

# Yeast and fermentation

## Publications

### 2010

Gibson, B., Kronlöf, J. & Londesborough, J. 2010. Hiivan fysiologian ja käyttäytymisen ymmärtäminen ja hallinta erittäin korkean kantaverteen käymisissä. *Mallas ja Olut* 2:2010, 40-49.

Huuskonen, A., Markkula, T., Vidgren, V., Lima, L., Mulder, L., Geurts, W., Walsh, M. & Londesborough, J. 2010. Selection from industrial lager yeast strains of variants with improved fermentation performance in very-high-gravity worts. *Appl. Environ. Microbiol.* 76, 1563-1573. [10.1128/AEM.03153-09](https://doi.org/10.1128/AEM.03153-09)

Storgårds, E., Vidgren, V. & Londesborough, J. 2010. Panimohiivan nimi - miksi se on niin hankalaa? *Mallas ja Olut* 2:2010, 50-54.

Vidgren, V., Multanen, J.-P., Ruohonen, L. & Londesborough, J. 2010. The temperature dependence of maltose transport in ale and lager strains of brewer's yeast. *FEMS Yeast Res.* 10, 402-411. [10.1111/j.1567-1364.2010.00627.x](https://doi.org/10.1111/j.1567-1364.2010.00627.x)

### 2009

Huuskonen, A. 2009. Flocculation assays. *Yeast Flocculation, Vitality, and Viability*. Boston, MA, USA, 20-21 April 2009. Master Brewers Association of the Americas.

Vidgren, V., Huuskonen, A., Virtanen, H., Ruohonen, L. & Londesborough, J. 2009. Improved fermentation performance of a lager yeast after repair of its AGT1 maltose and maltotriose transporter genes. *Appl. Environ. Microbiol.* 75, 2333-2345. [10.1128/AEM.01558-08](https://doi.org/10.1128/AEM.01558-08)

### 2008

Guimarães, P.M.R. & Londesborough, J. 2008. The adenylate energy charge and specific fermentation rate of brewer's yeasts fermenting high- and very high-gravity worts. *Yeast* 25, 47-58. [10.1002/yea.1556](https://doi.org/10.1002/yea.1556).

Guimaraes, P.M.R., Multanen, J.-P., Domingues, L., Teixeira, J.A. & Londesborough, J. 2008. Stimulation of zero-trans rates of lactose and maltose uptake into yeasts by preincubation with hexose to increase the adenylate energy charge. *Appl. Environ. Microbiol.* 74, 3076-3084. [10.1128/AEM.00188-08](https://doi.org/10.1128/AEM.00188-08)

Sibakov, J., Storgårds, E., Kaukovirta-Norja, A., Wilhelmson, A., Virtanen, H., Pöyri, S., Tapani, K., Pajunen, E., TalviOja, H., Toivonen, A., Vanhatalo, I. & Laitila, A. 2008. Production of non-alcoholic functional beverage bases using lactic acid bacteria. 1st International Symposium for Young Scientist and Technologists in Malting, Brewing and Distilling. University College Cork, Ireland, 6-7 Nov. 2008.

### 2007

Huuskonen, A., Rautio, J., Vidgren, V. & Londesborough, J. 2007. Monitoring yeast physiology through fermentations by frequent analyses of gene expression by the TRAC method. *Proceedings of the 31st European Brewery Convention Congress*. Venice, Italy, 6-10 May 2007. Fachverlag Hans Carl, Nürnberg, 32: 298-309.

Rautio, J. 2007. Development of rapid gene expression analysis and its application to bioprocess monitoring. Espoo, VTT. 123 p. + app. 83 p. VTT Publications; 661. ISBN 978-951-38-7057-7; 978-951-38-7058-4. <http://www.vtt.fi/inf/pdf/publications/2007/P661.pdf>

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Guimarães, P.M.R., Virtanen, H. & Londesborough, J. 2006. Direct evidence that maltose transport activity is affected by the lipid composition of brewer's yeast. *J. Inst. Brew.* 112, 203-209.

Virkajärvi, I. 2006. Accelerated processing of beer. *Brewing. New Technologies*. Bamforth, C.W. (Ed.). Woodhead Publishing Limited, Cambridge, UK, 254-274.

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Dietvorst, J., Londesborough, J. & Steensma, H.Y. 2005. Maltotriose utilization in lager yeast strains: MTT1 encodes a maltotriose transporter. *Yeast* 22, 775-788. [10.1002/yea.1279](https://doi.org/10.1002/yea.1279)

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Vidgren, V., Ruohonen, L. & Londesborough, J. 2005. Characterisation and functional analysis of the *MAL* and *MPH* loci for maltose utilization in some ale and lager yeast strains. *Appl. Environ. Microbiol.* 71, 7846-7857. [10.1128/AEM.71.12.7846-7857.2005](https://doi.org/10.1128/AEM.71.12.7846-7857.2005)

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## 2002

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## 2001

Londesborough, J. 2001. Fermentation of maltotriose by brewer's and baker's yeasts. *Biotechnol. Lett.* 23, 1995-2000. [10.1023/A:1013722711620](https://doi.org/10.1023/A:1013722711620)

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