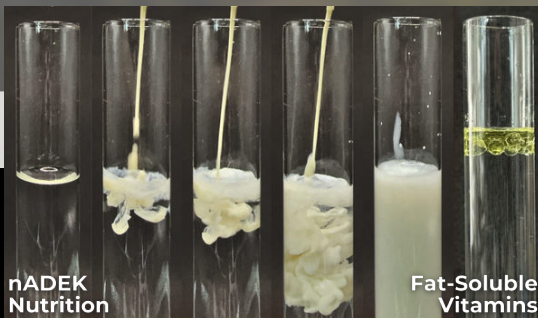
Liquid



ACTIVES: VITAMIN A (3,370 mcg/mL),
VITAMIN D3 (1,250 mcg/mL - 50,000 UI/mL),
VITAMIN E (57.5 mg/mL), and VITAMIN K2 (500 mcg/mL)

nADEK Nutrition is a liquid, water-soluble multivitamin supplement that combines essential vitamins for a complete and effective supplementation.

Developed with exclusive AcquaSolvion® technology, **nADEK Nutrition** ensures high bioavailability, gradual release, and protection against degradation, maximizing efficiency.



Comparative
image of
solubility
evaluation:

- Biocompatible, biodegradable, and vegan
- 100% water-dispersible
- Customizable dosing
- Pre-mixed complementary vitamins
- High compatibility



AcquaSolvion®
+ Solubility + Absorption



BIO
DIS
PO
NI
BI
LI
TY



PER
FOR
MAN
CE



nDK NUTRITION



ACTIVES: VITAMIN D3 (312.5 mcg/mL - 12,500 UI/mL) VITAMIN K2 (250 mcg/mL)

nDK Nutrition innovatively combines Vitamin D3 and Vitamin K2 in a highly bioavailable liquid formulation.

This supplement works synergistically to optimize calcium and phosphorus absorption, strengthening bones and teeth while preventing issues such as osteoporosis and arterial calcification.

Powered by AcquaSolvion® technology, **nDK Nutrition** ensures efficient solubilization of nutrients, maximizing absorption and bioavailability. Additionally, this technology protects active ingredients from environmental degradation such as light, heat, and oxygen preserving their effectiveness for longer.



Liquid



nCoQ10

NUTRITION



ACTIVE: COENZYME Q10 - UBIQUINONE (200 mg/mL)

Coenzyme Q10 is a powerful endogenous antioxidant that plays an essential role, supplying the mitochondrial bioenergetic chain, influencing electron transport, ATP synthesis and cellular respiration. The physiological impact of its functions at the molecular level is related to increased sports performance, cognitive modulation, reduced risks associated with cardiovascular problems and reduced inflammation present in chronic diseases. **CoQ10** supplementation is widely recommended to meet the body's needs, however the absorption of **CoQ10** is limited by its low solubility, with only 1 to 3% of the ingested dose being absorbed in the gastrointestinal tract.

nCoQ10 Nutrition has coenzyme Q10 enriched with vitamin E in the form of a nanoemulsion. Formulated with natural and biocompatible ingredients, **nCoQ10 Nutrition** is 100% water soluble, leading to more efficient absorption and better use.

>15,000x
more soluble



Liquid



BETTER STABILITY

The stability of **nCoQ10 Nutrition** was evaluated under different stress conditions, such as exposure to light, temperature and different pH variations, demonstrating that it is stable under gastrointestinal tract conditions (37°C, pH between 2.0 and 8.0).

GREATER SOLUBILITY

To ensure the absorption and bioavailability of Coenzyme Q10 in the fluids of the gastrointestinal tract, it is crucial that the active ingredient is adequately solubilized. The solubility of conventional Coenzyme Q10 powder was compared with its nanoencapsulated form, **nCoQ10 Nutrition**, using high performance liquid chromatography. The results demonstrated that the **nCoQ10 Nutrition** product has **15,384** times greater solubility in aqueous media compared to conventional Coenzyme Q10. This significant improvement in solubility promotes more efficient absorption by the body, enhancing the benefits of Coenzyme Q10.



