



Agricultural Journals

Czech Journal of

FOOD SCIENCES

[home](#) [page](#) [about us](#) [contact](#)

[us](#)

Table of Contents

IN PRESS

CJFS 2014

CJFS 2013

CJFS 2012

CJFS 2011

CJFS 2010

CJFS 2009

CJFS 2008

CJFS 2007

CJFS 2006

CJFS 2005

CJFS 2004

CJFS 2003

CJFS 2002

CJFS 2001

CJFS Home

Editorial Board

For Authors

- **Authors Declaration**
- **Instruction to Authors**
- **Guide for Authors**
- **Copyright Statement**
- **Submission**

For Reviewers

- **Guide for Reviewers**
- **Reviewers Login**

Subscription

Czech J. Food Sci.

**I. Borkovcová, E.
Janoušková, M.**

**Diacková, B. Janstová,
L. Vorlová:
Determination of
Sterols in Dairy
Products and
Vegetable Fats by
HPLC and GC Methods**

Czech J. Food Sci., 27 (2009): S217-
S219

Cholesterol concentrations in goat milk, goat milk cheeses, ewe' s milk, ewes milk cheeses, dairy bioproducts, and concentrations of cholesterol, stigmasterol and sitosterol in butter, butter with added vegetable fats and margarines were evaluated by RP HPLC method. Parallel analyses by capillary GC were performed. Prior to the final chromatographic analyses the saponification step was used, followed by the extraction of the unsaponifiable residue into *n*-hexane. Parameters of RP HPLC method were compared with parameters of GC determination. The detection limits (LOD) determined on the bases of blank

samples analysis were 5.2 mg/kg for cholesterol, 4.8 mg/kg for stigmasterol and 14.7 mg/kg for sitosterol. Recovery ranged between 80– 92%, repeatability expressed as RSD of 12 parallel samples measurements was 4.2– 6.8%. Accuracy tested on the SRM 1845 Whole Egg Powder (NIST) was 95.7%.

Keywords:

cholesterol; sterols; milk; dairy products; RP HPLC; GC

[[fulltext](#)]

© 2011 Czech Academy of Agricultural Sciences

XHTML11 VALID

OSS VALID