



Placentophagy Practices: Impact on Perinatal Health & Lactation

© Melissa Cole, MS, IBCLC, PMH-C

www.lunalactation.com

- Aagaard, K., Ma, J., Antony, K. M., Ganu, R., Petrosino, J., & Versalovic, J. (2014). The placenta harbors a unique microbiome. *Sci Transl Med*, 6(237), 237ra265. <https://doi.org/10.1126/scitranslmed.3008599>
- Abbott, P., Thompson, A. C., Ferguson, E. J., Doerr, J. C., Tarapacki, J. A., Kostyniak, P. J., Syracuse, J. A., Cartonina, D. M., & Kristal, M. B. (1991). Placental opioid-enhancing factor (POEF): generalizability of effects [Research Support, U.S. Gov't, Non-P.H.S. Research Support, U.S. Gov't, P.H.S.]. *Physiology & behavior*, 50(5), 933-940. <http://www.ncbi.nlm.nih.gov/pubmed/1666681>
- Akintonwa, A., Gbajumo, S. A., & Mabadeje, A. F. (1988). Placental and milk transfer of chloroquine in humans [Research Support, Non-U.S. Gov't]. *Therapeutic drug monitoring*, 10(2), 147-149. <http://www.ncbi.nlm.nih.gov/pubmed/3381230>
- Anderson, A. M. (2001). Disruption of lactogenesis by retained placental fragments [Case Reports]. *Journal of human lactation : official journal of International Lactation Consultant Association*, 17(2), 142-144. <http://www.ncbi.nlm.nih.gov/pubmed/11847829>
- Apari, P., & Rozsa, L. (2009). The tripartite immune conflict in placentals and a hypothesis on fetal-->maternal microchimerism [Research Support, Non-U.S. Gov't]. *Medical hypotheses*, 72(1), 52-54. <https://doi.org/10.1016/j.mehy.2008.08.021>
- Averback, P., & Wiglesworth, F. W. (1977). Monochorionic, monoamniotic, double-battledore placenta with stillbirth and postpartum cerebellar syndrome [Case Reports]. *American journal of obstetrics and gynecology*, 128(6), 697-699. <http://www.ncbi.nlm.nih.gov/pubmed/879230>
- Barak, Y., & Glue, P. (2020). Progesterone loading as a strategy for treating postpartum depression. *Hum Psychopharmacol*, 35(3), e2731. <https://doi.org/10.1002/hup.2731>
- Bensky, D., Clavey, S., & Stöger, E. (2004). *Chinese herbal medicine : materia medica* (3rd ed.). Eastland Press.
- Bensky, D., Gamble, A., & Kaptchuk, T. J. (1986). *Chinese herbal medicine : materia medica*. Eastland Press.
- Bensky, D., Gamble, A., & Kaptchuk, T. J. (1993). *Chinese herbal medicine : materia medica* (Rev. ed.). Eastland Press.
- Benyshek, D. C., Bovbjerg, M. L., & Cheyney, M. (2023). Comparison of placenta consumers' and non-consumers' postpartum depression screening results using EPDS in US community birth settings (n=6038): a propensity score analysis. *BMC Pregnancy Childbirth*, 23(1), 534. <https://doi.org/10.1186/s12884-023-05852-7>
- Benyshek, D. C., Cheyney, M., Brown, J., & Bovbjerg, M. L. (2018). Placentophagy among women planning community births in the United States: Frequency, rationale, and associated neonatal outcomes. *Birth*, 45(4), 459-468. <https://doi.org/doi:10.1111/birt.12354>
- Blank, M. S., & Friesen, H. G. (1980). Effects of placentophagy on serum prolactin and progesterone concentrations in rats after parturition or superovulation [Research Support, Non-U.S. Gov't Research Support, U.S. Gov't, P.H.S.]. *Journal of reproduction and fertility*, 60(2), 273-278. <http://www.ncbi.nlm.nih.gov/pubmed/7431335>
- Blickstein, I., Mincha, S., R, D. G., G, A. M., & L, G. K. (2006). The Northwestern twin chorionicity study: testing the 'placental crowding' hypothesis [Research Support, Non-U.S. Gov't]. *Journal of perinatal medicine*, 34(2), 158-161. <https://doi.org/10.1515/JPM.2006.028>
- Botelle, R., & Willott, C. (2020). Birth, attitudes and placentophagy: a thematic discourse analysis of discussions on UK parenting forums. *BMC Pregnancy Childbirth*, 20(1), 134. <https://doi.org/10.1186/s12884-020-2824-3>

- Brummer, H. (1972). [Placentophagy in cattle]. *Berliner und Munchener tierarztliche Wochenschrift*, 85(10), 195-197. <http://www.ncbi.nlm.nih.gov/pubmed/5065176> (Zur Placentophagie beim Rind.)
