Bovine Colostrum

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BOVINE COLOSTRUM Help on accessing alternative formats, such as Portable Document Format (PDF), Microsoft Word and PowerPoint (PPT) files, can be obtained in the alternate format help section. (PDF Version - 62 KB) This monograph is intended to serve as a guide to industry for the preparation of Product Licence Applications (PLAs) and labels for natural health product market authorization. It is not intended to be a comprehensive review of the medicinal ingredient. Notes Text in parentheses is additional optional information which can be included on the label at the applicant's discretion. The solidus (/) indicates that the terms and/or statements are synonymous. Either term or statement may be selected by the applicant on the label. Date January 10, 2025 Proper name(s), Common name(s), Source information Table 1. Proper name(s), Common name(s), Source information Proper name(s) Common name(s) Source information Source material(s) Part(s) Preparation(s) Bovine colostrum Bovine colostrum Bos taurus Colostrum 1 Dry References: Brayfield and Cadart 2024; Kim et al. 2009; Cesarone et al. 2007; Shing et al. 2007; Common name: Brayfield and Cadart 2024; Kim et al. 2009; Cesarone et al. 2007; Shing et al. 2007; Source information: Kim et al. 2009; Cesarone et al. 2007; Shing et al. 2007. 1 Not from hyper-immunized cattle. Route of Administration Oral Dosage Form(s) This monograph excludes foods or food-like dosage forms as indicated in the Compendium of Monographs Guidance Document. Acceptable dosage forms for oral use are indicated in the dosage form drop-down list of the web-based Product Licence Application form for Compendial applications. Use(s) or Purpose(s) Helps maintain/support immune function within the upper respiratory tract (Davison and Diment 2009; Cesarone et al. 2007; Crooks et al. 2006; Patel and Rana 2006; Brinkworth and Buckley 2003; Mero et al. 2002). Helps maintain/support the immune system (Davison and Diment 2009; Cesarone et al. 2007; Crooks et al. 2006; Patel and Rana 2006; Brinkworth and Buckley 2003; Mero et al. 2002). Note: The terms 'Helps' or 'Helps to' can be used interchangeably on the label. Dose(s) Subpopulation(s) Adults 18 years and older Quantity(ies) Method of preparation: Powdered 0.4 - 10 grams of dried colostrum, per day (Kim et al. 2009; Cesarone et al. 2007; Shing et al. 2007; Shing et al. 2006). Direction(s) for use No statement required. Duration of Use Ask a health care practitioner/health care provider/health care professional/doctor/physician for prolonged use (Cesarone et al. 2007; Brinkworth and Buckley 2004; Brinkworth et al. 2004; Coombes et al. 2002; Antonio et al. 2001). Risk Information Caution(s) and Warning(s) Ask a health care practitioner/health care provider/health care professional/doctor/physician before use if you are pregnant or breastfeeding. Ask a health care practitioner/health care provider/health care professional/doctor/physician before use if you have diabetes, a history of cancer, or an immune system disorder (Kim et al. 2009; Rowlands 2009; Salvioli et al. 2009; Tripathi et al. 2006; Albers et al. 2005; Mero et al. 2002; Mero et al. 1997). Ask a health care practitioner/health care provider/health care professional/doctor/physician before use if you are taking medications to suppress the immune system (Albers et al. 2005). Contraindication(s) Do not use if you have a known allergy/hypersensitivity to cow's milk (HC 2012). Known Adverse Reaction(s) No statement required. Non Medicinal Ingredients Must be chosen from the current Natural Health Products Ingredients Database (NHPID) and must meet the limitations outlined in the database. Storage Condition(s) Must be established in accordance with the requirements described in the Natural Health Products Regulations . Specifications The finished product specifications must be established in accordance with the requirements described in the Natural and Non-prescription Health Products Directorate (NNHPD) Quality of Natural Health Products Guide. The medicinal ingredient must comply with the requirements outlined in the NHPID. Example of Product Facts: Consult the Guidance Document, Labelling of Natural Health Products for more details. References Cited Albers R, Antoine JM, Bourdet-Sicard R, Calder PC, Gleeson M, Lesourd B, Samartín S, Sanderson IR, Van Loo J, Vas Dias FW, Watzl B. Markers to measure immunomodulation in human nutrition intervention studies. British Journal of Nutrition 2005;94(3):452-458. Antonio J, Sanders MS, Gammeren VD. The effects of bovine colostrum supplementation on body composition and exercise performance in active men and women. Nutrition 2001;17(3):243-247. Brayfield A, Cadart C, editors. Martindale: The Complete Drug Reference. London (GB): Pharmaceutical Press: 2024. [Accessed 2024 December 5]. Available from: https://www.medicinescomplete.com/#/browse/martindale Brinkworth GD, Buckley JD. Bovine colostrum supplementation does not affect plasma buffer capacity or haemoglobin content in elite female rowers.

