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Prosopis alba exudate gum as excipient for improving fish oil stability in alginate-chitosan beads

Franco Emanuel Vasile, Ana María Romero, María Alicia Judis, María Florencia Mazzobre

PII: S0308-8146(15)00963-2

DOI: http://dx.doi.org/10.1016/j.foodchem.2015.06.071

Reference: FOCH 17753

To appear in: Food Chemistry

Received Date: 8 January 2015 Revised Date: 8 June 2015 Accepted Date: 20 June 2015



Please cite this article as: Vasile, F.E., Romero, A.M., Judis, M.A., Mazzobre, M.F., *Prosopis alba* exudate gum as excipient for improving fish oil stability in alginate-chitosan beads, *Food Chemistry* (2015), doi: http://dx.doi.org/10.1016/j.foodchem.2015.06.071

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- 4 Franco Emanuel Vasile^{a,c,*}, Ana María Romero^a, María Alicia Judis^a, María Florencia
- 5 Mazzobre^{b,c}

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- 7 a Laboratorio de Industrias Alimentarias II. Universidad Nacional del Chaco Austral.
- 8 Comandante Fernández 755, Presidencia Roque Sáenz Peña (3700) Chaco, Argentina.
- 9 b Laboratorio de Conservación de Biomoléculas, Departamento de Industrias, Facultad de
- 10 Ciencias Exactas y Naturales, Universidad de Buenos Aires, Ciudad Universitaria -
- 11 Pabellón Industrias (1428) Buenos Aires, Argentina.
- ^c Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET). Argentina.

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- ^{*}Corresponding author. Tel.: +54 364 4420137 int. 114. Fax: +54 364 4420137
- 15 E-mail address: francovasile@hotmail.com (F. E. Vasile).

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Abstract

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The aim of the present work was to employ an exudate gum obtained from a South American wild tree (*Prosopis alba*), as wall material component to enhance the oxidative stability of fish oil encapsulated in alginate-chitosan beads. For this purpose, beads were vacuum-dried and stored under controlled conditions. Oxidation products, fatty acid profiles and lipid health indices were measured during storage. Alginate-chitosan interactions and the effect of gum were manifested in the FT-IR spectra. The inclusion of the gum in the gelation media allowed decreasing the oxidative damage during storage in comparison to the free oil and alginate-chitosan beads. The gum also improved wall

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