

POLY-PLUS

All the benefits of Poly-MVA "**Plus"** the added & synergistic benefits of water soluble vitamin A.

POLY-Plus is a unique mineral, vitamin and amino acid complex formulated for professional use.*

Directions for use: Take up to 1½ teaspoons daily, or as directed by your healthcare practitioner.

Can be mixed with water, juice, coffee, tea or your favorite beverage. Shake well before each use. Store in a cool dry place or may refrigerate after opening.

CAUTION: If you are taking medication, have a medical condition, are pregnant, nursing or thinking about becoming pregnant speak with your healthcare practitioner.

KEEP OUT OF THE REACH OF CHILDREN

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

447-6500

(619)



LEADING THE WAY TO OPTIMUM HEALTH™



LIPOIC ACID MINERAL COMPLEX FOR PROFESSIONAL USE ONLY

DIETARY SUPPLEMENT

4 fl. oz. (118.29 mL)

Supplements Facts

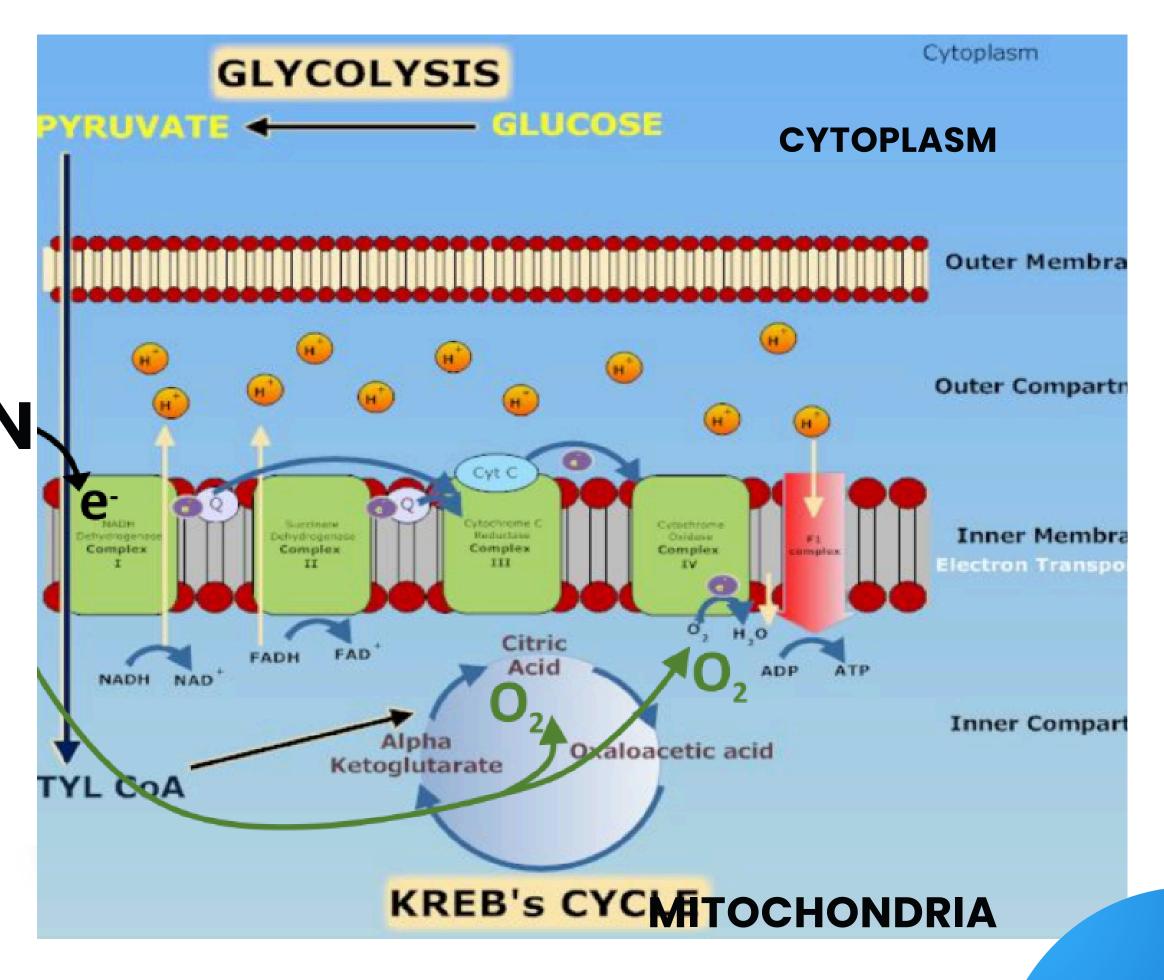
Serving Size 1.5 teaspoon (7.5mL) Servings Per Container Approx. 16

