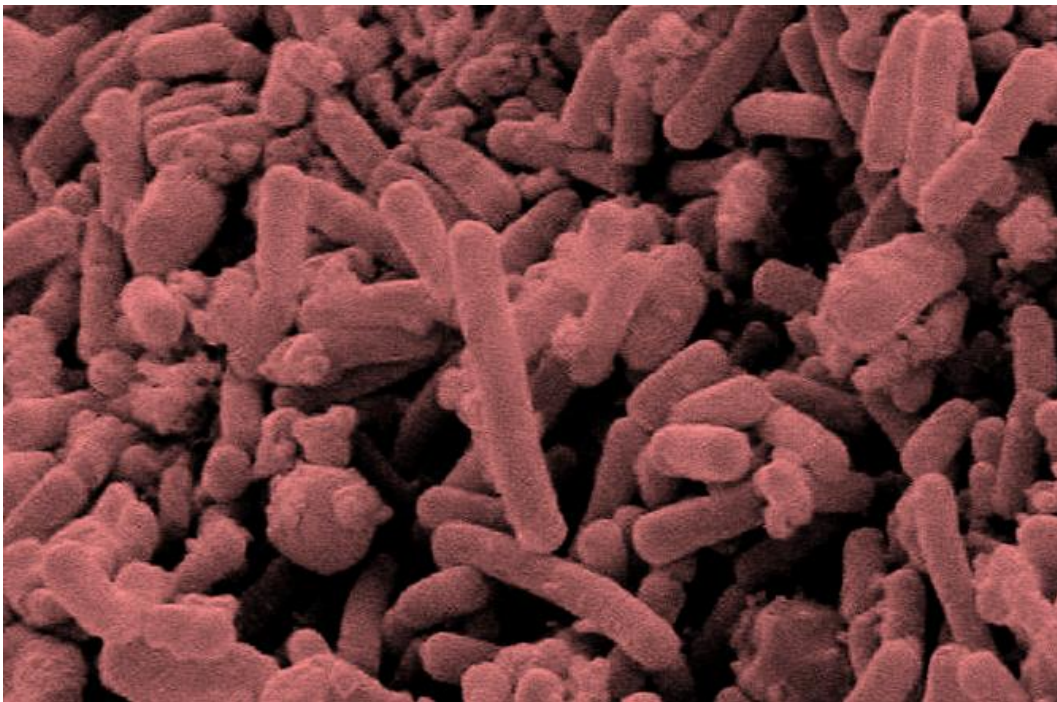


Bibliografía



Referencias Bibliográficas

- Abraham A. G. & de Antoni G. 1999. Characteristics of kefir grain grown in milk and in soy milk. *Journal of Dairy Research*. 66, 327-333.
- Al-Tamimi M. A. H. M., Palframan R. J., Cooper J. M., Gibson G. R. & Rastall R. A. 2006. In vitro fermentation of sugar beet arabinan and rabinoligosaccharides by the human gut microflora. *Journal of Applied Microbiology*. 100, 407-414.
- Amatayakul T., Halmos A. L., Sherkat F., & Shah N. P. 2006. Physical characteristics of yoghurts made using exopolysaccharideproducing starter cultures and varying casein to whey protein ratios. *International Dairy Journal*. 16, 40-51.
- Angulo L., Lopez E. & Lema C. 1993. Microflora present in kefir grains of the Galician Region (North-West of Spain). *Journal of Dairy Research*. 60, 263-267
- Babel S., Bernardi T. & Michaud P. 2011. New perspectives for Lactobacilli exopolysaccharides. *Biotechnology Advances*. 29, 54–66
- Bassete R. & Acosta J. S. 1988. Composition of milk products. In *Fundamentals of Dairy Chemistry*, 3rd ed. Ed.: Wong. N. P. 39-79. New York: Van Nostrand Reinhold.
- Biedrzycka E. & Bielecka M. 2004. Prebiotic effectiveness of fructans of different degrees of polymerization. *Trends in Food Science & Technology*. 15, 170–175.
- Blaut M., Collins M. D., Welling G. W., *et al.* 2002. Molecular biological methods for studying the gut microbiota: the EU human gut flora project. *British Journal Nutrition*. 87, Suppl. 2, S203–S211.
- Boon N., De Windt W., Verstraete W. & Top E. M. 2002. Evaluation of nested PCR-DGGE (denaturing gradient gel electrophoresis) with group-specific 16S rRNA primers for the analysis of bacterial communities from

different wastewater treatment plants. *FEMS Microbiology Ecology*. 39, 101–112.

- Bosch A., Golowczyc M., Abraham A. G., Garrote G. L., De Antoni G., & Yantorno O. 2006. Rapid discrimination of *Lactobacilli* isolated from kefir grains by FT-IR spectroscopy. *International Journal of Food Microbiology*. 111, 280–287.
- Bradford M. 1976. A rapid and sensitive method for quantization of microgram quantities of protein utilising the principle of protein-dye binding. *Analytical Biochemistry*. 72, 248-254.
- Brosius J., Dull T. J., Sleeter D. D. & Noller H. F. 1981. Gene organization and primary structure of a ribosomal RNA operon from *Escherichia coli*. *Journal of Molecular Biology*. 148, 107–127.
- Canquil N., Villarroel M., Bravo S., Rubilar M. & Shene C. 2007. Behavior of the rheological parameters of exopolysaccharides synthesized by three lactic acid bacteria. *Carbohydrate Polymers*. 68, 270-279.
- Cerning J. & Marshall V. M. 1999. Exopolysaccharides produced by the dairy lactic acid bacteria. *Recent Research and Developments in Microbiology*. 3, 195–209.
- Chen H. C., Wang S. Y. & Chen M. J. 2008. Microbiological study of lactic acid bacteria in kefir grains by culture-dependent and culture-independent methods. *Food Microbiology*. 25, 492–501.
- Cinquin C., Le Blay G., Fliss I. & Lacroix, C. 2006. Comparative effects of exopolysaccharides from lactic acid bacteria and fructo-oligosaccharides on infant gut microbiota tested in an in vitro colonic model with immobilized cells. *FEMS Microbiology Ecology*. 57, 226-238.
- Clark A. H. & Ross-Murphy S. B. 1987. Structural and mechanical properties of biopolymer gels. *Advances in Polymer Science*. 83, 57–192.

- Código Alimentario Argentino. Resolución Conjunta 261/2011 y 22/2011. BOLETIN OFICIAL N° 32.279. pp 22-23.
- Código Alimentario Argentino. Resolución Conjunta 229/2011 y 731/2011. BOLETIN OFICIAL N° 32.304. pp 5-6.
- Cocolin L., Manzano M., Cantoni C. & Comi G. 2001. Denaturing gradient gel electrophoresis analysis of the 16S rRNA gene V1 region to monitor dynamic changes in the bacterial population during fermentation of italian sausages. *Applied and Environmental Microbiology*. 67, 5113–5121.
- Colwell R. R. 1970. Polyphasic taxonomy of the genus *Vibrio*: numerical taxonomy of *Vibrio cholerae*, *Vibrio parahaemolyticus*, and related *Vibrio* species. *Journal of Bacteriology*. 104, 410–433.
- Costas M. 1992. Classification, identification, and typing of bacteria by the analysis of their one-dimensional polyacrylamide gel electrophoretic protein patterns. *Advances in Electrophoresis*. 5, 351–408.
- Cummings J. H., Antoine J-M., Azpiroz F., *et al.* 2004. Gut health and immunity. *European Journal of Nutrition*. 43, 118–73.
- Da Cruz Pedrozo Miguel M. G., Gomes Cardoso P., de Assis Lago L. & Freitas Schwan R. 2010. Diversity of bacteria present in milk kefir grains using culture-dependent and culture-independent methods. *Food Research International* 43, 1523–1528.
- Dal Bello F., Walter J., Hartel C. & Hammes W. P. 2001. *In vitro* study of prebiotic properties of levan-type exopolysaccharides from *Lactobacilli* and non-digestible carbohydrates using denaturing gradient gel electrophoresis. *Systematic & Applied Microbiology*. 24, 232-237.
- de Araújo J. C., Schneider P. R. 2008. DGGE with genomic DNA: Suitable for detection of numerically important organisms but not for identification of the most abundant organisms. *Water Research*. 42, 5002-5010.

