

# Infant Nutrition Research

Papers on infant formula and related nutritional components

<p><b>Direct effect of 2-palmitoyl glycerol on promotion of gamma aminobutyric acid synthesis in normal human fetal-derived astrocytes. (2022)</b></p>	<p>Author</p>	<p>Misato Tsuboi <sup>1),2)</sup>, Yoshitaka Nakamura <sup>1)</sup>, Hiroshi Sakuma <sup>2),3)</sup></p> <p>1) Food Microbiology and Function Research Laboratories, R&amp;D Division, Meiji Co., Ltd.                  2) Department of Pediatric Neurology, Niigata University Graduate School of Medical and Dental Sciences.                  3) Department of Brain and Neuroscience, Tokyo Metropolitan Institute of Medical Science.</p>
	<p>Journal</p>	<p>FEBS Open Bio 13(2023)1320-1332 (2022)</p>
<p><b>Highest concentration of breast-milk-derived exosomes in colostrum. (2022)</b></p>	<p>Author</p>	<p>Ohta M <sup>1)</sup>, Koshida S <sup>2)</sup>, Jimbo I <sup>3)</sup>, Oda M <sup>3),4)</sup>, Inoue R <sup>3),4)</sup>, Tsukahara T <sup>5)</sup>, Terahara M <sup>6)</sup>, Nakamura Y <sup>7)</sup>, Maruo Y <sup>1)</sup></p> <p>1) Department of Pediatrics, Shiga University of Medical Science.                  2) Perinatal Center, Shiga University of Medical Science.                  3) Laboratory of Animal Science, Department of Agricultural and Life Sciences, Kyoto Prefectural University.                  4) Laboratory of Animal Science, Department of Applied Biological Sciences, Faculty of Agriculture, Setsunan University - Hirakata Campus.                  5) Kyoto Institute of Nutrition &amp; Pathology.                  6) R&amp;D Management Department, Meiji Co., Ltd.                  7) Food Microbiology and Function Research Laboratories, Meiji Co., Ltd.</p>
	<p>Journal</p>	<p>Pediatrics International 64 (1), e15346 (2022)</p>
<p><b>Maternal Consumption of Dairy Products during Pregnancy Is Associated with Decreased Risk of Emotional Problems in 5-Year-olds: The Kyushu Okinawa Maternal and Child Health Study. (2022)</b></p>	<p>Author</p>	<p>1) Nguyen M.Q<sup>1)</sup>, Miyake Y<sup>2),3),4),5)</sup>, Tanaka K<sup>2),3),4),5)</sup>, Hasuo S<sup>1)</sup>, Takahashi K<sup>6)</sup>, Nakamura Y<sup>1)</sup>, Okubo H<sup>2),7),8)</sup>, Sasaki S<sup>9)</sup>, and Arakawa M<sup>10),11)</sup></p> <p>2) Food Microbiology and Function Research Laboratories, R&amp;D Division, Meiji Co., Ltd., Tokyo 192-0919, Japan.                  3) Department of Epidemiology and Public Health, Ehime University Graduate School of Medicine, Matsuyama 791-0295, Japan.                  4) Integrated Medical and Agricultural School of Public Health, Ehime University, Matsuyama 791-0295, Japan.                  5) Research Promotion Unit, Translational Research Center, Ehime University Hospital, Matsuyama 791-0295, Japan.                  6) Center for Data Science, Ehime University, Matsuyama 790-8577, Japan.                  7) Food Science and Technology Research Laboratories, R&amp;D Division, Meiji Co., Ltd., Tokyo 192-0919, Japan.</p>