Servings Fer Container Approx. 10				
Amount Per Serving	% Dail	y Value		
Vitamin A (as retinyl acetate)	136 mcg	15.2%		
Vitamin B1 (as thiamin HCI)	1.9 mg	161%		
Vitamin B2, Riboflaven (as 5'phospate sodium)	120 mcg	9.2%		
Vitamin B12 (as cyanocobalamin	n) 74mcg	3098%		
Molybdenum (from sodium molybdate dihydrate)	300 mcg	666%		
Sodium	45 mg	<2%		
Proprietary blend	90.3 mg			
Alpha lipoic acid		±±		
Palladium		**		
N-formylmethionine		**		
Ruthenium		**		
** Daily Value not established				

Other ingredients: Water Manufactured for: AMARC Enterprises San Diego, CA 92021



SUPPORTS OXYGEN
AND ATP PRODUCTION
BY DONATING
ELECTRONS TO THE
AEROBIC CASCADE.



POLY-MVA

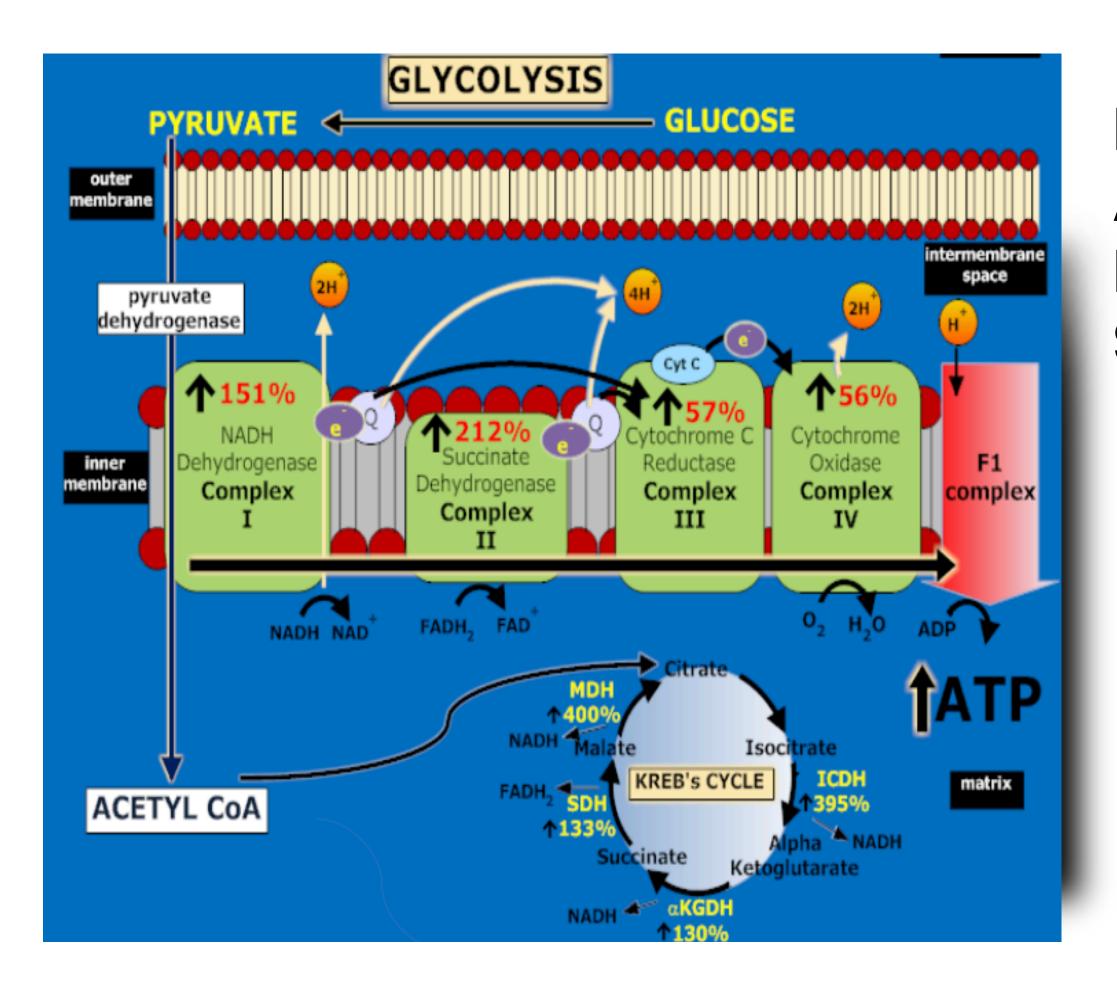
- Increase metabolism and ATP levels
- Demonstrate anti-oxidant activity
- DNA and chromosome protection
- Enhance DNA repair
- Attenuate radiation-induced weight loss
- Protect blood cells and increase spleen colony formation
- Repair radiation-induced mitochondria
- Enhance radio and chemotherapy