- De Man J. C., Rogosa M. & Sharpe M. 1960. A medium for cultivation of lactobacilli. *Journal of Applied Bacteriology*. 23, 130-135.
- de Moreno de LeBlanc A., Matar C., Farnworth E. & Perdigon G. 2007. Study of immune cells involved in the antitumor effect of kefir in a murine breast cancer model. *Journal Dairy Science*. 90, 1920–1928.
- De Vrese M., Keller B. & Barth C. A. 1992. Enhancement of intestinal hydrolysis of lactose by microbial β -galactosidase (EC 3.2.1.23) of kefir. *British Journal of Nutrition*. 67, 67-75.
- De Vuyst L. & Degeest B. 1999. Heteropolysaccharides from lactic acid bacteria. *FEMS Microbiology Reviews*. 23, 153-177.
- De Vuyst L. & Vanningelgem F. Developing new polysaccharide. 2004. In: *Texture in Food*. Ed: McKenna B. M. pp 27-308. Woodhead Publishing Ltd, Cambridge, England.
- De Vuyst L., De Vin F., Vanningelgem F. & Degeest B. 2001. Recent developments in the biosynthesis and applications of heteropolysaccharides from lactic acid bacteria. *International Dairy Journal*. 11, 687-707.
- Delfederico L., Hollmann A., Martínez M., Iglesias N. G., De Antoni G. & Semorile L. 2005. Molecular identification and typing of *lactobacilli* isolated from kefir grains. *Journal of Dairy Research*. 73, 20-7.
- Dellaglio F. & Felis G. E. 2005. Taxonomy of *lactobacilli* and *bifidobacteria*. In: *Probiotics and Prebiotics: Scientific Aspects*, pp. 25–50. Eds.: Tannock G.W. Caister Academic Press, Norfolk, UK.
- Dellaglio F., Felis G. & Torriani S. 2002. The status of the species *Lactobacillus casei* (Orla-Jensen 1916) Hansen and Lessel 1971 and *Lactobacillus paracasei* Collins et al. 1989. *International Journal of Systematic and Evolutionary Microbiology*. 52, 285–287.

- Dinoto A., Marques T. M., Sakamoto K., Fukiya S., Watanabe J., Ito S. & Yokota A. 2006b. Population dynamics of *Bifidobacterium* species in human feces during raffinose administration monitored by fluorescence *in situ* hybridization-flow cytometry. *Applied And Environmental Microbiology*. 72, 7739–7747.
- Dinoto A., Suksomcheep A., Ishizuka S., Kimura H., Hanada H., Kamagata Y, Asano K., Tomita F. & Yokota A. 2006a. Modulation of rat cecal microbiota by administration of raffinose and encapsulated *Bifidobacterium breve*. *Applied And Environmental Microbiology*. 72, 784–792.
- Dobson A., O'Sullivan O., Cotter P. D., Ross P. & Hill C. 2011. High-throughput sequence-based analysis of the bacterial composition of kefir and an associated kefir grain. *FEMS Microbiology Letters*. 320, 56-62.
- Dore J., Sghir A., Hannequart-Gramet G., Corthier G. & Pochart P. 1998. Design and evaluation of a 16S rRNA-targeted oligonucleotide probe for specific detection and quantitation of human faecal *Bacteroides* populations. *Systematic and Applied Microbiology*. 21, 65–71.
- Duboc P. & Mollet B. 2001. Applications of exopolysaccharides in the dairy industry. *International Dairy Journal*. 11, 759-768.
- Dubois M., Gilles K. A., Hamilton J. K., Rebers P. A. & Smith F. 1956. Colorimetric method for determination of sugars and related substances. *Analytical Chemistry*. 28, 350-356.
- Eisen J. A. 1995. The RecA protein as a model molecule for the molecular systematic studies of bacteria: comparison of trees of RecAs and 16S RNA from the same species. *Journal of Molecular Evolution*. 41, 1105–1123.
- Engel G., Krusch U. & Teuber M. 1986. Microbiological composition of kefir I. Yeasts. *Milchwissenschaft*. 41, 418-421.

- Ercolini D., Moschetti G., Blaiotta G. & Coppola S. 2001. Behavior of variable V3 region from 16S rDNA of important lactic acid bacteria in denaturing gradient gel electrophoresis. *Current Microbiology*. 42, 199–202.
- Faber E. J., Zoon P., Kamerling J. P. & Vliegenthart J. F. G. 1998. The exopolysaccharides produced by *Streptococcus thermophilus* Rs and Sts have the same repeating unit but differ in viscosity of their milk cultures. *Carbohydrate Research*. 310, 269-276.
- FAO/WHO. 2001. CODEX Standard for Fermented Milks #243. http://www.codexalimentarius.net/web/standard_list.jsp
- FAO/WHO. 2002. Conceptos sobre alimentos funcionales. <http://www.argenbio.org/adf/uploads/pdf/alimentosfuncionalesiLSI.pdf>
- Farnworth E. R., 2005. Kefir: a complex probiotic. *Food Science and Technology Bulletin: Functional Foods*. 2, 1–17.
- Farrelly V., Rainey F. A. & Stackebrandt E. 1995. Effect of genome size and rrn gene copy number on PCR amplification of 16S rRNA genes from a mixture of bacterial species. *Applied and Environmental Microbiology*. 61, 2798–2801.
- Felis G. E. & Dellaglio F. 2007. Taxonomy of *Lactobacilli* and *Bifidobacteria*. *Current Issues in Intestinal Microbiology*. 8, 44–61.
- Felske A., Adl A. & Vos M. W. 1998. Quantification of 16S rRNAs in complex bacterial communities by multiple competitive reverse transcription-PCR in temperatura gradient gel electrophoresis fingerprints. *Applied and Environmental Microbiology*. 64, 4581-4587.
- Fernandez E., Bienvenu T., Arramond F. D., Beldjord K Kaplan., J. C. & Beldjord C. 1993. Use of chemical clamps in denaturing gradient gel electrophoresis: application in the detection of the most frequent Mediterranean beta-thalassemic mutations. *PCR Methods and Applications*. 3, 122–124.

- Ferris M. J. & Ward D. M. 1997. Seasonal distributions of dominant 16S rRNA-defined populations in a hot spring microbial mat examined by denaturing gradient gel electrophoresis. *Applied And Environmental Microbiology*. 63, 1375–1381
- Folkenberga D. M., Dejmekc P, Skriverb A., Guldagerb H. S. & Ipsen R. 2006. Sensory and rheological screening of exopolysaccharide producing strains of bacterial yoghurt cultures. *International Dairy Journal*. 16, 111-118
- Font de Valdez G., Torino M. I., De Vuyst L. & Mozzi F. 2003. Food-grade heteropolysaccharides: ongoing research and future trends of biopolymers from lactic acid bacteria. *Applied biotechnology food science and policy*. 1, 223-234.
- Fontán M. C. G., Martínez S., Franco I., & Carballo J. 2006. Microbiological and chemical changes during the manufacture of Kefir made from cow's milk, using a commercial starter culture. *International Dairy Journal*. 16, 762–767.
- Fujisawa T., Adachi S., Toba T., Arihara K., & Mitsuoka T. 1988. *Lactobacillus kefiranofaciens* sp. nov. isolated from kefir grains. *International Journal of Systematic Bacteriology*. 38, 12–14.
- Furukawa N., Iiyama R., Takahashi T. & Yamanaka Y. 1992. Effect of oral administration of water soluble fraction from kefir grain on antibody production in mice. *Animal Science Technology*. 63, 428-436.
- Furuno T. & Nakanishi M. 2012. Kefiran Suppresses Antigen-Induced Mast Cell Activation. *Biological and Pharmaceutical Bulletin*. 35, 178—183.
- Garrity G. M., Bell J. A. & Lilburn T. G. 2004. Taxonomic Outline of the Procaryotes. *Bergey's Manual of Systematic Bacteriology*, 2nd edition, Release 5.0, Springer-Verlag, New York. DOI: <http://dx.doi.org/10.1007/bergeysoutline200405>.

