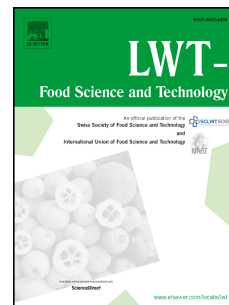


Accepted Manuscript

Probiotic characteristics in *Saccharomyces cerevisiae* strains: Properties for application in food industries

Pilar Fernandez-Pacheco, María Arévalo-Villena, Antonio Bevilacqua, Maria Rosaria Corbo, Ana Briones Pérez



PII: S0023-6438(18)30583-8

DOI: [10.1016/j.lwt.2018.07.007](https://doi.org/10.1016/j.lwt.2018.07.007)

Reference: YFSTL 7250

To appear in: *LWT - Food Science and Technology*

Received Date: 21 February 2018

Revised Date: 5 July 2018

Accepted Date: 6 July 2018

Please cite this article as: Fernandez-Pacheco, P., Arévalo-Villena, Marí., Bevilacqua, A., Corbo, M.R., Pérez, A.B., Probiotic characteristics in *Saccharomyces cerevisiae* strains: Properties for application in food industries, *LWT - Food Science and Technology* (2018), doi: 10.1016/j.lwt.2018.07.007.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Probiotic characteristics in *Saccharomyces cerevisiae* Strains: Properties for Application in Food Industries

Pilar Fernandez-Pacheco¹, María Arévalo-Villena^{1*}, Antonio Bevilacqua², Maria Rosaria Corbo², Ana Briones Pérez¹

1 Food Science and Technology Department.
Av. Camilo José Cela S/N
Edificio Marie Curie, 13071 Ciudad Real, Spain
Castilla-La Mancha University

2 Department of the Science of Agriculture, Food and Environment (SAFE), University of Foggia
Via Napoli n° 25 – 71122 Foggia, Italy

*Corresponding author: María Arévalo Villena
Tel: 0034 926 295300 (3423)
Email: Maria.Arevalo@uclm.es

ABSTRACT

In this work, the probiotic or health-beneficial potential of 142 *Saccharomyces* strains isolated from food ecosystems belonging to the collection of the Yeast Biotechnology Laboratory (University of Castilla-La Mancha) have been studied.

They were screened for their ability to resist and grow when exposed to simulated *in vitro* digestion conditions. As a result, 44 strains showed good kinetic properties and were chosen through k-means and one-way ANOVA and used to assess other important probiotic characteristics. For the second step, a Principal Component Analysis was run with the results from auto-aggregation and hydrophobicity at 30°C assays, antibiotic resistance and antimicrobial activity, and 10 yeasts were then selected in order to study their biofilm formation capability, auto-aggregation and

Download English Version:

<https://daneshyari.com/en/article/8890156>

Download Persian Version:

<https://daneshyari.com/article/8890156>

[Daneshyari.com](https://daneshyari.com)