- Buser, G. L., Mató, S., Zhang, A. Y., Metcalf, B. J., Beall, B., & Thomas, A. R. (2017). Notes from the Field: Late-Onset Infant Group B Streptococcus Infection Associated with Maternal Consumption of Capsules Containing Dehydrated Placenta - Oregon, 2016. *MMWR Morb Mortal Wkly Rep*, 66(25), 677-678. <https://doi.org/10.15585/mmwr.mm6625a4>
- Bussmann, L. E., Koninckx, A., & Deis, R. P. (1983). Effect of estrogen and placental lactogen on lactogenesis in pregnant rats [Research Support, Non-U.S. Gov't]. *Biology of reproduction*, 29(3), 535-541. <http://www.ncbi.nlm.nih.gov/pubmed/6414540>
- Byatt, J. C., Eppard, P. J., Veenhuizen, J. J., Curran, T. L., Curran, D. F., McGrath, M. F., & Collier, R. J. (1994). Stimulation of mammatogenesis and lactogenesis by recombinant bovine placental lactogen in steroid-primed dairy heifers [Comparative Study]. *The Journal of endocrinology*, 140(1), 33-43. <http://www.ncbi.nlm.nih.gov/pubmed/7511153>
- Cole, M. (2014). Placenta Medicine as a Galactagogue: Tradition or Trend? *Clinical Lactation*, 5(4), 116-122. <https://doi.org/10.1891/2158-0782.5.4.116>
- Corpening, J. W., Doerr, J. C., & Kristal, M. B. (2004). Ingested placenta blocks the effect of morphine on gut transit in Long-Evans rats [Comparative Study]. *Brain research*, 1016(2), 217-221. <https://doi.org/10.1016/j.brainres.2004.05.006>
- Cremers, G. E., & Low, K. G. (2013). Attitudes Toward Placentophagy: A Brief Report. *Health care for women international*. <https://doi.org/10.1080/07399332.2013.798325>
- Dewan, P., Jain, V., Gupta, P., & Banerjee, B. D. (2012). Organochlorine pesticide residues in maternal blood, cord blood, placenta, and breastmilk and their relation to birth size. *Chemosphere*. <https://doi.org/10.1016/j.chemosphere.2012.09.083>
- DiPirro, J. M., & Kristal, M. B. (2004). Placenta ingestion by rats enhances delta- and kappa-opioid antinociception, but suppresses mu-opioid antinociception [Research Support, Non-U.S. Gov't Research Support, U.S. Gov't, Non-P.H.S.]. *Brain research*, 1014(1-2), 22-33. <https://doi.org/10.1016/j.brainres.2004.04.006>
- Doerge, D., Churchwell, M., Chang, H., Newbold, R., & Delelos, B. (2001). Placental transfer of soy isoflavone genistein following dietary and gavage administration to Sprague-Dawley rats. *Reproductive toxicology*, 15, 105 - 110.
- Englund, A. *Placenta Power*. Retrieved 8/17/13 from <http://www.placentapower.com/>
- Farr, A., Chervenak, F. A., McCullough, L. B., Baergen, R. N., & Grünebaum, A. (2018). Human placentophagy: a review. *American journal of obstetrics and gynecology*, 218(4), 401.e401-401.e411. <https://doi.org/10.1016/j.ajog.2017.08.016>
- Field, M. (1984). Placentophagy [Case Reports]. *Midwives chronicle*, 97(1162), 375-376. <http://www.ncbi.nlm.nih.gov/pubmed/6569318>
- Fujisawa, M., Hockings, K. J., Soumah, A. G., & Matsuzawa, T. (2016). Placentophagy in wild chimpanzees (*Pan troglodytes verus*) at Bossou, Guinea [Research Support, Non-U S Gov't]. *Primates*, 57(2), 175-180.
