

Accepted Manuscript

Title: Biopolymer-prebiotic carbohydrate blends and their effects on the retention of bioactive compounds and maintenance of antioxidant activity

Author: Eric Keven Silva Giovani L. Zabot Cinthia B.B. Cazarin Mário R. Maróstica Jr. M. Angela A. Meireles



PII: S0144-8617(16)30110-2
DOI: <http://dx.doi.org/doi:10.1016/j.carbpol.2016.02.045>
Reference: CARP 10800

To appear in:

Received date: 13-11-2015
Revised date: 28-1-2016
Accepted date: 15-2-2016

Please cite this article as: Silva, Eric Keven., Zabot, Giovani L., Cazarin, Cinthia BB., Maróstica, Mário R., & Meireles, M. Angela A., Biopolymer-prebiotic carbohydrate blends and their effects on the retention of bioactive compounds and maintenance of antioxidant activity. *Carbohydrate Polymers* <http://dx.doi.org/10.1016/j.carbpol.2016.02.045>

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.

Biopolymer-prebiotic carbohydrate blends and their effects on the retention of bioactive compounds and maintenance of antioxidant activity

Eric Keven Silva, Giovani L. Zobot, Cinthia B. B. Cazarin, Mário

R. Maróstica Jr, M. Angela A. Meireles*

LASEFI/DEA/FEA (School of Food Engineering)/UNICAMP (University of Campinas);

Rua Monteiro Lobato, 80; Campinas, SP; CEP: 13083-862; Brazil

*E-mail address: maameireles@gmail.com (M. A. A. Meireles)

Tel.: +55-19-3788-4033; fax: +55-19-3788-4027

HIGHLIGHTS

- We evaluated the use of inulin as encapsulating matrix of lipophilic bioactive compounds;
- We studied blends of inulin with modified starch, whey protein isolate and gum acacia;
- Whey protein isolate + inulin blend yielded the highest encapsulation efficiency;
- Encapsulation of annatto seed oil maintained geranylgeraniol composition;
- Blends with inulin were efficient for maintaining antioxidant activity (ORAC and DPPH);

Download English Version:

<https://daneshyari.com/en/article/7785931>

Download Persian Version:

<https://daneshyari.com/article/7785931>

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