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	Journal	Nutrients 14 (22), 4713 (2022)
<p><b>Effect of <i>Bifidobacterium Bifidum</i> Administration on Term Infants at 1 year of Age: An Open-Label Randomized Control Trial. (2022)</b></p>	Author	<p>Satsuki Totsu<sup>1)</sup>, Ayako Nishiyama<sup>2),3)</sup>, Masaki Terahara<sup>4)</sup>, Masaki Wada<sup>5)</sup>, and Satoshi Kusuda<sup>6),7)</sup></p> <p>1) Department of Neonatal Medicine, Sanno Hospital</p> <p>2) Department of Pediatrics, Shiseikai Daini Hospital</p> <p>3) Nishiyamakodomo Clinic</p> <p>4) R&amp;D Management Department, Meiji Co., Ltd</p> <p>5) Department of Neonatology, Tokyo women's Medical University</p> <p>6) Neonatal Research Network of Japan</p> <p>7) Department of Pediatrics, Kyorin University</p>
	Journal	British Journal of Gastroenterology 4(1): 229-234 (2022)
<p><b>Effects of the intake of non-live <i>Bifidobacterium bifidum</i> on the faecal IgA of full-term infants: a double-blind, randomised, placebo-controlled study. (2021)</b></p>	Author	<p>Masaki Terahara<sup>1)</sup>, Yoshitaka Nakamura<sup>2)</sup>, Misato Tsuboi<sup>3)</sup>, Shinji Jinno<sup>2)</sup>, Takamitsu Tsukahara<sup>3)</sup>, Takao Miyake<sup>4)</sup>, Naoki Shimojo<sup>5)</sup></p> <p>1) R&amp;D Management Department, Meiji Co., Ltd</p> <p>2) Food Microbiology and Function Research Laboratories, Meiji Co., Ltd</p> <p>3) Kyoto Institute of Nutrition &amp; Pathology Inc</p> <p>4) Miyake Women's Clinic</p> <p>5) Center for Preventive Medical Sciences, Chiba University</p>
	Journal	Bioscience of Microbiota, Food and Health 40 (4), 196-203 (2021)
<p><b>Chronological changes of serum exosome in preterm infants: A prospective study. (2021)</b></p>	Author	<p>Motoki Ohta<sup>1)</sup>, Shigeki Koshida<sup>2)</sup>, Itsuki Jimbo<sup>3)</sup>, Machi Oda<sup>3),4)</sup>, Ryo Inoue<sup>3),4)</sup>, Takamitsu Tsukahara<sup>5)</sup>, Masaki Terahara<sup>6)</sup>, Takahide Yanagi<sup>1)</sup>, Sayuri Nakahara<sup>1)</sup>, Masami Shibata<sup>1)</sup>, Hidemi Tsutsui<sup>1)</sup>, Daisuke Yoshida<sup>1)</sup>, Ouki Furukawa<sup>1)</sup>, Yoshihiro Maruo<sup>1)</sup></p> <p>1) Department of Pediatrics, Shiga University of Medical Science</p> <p>2) Perinatal Center, Shiga University of Medical Science</p> <p>3) Laboratory of Animal Science, Department of Agricultural and Life Sciences, Kyoto Prefectural University</p> <p>4) Laboratory of Animal Science, Department of</p>