- Garrote G. L., Abraham A. G. & De Antoni G. L. 1998. Characteristics of kefir prepared with different grain: milk ratios. *Journal of Dairy Research*. 65, 149-154.
- Garrote G., Abraham A.G., & De Antoni G. 2001. Chemical and microbiological characterization of kefir grains from different origins. *Journal of Dairy Research* 68, 639–652.
- Garrote G. L., Abraham A. G. & De Antoni G. L. 2010. Microbial Interactions in Kefir: A Natural Probiotic Drink. In *Biotechnology of Lactic Acid Bacteria: Novel Applications*. 18, 327-340. Ed. Mozzi F., Raya R. & Vignolo G. M.
- Gevers D., Huys G. & Swings J. 2001. Applicability of rep-PCR fingerprinting for identification of *Lactobacillus* species. *FEMS Microbiology Letters*. 205, 31-36.
- Gevers D., Cohan F. M., Lawrence J. G., Spratt B. G., Coenye T., Feil E. J., Stackebrandt E., Van de Peer Y., Vandamme P., Thompson F.L. & Swings J. 2005. Opinion: Re-evaluating prokaryotic species. *Nature Reviews Microbiology*. 3, 733–739.
- Gibson G. & Roberfroid M. 1995. Dietary Modulation of the Human Colonie Microbiota: Introducing the Concept of Prebiotics. *The Journal of Nutrition*. 125, 1401-1412.
- Gibson G. R., Beatty E. R., Wang X., *et al.* 1995. Selective stimulation of bifidobacteria in the human colon by oligofructose and inulin. *Gastroenterology*. 108, 975–982.
- Golowczyc M. A., Mobili P., Garrote G. L., Abraham A. G. & De Antoni G. L. 2007. Protective action of *Lactobacillus kefir* carrying S-layer protein against *Salmonella enterica* serovar Enteritidis. *Internationaal Journal Food Microbiology*. 118, 264–273.

- Golowczyc M. A., Gugliada M. J., Hollmann A., Delfederico L, Garrote G. L., Abraham A. G., Semorile L. & De Antoni G. L. 2008. Characterization of homofermentative lactobacilli isolated from kefir grains: potential use as probiotic. *Journal Dairy Reserch.* 75, 211-217.
- Gomez-Zavaglia A., Abraham A., Giorgieri S. & De Antoni G. 1999. Application of polyacrylamide gel electrophoresis and capillary gel electrophoresis to the analysis of *Lactobacillus delbrueckii* whole-cell proteins. *Journal of Dairy Science.* 82, 870–877
- Gorret N., Renard C. M. G. C., Famelart M. H., Maubois J. L. & Doublier J. L. 2003. Rheological characterization of the EPS produced by *P. acidipropionici* on milk microfiltrate. *Carbohydrate Polymers.* 51, 149-158.
- Green G. L., Brostoff J., Hudspith B., *et al.* 2006. Molecular characterization of the bacteria adherent to human colorectal mucosa. *Journal of Applied Microbiology.* 100, 460–469.
- Guarner F. & Malagelada J. R. 2003. Gut flora in health and disease. *Lancet.* 361, 512–519.
- Gulmez M. & Guven A. 2003. Survival of *Escherichia coli* O157:H7, *Listeria monocytogenes* 4b and *Yersinia enterocolitica* O3 in different yogur and kefir combinations as prefermentation contaminant. *Journal of Applied Microbiology.* 95, 631-636.
- Haarman M. & Knol J. 2005. Quantitative real-time PCR assays to identify and quantify fecal *Bifidobacterium* species in infants receiving a prebiotic infant formula. *Applied And Environmental Microbiology.* 71, 2318–2324.
- Halle´ C., Leroi F., Dousset X. & Pidoux M. 1994. Les kefirs. Des associations bacteries lactique-levures. In: *Bacteries lactiques: aspects fondamentaux et technologiques.* 2, 169-182. Eds.: de Roissart, H. & Luquet, F. M.

- Hammes W. P. & Vogel R. F. 1995. The genus *Lactobacillus*. In: The Genera of Lactic Acid Bacteria. vol. 2, pp. 19–54. Eds.: Wood B. J. B. & Holzapfel W.H. Blackie Academic & Professional (UK).
- Hammes W.P. & Hertel C. 2003. The Genera *Lactobacillus* and *Carnobacterium*. In: The Prokaryotes Release 3.15. Ed.: Martin Dworkin
- Hansen M. C., Tolker-Nielsen T., Givskov M. & Molin S. 1998. Biased 16S rDNAPCR amplification caused by interference from DNA flanking the template region. FEMS Microbiology Ecology. 262, 141-149.
- Harmsen H. J. M., Raangs G. C., He T., Degener J. E. & Welling G. W. 2002. Extensive set of 16S rRNA-based probes for detection of bacteria in human feces. Applied Environmental Microbiology. 68, 2982–2990.
- Hassan A. N., Frank J. F., Schmidt K. A. & Shalabi S. I. 1996. Rheological properties of yogurt made with encapsulated nonropy lactic cultures. Journal of Dairy Science. 79, 2091–2097.
- Hassan A. N., Frank J. F., & Qvist K. B. 2002. Direct observation of bacterial exopolysaccharides in dairy products using confocal scanning laser microscopy. Journal Dairy Science. 85,1705–1708.
- Hassan A. N., Ipsen R., Janzen T. & Qvist K. 2003. Microstructure and rheology of yogurt made with cultures differing only in their ability to produce exopolysaccharide. Journal of Dairy Science. 86, 1632-1638.
- Hertzler S. R. & Clancy S. M. 2003. Kefir improves lactose digestion and tolerance in adults with lactose maldigestion. Journal of the American Dietetic Association. 103, 582-587.
- Heuer H. & Smalla K. 1997. Application of denaturing gradient gel electrophoresis (DGGE) and temperature gradient gel electrophoresis (TGGE) for studying soil microbial communities. In: Modern Soil Microbiology. Eds.: van Elsas J. D., Trevors J. T. & Wellington E. M. H. Marcel Dekker, New York. pp. 353–373

- Hill M. J. 1997. Intestinal flora and endogenous vitamin synthesis. *European Journal of Cancer* prev. 6, 43-45
- Hugo A., Kakisu E., De Antoni G. & Perez P. F. 2008. Lactobacilli antagonize biological effects of enterohaemorrhagic *Escherichia coli* *in vitro*. *Letter in Applied Microbiology*. 46, 613-619.
- Huys G., Vanhoutte T., & Vandamme P. 2008. Application of sequence-dependent electrophoresis fingerprinting in exploring biodiversity and population dynamics of human intestinal microbiota: what can be revealed?. *Interdisciplinary Perspectives on Infectious Diseases*. 1-26
- Itoh K., Toba T, Itoh T. & Adachi S. 1992. Properties of β -galactosidase of *Lactobacillus kefirifaciens* K-1 isolated from kefir grains. *Letters in Applied Microbiology*. 15, 232-234.
- Jacquet J. & Thevenot R. 1961. Le lait et le froid. 216-218. Ed.: J.B. Baillière, Paris.
- Jianzhong Z., Xiaoli L., Hanhu J. & Mingsheng, D. 2009. Analysis of the microflora in Tibetan kefir grains using denaturing gradient gel electrophoresis. *Food Microbiology*. 26, 770-775.
- Jolly L., Vincent S. J. F., Duboc P., & Neeser J. R. 2002. Exploiting exopolysaccharides from lactic acid bacteria. *Antonie Van Leeuwenhoek*. 82, 367-374.
- Kakisu E. J., Abraham A. G., Pérez P. F. & De Antoni G. L. 2007. Inhibition of *Bacillus cereus* in milk fermented with kefir grains. *Journal of Food Protection*. 70, 2613-2616.
- Kanagawa T. 2003. Bias and artifacts in multitemplate polymerase chain reactions (PCR). *Journal of Bioscience and Bioengineering*. 96, 317-323.
- Kandler O. & Kunath P. 1983. *Lactobacillus kefir* sp. Nov., a component of the microflora of kefir. *Systematic and Applied Microbiology*. 4, 286-294.