Comparative photo of the solubility assessment of conventional Coenzyme Q10 powder (right) and nCoQ10 Nutrition (left) in an aqueous medium.

nASTAXANTHIN

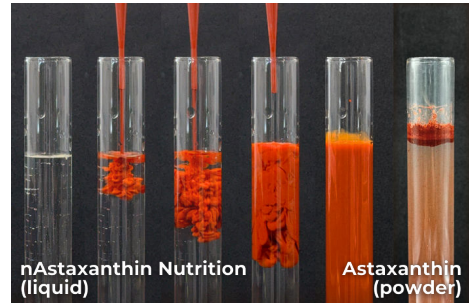
NUTRITION



ACTIVE: ASTAXANTHIN (10 mg/mL)

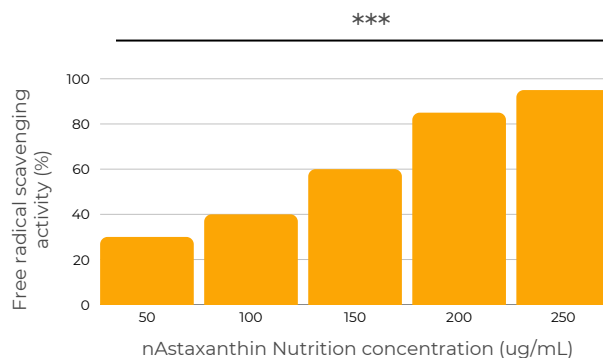
nAstaxanthin Nutrition enhances the action of this powerful antioxidant active even further. Extracted from microalgae such as *Haematococcus pluvialis*, astaxanthin is a xanthophyll with supplementation benefits that include photoprotection and anti-inflammatory action.

nAstaxanthin Nutrition increases astaxanthin's solubility by **120,000 times**, significantly improving its bioavailability and effectiveness when administered orally.



Comparative photo: aqueous solubility of nAstaxanthin Nutrition (left) vs. conventional powdered astaxanthin (right)

ANTIOXIDANT EFFICACY



In the study evaluating antioxidant activity through DPPH radical scavenging (2,2-diphenyl-1-picrylhydrazyl), nAstaxanthin Nutrition demonstrated free radical sequestration capability at all tested concentrations, with activity exceeding 80% at concentrations above 200 µg/mL.

120,000x
more soluble



nVITAMIN A

NUTRITION



ACTIVE: VITAMIN A - RETINYL PALMITATE (200,000 mcg/mL)

Retinyl palmitate is one of the most common forms of vitamin A in tissues. This vitamin is obtained naturally through diet; however, vitamin A deficiency in the body compromises tissue function, resulting in vision loss, anemia, and a weakened immune response, especially during critical periods of development such as early childhood, childhood, pregnancy, and lactation. Thus, vitamin A supplementation may be indicated in children and adults.

nVitamin A is an emulsion of retinyl palmitate, with a formulation that is capable of increasing the solubility of retinyl palmitate by **more than a million times**. This advancement in solubility is a milestone, as it improves the bioavailability and potential efficacy of vitamin A when administered orally.

>1,000,000x
more soluble



Liquid



nVEGAN D3

NUTRITION



ACTIVE: VITAMIN D3 - CHOLECALCIFEROL
(1,000 mcg/mL - 40,000 UI/mL)

Vitamin D3 (cholecalciferol) is a steroid hormone derived from cholesterol, crucial for bone metabolism, muscle function, gene expression, and the immune system. Sun exposure is the main source of vitamin D3, supplemented by some animal-derived foods. Due to the difficulty of obtaining adequate amounts through diet and sun alone, supplementation is recommended to ensure optimal levels in the body.

nVitamin D3 Nutrition uses a system that increases the solubility of vitamin D in aqueous medium by more than **300 times**, facilitating its absorption in the GI tract and resulting in greater bioavailability. In addition, it protects vitamin D against degradation by light, heat, and oxidation, increasing the stability and shelf life of the product. This technology allows for the administration of vitamin D without oily vehicles, ideal for fat-restricted diets, ensuring efficient and convenient supplementation.