- Gbedande, K., Fievet, N., Viwami, F., Ezinmegnon, S., Issifou, S., Chippaux, J. P., Dossou, Y., Moutairou, K., Massougboji, A., Ndam, N., de Jongh, W. A., Sogaard, T. M. M., Salanti, A., Nielsen, M. A., Esen, M., Mordmuller, B., Deloron, P., & Luty, A. J. F. (2017). Clinical development of a VAR2CSA-based placental malaria vaccine PAMVAC: Quantifying vaccine antigen-specific memory B & T cell activity in Beninese primigravidae. *Vaccine*, 35(27), 3474-3481. <https://doi.org/10.1016/j.vaccine.2017.05.027>
- GL, B., S, M., AY, Z., BJ, M., B, B., & AR, T. (2016). Notes from the Field: Late-Onset Infant Group B Streptococcus Infection Associated with Maternal Consumption of Capsules Containing Dehydrated Placenta — Oregon, 2016. *Morbidity and Mortality Weekly Report (MMWR)*, 66. <https://www.cdc.gov/mmwr/volumes/66/wr/mm6625a4.htm>
- Gryder, L. K., Young, S. M., Zava, D., Norris, W., Cross, C. L., & Benyshek, D. C. (2017). Effects of Human Maternal Placentophagy on Maternal Postpartum Iron Status: A Randomized, Double-Blind, Placebo-Controlled Pilot Study. *Journal of midwifery & women's health*, 62(1), 68-79. <https://doi.org/10.1111/jmwh.12549>

- Gude, N. M., Roberts, C. T., Kalionis, B., & King, R. G. (2004). Growth and function of the normal human placenta. *Thromb Res*, 114(5-6), 397-407. <https://doi.org/10.1016/j.thromres.2004.06.038>
- Hammett, F. S. (1918). The effect of the maternal ingestion of desiccated placenta upon the rate of growth of the breast-fed infant. *Journal of Biological Chemistry*(36), 569-573.
- Hammett, F. S. (1919). Internal secretion of the placenta. In *Endocrinology: The bulletin of the association for the study of internal secretions* (Vol. 3).
- Johnson, S. K., Pastuschek, J., Rödel, J., Markert, U. R., & Groten, T. (2018). Placenta - Worth Trying? Human Maternal Placentophagia: Possible Benefit and Potential Risks. *Geburtshilfe Frauenheilkd*, 78(9), 846-852. <https://doi.org/10.1055/a-0674-6275>
- Kaya, M. D., Baser, E., Kaya, S., Takal, M. K., Sahin, F., Kuscu, E., & Yanik, F. (2014). The effect of Silymarin on VEGF, VEGFR-1 and IL-1alpha levels in placental cultures of severe preeclamptic women. *J Turk Ger Gynecol Assoc*, 15(1), 30-35. <https://doi.org/10.5152/jtgga.2014.81592>
- Keldenich, H., Bizzi, G., & Longhi, O. (1976). [Treatment of hypogalactia with a placental extract. Clinical study] [English Abstract]. *Minerva ginecologica*, 28(12), 1015-1020.
- Kong, M., & Park, S. B. (2012). Effect of human placental extract on health status in elderly Koreans. *Evid Based Complement Alternat Med*, 2012, 732915. <https://doi.org/10.1155/2012/732915>
- Kristal, M. B., Abbott, P., & Thompson, A. C. (1988). Dose-dependent enhancement of morphine-induced analgesia by ingestion of amniotic fluid and placenta [Research Support, U.S. Gov't, Non-P.H.S.]. *Pharmacology, biochemistry, and behavior*, 31(2), 351-356. <http://www.ncbi.nlm.nih.gov/pubmed/3244713>
- Kristal, M. B., Thompson, A. C., & Grishkat, H. L. (1985). Placenta ingestion enhances opiate analgesia in rats [Research Support, U.S. Gov't, P.H.S.]. *Physiology & behavior*, 35(4), 481-486. <http://www.ncbi.nlm.nih.gov/pubmed/4070418>
- Kristal, M. B., Thompson, A. C., Heller, S. B., & Komisaruk, B. R. (1986). Placenta ingestion enhances analgesia produced by vaginal/cervical stimulation in rats. *Physiology & behavior*, 36(6), 1017-1020. <http://www.ncbi.nlm.nih.gov/pubmed/3725903>
- Kristal, M. B., Whitney, J. F., & Peters, L. C. (1981). Placenta on pups' skin accelerates onset of maternal behaviour in non-pregnant rats. *Anim Behav*, 29(1), 81-85. <http://www.ncbi.nlm.nih.gov/pubmed/7235315>
- Kulski, J. K., Ethel, P., Hartmann, P. E., & Smith, M. (1982). Placental lactogen in human serum and colostrum [Research Support, Non-U.S. Gov't]. *Hormone and metabolic research = Hormon- und Stoffwechselforschung = Hormones et metabolisme*, 14(8), 441-442. <https://doi.org/10.1055/s-2007-1019041>
- Lauer, N. (2006). *Hawaiian Law Now Permits Parents to Keep Placentas*. WeNews. Retrieved 8/17/13 from http://womensenews.org/story/parenting/060728/hawaiian-law-now-permits-parents-keep-placentas#.UHA_pI3tV0
- Lee, K.-K. (2011). Efficacy and Safety of Human Placental Extract Solution on Fatigue: A Double-Blind, Randomized, Placebo-Controlled Study. <http://www.hindawi.com/journals/ecam/2012/130875/abs/>
- Lee, K. K., Choi, W. S., Yum, K. S., Song, S. W., Ock, S. M., Park, S. B., & Kim, M. J. (2012). Efficacy and safety of human placental extract solution on fatigue: a double-blind, randomized, placebo-controlled study. *Evid Based Complement Alternat Med*, 2012, 130875. <https://doi.org/10.1155/2012/130875>
- McNeile, L. G. (1918). Effect of ingestion of desiccated placenta during first 11 days of lactation, preliminary report. *The American Journal of obstetrics and diseases of women and children*, 77, 377-383.