European Journal of Applied Physiology 2004;91(2-3):353-356. Brinkworth, GD, Buckley JD. Concentrated bovine colostrum protein supplementation reduces the incidence of self-reported symptoms of upper respiratory tract infection in adult males. European Journal of Nutrition 2003;42(4):228-232. Brinkworth GD, Buckley JD, Slavotinek JP, Kurmis AP. Effects of bovine colostrum supplementation on the composition of resistance trained and untrained limbs in healthy young men. European Journal of Applied Physiology 2004;91(1):53-60. Cesarone MR, Belcaro G, Di Renzo A, Dugall M, Cacchio M, Ruffini I, Pellegrini L, Del Boccio G, Fano F, Ledda A, Bottari A, Ricci A, Stuard S, Vinciguerra G. Prevention of influenza episodes with colostrum compared with vaccination in healthy and high-risk cardiovascular subjects: The epidemiologic study in San Valentino. Clinical and Applied Thrombosis/Hemostasis 2007;13(2):130-136. Coombes JS, Conacher M, Austen SK, Marshall PA. Dose effects of oral bovine colostrum on physical work capacity in cyclists. Medicine and Science in Sports and Exercise 2002;34(7):1184-1188. Crooks CV, Wall CR, Cross ML, Rutherfurd-Markwick KJ. The effect of bovine colostrum supplementation on salivary IgA in distance runners. International Journal of Sport Nutrition and Exercise Metabolism 2006;16(1):47-64. Davison G, Diment BC. Bovine colostrum supplementation attenuates the decrease of salivary lysozyme and enhances the recovery of neutrophil function after prolonged exercise. British Journal of Nutrition 2009;103(10):1425-1432. HC 2012: Health Canada, The Use of Food Allergen Precautionary Statements on Prepackaged Foods. [Accessed 2024 March 4]. Available from: https://www.cana da.ca/content/dam/hc-sc/migration/hc-sc/fn-an/alt_formats/pdf/label-etiquet/allergen/precaution_label-etiquetteeng.pdf Kim JH, Jung WS, Choi NJ, Kim DO, Shin DH, Kim YJ. Health-promoting effects of bovine colostrum in Type 2 diabetic patients can reduce blood glucose, cholesterol, triglyceride and ketones. Journal of Nutritional Biochemistry 2009;20(4):298-303. Mero A, Miikkulainen H, Riski J, Pakkanen R, Aalto J, Takala T. Effects of bovine colostrum supplementation on serum IGF-I, IgG hormone, and saliva IgA during training. Journal of Applied Physiology 1997;83(4):1144-1151 Mero A, Kahkonen J, Nykanen T, Parviainen T, Jokinen I, Takala T, Nikula T, Rasi S, Leppaluoto J. IGF-I, IgA, and IgG responses to bovine colostrum supplementation during training. Journal of Applied Physiology 2002;93(2):732-739. Patel K, Rana R. Pedimune in recurrent respiratory infection and diarrhea- the Indian Experience - the PRIDE study. Indian Journal of Pediatrics 2006;73(7):585-591. Rowlands MA, Gunnell D, Harris R, Vatten LJ, Holly JM, Martin RM. Circulating insulin-like growth factor peptides and prostate cancer risk: a systematic review and meta-analysis. International Journal of Cancer 2009;124(10):2416-2429. Salvioli S, Capri M, Bucci L, Lanni C, Racchi M, Uberti D, Memo M, Mari D, Govoni S, Franceschi C. Why do centenarians escape or postpone cancer? The role of IGF-1, inflammation and p53. Cancer Immunology, Immunotherapy 2009;58(12):1909-1917. Shing CM, Jenkins DG, Stevenson L, Coombes JS. The influence of bovinen colostrum supplementation on exercise performance in highly trained cyclists. British Journal of Sports Medicine 2006;40:797-801. Shing CM, Peake J, Suzuki K. Effects of bovine colostrums supplementation on immune variables in highly trained cyclists. Journal of Applied. Physiology 2007;102(3):1113-1122. Tripathi V, Vashishtha B. Bioactive compounds of colostrum and its application. Food Reviews International 2006;22(3):225-244. References Reviewed Bolke E, Jehle PM, Hausmann F. Preoperative oral application of immunoglobulin-enriched colostrum milk and mediator response during abdominal surgery. Shock 2002;17(1):9-12. Brinkworth GD, Buckley JD, Bourdon PC, Gulbin JP, David AZ. Oral bovine colostrum supplementation enhances buffer capacity but not rowing performance in elite female rowers. International Journal of Sport Nutrition and Exercise Metabolism 2002;12:349-363. Buckley JD, Abbot MJ, Brinkworth GD, Whyte PBD. Bovine colostrum supplementation during endurance running training improves recovery, but not performance. Journal of Science and Medicine in Sport 2002;5(2):65-79. Buckley JD, Brinkworth GD, Abbot MJ. Effect of bovine colostrum on anaerobic exercise performance and plasma insulin-like growth factor I. Journal of Sports Sciences 2003;21(7):577588. Caccavo D, Pellegrino NM, Altamura M, Rigon A, Amati L, Amoroso A, Jirillo E. Antimicrobial and immunoregulatory functions of lactoferrin and its potential therapeutic application. Journal of Endotoxin Research 2002;8(6):403-417. Cross ML, Gill HS. Immunomodulatory properties of milk. British Journal of Nutrition 2000;84(S1):S81-S89. El-Loly, MM. Bovine milk immunoglobulins in relation to human health. International Journal of Dietary Science 2007;2(3):183-195. Farke C, Rattenberger E, Roiger SU, Meyer HH. Bovine colostrum: determination of naturally occurring steroid hormones by Liquid Chromatography-Tandem Mass spectrometry (LCMS/MS). Journal of Agricultural and Food Chemistry 2011;59(4):1423-1427. Gopal PK, Gill HS. Oligosaccharides and glycoconjugates in bovine milk and colostrum. British Journal of Nutrition 2000;84(S1):S69-S74. Greenberg PD, Cello JP. Treatment of severe diarrhea caused by Cryptosporidium parvum with oral bovine immunoglobin concentrate in patients with AIDS. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology 1996;13(4):348-354. Hammarstrom L, Weiner CK. Targeted antibodies in dairy-based products. Advances in Experimental Medicine and Biology 2008;606:321-343. He F, Tuomola E, Arvilommi H, Salminen S. Modulation of human humoral immune response through orally administered bovine colostrum. FEMS Immunology and Medical Microbiology 2001;31(2):93-96. Huppertz HI, Rutkowski R, Busch DH, Eisebit R, Lissner R, Karch H. Bovine colostrum ameliorates diarrhea infestion with diarrheagic Escherichia coli, shiga toxin-producing E. coli, and E. coli expressing intimin and hemolysin. Journal of Pediatric Gastroenterology and Nutrition 1999;29(4):452-456 Kelly GS. Bovine Colostrums: A review of clinical uses. Alternative Medicine Review 2003;8(4):378-394. Korhonen H, Marnila P, Gill HS. Milk immunoglobulins and complement factors. British Journal of Nutrition 2000;84(S1):S75-S80. Mero A, Nykanen T, Keinanen O, Knuutinen J, Lahti K, Alen M, Rasi S, Leppaluoto J. Protein metabolism and strength performance after bovine colostrum supplementation. Amino Acids 2005;28(3):327-335. Mitra AK, Mahalanabis D, Ashraf H, Unicomb L, Eeckls R, Tzipori S. Hyperimmune cow colostrum reduces diarrhoea due to rotovirus: a double-bind, controlled clinical trial. Acta Paediatrica 1995;84(9):996-1001 Pakkanen R, Aalto J. Growth factors and antimicrobial factors of bovine colostrum. International Dairy Journal 1997;7(5):285-297 Playford RJ, Macdonald CE, Johnson WS. Colostrum and milk-derived peptide growth factors for the treatment of gastrointestinal disorders. American Journal of Clinical Nutrition 2000;72(1):5-14. Plettenberg A, Stoehr A, Stellbrink HJ, Albrecht H, Meigel W. A preparation from bovine colostrum in the treatment of HIV-positive patients with chronic diarrhea. The Clinical Investigator 1993;71(1):42-45. Poke GS, Roy JH. The oestrogenic activity of bovine colostrum. The Biochemical Journal 1953;53(3):427-430. Przybylska J, Albera E, Kankofer M. Antioxidants in bovine colostrum. Reproduction in Domestic Animals 2007;42(4):402-409. Roos N, Mahe S, Benamouzig R, Sick H, Rautureau J, Tome D. 15N-labeled immunoglobulins from bovine colostrum are partially resistant to digestion in the human intestine. The Journal of Nutrition 1995;125(5):1238-1244. Rump JA, Arndt R, Arnold A, Bendick C, Dichtelmuller H, Franke M, Helm EB, Jager H, Kampmann B, Kolb P, Kreuz W, Lissner R, Meigel W, Ostendorf P, Peter HH, Plettenberg A, Schedel I, Stellbrink HW, Stephan W. Treatment of diarrhoea in human immunodeficiency virus-infected patients with immunoglobulins from bovine colostrum. The Clinical Investigator 1992;70(7):588-594. Solomons NW. Modulation of the immune system and the response against pathogens with bovine colostrum concentrates. European Journal of Clinical Nutrition 2002; 56(S3): S24-S28. Struff, WG, Sprotte G. Bovine colostrum as a biologic in clinical medicine: a review. Part II: clinical studies. International Journal of Clinical Pharmacology and Therapeutics 2008;46(5):211-225. Thapa BR. Health factors in colostrum. Indian Journal of Pediatrics 2005;72(7):579-581. Thapa, BR. Therapeutic potentials of bovine colostrums. Indian Journal of Pediatrics 2005;72 (10):849-852. Uruakpa FO, Ismond MAH, Akobundu ENT. Colostrum and its benefits: a review. Nutrition Research 2002;22(6):755-767, van Hooijdonk, ACM, Kussendrager KD, Steijns JM. In vivo antimicrobial and antiviral activity of components in bovine milk and colostrum involved in non-specific defence. British Journal of Nutrition 2000;84(S1):S127-S134. Weiner C, Pan Q, Hurtig M, Boren T, Bostwick E, Hammarstrom L. Passive immunity against human pathogens using bovine antibodies. Clinical and Experimental Immunology 1999;116:193-205. Wolvers DAW, van Herpen-Broekmans WMR, Logman MHGM van der Wielen RPJ, Albers R. Effect of a mixture of micronutrients, but not of bovine colostrum concentrate, on immune function parameters in healthy volunteers: a randomized placebo-controlled study. Nutrition Journal 2006;5:28-39. Xu L, Zhang L, Zhang Y, Sheng Q, Zhao A. Qualitative and quantitative comparison of hormone contents between bovine and human colostrums. International Dairy Journal 2011;21(1):54-57. Report a problem on this page Date modified: 2019-03-01