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	Journal	<p>Pediatric International 27 (2021)</p> <p>doi: 10.1111/ped.14933</p>
<p><b>Daily protein and energy intakes of infants fed a commercial infant formula with a reduced protein concentration of 2.2 g/100 kcal: an impact of feeding interval on energy intake. (2020)</b></p>	Author	<p>Shinji Jinno <sup>1)</sup>, Kae Yamazaki <sup>1)</sup>, Yoshitaka Nakamura <sup>1)</sup>, Toshi Kinouchi <sup>2)</sup></p> <p>1) Nutrition Research Department, Food Microbiology and Function Research Laboratories, R&amp;D Division, Meiji Co., Ltd.</p> <p>2) Marketing Solution Department, Marketing &amp; Development Management Division, Meiji Co., Ltd.</p>
	Journal	<p>Bioscience, Biotechnology, and Biochemistry (2020)</p> <p><a href="https://doi.org/10.1080/09168451.2020.1722609">https://doi.org/10.1080/09168451.2020.1722609</a></p>
<p><b>Calcium intake during pregnancy is associated with decreased risk of emotional and hyperactivity problems in five-year-old Japanese children. (2019)</b></p>	Author	<p>Keiji Takahashi<sup>1)2)</sup>, Keiko Tanaka<sup>1)3)</sup>, Yoshitaka Nakamura<sup>2)</sup>, Hitomi Okubo<sup>1)</sup>, Satoshi Sasaki<sup>4)</sup>, Masashi Arakawa<sup>5)</sup> and Yoshihiro Miyake<sup>1)3)</sup></p> <p>1) Department of Epidemiology and Preventive Medicine, Ehime University Graduate School of Medicine</p> <p>2) Food Science &amp; Technology Research Laboratories, R&amp;D Division, Meiji CO., Ltd.</p> <p>3) Epidemiology and Medical Statistics Unit, Translational Reserach Center, Ehime University Hospital</p> <p>4) Department of Social and Preventive Epidemiology, Graduate School of Medicine, The University of Tokyo</p> <p>5) Health Tourism Research Fields, Graduate School of Tourism Sciences, University of the Ryukyus</p>
	Journal	<p>NUTRITIONAL NEUROSCIENCE</p> <p><a href="https://www.tandfonline.com/doi/full/10.1080/1028415X.2019.1676971">https://www.tandfonline.com/doi/full/10.1080/1028415X.2019.1676971</a></p> <p>(2019)</p>
<p><b>Estimation of daily selenium intake by 3- to 5-year-old Japanese children based on selenium excretion in 24-h urine samples. (2019)</b></p>	Author	<p>Yoshitaka Nakamura<sup>1)</sup>, Michiko Fukushima<sup>2)</sup>, Seiko Hoshi<sup>3)</sup>, Amares Chatt<sup>4)</sup> and Takashi Sakata<sup>2)</sup></p> <p>1) Food Science &amp; Technology Research Laboratories, Meiji Co., Ltd.</p> <p>2) Ishinomaki Senshu University</p> <p>3) Shohei Gakuin University</p> <p>4) Department of Chemistry, Dalhousie University</p>
	Journal	<p>JOURNAL OF NUTRITIONAL SCIENCE</p> <p>vol.8,e24,page1of8 (2019)</p>
<p><b>Growth of term infants fed a commercial infant formula with a</b></p>	Author	<p>Shinji Jinno, Kae Yamazaki, Yoshitaka Nakamura and Toshi Kinouchi</p>