>300x
more soluble



Liquid



nVITAMIN E



NUTRITION

ACTIVE: VITAMIN E - TOCOPHERYL ACETATE (200 mg/mL)

Vitamin E is a fat-soluble vitamin with powerful antioxidant action. It works by preventing the peroxidation of polyunsaturated fatty acids—key structural components of cell membranes—and by protecting cells from oxidative damage through the neutralization of free radicals and reactive oxygen species.

nVitamin E Nutrition is a tocopheryl acetate emulsion with the potential to increase Vitamin E's solubility in water by up to **23.5 times**, enhancing its absorption in gastrointestinal fluids and, consequently, its bioavailability.

>23.5x
more soluble



Liquid



nVITAMIN K2



NUTRITION

ACTIVE: VITAMIN K2 - MENAQUINONE-7 (250 mcg/mL)

Vitamin K2 (menaquinone-7 or MK-7) is synthesized by intestinal bacteria and found in animal and fermented foods. Essential for calcium metabolism, vitamin K2 plays a crucial role in bone and cardiovascular health. However, its low water solubility limits absorption in the gastrointestinal tract, especially in low-fat diets, with only about 10 to 15% of the oral dose being absorbed.

nVitamin K2 Nutrition utilizes AcquaSolvion® technology, which improves the stability of MK-7, allowing for controlled and gradual release, increasing its absorption, bioavailability, and the benefits for bone and cardiovascular health in a more effective and prolonged manner.



Liquid



nVITAMIN B12

NUTRITION



ACTIVE: VITAMIN B12 - METHYLCOBALAMINE (1,000 mcg/mL)

nVitamin B12 Nutrition features vitamin B12 (methylcobalamin) in a solution formulated with natural ingredients. The main function of vitamin B12 (methylcobalamin) in the body is the formation and maturation of red blood cells, being essential for the prevention of anemia and aiding in the maintenance of the health of the nervous and cardiovascular systems. Generally present in foods of animal origin, vitamin B12 can be supplemented in restricted diets and in cases of deficiency.

The AcquaSolvion® technology present in **nVitamin B12 Nutrition** offers a stable matrix that protects the active ingredient from degradation caused by light, heat, and extreme pH conditions, increasing the stability and shelf life of the product.



Liquid



nIRON

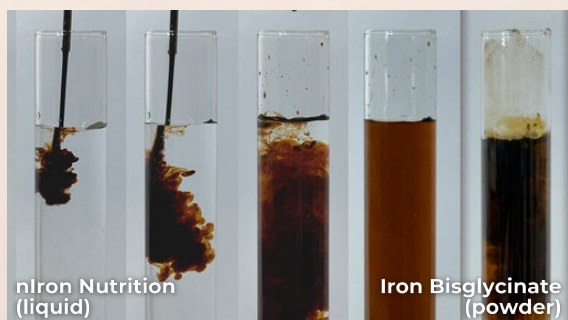
NUTRITION



ACTIVE: FERROUS GLYCINATE (50 mg/mL)

Iron is an essential mineral for the proper functioning of the body, necessary for the synthesis of hemoglobin. Maintaining adequate levels of iron in the body helps prevent fatigue, promotes cardiovascular health, aids in cognitive function, and supports the immune system's resistance against infections.

Containing iron bisglycinate in a solution with AcquaSolvion® technology, **nIron Nutrition** features structures that protect iron, providing a stable matrix that minimizes adverse environmental effects such as light and oxygen.



nIron Nutrition
(liquid)

Iron Bisglycinate
(powder)

Comparative photo: aqueous solubility of nIron Nutrition (left) vs. conventional powdered ferrous bisglycinate (right)



Liquid



Research, Development & Innovation

We offer Research, Development, and Innovation (**RDI**) services and projects with the use of **AcquaSolvion®** technology, fully customized to meet the specific needs of your industry.

Our expertise and innovative approach ensure cutting-edge solutions that boost the performance and competitiveness of your products.



Learn about
our solutions



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