science for health

LcS Topic: Immune function

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

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

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Please also see LcS Topic: IBD

Healthy people: immune parameters

Probiotic modulation of dendritic cell function in influenced by ageing.
You J, Dong H, Mann ER et al (2014) *Immunobiology* **219:**138-148.
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Daily intake of *Lactobacillus casei* Shirota increases natural killer cell activity in smokers.
Reale M, Boscolo P, Bellante V *et al* (2011) *British Journal of Nutrition* **108(2):**308-314.
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Probiotic *Lactobacillus casei* Shirota supplementation does not modulate immunity in healthy men with reduced natural killer cell activity.
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The effect of 14 days supplementation with a probiotic on circulating hormonal, leukocyte, and cytokine responses to prolonged cycling in man.
Gleeson M (2008) *International Journal Probiotics & Prebiotics* **3(3):** 185. Also: Poster at 13th European College of Sport Science Congress 09-12 July, Estoril Portugal. Abstract-ID:1991.

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Takeda K & Okumura K (2007) *Journal of Nutrition* **137 (Suppl):** 791S-793S.
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Modulation of natural killer cell activity by supplementation of fermented milk containing *Lactobacillus casei* in smokers.
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Allergy

Effect of probiotic *Lactobacillus casei* L. shirota strain in patients with allergic rhinitis symptoms.
Widuri A, Suryani L (2013) Allergy 68 (suppl 98) 60.

Oral delivery of a probiotic induced changes at the nasal mucosa of seasonal allergic rhinitis subjects after local allergen challenge: A randomised clinical trial
Ivory K, Wilson AM, Sankaran P *et al* (2013) PLoS One 8(11): e78650.
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Liver disease

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Necrotising enterocolitis

Efficacy of *Bifidobacterium breve* and *Lactobacillus casei* oral supplementation on necrotizing enterocolitis in very-low-birth-weight preterm infants: a double-blind, randomized, controlled trial.
Braga TD, da Silva GA, de Lira PIC *et al* (2011) *American Journal of Clinical Nutrition* **93**:81-86.
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Mechanistic & safety studies

(for further papers see LcS topics on IBD and cancer)

Heat-killed probiotic bacteria differentially regulate colonic epithelial cell production of human b-defensin-2: dependence on inflammatory cytokines.
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Reviews

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