- Kaufmann P., Pfefferkorn A., Teuber M. & Meile L. 1997. Identification and quantification of *Bifidobacterium* species isolated from food with genus-specific 16S rRNA-targeted probes by colony hybridization and PCR. *Applied Environmental Microbiology*. 63, 1268–1273.
- Kersters K., Pot B., Dewettinck D., Torck U., Vancanneyt M., Vauterin L. & Vandamme P. 1994. Bacterial diversity and systematics. In: Identification and typing of bacteria by protein electrophoresis, p. 51–66. Eds.: Priest F. G., Ramos-Cormenzana A., & Tyndall B. Plenum Press, New York.
- Kesmen Z. & Kacmaz, N. 2011. Determination of lactic microflora of kefir grain and kefir beverage by using culture dependent and culture independent methods. *Journal of Food Science*. 76, M276–M283.
- Keswani J. & Whitman W. B. 2001. Relationship of 16S rRNA sequence similarity to DNA hybridization in prokaryotes. *International Journal of Systematic Evolutionary Microbiology*. 51, 667–678.
- Kimmel S. A. & Roberts R. F. 1998. Development of a growth medium suitable for exopolysaccharide production by *Lactobacillus delbrueckii* subsp. *bulgaricus* RR. *International Journal of Food Microbiology*. 40, 87–92.
- Kleerebezem M., van Kranenburg R., Tuinier R., Bolees I. C., Zoon P., Looijesteijn E., Hugenholtz J. & de Vos W. M. 1999. Exopolysaccharides produced by *Lactococcus lactis*: from genetic engineering to improved rheological properties? *Antonie van Leeuwenhoek*. 76, 357-365.
- Kolida S. & Gibson G. R. 2007. Prebiotic capacity of inulin-type fructans. *Journal Nutrition*. 137, 2503S–2506S.
- Kooiman P. 1968. The chemical structure of kefirin, the water-soluble polysaccharide of kefir grain. *Carbohydrate Research*. 7, 200-211.
- Korakli M., Ganzle M. G. & Vogel R.F. 2002. Metabolism by bifidobacteria and lactic acid bacteria of polysaccharides from wheat and rye, and exopolysaccharides produced by *Lactobacillus sanfranciscensis*. *Journal of Applied Microbiology*. 92, 958–965.

- Koroleva, N. S. 1982. Special products (kefir, koumyss, etc.). Proceedings.
- Koroleva N. S. 1988. Starters for fermented milks, section 4: kefir and kumys starters. Bulletin of the International Dairy Federation. 227, 35-40.
- Koroleva, N.S. 1991. Products prepared with lactic acid bacteria and yeasts. In: Therapeutic properties of fermented milks. 159-179. Ed.: Robinson, R. K., Elsevier Applied Sciences Publishers, London, UK.
- Kruse H. P., Kleessen B. & Blaut M. 1999. Effects of inulin on faecal bifidobacteria in human subjects. British Journal of Nutrition. 82, 375-382.
- Kuo Ch. Y. & Lin Ch. W. 1999. Taiwanese kefir grains: their growth, microbial and chemical composition of fermented milk. Australian Journal of Dairy Technology. 54, 19-23.
- Kwon O. K., Ahn K. S., Lee M. Y., Kim S. Y., Park B. Y., Kim M. K., Lee I. Y., Oh S. R. & Lee H. K. 2008. Inhibitory effect of kefiran on ovalbumin-induced lung inflammation in a murine model of asthma. Archives of Pharmacal Research. 31, 1590-1596.
- La Riviere J. W. M., Kooiman P. & Schmidt K. 1967. Kefiran, a novel polysaccharide produced in the Kefir grain by *Lactobacillus brevis*. Archiv für Mikrobiologie. 59, 269-278.
- Laemmli U. K. 1973. Cleavage of structural proteins during the assembly of the head of bacteriophage T4. Nature. 227, 680-685.
- Langlands S. J., Hopkins M. J., Coleman N., *et al.* 2004. Prebiotic carbohydrates modify the mucosa associated microflora of the human large bowel. Gut. 53, 1610-1616.
- Latorre-García L., Castillo-Agudo L. & del Polaina J. 2007. Taxonomical classification of yeast isolated from kefir based on the sequence of their ribosomal RNA genes. World Journal Microbiology and Biotechnology. 23, 785-791.

- Lee M. Y., Ahn K. S., Kwon O. K., Kim M. J., Kim M. K., Lee I. Y., Oh S. R. & Lee H. K. 2007. Anti-inflammatory and anti-allergic effects of kefir in a mouse asthma model. *Immunobiology*. 212, 647-654.
- Lin C. W. & Kuo C. Y. 1999. Identification and characterization of lactic acid bacteria and yeasts isolated from kefir grains in Taiwan. *Australian Journal of Dairy Technology*. 54, 14-18
- Liu J-R., Wang, S-Y., Lin Y-Y. & Lin C-W. 2002. Antitumor activity of milk kefir and soy milk kefir in tumor-bearing mice. *Nutrition and Cancer*. 44, 182-187.
- Lloyd A. T. & Sharp P. M. 1993. Evolution of the recA gene and the molecular phylogeny of bacteria. *Journal of Molecular Evolution*. 37, 399-407.
- Londero A., Hamet M. F., De Antoni G. L., Garrote G. L., & Abraham A. G. 2012. Kefir grains as starter for whey fermentation at different temperatures: chemical and microbiological characterization. *Journal of Dairy Research*. Artículo en prensa.
- Looijesteijn P. J., Trapet L., de Vries E., Abee T. & Hugenholtz. J. 2001. Physiological function of exopolysaccharides produced by *Lactococcus lactis*. *International Journal of Food Microbiology*. 64 71-80.
- Lopitz-Otsoa F., Rementeria A., Elguezabal N. & Garaizar, J. 2006. Kefir: A symbiotic yeasts-bacteria community with alleged healthy capabilities. *Revista Iberoamericana de Micología*. 23, 67-74.
- Macfarlane S., Macfarlane G. T., & Cummings J. H. 2006. Review article: prebiotics in the gastrointestinal tract. *Alimentary Pharmacology & Therapeutics*. 24, 701-714.
- Maeda H., Zhu X., Suzuki S., Suzuki K. & Kitamura S. 2004a. Structural characterization and biological activities of an exopolysaccharide kefiran produced by *Lactobacillus kefiranofaciens* WT-2B(T). *Journal of Agricultural Food Chemistry*. 52, 5533-5538.

