

[Available Issues](#) | [Japanese](#)
[>> Publisher Site](#)

 Author: [ADVANCED](#) | Volume Page
 Keyword: |

[TOP](#) > [Available Issues](#) > [Table of Contents](#) > Abstract

ONLINE ISSN : 1881-3984

PRINT ISSN : 1344-6606

Food Science and Technology Research

Vol. 9 (2003) , No. 2 pp.142-147


[\[PDF \(353K\)\]](#) [\[References\]](#)

Interfacial and Emulsifying Properties of Diacylglycerol

[Atsuko SHIMADA](#)¹⁾ and [Kyoko OHASHI](#)¹⁾
1) Graduate School of Human Life Science, Showa Womens University

(Received: May 27, 2002)

(Accepted: January 29, 2003)

The interfacial properties and emulsifying properties of diacylglycerol (DAG) were examined for comparison with those of triacylglycerol (TAG). The fatty acid composition and other properties of DAG were adjusted to approximately the same levels as those of TAG. The interfacial tension of DAG was about half that of TAG. When DAG was mixed with TAG, the interfacial tension of the mixture decreased in proportion to the increasing concentration of DAG and showed no breaking point. Mixtures of DAG and water were homogenized with varying oil-water proportions, with and without salt, and with and without an emulsifier. DAG was more easily emulsified than TAG and tended to become a water/oil (w/o) emulsion. The addition of salt markedly increased the stability of the DAG emulsion. DAG mixtures containing 0.25% of an emulsifier having an HLB value of between 4.5 and 13 formed w/o emulsions, while o/w emulsions were formed with TAG under the same conditions.

Keywords: [interfacial property](#), [emulsifying property](#), [diacylglycerol](#), [salt](#), [emulsifier](#)

[\[PDF \(353K\)\]](#) [\[References\]](#)

 Download Meta of Article [\[Help\]](#)
[RIS](#)
[BibTeX](#)

To cite this article:

Interfacial and Emulsifying Properties of Diacylglycerol Atsuko SHIMADA and Kyoko OHASHI, *FSTR*. Vol. **9**, 142-147. (2003) .

doi:10.3136/fstr.9.142

JOI JST.JSTAGE/fstr/9.142

Copyright (c) 2007 by Japanese Society for Food Science and Technology



[Japan Science and Technology Information Aggregator, Electronic](#)

