

BIACTO

Company: Actoverco

Generic Name: Biotin (Vitamin B7, Vitamin H)

Dosage Form: Injectable Solution 5mg/mL (1 mL)

Therapeutic Category: Nutritional Supplement; B Vitamin

Therapeutic Indications: Biotinidase Deficiency, Brittle Nails, Carboxylase Deficiency, Holocarboxylase Deficiency In Pregnancy, Parenteral Alimentation-Induced Deficiency, Vaginal Candidiasis, Alopecia Areata, Basal-Ganglia Disease, Biotin-Responsive Beta-Methylcrotonyl-Glycinuria, Solution: 10 Milligrams Daily, Biotinidase Deficiency Parenteral Alimentation-Induced Deficiency, Partial Biotinidase Deficiency, Protein-Energy Malnutrition, Pyruvate-Carboxylase Deficiency, Uncombable Hair Syndrome

Contraindications: Hypersensitivity to biotin

Warning/Precautions:

Biotin in blood or other samples taken from patients who are ingesting high levels of biotin from dietary supplements (including multivitamins; prenatal multivitamins; biotin supplements; and dietary supplements for hair, skin, and nail growth) can cause clinically significant incorrect lab test results. Some testing methods use biotin technology (eg, Troponin, hormone tests), using biotin to bind to specific proteins that are measured to detect health conditions. An increase in the number of reported adverse events, including one death, related to biotin interference with lab tests has been reported. If a lab test result does not correspond with a patient's clinical symptoms, biotin interference should be considered as a possible source of error

Adverse Effects:

Gastrointestinal upset. Concurrent administration of anticonvulsant medications may impair biotin absorption

Drug/Food Interaction:

No human interaction data available.

Pregnancy: Not Studied

Lactation: Not Studied

Pharmacokinetics:

Bioavailability: Oral, Solution: 100%

Metabolism: Hepatic

Excretion: Primarily in Urine

BEPACTO

Company: Actoverco

Generic Name: Dexpanthenol

Dosage Form: Injectable solution 250 mg/mL (2mL)

Therapeutic Category: Nutritional Supplement; B Vitamin

Therapeutic Indications: Pantothenic Acid Deficiency (FDA Labeled), Off-label: Acne Vulgaris, Hair loss, Hyper lipedema, Osteoarthritis, Rheumatoid Arthritis, Weight Loss, Wound Healing.

Contraindications: Hypersensitivity to pantothenic acid.

Warnings/Precautions: No results available.

Adverse Effects: Diarrhea may occur with large doses of pantothenic acid. Respiratory embarrassment was noted in 1 case of administration of pantothenic acid during recovery from anesthesia. One case of eczema has been reported

Drug/Food Interactions: not available.

Pregnancy/Lactation: U.S. food and drug administration (FDA) pregnancy category A. If used in doses above the RDA it is classified as risk factor C.

Pharmacokinetics:

Bioavailability: Oral: Readily absorbed

Excretion: Renal: 70%

References: Biotine

1. Hochman LG, Scher RK, Meyerson MS. Brittle nails: response to daily biotin supplementation. *Cutis*. 1993;51(4):303-5. 2. Lipner SR, Scher RK. Biotin for the treatment of nail disease: what is the evidence? *Journal of Dermatological Treatment*. 2018;29(4):411-4. 3. Camacho FM, García-Hernández M-J. ZINC ASPARTATE, BIOTIN, AND CLOBETASOL PROPIONATE IN THE TREATMENT OF ALOPECIA AREATA IN CHILDHOOD. *Pediatric Dermatology*. 1999;16(4):335-8. 4. Charles B, Hosking G, Green A, Pollitt R, Bartlett K, Taitz L. BIOTIN-RESPONSIVE ALOPECIA AND DEVELOPMENTAL REGRESSION. *The Lancet*. 1979;314(8134):118-20. 5. Nisenson A. Seborrheic dermatitis of infants and Leiner's disease: a biotin deficiency. *Journal of Pediatrics*. 1957;51:537-48. 6. Boccaletti V, Zendri E, Giordano G, Gnetti L, De Panfilis G. Familial Uncombable Hair Syndrome: Ultrastructural Hair Study and Response to Biotin. *Pediatric Dermatology*. 2007;24(3):E14-E6. 7. Shelley WB, Shelley ED. Uncombable hair syndrome: Observations on response to biotin and occurrence in siblings with ectodermal dysplasia. *J Am Acad Dermatol*. 1985;13(1):97-102. 8. Borboni P, Magnaterra R, Rabini RA, Staffolani R, Porzio O, Sesti G, et al. Effect of biotin on glucokinase activity, mRNA expression and insulin release in cultured beta-cells. *Acta Diabetologica*. 1996;33(2):154-8. 9. Furukawa Y. [Enhancement of glucose-induced insulin secretion and modification of glucose metabolism by biotin]. *Nihon Rinsho*. 1999;57(10):2261-9. 10. Reddi A, DeAngelis B, Frank O, Lasker N, Baker H. Biotin supplementation improves glucose and insulin tolerances in genetically diabetic KK mice. *Life Sciences*. 1988;42(13):1323-30. 11. McClain CJ, Baker H, Onstad GR. Biotin deficiency in an adult during home parenteral nutrition. *Jama*. 1982;247(22):3116-7. 12. Sekiguchi T, Nagamine T. Inhibition of free radical generation by biotin. *Biochemical pharmacology*. 1994;47(3):594-6.

