

# LcS Topic: Infections other than diarrhoea

*Lactobacillus casei* Shirota (LcS) is the unique probiotic strain in Yakult

For further information visit our website: [www.yakult.co.uk/hcp](http://www.yakult.co.uk/hcp)  
 Contact the UK science team on [science@yakult.co.uk](mailto:science@yakult.co.uk) or 0208 8427 600.  
 Contact the Irish science team on [science@yakult.ie](mailto:science@yakult.ie) or 01 804 7695

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## *Helicobacter pylori*

**Compounds secreted by *Lactobacillus casei* strain Shirota YIT9029 irreversibly and reversibly impair the swimming motility of *Helicobacter pylori* and *Salmonella enterica* serovar Typhimurium, respectively.**

Liévin-Le Moal V, Fayol-Messaoudi D, Servin AL (2013) *Microbiology* **159(9)**:1956-1971.

[PubMed]

**Eradication of *Helicobacter pylori*: triple treatment scheme plus *Lactobacillus* vs triple treatment alone.**

Sahagún-Flores JE, López-Peña LS, de la Cruz-Ramírez Jaimes J, García-Bravo MS, Peregrina-Gómez R, de Alba-García JE (2007) *Cirugia Y Cirujanos*. **75(5)**: 333-336

[PubMed]

***In vitro* and *in vivo* inhibition of *Helicobacter pylori* by *Lactobacillus casei* strain Shirota.**

Sgouras D, Maragkoudakis P, Petraki K, Martinez-Gonzalez B, Eriotou E, Michopoulos S, Kalantzopoulos G, Tsakalidou E, Mentis A (2004) *Applied and Environmental Microbiology* **70(1)**: 518-26.

[Free article] [PubMed]

**Effect of frequent consumption of a *Lactobacillus casei*-containing milk drink in *Helicobacter pylori*-colonized subjects.**

Cats A, Kuipers EJ, Bosscherts MAR, Pot RGJ, Vandenbroucke-Grauls CMJE, Kusters JG (2003) *Alimentary Pharmacology and Therapeutics* **17(3)**: 429-435.

[Free article] [PubMed]

**Effect of fermented milk-based probiotic preparations on *Helicobacter pylori* eradication: a systematic review and meta-analysis of randomized-controlled trials.**

Sachdeva A & Nagpal J (2009) *European Journal of Gastroenterology and Hepatology* **21 (1)**: 45-53.

[PubMed]

## Human papillomavirus (HPV)

**Probiotics enhance the clearance of human papillomavirus-related lesions: a prospective controlled pilot study.**

Verhoeven V, Renard N, Makar A *et al* (2012) *European Journal of Cancer* **22(1)**:46-51.

[Abstract]

## HTLV-1 associated myelopathy

**Immunogenetics and the pathological mechanisms of human T-cell leukemia virus type 1- (HTLV-1-) associated myelopathy/tropical spastic paraparesis (HAM/TSP).**

Saito M (2010) *Interdisciplinary Perspectives on Infectious Disease*. Article ID 478461 doi:10.1155/2010/478461

[Free article] [PubMed]

**A prospective uncontrolled trial of fermented milk drink containing viable *Lactobacillus casei* strain Shiota in the treatment of HTLV-1 associated myelopathy/tropical spastic paraparesis.**

Matsuzaki T, Saito M, Usuku K, Nose H, Izumo S *et al* (2005) *Journal of the Neurological Sciences* **237**: 75-81  
[PubMed] [Synopsis]

## Parasites

**Effect of *Lactobacillus casei* Shiota strain intraperitoneal administration in CD1 mice on the establishment of *Trichinella spiralis* adult worms and on IgA anti-*T. spiralis* production.**

Martínez-Gomez F, Santiago-Rosales R, Bautista-Garfias CR (2009) *Veterinary Parasitology* **162**: 171-175  
[PubMed] [Synopsis]

## Post-operative infections

**Perioperative synbiotic therapy in elderly patients undergoing gastroenterological surgery: A prospective, randomized control trial.**