<p><b>protein content of 2.2 g/100 kcal: an observational follow-up study. (2019)</b></p>	<p>Journal</p>	<p>Bioscience, Biotechnology, and Biochemistry  <a href="https://doi.org/10.1080/09168451.2019.1689096">https://doi.org/10.1080/09168451.2019.1689096</a>                      (2019)</p>
<p><b>Poor Bifidobacterial Colonization Is Associated with Late Provision of Colostrum and Improved with Probiotic Supplementation in Low Birth Weight Infants. (2019)</b></p>	<p>Author</p>	<p>Katsunori Tanaka<sup>1)2)</sup>, Yoshitaka Nakamura<sup>3)</sup>, Masaki Terahara<sup>3)</sup>, Takahide Yanagi<sup>1)</sup>, Sayuri Nakahara<sup>1)</sup>, Ouki Furukawa<sup>1)</sup>, Hidemi Tsutsui<sup>1)</sup>, Ryo Inoue<sup>4)</sup>, Takamitsu Tukahara<sup>5)</sup> and Shigeki Koshida<sup>6)</sup></p> <p>1) Department of Pediatrics, Shiga University of Medical Science                      2) Department of Pediatrics, National Hospital Organization Higashi-Ohmi General Medical Center                      3) Food Science &amp; Technology Research Laboratories, Meiji Co., Ltd.                      4) Department of Agricultural and Life Sciences, Kyoto Prefectural University                      5) Kyoto Institute of Nutrition &amp; Pathology                      6) Department of Community Perinatal Medicine, Shiga University of Medical Science</p>
	<p>Journal</p>	<p>Nutrients 2019, 11(4), 839;                      doi:10.3390/nu11040839 (2019)</p>
<p><b>Probiotics and the development of very-low-birth-weight infants: Follow up study of a randomized trial. (2018)</b></p>	<p>Author</p>	<p>Satsuki Totsu, Masaki Terahara, Satoshi Kusuda</p>
	<p>Journal</p>	<p>BMJ Paediatrics Open 2018 Apr 17; 2(1):e000256                      doi:10.1136/bmjpo-2018-000256 (2018)</p>
<p><b>Maternal prebiotic ingestion increased fecal bifidobacteria in pregnant women, but not in their neonates aged 1 month. (2017)</b></p>	<p>Author</p>	<p>Jinno S, Toshimitsu T, Nakamura Y, Kubota T, Igoshi Y, Ozawa N, Suzuki S, Nakano T, Morita Y, Arima T, Yamaide F, Kohno Y, Masuda K, Shimojo N.</p>
	<p>Journal</p>	<p>Nutrients 9(3) :196                      doi:10.3390/nu9030196 (2017)</p>
<p><b><i>Bifidobacterium bifidum</i> OLB6378 Simultaneously Enhances Systemic and Mucosal Humoral Immunity in Low Birth Weight Infants: A Non-Randomized Study. (2017)</b></p>	<p>Author</p>	<p>Katsunori Tanaka, Takamitsu Tsukahara, Takahide Yanagi, Sayuri Nakahara, Ouki Furukawa, Hidemi Tsutsui, Shigeki Koshida</p>
	<p>Journal</p>	<p>Nutrients 9(3):195                      doi:10.3390/nu9030195 (2017)</p>
<p><b>Design of safe foods that induce mastication in very young children. (2015)</b></p>	<p>Author</p>	<p>Akemi Utsumi, Yoshitaka Nakamura, Akiko Ishizaki, Kayo Nomura, Megumu Igawa, Kaori Miwa, Natsumi Sonoda, Kayoko Kaneko, Yoshiharu Mukai, Shouji Hironaka</p>
	<p>Journal</p>	<p>Pediatric Dental Journal 25(3):55-63 (2015)</p>
<p><b>Postnatal weight gain induced by overfeeding pups and maternal high-fat diet during the lactation period modulates glucose metabolism and the production of pancreatic and gastrointestinal peptides. (2015)</b></p>	<p>Author</p>	<p>Du Q, Hosoda H, Umekawa T, Kinouchi T, Ito N, Miyazato M, Kangawa K, Ikeda T.</p>
	<p>Journal</p>	<p>Peptides 70:23-31 (2015)</p>

<b>Bacterial Translocation in Neonatal Rat: Effects on Phagocytic Activity of Peritoneal Polymorphonuclear Leukocytes (2006)</b>	Author	Yajima M, Yajima T, Kuwata T
	Journal	Chonai Saikingaku Zasshi 20,19-24 (2006)
<b>Intraperitoneal injection of lactoferrin ameliorates severe albumin extravasation and neutrophilia in LPS-induced inflammation in neonatal rats (2005)</b>	Author	Masako Yajima, Takaji Yajima, Tamotsu Kuwata
	Journal	Biomedical Research 26(6) 249-255 (2005)
<b>A survey of physical growth, nutritional intake, fecal properties and morbidity of infants as related to feeding methods No 10 (2005)</b>	Author	Kanno T, Yonekubo A
	Journal	The Journal of Child Health 64(4) 594-601 (2005)
<b>A survey of physical growth, nutritional intake, fecal properties and morbidity of infants as related to feeding method No 9 (2005)</b>	Author	Kanno T, Yonekubo A
	Journal	The Journal of Child Health 64(4) 585-593 (2005)
<b>Design of protein nutrition containing milk for low-birth-weight infants (2005)</b>	Author	Kinouchi T
	Journal	Shusanki Igaku 35 370-373 (2005)
<b>Are there differences in immunological effects of breast milk and artificial milk? (2005)</b>	Author	Takahashi T
	Journal	Shini Naika 37(5) 641-643 (2005)
<b>Administration of fructooligosaccharides increase the expression of the secretory component with the production of immunoglobulin A in the intestinal tract of suckling mouse (2004) Dietary fructooligosaccharides up-regulate immunoglobulin A response and polymeric immunoglobulin receptor expression in intestines of infant mice</b>	Author	Nakamura Y, Nosaka S, Suzuki M, Nagafuchi S, Takahashi T, Yajima T, Takenouchi-Ohkubo N, Iwase T, Moro I
	Journal	Clinical & Experimental Immunology 137 (1) 52-58 (2004)
<b>Trace elements in Japanese maternal milk and infant formula (2004)</b>	Author	Kaneko T, Yamawaki N
	Journal	Biomedical Research on Trace Elements 15(3) 235-242 (2004)
<b>Development of Foods for Food Allergies (2004)</b>	Author	Kaneko T
	Journal	Journal of Japanese Society of Clinical Nutrition 25(4) 288-292 (2004)
<b>Influence of the oral ingestion of fructooligosaccharides during the</b>	Author	Nakamura Y, Nozaka M, Suzuki B, Takahashi T, Yajima T, Muro S