- Maeda H., Zhu X., Omura K., Suzuki S. & Kitamura S. 2004b. Effects of an exopolysaccharide (kefiran) on lipids, blood pressure, blood glucose, and constipation. *Biofactors*. 22, 197-200.
- Manning T. S., Rastall R. & Gibson G. 2004. Prebiotics and Lactic Acid Bacteria. In *Lactic Acid Bacteria*. Eds.: Salminen S, von Wright A., Ouwehand A.
- Margulis L. 1996. From kefir to death. In: *How things are*. 69-78. Eds.: Brockman, J. & Matson, K. William Morrow & Co., New York, USA.
- Marquina D., Santos A., Corpas I., Munoz J., Zazo J. & Pienado J.M. 2002. Dietary influence of kefir on microbial activities in the mouse bowel. *Letters in Applied Microbiology*. 35, 136-140.
- Marshall V. M., Cole W. M. & Farrow J. A. E. 1984. A note on the heterofermentative *Lactobacillus* isolated from kefir grains. *Journal of Applied Bacteriology*. 56, 503-505.
- Marshall V. M. 1993. Starter cultures for milk fermentation and their characteristics. *Journal Society Dairy Technology*. 46, 49-56.
- Marshall V. M., Cowie E. N. & Moreton R. S. 1995. Analysis and production of two exopolysaccharides from *Lactococcus lactis* subsp. *cremoris* LC330. *Journal of Dairy Research*. 62, 621-628.
- Marshall V. M. & Rawson H. L. 1999. Effects of exopolysaccharide produced by strain of thermophilic lactic acid bacteria on the texture of stirred yogurt. *International Journal of Food Science & Technology*. 34, 137-143.
- Medrano M., Perez P. F. & Abraham A. G. 2008. Kefiran antagonizes cytopathic effects of *Bacillus cereus* extracellular factors. *International Journal of Food Microbiology*. 122, 1-7.

- Medrano M., Hamet M. F., Abraham A. G. & Pérez P. F. 2009. Kefiran protects Caco-2 cells from cytopathic effects induced by *Bacillus cereus* infection. *Antonie van Leeuwenhoek International Journal of General and Molecular Microbiology*. 96, 505-513
- Medrano M., Racedo S. M., Rolny I, Abraham A. G. & Perez P. F. 2011. Oral administration of kefir induces changes in the balance of immune cells in a murine model. *Journal of Agriculture and Food Chemistry*. 59, 5299–5304.
- Miambi E., Guyot J. P. & Ampe F. 2003. Identification, isolation and quantification of representative bacteria from fermented cassava dough using an integrated approach of culture-dependent and culture-independent. *International Journal of Food Microbiology*. 82, 111–120.
- Micheli L., Uccelletti D., Palleschi C., Crescenzi V. 1999. Isolation and characterisation of a ropy *Lactobacillus* strain producing the exopolysaccharide kefir. *Applied Microbiology and Biotechnology*. 53, 69–74.
- Mitsue T., Tachibana K. & Fujio Y. 1998. Isolation of kefir producing lactic acid bacteria from kefir grain and improvement of kefir productivity. *Seibutu-Kogaku Kaishi*. 76, 447–450.
- Mitsuoka T., Hidaka H. & Eida T. 1987. Effect of fructooligosaccharides on intestinal microflora. *Nahrung*. 31, 427–436.
- Miyamoto M., Seto Y., Nakajima H., Burenjargal S., Gombojav A., Demberel S. & Miyamoto T. 2010. Denaturing Gradient Gel Electrophoresis Analysis of Lactic Acid Bacteria and Yeasts in Traditional Mongolian Fermented Milk. *Food Science and Technology Research*. 16 , 319 – 326.
- Molska I., Moniuszco I., Komorows K. A. M. & Merilanen V. 1983. Characteristics of bacilli of *Lactobacillus casei* species appearing in kefir grains. *Acta Alimentaria PoloUnica*. 9, 80-88

- Monchois V., Willemot R.-V., & Monasn P. 1999. Glucansucrases: mechanism of action and structure-function relationships. *FEMS Microbiology Review*. 23, 131-151.
- Monsan P., Bozonnet S., Albenne C., Joucla G., Willemot R. M. & Remaud-Simeon M. 2001. Homopolysaccharides from lactic acid bacteria. *International Dairy Journal*. 11, 675-685.
- Montesi A., García-Albiacha R., Pozueloa M. J., Pintado C., Gonñic I. & Rotgerb R. 2005. Molecular and microbiological analysis of caecal microbiota in rats fed with diets supplemented either with prebiotics or probiotics. *International Journal of Food Microbiology*. 98, 281– 289.
- Mozzi F., Savoy de Giori G. & Font de Valdez G. 1996. Exopolysaccharide production by *Lactobacillus casei* in milk under different growth conditions. *Milchwissenschaft*. 51, 670-673.
- Mozzi F., Vaningelgem F., Hébert E. M., Van der Meulen R., Foulquié Moreno M. R., Font de Valdez G. & De Vuyst L. 2006. Diversity of heteropolysaccharide-producing lactic acid bacterium strains and their biopolymers. *Applied and environmental microbiology*. 72, 4431–4435.
- Mukai T., Toba T., Itoh T. & Adachi S. 1988. Structural Microheterogeneity of Kefiran from Kefir Graiss. *Japanese Journal of Zootechnical Science*. 59, 167-176.
- Mukai T., Toba T., Itoh T., Nimura T. & Adachi, S. 1990. Carboxymethyl kefiran: preparation and viscometric properties. *Journal of Food Science*. 55, 1483-1484.
- Mukai T., Watanabe N., Toba T., Itoh T. & Adachi S. 1991. Gel-Forming Characteristics and Rheological Properties of Kefiran. *Journal of Food Science*. 56, 1017-1018.
- Mukai T., Onose Y., Toba T. & Itoh T. 1992. Presence of glycerol teichoic acid in the cell wall of *Lactobacillus kefiranofaciens*. *Letters in Applied Microbiology*. 15, 29-31.

- Murofushi M., Shiomi M. & Aibara K. 1983. Effect of orally administered polysaccharide from kefir grain on delayed-type hypersensitivity and tumor growth in mice. *Japanese Journal of Medical Science and Biology*. 36, 49-53.
- Murofushi M., Mizuguchi J., Aibara K. & Matuhasi T. 1986. Immunopotentiative effect of polysaccharide from kefir grain, KGF-C, administered orally in mice. *Immunopharmacology*. 12, 29-35.
- Murphy K., Travers P. & Walport M. 2008. The Mucosal Immune System. In Janeway's *Immunobiology*, 7th ed. pp: 459-495. Eds: Murphy K.; Travers P. & Walport M. Garland Science, Taylor & Francis Group, LLC. New York.
- Muyzer G., De Waal E. & Uiterlinden A. 1993. Profiling of complex microbial populations by denaturing gradient gel electrophoresis analysis of polymerase chain reaction-amplified genes coding for 16S rRNA. *Applied and Environmental Microbiology*. 59, 695-700.
- Muyzer G. & Smalla K. 1998. Application of denaturing gradient gel electrophoresis (DGGE) and temperature gradient gel electrophoresis (TGGE) in microbial ecology. *Antonie van Leeuwenhoek*. 73, 127-141.
- Muyzer G. 1999. DGGE/TGGE a method for identifying genes from natural ecosystems. *Current Opinion in Microbiology*. 2, 317-322.
- Naser S., Thompson F. L., Hoste B., Gevers D., Dawyndt P., Vancanneyt M. & Swings J. 2005. Application of multilocus sequence analysis (MLSA) for rapid identification of *Enterococcus* species based on *rpoA* and *pheS* genes. *Microbiology*. 151, 2141-2150.
- Naser S., Dawyndt P., Hoste B., Gevers D., Vandemeulebroecke K., Cleenwerck I., Vancanneyt M., & Swings J. 2007. Identification of *Lactobacilli* by *pheS* and *rpoA* gene sequence analyses. *International Journal of Systematic and Evolutionary Microbiology*. 57, 2777-2789