- McNeile, L. G. (1918). Effect of ingestion of desiccated placenta during the first eleven days of lactation, preliminary report. *The American Journal of obstetrics and diseases of women and children*, 77, 377-383.
- Moeti, C., Mulaudzi, F. M., & Rasweswe, M. M. (2023). The Disposal of Placenta among Indigenous Groups Globally: An Integrative Literature Review. *Int J Reprod Med*, 2023, 6676809. <https://doi.org/10.1155/2023/6676809>
- Mota-Rojas, D., Orihuela, A., Strappini, A., Villanueva-García, D., Napolitano, F., Mora-Medina, P., Barrios-García, H. B., Herrera, Y., Lavalle, E., & Martínez-Burnes, J. (2020). Consumption of Maternal

- Placenta in Humans and Nonhuman Mammals: Beneficial and Adverse Effects. *Animals (Basel)*, 10(12). <https://doi.org/10.3390/ani10122398>
- Neifert, M. R., McDonough, S. L., & Neville, M. C. (1981). Failure of lactogenesis associated with placental retention [Case Reports]. *American journal of obstetrics and gynecology*, 140(4), 477-478. <http://www.ncbi.nlm.nih.gov/pubmed/7246673>
- Novak, S., Paradis, F., Patterson, J. L., Pasternak, J. A., Oxtoby, K., Moore, H. S., Hahn, M., Dyck, M. K., Dixon, W. T., & Foxcroft, G. R. (2012). Temporal candidate gene expression in the sow placenta and embryo during early gestation and effect of maternal Progenos supplementation on embryonic and placental development [Controlled Clinical Trial]. *Reproduction, fertility, and development*, 24(4), 550-558. <https://doi.org/10.1071/RD10312>
- Ober, W. B. (1973). Placentophagy. *Obstetrics and gynecology*, 41(2), 317-318. <http://www.ncbi.nlm.nih.gov/pubmed/4684222>
- Ober, W. B. (1979). Notes on placentophagy [Historical Article]. *Bull N Y Acad Med*, 55(6), 591-599. <http://www.ncbi.nlm.nih.gov/pubmed/111747>
- Park, B. H., Kim, Y. J., Park, J. S., Lee, H. Y., Ha, E. H., Min, J. W., & Park, H. S. (2005). [Folate and homocysteine levels during pregnancy affect DNA methylation in human placenta]. *J Prev Med Public Health*, 38(4), 437-442. <http://www.ncbi.nlm.nih.gov/pubmed/16358830>
- Phuapradit, W., Chanrachakul, B., Thuvasethakul, P., Leelaphiwat, S., Sassanarakkit, S., & Chanworachaikul, S. (2000). Nutrients and hormones in heat-dried human placenta [Comparative Study]. *Journal of the Medical Association of Thailand = Chotmaihet thangphaet*, 83(6), 690-694. <http://www.ncbi.nlm.nih.gov/pubmed/10932499>
- Schuetz, S. A., Brown, K. M., Cuthbert, D. A., Coyle, C. W., Wisner, K. L., Hoffman, M. C., Yang, A., Ciolino, J. D., Newmark, R. L., & Clark, C. T. (2017). Perspectives from Patients and Healthcare Providers on the Practice of Maternal Placentophagy. *J Altern Complement Med*, 23(1), 60-67. <https://doi.org/10.1089/acm.2016.0147>
- Selander, J. *PlacentaBenefits.info*. Retrieved 8/17/13 from <http://placentabenefits.info/index.asp>
- Selander, J., Cantor, A., Young, S. M., & Benyshek, D. C. (2013). Human maternal placentophagy: a survey of self-reported motivations and experiences associated with placenta consumption. *Ecol Food Nutr*, 52(2), 93-115. <https://doi.org/10.1080/03670244.2012.719356>
- Seo, T. B., Han, I. S., Yoon, J. H., Seol, I. C., Kim, Y. S., Jo, H. K., An, J. J., Hong, K. E., Seo, Y. B., Kim, D. H., Park, S. K., Yang, D. C., & Namgung, U. (2006). Growth-promoting activity of Hominis Placenta extract on regenerating sciatic nerve. *Acta Pharmacol Sin*, 27(1), 50-58. <https://doi.org/10.1111/j.1745-7254.2006.00252.x>
- Soykova-Pachnerova, E., Brutar, V., Golova, B., & Zvolska, E. (1954). Placenta as a lactagogen. *Gynaecologia. International monthly review of obstetrics and gynecology. Revue internationale mensuelle d'obstetrique et de gynecologie. Monatsschrift fur Geburtshilfe und Gynakologie*, 138(6), 617-627.
