ONLINE ISSN : 1881-3984
PRINT ISSN : 1344-6606

Food Science and Technology Research
Vol. 7 (2001) , No. 4 pp.300-302

[PDF (123K)] [References]

Preparation of W/O/W Emulsions at Low Emulsifier Concentrations

Yuri HASEGAWA[1)], Hanaho IMAOKA[1)], Shuji ADACHI[1)] and Ryuichi MATSUNO[1)]

1) Division of Food Science and Biotechnology, Graduate School of Agriculture, Kyoto University

(Received: March 7, 2001)
(Accepted: August 1, 2001)

W/O/W emulsions were prepared using low concentrations of emulsifiers in the oily and outer aqueous phases, and the formation of the emulsions were evaluated by the encapsulation efficiency of a fluorescent marker in the inner aqueous phase. W/O/W emulsions were produced even at low emulsifier concentrations, although the standard deviation of the encapsulation efficiency immediately after preparation became larger as the emulsifier concentration decreased. Long-term stability of the emulsions with no emulsifier was unsatisfactory, although emulsions with a lipophilic emulsifier only in the oily phase were stable for 30 days with a decrease in the encapsulation efficiency of less than around 5%. Emulsifier species also significantly affected the formation of W/O/W emulsions.

Keywords: W/O/W emulsion, low emulsifier concentration, encapsulation efficiency

[PDF (123K)] [References]

Download Meta of Article[Help]
RIS
BibTeX

To cite this article:

Preparation of W/O/W Emulsions at Low Emulsifier Concentrations Yuri HASEGAWA, Hanaho IMAOKA, Shuji ADACHI and Ryuichi MATSUNO, *FSTR*. Vol. **7**, 300-302. (2001) .

doi:10.3136/fstr.7.300
JOI JST.JSTAGE/fstr/7.300