- Ninane V., Mukandayambaje R. & Berben G. 2007. Identification of lactic acid bacteria within the consortium of a kefir grain by sequencing 16S rDNA variable regions. *Journal of AOAC International*. 90, 1111-1117.
- Nübel U., Engelen B., Felske A., Snaidr J., Wieshuber A., Amann R.I., Ludwig W. & Backhaus H. 1996. Sequence heterogeneities of genes encoding 16S rRNAs in *Paenibacillus polymyxa* detected by temperature gradient gel electrophoresis. *Journal of Bacteriology*. 178, 5636–5643.
- Ohya T., Kubo M. & Watase H. 1988. Electrophoretic protein patterns in *Campylobacter* species with special reference to *Campylobacter mucosalis* and *Campylobacter hyointestinalis*. *Japanese Journal of Veterinary Research*. 50, 692–698.
- Oliveira R. P. D. S., Perego P., Oliveira M. N. D. & Converti A. 2011. Effect of inulin as prebiotic and synbiotic interactions between probiotics to improve fermented milk firmness. *Journal of Food Engineering*. 107, 36-40.
- Otes S. & Cagindi O. 2003. Kefir: a probiotic dairy-composition, nutritional and therapeutic aspect. *Pakistan Journal Nutrition*. 2, 54-59.
- Ottogalli G., Galli A., Resmini P. & Volonterio G. 1973. Composizione microbiologica, chimica ed ultrastruttura dei granuli di kefir. *Annali di Microbiologia ed Enzimologia*. 23, 109-121
- Ouwehand A. C., Niemi P. & Salminen S. J. 1999. The normal faecal microbiota does not affect the adhesion of probiotic bacteria in vitro. *FEMS Microbiol Letters*. 177, 35-38.
- Petry S., Furlan S., Waghorne E., Saulnier L., Cerning J., & Maguin E. 2003. *FEMS Microbiology Letter*. 221, 285.
- Piermaria J., de la Canal M. & Abraham A. G. 2008. Gelling properties of Kefiran, a food grade polysaccharide obtained from kefir grain. *Food Hydrocolloids*. 22, 1520-1527.

- Piermaria J., Pinotti A., García M. A., & Abraham A. G. 2009. Films based on kefiran, an exopolysaccharide obtained from kefir grain: development and characterization. *Food Hydrocolloids*. 23, 684-690.
- Piermaria J., Bosch A., Pinotti A., Yantorno O., Garcia M. A. & Abraham A. G. 2011. Kefiran films plasticized with sugars and polyols: water vapor barrier and mechanical properties in relation to their microstructure analyzed by ATR/FT-IR spectroscopy. *Food Hydrocolloids*. 25, 1261-1269.
- Pilosof A. M. R. Gelificación. 2000. In *Caracterización funcional estructural de proteínas*. Eds: Pilosof A. M. R., Bartholomai B.
- Pintado M. E., Lopes Da Silva J. A., Fernandes P. B., Malcata F. X. & Hogg T. A. 1996. Microbiological and rheological studies on Portuguese kefir grains. *International Journal of Food Science & Technology*. 31, 15-26.
- Powell J. E, Witthuhn R.C, Todorov S. D & Dicks. L. M. T. 2007. Characterization of bacteriocin ST8KF produced by a kefir isolate *Lactobacillus plantarum* ST8KF. *International Dairy Journal*. 17, 190-198.
- Renard D., van de Velde F. & Visschers R. W. 2006. The gap between food gel structure, texture and perception. *Food Hydrocolloids*. 20, 423-431.
- Rimada P. S. & Abraham A. G. 2001. Polysaccharide production by kefir grains during whey fermentation. *Journal of Dairy Research*. 68, 653-661.
- Rimada P. S. & Abraham A. G. 2003. Comparative study of different methodologies to determine the exopolysaccharide produced by kefir grains in milk and whey. *Le lait*. 83, 79-88.
- Rimada P. S. & Abraham A. G. 2006. Kefiran improves rheological properties of glucono-delta-lactone induced skim milk gels. *International Dairy Journal*. 16, 33-39.
- Roberfroid M. B., Bornet F., Bouley C., Cummings J. H., 1995. Colonic microflora: nutrition and health: summary and conclusion of an international Life Science Institute (ILSI) (Europe). 53, 127-30.

- Roberfroid M. B. 1998. Prebiotics and synbiotics: concepts and nutritional properties. *British Journal of Nutrition*. 80, S197–S202.
- Roberfroid M. B., Van Loo J. A., Gibson G. R. 1998. The bifidogenic nature of chicory inulin and its hydrolysis products. *Journal Nutrition*. 128, 11-9.
- Roberfroid M, Gibson GR, Hoyles L, McCartney AL, Rastall R, Rowland I, Wolvers D, Watzl B, Szajewska H, Stahl B, Guarner F, Respondek F, Whelan K, Coxam V, Davicco MJ, Léotoing L, Wittrant Y, Delzenne NM, Cani PD, Neyrinck AM, Meheust A. 2010. Prebiotic concept and health. *British Journal of Nutrition*. 2, S1-S63
- Rodrigues K. L., Carvalho J. C. & Schneedorf J. M. 2005a. Anti-inflammatory properties of kefir and its polysaccharide extract. *Inflammopharmacology*. 13, 485-492.
- Rodrigues K. L., Caputo L. R., Carvalho, J. C., Evangelista J. & Schneedorf J. M. 2005b. Antimicrobial and healing activity of kefir and kefiran extract. *International Journal of Antimicrobial Agents*. 25, 404-408.
- Rohm H., Eliskases-Lchner F. & Brauer M. 1992. Diversity of yeasts in selected dairy products. *Journal of Applied Bacteriology*. 72, 370-376.
- Rohm H., & Kovac A. 1994. Effects of starter cultures on linear viscoelastic and physical properties of yogurt gels. *Journal of Texture Studies*, 25, 311–329.
- Rosado A. S., Duarte G. F., Seldin L. & van Elsas J. D. 1998. Genetic diversity of nifH gene sequences in *Paenibacillus azotofixans* strains and soil samples analyzed by denaturing gradient gel electrophoresis of PCR-amplified gene fragments. *Appl. Environ. Microbiol.* 4:2770–2779.
- Rosi J. & Rossi, J. 1978. I microorganismi del kefir: I fermenti lattici. *Scienza e Tecnica Lattiero-Casearia*. 29, 291-305.
- Rosselló-Mora R. & Amann R. 2001. The species concept for prokaryotes. *FEMS Microbiology Review*. 25, 39–67.

- Ross-Murphy S. B. 1995. Rheology of biopolymer solutions and gels. In *New Physico-Chemical Techniques for the Characterization of Complex Food Systems*. pp 130–156. Ed.: Dickinson E.. Blackie Academic & Professional, Glasgow.
- Rowland I. R., Mallett A. K. & Wise A. 1985. The effect of diet on the mammalian gut flora and its metabolic activities. *Critical Reviews Toxicology*. 16, 31–103.
- Ruas-Madiedo P., Hugenholtz J. & Zoon P. 2002a. An overview of the functionality of exopolysaccharides produced by lactic acid bacteria. *International Dairy Journal*. 12, 167-171.
- Ruas-Madiedo P., Tuinier, R., Kanning M. & Zoon, P. 2002b. Role of exopolysaccharides produced by *Lactococcus lactis* subsp. *cremoris* on the viscosity of fermented milks. *International Dairy Journal*. 12, 689–695.
- Ruas-Madiedo P. & Zoon P. 2003. Effect of exopolysaccharide-producing *Lactococcus lactis* strains and temperature on the permeability of skim milk gels. *Colloids and Surfaces*. 213, 245-253
- Ruas-Madiedo P. & de los Reyes-Gavilán C. G. 2005. Invited Review: Methods for the screening, isolation, and characterization of exopolysaccharides produced by lactic acid bacteria. *Journal of Dairy Science*. 88, 843-856.
- Ruas-Madiedo P., Moreno J. A., Salazar N., Delgado S., Mayo B., Margolles A. & de los Reyes-Gavilán C. G. 2007. Screening of exopolysaccharide-producing *Lactobacillus* and *Bifidobacterium* strains isolated from the human intestinal microbiota. *Applied And Environmental Microbiology*. 73, 4385–4388.