- Stanley, C., Baillargeon, A., & Selk, A. (2019). Understanding Placentophagy. *Journal of obstetric, gynecologic, and neonatal nursing : JOGNN / NAACOG*, 48(1), 37-49. <https://doi.org/10.1016/j.jogn.2018.10.002>
- Steuer, M. A., Thompson, A. C., Doerr, J. C., Youakim, M., & Kristal, M. B. (1987). Induction of maternal behavior in rats: effects of pseudopregnancy termination and placenta-smear pups [Research Support, U.S. Gov't, P.H.S.]. *Behavioral neuroscience*, 101(2), 219-227. <http://www.ncbi.nlm.nih.gov/pubmed/3580124>
- Tarapacki, J. A., Thompson, A. C., & Kristal, M. B. (1992). Gastric vagotomy blocks opioid analgesia enhancement produced by placenta ingestion [Research Support, U.S. Gov't, Non-P.H.S.]. *Physiology & behavior*, 52(1), 179-182. <http://www.ncbi.nlm.nih.gov/pubmed/1529004>
- Taylor, B. (1995). Retained placenta and suppressed lactogenesis? [Letter]. *Journal of human lactation : official journal of International Lactation Consultant Association*, 11(4), 261. <http://www.ncbi.nlm.nih.gov/pubmed/8634097>
- Turkington, R. W., & Topper, Y. J. (1966). Stimulation of casein synthesis and histological development of mammary gland by human placental lactogen in vitro [In Vitro]. *Endocrinology*, 79(1), 175-181. <http://www.ncbi.nlm.nih.gov/pubmed/5950486>

- Yeom, M. J., Lee, H. C., Kim, G. H., Shim, I., Lee, H. J., & Hahm, D. H. (2003). Therapeutic effects of Hominis placenta injection into an acupuncture point on the inflammatory responses in subchondral bone region of adjuvant-induced polyarthritic rat. *Biol Pharm Bull*, *26*(10), 1472-1477. <https://doi.org/10.1248/bpb.26.1472>
- Young, S. M., & Benyshek, D. C. (2010). In search of human placentophagy: a cross-cultural survey of human placenta consumption, disposal practices, and cultural beliefs [Review]. *Ecol Food Nutr*, *49*(6), 467-484. <https://doi.org/10.1080/03670244.2010.524106>
- Young, S. M., Benyshek, D. C., & Lienard, P. (2012). The conspicuous absence of placenta consumption in human postpartum females: the fire hypothesis. *Ecol Food Nutr*, *51*(3), 198-217. <https://doi.org/10.1080/03670244.2012.661349>
- Young, S. M., Gryder, L. K., Cross, C., Zava, D., Kimball, D. W., & Benyshek, D. C. (2018). Effects of placentophagy on maternal salivary hormones: A pilot trial, part 1 [Randomized Controlled Trial]. *Women Birth*, *31*(4), e245-e257. <https://doi.org/10.1016/j.wombi.2017.09.023>
- Young, S. M., Gryder, L. K., David, W. B., Teng, Y., Gerstenberger, S., & Benyshek, D. C. (2016). Human placenta processed for encapsulation contains modest concentrations of 14 trace minerals and elements. *Nutrition research*, *36*(8), 872-878. <https://doi.org/10.1016/j.nutres.2016.04.005>
- Young, S. M., Gryder, L. K., Zava, D., Kimball, D. W., & Benyshek, D. C. (2016). Presence and concentration of 17 hormones in human placenta processed for encapsulation and consumption. *Placenta*, *43*, 86-89. <https://doi.org/10.1016/j.placenta.2016.05.005>