<b>suckling period on secretory components (polymeric immunoglobulin receptor) and intestinal IgA (2003)</b>	Journal	Shokaki to Meneki 40,38-40 (2003)
<b>Roles of milk-borne components in the development of pancreatic enzymes during the suckling period (2002)</b>	Author	Kinouchi T, Yajima T
	Journal	Biology of the Intestine in Growing Animals 203-220 (2002)
<b>Physiological functions of breast milk hormones (2002)</b>	Author	Kinouchi T, Yajima T
<b>Biological function of hormones in milk</b>	Journal	The Bio-defensive Function of Dairy Foods 77-88 (2002)
<b>Dietary nucleotides increase the mucosal IgA response and the secretion of transforming growth factor <math>\beta</math> from intestinal epithelial cells in mice (2002)</b>	Author	Nagafuchi S, Totsuka M, Hachimura S, Goto M, Takeshi Takahashi T, Yajima T, Kuwata T, Kaminogawa S
	Journal	Cytotechnology 40,49-58 (2002)
<b>Anti-allergic effects and applications of nucleic acids and related substances (2001)</b>	Author	Takahashi T
	Journal	Food Style 21 5(3) 56-60 (2001)
<b>Milk-borne insulin with trypsin inhibitor in milk induces pancreatic amylase development at the onset of weaning in rats (2000)</b>	Author	T.Kinouchi, K.Koizumi, T.Kuwata, T.Yajima
	Journal	Journal of Pediatric Gastroenterology and Nutrition 30(5) 515-521(2000)
<b>Bacterial translocation in neonatal rats: the relation between intestinal flora, translocated bacteria, and influence of milk (2001)</b>	Author	Yajima M, Nakayama N, Hatano S, Yamazaki K, Aoyama Y, Yajima T, Kuwata T
	Journal	Journal of Pediatric Gastroenterology and Nutrition 33(5) 592-601 (2001)
<b>Enhancing effect of dietary oil emulsions on immune responses to protein antigens fed to mice (2000)</b>	Author	Kaneko T, Teresawa Y, Senno Y, Nagata M, Kuwata T
	Journal	International Archives of Allergy and Immunology 121 317-323 (2000)
<b>Dietary nucleotides increase the proportion of a TCR<math>\gamma\delta</math>+subset of intraepithelial lymphocytes (IEL) and IL-7 production by intestinal epithelial cells (IEC); implications for modification of cellular and molecular cross-talk between IEL and IEC by dietary nucleotides (2000)</b>	Author	Nagafuchi S, Totsuka M, Hachimura S, Goto M, Takahashi T, Yajima T, Kuwata T, Kaminogawa S
	Journal	Bioscience Biotechnology Biochemistry 64(7) 1459-1465 (2000)
<b>Dietary nucleotides can up-regulate antigen-specific Th1 immune responses and suppress antigen-specific IgE responses in mice (2000)</b>	Author	Nagafuchi S, Hachimura S, Totsuka M, Takahashi T, Goto M, Yajima T, Kuwata T, Habu S, Kaminogawa S
	Journal	International Archives of Allergy and Immunology 122,33-41 (2000)

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<b>Protein nutrition and the prospects of infant nutrition becoming more like breast milk (2000)</b>	Author	Kaneko T
	Journal	Journal of Japanese Society of Clinical Nutrition 21(3, 4) 13-17 (2000)