- Ruas-Madiedo P., Abraham A. G., Mozzi F., & de los Reyes-Gavilán C. G. 2008. Functionality of exopolysaccharides produced by lactic acid bacteria. In Molecular aspects of lactic acid bacteria for traditional and new applications. pp. 137-166. Eds.: Mayo B., López P., & Pérez-Martínez G. Kerala: Research Signpost.
- Ruijsenaars H. J., F. Stinglele & Hartmans S. 2000. Biodegradability of food-associated extracellular polysaccharides. Current of Microbiology. 40, 194–199.
- Ruijsenaars H. J., Stinglele F. & Hartmans S. 2000. Biodegradability of food-associated extracellular polysaccharides. Current Microbiology. 40, 194-199.
- Ryan M.P., Rea M.C., Hill C. & Ross P. 1996. An application in Cheddar cheese manufacture for a strain of *Lactococcus lactis* producing a novel broad-spectrum bacteriocin, lacticin 3147. Applied and Environmental Microbiology. 62, 612-619.
- Salazar N, Gueimonde M, Hernandez-Barranco A, Ruas-Madiedo P & de los Reyes-Gavilan C. 2008. Exopolysaccharides produced by intestinal *Bifidobacterium* strains act as fermentable substrates for human intestinal bacteria. Applied And Environmental Microbiology. 15, 4737–4745.
- Salles J. F., De Souza F. A. & van Elsas J. D. 2001. Molecular method to assess the diversity of burkholderia species in environmental samples. Applied And Environmental Microbiology. 68, 1595–1603.
- Salminen S., Bouley C., Bouton-Ruault M. C., *et al.* 1998. Functional Food, science and gastrointestinal physiology and function. British Journal of Nutrition. 80, 147-171.
- Salminen S., Roberfroid M., Ramos P. & Fonden R. 1998. Prebiotic substrates and lactic acid bacteria. In Lactic Acid Bacteria. pp 343–358. Eds.: Salminen S., von Wright A. Marcel Dekker: New York.

- Santos A., San Mauro M., Sanchez A., Torres J. M. & Marquina D. 2003. The antimicrobial properties of different strains of *Lactobacillus* spp. isolated from kefir. *Systematic and Applied Microbiology*. 26, 434-437.
- Satokari R. M., Vaughan E. , Akkermans A. D. L., Saarela M., & De Vos W. M. 2001. Bifidobacterial diversity in human feces detected by genus-specific PCR and denaturing gradient gel electrophoresis. *Applied and Environmental Microbiology*. 67, 504-413.
- Schleifer K. H. & Ludwig W. 1994. Molecular taxonomy: classification and identification. In: *Bacterial Diversity and Systematics*. F.G. Priest Eds.
- Schrezenmeir J. & de Vrese M. 2001. Probiotics, prebiotics, and synbiotics—approaching a definition. *The American Journal of Clinical nutrition*. 73, 361S–364S.
- Schwab C. & Gänzle M. G. 2006. Effect of membrane lateral pressure on the expression of fructosyltransferases in *Lactobacillus reuteri*. *Systematic of Applied Microbiology*. 29, 89-99.
- Sekiguchi H., Tomioka N., Nakahara T., Uchiyama H., 2001. A single band does not always represent single bacterial strains in denaturing gel electrophoresis analyses. *Biotechnology Letters*. 23, 1205–1208.
- Serot T., Dousset X., Zucca J. & Torcatis N. 1990. Mise en évidence et purification partielle de substances antibactériennes produites par *Leuconostoc mesenteroides* et *Lactobacillus plantarum* isolés de grains de kéfir. *Microbiology Alim. Nutr.* 8, 71-76.
- Shiomi M., Sasaki K., Murofushi M. & Aibara K. 1982. Antitumor activity in mice of orally administered polysaccharide from kefir grain. *Japanese Journal of Medical Science and Biology*. 35, 75-80.
- Silva K. R., Rodrigues S. A., Filho L. X. & Lima A. S. 2009. Antimicrobial Activity of Broth Fermented with Kefir Grains. *Applied Biochemistry and Biotechnology*. 152, 316-325.

- Simon G. L. & Gorbach S. L. 1984. Intestinal flora in health and disease. *Gastroenterology*. 86, 174.
- Snart J., Bibiloni R., Grayson T., Lay C., Zhang H., Allison G. E., Laverdiere J. K., Temelli F., Vasanthan T., Bell R. & Tannock G. W. 2006. Supplementation of the Diet with High-viscosity β -Glucan: Results in Enrichment for *Lactobacilli* in the Rat Cecum. *Applied and Environmental Microbiology*. 72, 1925–1931
- Southgate D. A. 1976. Selected methods. In *Determination of Food Carbohydrates*. pp. 99-144. Applied Science Publishers Ltd. Essex, UK.
- Speksnijder A. G. C. L., Kowalchuk G. A., De Jong S., Kline E., Stephen J. R. & Laanbroek H. J.. 2001. Microvariation Artifacts Introduced By Pcr And Cloning Of Closely Related 16s Rrna Gene Sequences Applied And Environmental. *Microbiology*. 69, 469–472.
- Staley J. T. & Krieg N. R. 1989. Classification of procaryotic organisms: an overview. In: *Bergey's Manual of Systematic Bacteriology*, vol. 3, pp. 1601– 1603. Eds. Staley J. T., Bryant M. P., Pfennig N. & Holt J. G., Baltimore Williams & Wilkins
- Steffe J. F. 1996. *Rheological methods in food process engineering*. Second edition. Freeman Press. East Lansing, USA.
- Suau A., Bonnet R., Sutren M., Godon J-J., Gibson G., Collins M. A. & Dore J. 1999. Direct analysis of genes encoding 16S RNA from complex communities reveals many novel molecular species within the human gut. *Applied Environmental Microbiology*. 65, 4799–4807.
- Suzuki M. T. & Giovannoni S. J. 1996. Bias caused by template annealing in the amplification of mixtures of 16S rRNA genes by PCR. *Applied and Environmental Microbiology*. 62, 625-630.

- Takizawa S., Kojima S., Tamura S., Fujinaga S., Benno Y. & Nakase T. 1994. *Lactobacillus kefirgranum* sp. nov. and *Lactobacillus parakefir* sp. nov., two new species from kefir grains. *International Journal of Systematic Bacteriology*. 44, 435-439.
- Takizawa S., Kojima S., Tamura S., Fujinaga S., Benno Y. & Nakase T. 1998. The composition of the lactobacillus flora in kefir grains. *Systematic and Applied Microbiology*. 21, 121-127.
- Tamime A. Y., Muir D. D. & Wszolek M. 1999. Kefir, koumiss and kishk. *Dairy Industries International*. 64, 32-33.
- Tannock G.W. 1995. Sticky microbes: the association of microbes with host surface. In *Normal microflora. An Introduction to Microbes Inhabiting the Human Body*. . pp. 49-60. Ed.: Tannock G. W Chapman & Hall. London.
- Tannock G. W., Munro K., Bibiloni R., Simon M. A., Hargreaves P., Gopal P., Harmsen H. & Welling G. 2004. Impact of consumption of oligosaccharide-containing biscuits on the fecal microbiota of humans. *Applied And Environmental Microbiology*. 70, 2129–2136.
- Thompson J. K., Johnston D. E., Murphy R. J. & Collins M. A. 1990. Characteristics of a milk fermentation from rural Northern Ireland which resembles kefir. *Irish Journal of Food Science Technology*. 14, 35-49.
- Thoreux K. & Schmucker D. L. 2001. Kefir milk enhances intestinal immunity in young but not old rats. *Journal of Nutrition*. 131, 807-812.
- Toba T., Uemura H., Mukai T., Fujii T., Itoht T. & Adachi S. 1991. A new fermented milk using capsular polysaccharide-producing *Lactobacillus kefiranofaciens* isolated from kefir grains. *Journal of Dairy Research*. 58, 497-502.
- Tolstoguzov V. 2003, *Food Hydrocolloid.*, 17, 1.
- Torino M. I., Mozzi F., & Font de Valdez G. 2005, Exopolysaccharide biosynthesis by *Lactobacillus helveticus* ATCC 15807. *Applied Microbiology and Biotechnology*. 68, 259-165.

