

Supplementary Table S1 - List of polysaccharide probes included in the microarray and their main composition.

Position ^a	Probe designation ^b	Predominant oligosaccharide sequence or monosaccharide composition ^c
BSY		
1	1M KOH	Carbohydrates (35%): Glc (58%), Man (42%) 4-Glc (29%), 6-Glc (2%), 3-Glc (0.2%)
2	4M KOH	Carbohydrates (44%): Man (67%), Glc (33%) 4-Glc (22%), 6-Glc (3%), 3-Glc (0.3%)
3	180 SWE	Carbohydrates (33%): Man (68%), Glc (32%) 3-Glc (16%), 4-Glc (5%), 6-Glc (2%)
4	200 SWE	Carbohydrates (23%): Man (54%), Glc (46%) 3-Glc (27%), 4-Glc (7%), 6-Glc (2%)
Glucans		
5	NSG- β -glucan	Linear β 1,3-Glc backbone with occasional monoglucosyl β 1,6-Glc branches
6	Lichenan	Mixed-linked β 1,3/1,4-Glc; 1:2 linkage ratio
7	Barley	Mixed-linked β 1,3/1,4-Glc; 1:3-4 linkage ratio; contains Ara (2%), Xyl (0.2%)
8	Oat	Mixed-linked β 1,3/1,4-Glc
9	PGG- β -glucan	Linear β 1,3-Glc backbone with occasional monoglucosyl β 1,6-Glc branches
Mannans		
10	Mannoprotein (MP1)	Yeast cell wall; sequential extraction 4M KOH Ara (1%), Xyl (1%), Man (85%), Glc (13%)
11	Mannoprotein (MP2)	Yeast cell wall; sequential extraction 8M KOH Ara (1%), Xyl (0%), Man (65%), Glc (35%)
12	Mannan (<i>S. cerevisiae</i>)	α 1,6-Man backbone with oligomeric α 1,2-, α 1,3-Man branches

^aPosition of the polysaccharide probes in the charts.

^bYeast fractions (#1-4) are solubilized material after *in vitro* digestion of brewer's spent yeast microcapsules resultant from alkaline extractions (1M KOH and 4M KOH) and subcritical water extractions (SWE) using microwave at different temperatures (180 SWE and 200 SWE). The source of glucans are as follows: NSG- β -glucan (#5) from *S. cerevisiae*, Biothera; Lichenan (#6) from Icelandic moss, Megazyme (P-LICHN); Barley (#7) from barley flour, Megazyme (P-BGBL); Oat (#8) from oat flour, Megazyme (P-BGOM), PGG from *S. cerevisiae*, Biothera. These were previously described (Palma *et al.*, 2015). Mannoproteins MP1 (#10) and MP2 (#11) were isolated from yeast cell walls and were previously described (Pinto, Coelho, Nunes, Brandão, & Coimbra, 2015); Mannan from *S. cerevisiae* (#12) was from Sigma.

^cFor the BSYIM fractions and mannoproteins MP1 and MP2, the main sugars (mol %) and glycosidic linkages (relative molar ratio, %) identified by sugar and methylation analysis are shown.

Abbreviations: Ara, arabinose; BSYIM, brewer's spent yeast insoluble material; Glc, glucose, Man, mannose, NSG, neutral soluble glucan; PGG, poly-(1,6)-D-glucopyranosyl-(1,3)-D-glucopyranose; Xyl, xylose.

Supplementary References:

- Palma, A. S., Liu, Y., Zhang, H., Zhang, Y., McCleary, B. V., Yu, G., Huang, Q., Guidolin, L. S., Ciocchini, A. E., Torosantucci, A., Wang, D., Carvalho, A. L., Fontes, C. M., Mulloy, B., Childs, R. A., Feizi, T., & Chai, W. (2015). Unravelling glucan recognition systems by glycome microarrays using the designer approach and mass spectrometry. *Mol Cell Proteomics*, 14(4), 974-988.
- Pinto, M., Coelho, E., Nunes, A., Brandão, T., & Coimbra, M. A. (2015). Valuation of brewers spent yeast polysaccharides: a structural characterization approach. *Carbohydr Polym*, 116, 215-222.