MEDICINAL INGREDIENT(S)

Must be chosen from the current Natural Health Products Ingredients Database (NHPID) and must meet the limitations outlined in the database.

DOSAGE FORM(S)

Acceptable dosage forms for oral use are indicated in the dosage form drop-down list of the web-based Product Licence Application form for Compendial applications.

RISK INFORMATION

Caution(s) and Warning(s) Ask a health care practitioner/health care provider/health care professional/doctor/physician before use if you are pregnant or breastfeeding. Ask a health care

practitioner/health care provider/health care professional/doctor/physician before use if you have diabetes, a history of cancer, or an immune system disorder (Kim et al. 2009; Rowlands 2009; Salvioli et al. 2009; Tripathi et al. 2006; Albers et al. 2005; Mero et al. 2002; Mero et al. 1997). Ask a health care practitioner/health care provider/health care professional/doctor/physician before use if you are taking medications to suppress the immune system (Albers et al. 2005). Contraindication(s) Do not use if you have a known allergy/hypersensitivity to cow's milk (HC 2012). Known Adverse Reaction(s) No statement required.

SPECIFICATIONS

The finished product specifications must be established in accordance with the requirements described in the Natural and Non-prescription Health Products Directorate (NNHPD) Quality of Natural Health Products Guide. The medicinal ingredient must comply with the requirements outlined in the NHPID.

REFERENCES

1Not from hyper-immunized cattle.

Proper name(s)	Common name(s)	Source information		
Source material(s)	Part(s)	Preparation(s)		
Bovine colostrum	Bovine colostrum	Bos taurus	Colostrum1	Dry