- Tuinier R., Zoon P., Olieman C., Cohen Stuart M. A., Fler G. J., & de Kruif C. G. 1999. Isolation and physical characterization of an exocellular polysaccharide. *Biopolymers*. 49, 1-9.
- Tuohy K.M., Finlay R.K., Wynne A.G., *et al.* 2001a. A human volunteer study on the prebiotic effects of HP-inulin Faecal bacteria enumerated using fluorescent in situ hybridisation (FISH). *Anaerobe* 7, 113–118.
- Tuohy K.M., Kolida S., Lustenberger A.M., *et al.* 2001b. The prebiotic effects of biscuits containing partially hydrolysed guar gum and fructo-oligosaccharides – a human volunteer study. *British of Journal Nutrition*. 86, 341–348.
- van de Wiele T., Boon N., Possemiers S., *et al.* 2004 Prebiotic effects of chicory inulin in the simulator of the human intestinal microbial ecosystem. *FEMS Microbiology Ecology*. 51, 143–153.
- Van der Meulen R., Grosu-Tudor S., Mozzi F., Vaningelgem F., Zamfir M., Font de Valdez G. & De Vuyst L. 2007. Screening of lactic acid bacteria isolates from dairy and cereal products for exopolysaccharide production and genes involved. *International Journal of Food Microbiology*. 118, 250–258.
- Van Geel-Schutten G. H., Faber E. J., Smit E., Bonting K., Smith M. R., Ten Brink B., *et al.* 1999. Biochemical and structural characterization of the glucan and fructan exopolysaccharides synthesized by the *Lactobacillus reuteri* wild-type strain and by mutantstrains. *Applied and Environmental Microbiology*. 65, 3008–3014.
- van Hijum S. A. F. T., Kralj S., Ozimek L. K., Dijkhuizen L. & Van Geel-Schutten I. G. H. 2006. Structure-function relationships of glucansucrase and fructansucrase enzymes from lactic acid bacteria. *Microbiology And Molecular Biology Reviews*. 70, 157.
- Van Loo J., Franck A, Roberfroid M. 1999. Functional food properties of non-digestible oligosaccharides. *British Journal of Nutrition*. 82, 329-402.

- Van Marle M. E., & Zoon P. 1995. Permeability and rheological properties of microbially and chemically acidified skim-milk gels. *Netherlands Milk & Dairy Journal*. 49, 47–65.
- Vancanneyt M., Mengaud J., Cleenwerck I., Vanhonacker K., Hoste B., Dawyndt P., Degivry M. C., Ringuet D., Janssens D. & Swings, J. 2004. Reclassification of *Lactobacillus kefirgranum* Takizawa *et al.* 1994 as *Lactobacillus kefiranofaciens* subsp. *kefirgranum* subsp. nov. and emended description of *L. kefiranofaciens* Fujisawa *et al.* 1988. *International Journal of Systematic and Evolutionary Microbiology*. 54, 551-556.
- Vandamme P., Pot B., Gillis M., de Vos P., Kersters K. & Swings J. 1996. Polyphasic taxonomy, a consensus approach to bacterial systematics. *American Society for Microbiology. Microbiological Reviews*. 60, 407–438
- Vanhoutte T., de Preter V., De Brandt E., *et al.* 2006. Molecular monitoring of the fecal microbiota of healthy human subjects during administration of lactulose and *Saccharomyces boulardii*. *Applied Environmental Microbiology*. 72, 5990–5997.
- Vaningelgem F., Zamfir M., Mozzi F., Adriany T., Vancanneyt M., Swings J. & De Vuyst L. 2004a). Biodiversity of exopolysaccharides produced by *Streptococcus thermophilus* strains is reflected in their production and their molecular and functional characteristics. *Applied and Environmental Microbiology*. 70, 900-912.
- Vaningelgem F, Van der Meulen R, Zamfir M, Adriany T., Laws A & De Vuyst L. 2004b). *Streptococcus thermophilus* ST 111 produces a stable high molecular mass exopolysaccharide in milk-based medium. *International Dairy Journal*. 14, 857-864.
- Vauterin L., Swings J. & Kersters K. 1993. Protein electrophoresis and classification. In *Handbook of new bacterial systematics*. pp. 251–280. Eds.: Goodfellow M. & O'Donnell A. G. Academic Press Ltd., London.

- Vedamuthu E. R. 1982. Fermented milks. In Economic Microbiology ., pp. 199–226. Ed.: Rose A. H. Academic Press: Washington.
- Vinderola G., Perdigon G., Duarte J., Farnworth E. & Matar C. 2006. Effects of the oral administration of the exopolysaccharide produced by *Lactobacillus kefiranofaciens* on the gut mucosal immunity. Cytokine. 36, 254–260.
- Walstra P. 1990. On the stability of casein micelles. Dairy foods. Journal of Dairy Science. 73, 1965-1979.
- Walter J., Tannock G. W., Tilsala-Timisjarvi A., Rodtong S, Loach D. M, Munro K., & Alatosava T. 2000. Detection and identification of gastrointestinal *Lactobacillus* species by using denaturing gradient gel electrophoresis and species-specific pcr primers. Applied And Environmental Microbiology. 66, 297–303.
- Wang Y. P., Zaheer A., Feng W., Li C., & Song S. Y. 2008. Physicochemical properties of exopolysaccharide produced by *Lactobacillus kefiranofaciens* ZW3 isolated from Tibet kefir. International Journal of Biological Macromolecules, 43, 283– 288
- Witthuhn R. C., Schoeman T. & Britz T. J. 2005. Characterisation of the microbial population at different stages of kefir production and kefir grain mass cultivation. International Dairy Journal. 15, 383–389.
- Woese C. R. 1987. Bacterial evolution. Microbiological Reviews. 51, 221–271.
- Wolfaardt G. M., Lawrence J. R. & Korber D. R. 1999. Functions of EPS. In: Microbial extracellular polymeric substances. pp. 172–200. Ed.: Wingender J. Springer: Berlin
- Wyder M. T. 2001. Yeast in Dairy Products. FAM Swiss Federal Dairy Research Station. 4, 1-21.

- Yazawa K., Imai K. & Tamura Z. 1978. Oligosaccharides and polysaccharides specifically utilizable by bifidobacteria. *Chemical and Pharmaceutical Bulletin (Tokyo)*. 26, 3306–3311.
- Yokoi H., Watanabe T., Fujii Y., Toba T., & Adachi, S. 1990. Isolation and characterization of polysaccharide producing bacteria from kefir grains. *Journal of Dairy Science*. 73, 1684–1689.
- Yokoi H., Watanabe T., Fujii Y., Mukai T., Toba T. & Adachi S. 1991. Some taxonomical characteristics of encapsulated *Lactobacillus* sp. KPB-167B isolated from kefir grains and characterization of its extracellular polysaccharide. *International Journal of Food Microbiology* 13, 257-264.
- Zacconi C., Scolari G., Vescovo M. & Sarra P. G. 2003 Competitive exclusion of *Campylobacter jejuni* by kefir fermented milk. *Annals of Microbiology*. 53, 179-187.
- Zhou J., Liu X., Jiang H. & Dong M. 2009. Analysis of the microflora in Tibetan kefir grains using denaturing gradient gel electrophoresis. *Food Microbiology*. 26, 770–775.
- Zoetendal E. G., Akkermans A. D. L. & de Vos W. M. 1998. Temperature gradient gel electrophoresis analysis of 16S rRNA from human fecal samples reveals stable and host-specific communities of active bacteria. *Applied Environmental Microbiology*. 64, 3854–3859.
- Zoetendal E. G., Akkermans A. D. L., Akkermans van-Vliet W. M., de Visser J. A. G. M. & de Vos W. M. 2001. The host genotype affects the bacterial community in the human gastrointestinal tract. *Microbial Ecology in Health Disease*. 13, 129–134.
- Zourari A. & Anifantakis E. M. 1988. Le kefir caracteres physico-chimiques, microbiologiques et nutritionnels. *Technologie de Production. Le Lait*. 68, 373-392.

- Zweig G. & Sherma J. 1978. Section A: General Data and Principles Volume II. En Handbook Series in Chromatography. CRC Press Inc., Florida. Pág.124-130.