References: Dexpanthenol

1. Yang M, Moclair B, Hatcher V, Kaminetsky J, Mekas M, Chapas A, et al. A Randomized, Double-Blind, Placebo-Controlled Study of a Novel Pantothenic Acid-Based Dietary Supplement in Subjects with Mild to Moderate Facial Acne. *Dermatology and Therapy*. 2014;4(1):93-101. 2. Leung LH. Pantothenic acid deficiency as the pathogenesis of acne vulgaris. *Medical Hypotheses*. 1995;44(6):490-2. 3. Weimann, Hermann. Studies on Wound Healing: Effects of Calcium D-Pantothenate on the Migration, Proliferation and Protein Synthesis of Human Dermal Fibroblasts in Culture. *International Journal for Vitamin and Nutrition Research*. 1999;69(2):113-9. 4. Pollack SV. Wound Healing: A Review: III. Nutritional Factors Affecting Wound Healing. *The Journal of Dermatologic Surgery and Oncology*. 1979;5(8):615-9. 5. Vaxman F, Olender S, Lambert A, Nisand G, Aprahamian M, Bruch JF, et al. Effect of Pantothenic Acid and Ascorbic Acid Supplementation on Human Skin Wound Healing Process. *European Surgical Research*. 1995;27(3):158-66.

ACTOVERCO

Together for a healthy future

No.58, 8th St., Kooye Nasr (Gisha St.), Tehran, IR Iran
Postal Code: 1446863914, Tel: +98(21)41637000
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Where
Beauty
& **Health**
come together



BIACTO
BEPACTO

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Together for a healthy future

BIACTO

Biotin
Solution for IM injection 5mg/mL

AS A SUPPLEMENT, BIOTIN HAS BEEN SHOWN TO BE EFFECTIVE IN FOLLOWING ITEMS:

Hair, Skin and Nails:

Improvement of nail strength and preventing brittleness^(2,1)



Alopecia^(4,3)



Seborrheic dermatitis in pediatrics⁽⁵⁾



Uncombable hair syndrome^(7,6)



Also effective in other items:

Increasing insulin sensitivity and improving glucose metabolism^{(10,9)(8)}



Treatment of biotin deficiency in patients taking antibiotics in long-term⁽¹¹⁾



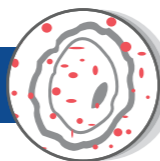
Reducing free radical synthesis⁽¹²⁾



Normal cell



Free radicals attacking cell



Cell with oxidative stress

BEPACTO

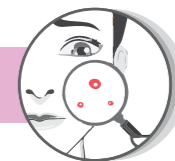
Dexpanthenol
Solution for IM injection 250mg/mL

Dexpanthenol is an alcoholic analogue of D-pantothenic acid.

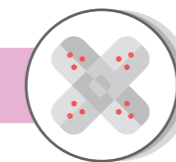
PANTOTHENIC ACID AS A SUPPLEMENT HAS BEEN PROVED EFFECTIVE IN THE FOLLOWING CONDITIONS :

Hair, Skin and Nails:

Controlling acne vulgaris and reducing the inflammation^(2,1)



Accelerate wound healing⁽⁵⁻³⁾



ACTOVERCO AMPOULE LINE

Equipped with the most advanced machines in the world, Actoverco launched its production line of injectable products in 1397 with technology transfer from a well-known German company, Merck. This line with an annual production capacity of 50 million ampoules and GMP standards, produces a variety of injectable products such as Biacto, Bepacto, and Neurobion.