PLUS- VITAMIN A

- All of the support of Poly-MVA plus the following:
- Helps maintain healthy vision
- Can benefit skin: aging, acne, dryness
- Supports the immune system
- Promotes healthy bones and teeth
- Helps maintain healthy endothelial cells
- Stimulates white blood cell production and activity
- Helps the body ward off infection and toxins

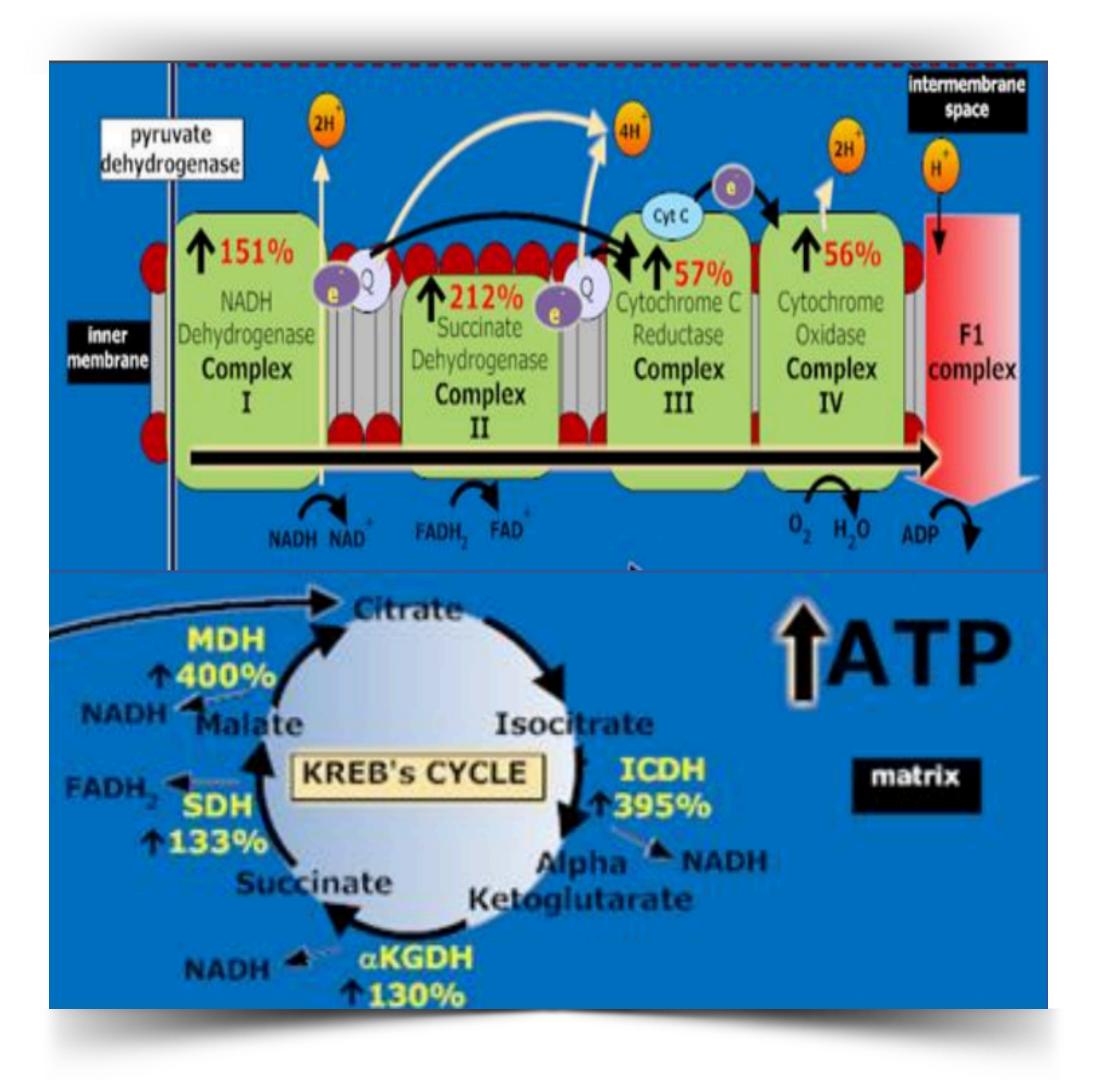




POLY MVA INCREASES AEROBIC METABOLISM, DEMONSTRATED BY SIGNIFICANT INCREASES:

- Kreb's Cycle Enzymes
- Electron Transport Chain Complexes
- ATP synthesis

Sudheesh, et al., 2009; Ajith et al., 2014



COMPLEX I-IV UPREGULATION:

- Complex I 151%
- Complex II 212%
- Complex III 57%
- Complex IV 56%

KREB'S CYCLE INCREASE

- MDH 400%
- ICDH 395%
- SDH 133%
- KGDH 130%

VITAMIN A AEROBIC METABOLISM BENEFITS:

- Facilitates iron mobilization to form hemoglobin in red blood cells. Complex II 212%
- Semba RD, Bloem MW. The anemia of vitamin A deficiency: epidemiology and pathogenesis. Eur J Clin Nutr. 2002;56(4):271-281.
- Allen LH. Iron supplements: scientific issues concerning efficacy and implications for research and programs. J Nutr. 2002;132(4 Suppl):813S-819S.

Blood support

- Suharno, D., West, C. E., Muhilal, Karyadi, D. & Hautvast, J. G. (1993) Supplementation with vitamin A and iron for nutritional anemia in pregnant women in West Java, Indonesia. Lancet 342: 1325–1328. 37.
- Mejia, L. A. & Chew, F. (1988) Hematological effect of supplementing anemic children. Am. J. Clin. Nutr. 48: 595-600.
 - When cells are deprived of Vitamin A the synthesis of ATP decreases as did respiration, but such declines were restored when vitamin A levels were restored.
- Acin-Perez, R., et al., (2010) Control of oxidative phosphorylation by vitamin A illuminates a fundamental role in mitochondrial energy homeostasis.
- FASEB Journal 24: 627-636.

