

Dermutec™

Description:

Dermutec™ is designed to provide nutritional support for the integument and hair through archetypal nutritional balances, biochemically rich ingredients and non-thermal processing.

Indications: Skin and coat

Clinical Biochemistry: See introduction.

Precautions, Adverse Reactions, Contraindications:

Digestive upset or diarrhea may result if over consumed or not gradually introduced. Do not use for pregnant or nursing animals.

Ingredients:

Beef, Beef Liver, Chicken, Chicken Liver, Ground Beef and Chicken Bone, Fish Oil, Coconut Oil, Evening Primrose Oil, Lecithin, Glucosamine, Beta-Carotene, Milk Calcium, Plums, Lactoferrin, Lactoperoxidase, Barley Grass, Wheat Grass, Desiccated Sea Plankton, Artichoke, Amylase, Protease, Lipase, Cellulase, Dried Enterococcus faecium Fermentation Product, Dried Lactobacillus plantarum Fermentation Product, Dried Lactobacillus acidophilus Fermentation Product, Dried Lactobacillus casei Fermentation Product, Dried Lactobacillus lactis Fermentation Product, Dried Saccharomyces cerevisiae Fermentation Product, Dried Aspergillus oryzae Fermentation Product, Dried Aspergillus niger Fermentation Product, Phytase, Natural Extractives of Rosemary, Natural Extractives of Sage, Choline Chloride, Ascorbic Acid, Zinc Proteinate, Iron Proteinate, Vitamin E Supplement, Niacin Supplement, Manganese Proteinate, Calcium Pantothenate, Thiamine Mononitrate, Copper Proteinate, Pyridoxine Hydrochloride, Riboflavin Supplement, Vitamin A Acetate, Folic Acid, Biotin, Vitamin B₁₂ Supplement, Vitamin D₃ Supplement.

Analysis: Protein 50.0%, Fat 28%, Fiber 2.8%, Moisture 3.0%

References:

Barham JB, et al. Addition of eicosapentaenoic acid to gamma-linolenic acid-supplemented diets prevents serum arachidonic acid accumulation in humans. *J Nutr.* 130(8):1925-31. 2000.; Barre DE. Potential of evening primrose, borage, black currant, and fungal oils in human health. *Ann Nutr Metab.* 45(2):47-57. 2001.; Bates CJ. Vitamin A. *Lancet.* 345:31-5. 1995.; Belch JJ, et al. Evening primrose oil and borage oil in rheumatologic conditions. *Am J Clin Nutr.* 71(1 Suppl):352S-6S. 2000.; Berth-Jones J, et al. Placebo-controlled trial of essential fatty acid supplementation in atopic dermatitis. *Lancet.* 341:1557-60. 1993.; Calder PC, et al. Fatty acids and atopic disease. *Pediatr Allergy Immunol.* 13(11 Suppl):29-36. 2000.; Collins MD, et al. Teratology of retinoids. *Amu Rev Pharmacol Toxicol.* 39:399-430. 1999.; Fan YY, et al. Importance of dietary gamma-linolenic acid in human health and nutrition. *J Nutr.* 128(9):1411-4. 1998.; Furse RK, et al. Gammalinolenic acid, an unsaturated fatty acid with anti-inflammatory properties, blocks amplification of IL-1 beta production by human monocytes. *J Immunol.* 167(1):490-6. 2001.; Futoryan T, et al. Retinoids and the skin. *Nutr Rev.* 52:299-310. 1994.; Hederos CA, et al. Epogam evening primrose oil treatment in atopic dermatitis and asthma. *Arch Dis Child.* 75(6):494-7. 1996.; Henz BM, et al. Double-blind, multicentre analysis of the efficacy of borage oil in patients with atopic eczema. *Br J Dermatol.* 149:685-88. 1999.; Holman RT. Essential fatty acid deficiency. *Prog Chem Fats Lipids.* 9:275-348. 1970.; Horrobin DF, et al. Evening primrose oil and atopic eczema. *Lancet.* 345:260-1. 1995.; Huang Y-S, et al. Gamma-linolenic acid: metabolism and its role in nutrition. Champaign, IL: American Oil Chemists Society Press. 1996.; Kinsella JE. Food lipids and fatty acids; importance in food quality, nutrition, and health. *Food Technology.* 42:124-45. 1988.; Kruger MC, et al. Calcium metabolism, osteoporosis and essential fatty acids: a review. *Prog Lipid Res.* 36:131-51. 1997.; Mertin J. Omega-6 and omega-3 polyunsaturates and the immune system. *Br J Clin Pract.* 31:111-4. 1985.; Morse PF, et al. Meta-analysis of placebo-controlled studies of the efficacy of Epogam in the treatment of atopic eczema: relationship between plasma essential fatty changes and treatment response. *Br J Dermatol.* 121(1):95-90.; Pryor WA, et al. Beta carotene: from biochemistry to clinical trials. *Nutr Rev.* 58:39-53. 2000.; Redgrave TG. Lipids in enteral nutrition. *Curr Opin Nutr Metab Care.* 2(2):147-52. 1999.; Russell RM. The vitamin A spectrum: from deficiency to toxicity. *Am J Clin Nutr.* 71:878-84. 2000.; Setnikar I, et al. Pharmacokinetics of glucosamine in the dog and in man. *Arzneimittelforsch.* 36:729-35. 1986.; Simopoulos AP. Essential fatty acids in health and chronic disease. *Am J Clin Nutr.* 70(3 Suppl):560S-569S. 1999.; Tahara S, et al. Age-related changes in oxidative damage to lipids and DNA in rat skin. *Mech Ageing Dev.* 122(4):415-26. 2001.; Varani J, et al. Vitamin A antagonized decreased cell growth and elevated collagen-degrading matrix metallo-proteinases and stimulates collagen accumulation in naturally aged human skin. *J Invest Dermatol.* 114:480-6. 2000.; Wolf G. A history of vitamin A and retinoids. *FASEB J.* 10:1102-7. 1996.; Worm M. Novel unconventional therapeutic approaches to atopic eczema. *Dermatology.* 201(3):191-5. 2000.; Wysong RL. Lipid nutrition: understanding fats and oils in health and disease. Midland, MI. 1990.; Yoon S, et al. The therapeutic effect of evening primrose oil in atopic dermatitis patients with dry scaly skin lesions is associated with the normalization of serum gamma-interferon levels. *Skin Pharmacol Appl Skin Physiol.* 15(1):20-5. 2002.