Okazaki M, Matsukama S, Suto R *et al* (2013) *Nutrition* **29**:1224-1230.  
[PubMed]

**Effects of perioperative synbiotic treatment on infectious complications, intestinal integrity and faecal flora and organic acids in hepatic surgery with or without cirrhosis.**

Usami M, Miyishi M, Kanbara Y *et al* (2011) *Journal of Parenteral and Enteral Nutrition* **15**: 317-328.  
[PubMed] [Free paper]

**Perioperative synbiotic treatment to prevent infectious complications in patients after elective living donor liver transplantation. A prospective randomised study.**

Eguchi S, Takatsuki M, Hidaka M *et al* (2010) *The American Journal of Surgery* **201**(4):498-502  
[PubMed]

**Abnormal intestinal microbiota in pediatric surgical patients and the effects of a newly designed symbiotic therapy.**

Kanamori Y, Sugiyama M, Goishi K *et al* (2006) *International Journal of Probiotics & Prebiotics* **1**(3/4):149-160.  
[Abstract]

**Perioperative synbiotic treatment to prevent postoperative infectious complications in biliary cancer surgery: A randomized controlled trial.**

Sugawara G, Nagino M, Nishio H *et al* (2006) *Annals of Surgery* **244**(5):706-714.  
[Free paper] [PubMed]

**Synbiotics reduce postoperative infectious complications: a randomized controlled trial in biliary cancer patients undergoing hepatectomy.**

Kanazawa H, Nagino M, Kamiya S *et al* (2005) *Langenbeck's Archives of Surgery* **390**(2): 104-113.  
[PubMed]

**LC-9018 treatment enhances survival in gram-negative burn wound sepsis.**

Holder IA, Miller RG, Neely AN (1993) *International Journal of Antimicrobial Agents* **2**(4):247-253.  
[PubMed]

**A comparative trial of LC9018 plus doxorubicin and doxorubicin alone for the treatment of malignant pleural effusion secondary to lung cancer.**

Masuno T, Kishimoto S, Ogura T *et al* (1991) *Cancer* **68**(7):1495-1500.  
[PubMed]

## Upper respiratory tract infections

**Decreased duration of acute upper respiratory tract infections with daily intake of fermented milk: A multicentre, double-blinded, randomized comparative study in users of day care facilities for the elderly population.**

Fujita R, Iimuro S, Shinozaki T *et al* (2013) *American Journal of Infection Control* **41(12)**:1231-1235.

[PubMed]

**Efficacy of daily intake of *Lactobacillus casei* Shirota on respiratory symptoms and influenza vaccination immune response: a randomized double-blind, placebo-controlled trial in healthy elderly nursing home residents.**

Van Puyenbroeck K, Hens N, Coenen S *et al* (2012). *American Journal of Clinical Nutrition* Epub 22 March

[PubMed]

**Daily probiotic's (*Lactobacillus casei* Shirota) reduction of infection incidence in athletes.**

Gleeson M, Bishop NC, Oliveira M, Tauler P (2011) *International Journal of Sport Nutrition & Exercise Metabolism* **21**:55-64.

[Reprint available on request] [Abstract]

## Miscellaneous

**Effects of the continuous intake of *Lactobacillus casei* strain Shirota-fermented milk on risk management of long-term inpatients at health service facilities for the elderly.**

Bian L, Nagata S, Asahara T *et al* (2011) *International Journal of Probiotics and Prebiotics* **6(2)**:123-132.

[Abstract]

**Synbiotic therapy reduces the pathological Gram-negative rods caused by an increased acetic acid concentration in the gut.**

Hayakawa M, Asahara T, Ishitani T *et al* (2012) *Digestive Diseases & Sciences* **57**:2642-2649.

[PubMed]

**Yakult: a role in combating multi-drug resistant *Pseudomonas aeruginosa*?**

Thomson CH, Hassan I, Dunn K (2012) *Journal of Wound Care* **21(11)**:566-569.

[Abstract]