Table 1. Effect of Poly-PLUS on hematological parameters in radiation (5Gy) exposed animals.

Group	Hemoglobin g/dl	Total RBC Count Million/cu mm	Platelet count Lakh/cu mm
Normal	14.50 ± 0.56	5.95 ± 0.35	5.33 ± 0.75
Poly-PLUS + 5 Gy	16.00 ± 0.84**,b	6.30 ± 0.28 ^a	3.95 ± 0.07***,b
Radiation 5 Gy	13.73 ± 0.40	5.60 ± 0.14	2.15 ± 0.07***

^{*} P< 0.05, ** P <0.01 and ***P<0.001 (Bonferroni multiple comparison test) significantly different from the normal group. Others are non-significant (p>0.05); a p<0.05, b p<0.01 (Dunnett multiple comparison test) significantly different from the control (radiation) group.

Therefore, Vitamin A works synergistically with the LAMC in Poly-PLUS due to its ability to potentiate oxygen delivery to the aerobic cascade.





Poly-PLUS is an enhanced version of the LAMC formulation containing water soluble Vitamin A, which is utilized to potentiate cellular energy, attenuate fatigue and up-regulate mitochondrial pathways.

POLY-PLUS

Poly-PLUS is a scientifically formulated nutraceutical containing Poly MVA and now vitamin A. Poly MVA contains the unique Lipoic Acid Mineral Complex (LAMC) which is composed of the transition mineral palladium covalently bound to the antioxidant alpha-lipoic acid and thiamin, vitamin B-1 creating a potent redox polymer. A redox molecule not only absorbs electrons, but it also donates them. In addition to the Lipoic Acid Mineral Complex, the proprietary formulation also contains riboflavin, cyanocobalamin, formyl-methionine, N acetyl- cysteine and now solubilized vitamin A. Vitamin A works synergistically with the LAMC formulation to further potentiate the complex and aerobic metabolism.

The lipoic acid complex along with its cofactors in the LAMC formulation act early in the aerobic cascade, they show the direct its benefit to the mitochondria. Studies have demonstrated that LAMC formulation can be useful in attenuating mitochondria which is highly useful for almost every one of our cells, the greater the concentration of mitochondria the greater the impact to protect and support that cells function and actions. With age, there is a decrease in the ability of body tissues to produce energy, an increase in the production of harmful free radicals, and a decrease in the number of anti-oxidants. Research , (Sudheesh et al. 2009, 2010, 2014) have demonstrated that the LAMC formulation not only enhances aerobic metabolism by statistically increasing the enzymatic activity of the Krebs's Cycle and Electron Transport Chain, but potentiates the quenching of free radicals by elevating anti-oxidant levels in tissues.

CONTINUED

POLY-PLUS

In addition to vitamin A's benefits to the skin, immune system and vision, our recent study has demonstrated its enhanced energy benefit to LAMC. In multiple research models were radiation was used, the addition of vitamin A to the LAMC formulation significantly enhanced hemoglobin content and red blood cell counts (Venna et al, 2017), while maintaining LAMC's anti-oxidant benefit. Additional work has demonstrated that a reduction in vitamin A reduced cellular respiration and ATP production (Acin-Perez et al., 2010). Multiple clinical studies observed vitamin A deficiency impaired cellular processes and synthesis, even in the presence of iron, which was restored upon vitamin A supplementation (Allen, 2002). Therefore, vitamin A's ability to potentiate oxygen delivery makes it synergistic with LAMC in Poly-PLUS.

In summary, Poly-PLUS is an enhanced version of the LAMC formulation which can be utilized to further potentiate cellular energy, attenuate fatigue and support therapy of metabolically dysfunctional cells and tissues.

