

HOME HELP FEEDBACK SUBSCRIPTIONS ARCHIVE SEARCH TABLE OF CONTENTS

<i>QUICK</i> SEARCH:		[advanced]
Auth	nor: Ke	eyword(s):
Go		
Year:	Vol:	Page:

Journal of Dairy Science Vol. 76 No. 12 3629-3638 © 1993 by American Dairy Science Association ®

Mozzarella Cheese: Impact of Milling pH on Chemical Composition and Proteolysis

J. Joseph Yun 1 , David M. Barbano 1 , and Paul S. Kindstedt 1

 $^{
m 1}$ Northeast Dairy Foods Research Center Department of Food Science Cornell University, Ithaca, NY 14853

The objective of this study was to determine the impact of milling pH on initial chemical composition and proteolytic changes in Mozzarella cheese during refrigerated storage. A new pilot-scale Mozzarella cheese-making method without brine salting was developed to produce cheese with homogeneous chemical composition within and among vats. Three milling pH (5.10, 5.25, and 5.40) were used to make three vats of cheese in 1 d. Cheese making was replicated on 3 d, on which the order of cheese making for each pH was selected so that effects of day and order of cheese making were blocks in a 3 x 3 Latin square design.

Milling pH affected cheese pH and titratable acidity. However, the

initial chemical composition (i.e., moisture, fat, and protein) and amounts of nitrogen soluble in 12% TCA and in pH 4.6 acetate buffer were unaffected by differences in milling pH. During 50 d of refrigerated storage, differences in cheese pH among treatments were unchanged, the amount of nitrogen soluble in TCA and in acetate buffer increased, the amount of residual intact α_s -casein decreased, and the amount of intact β -casein remained constant.

Proteolysis during refrigerated storage was unaffected by differences in milling pH.

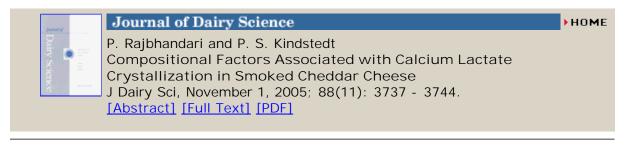
Key Words: Mozzarella cheese • milling pH • composition • proteolysis

Submitted on September 25, 1992 Accepted on August 3, 1993

This Article Full Text (PDF) Alert me when this article is cited Alert me if a correction is posted Services Similar articles in this journal Alert me to new issues of the journal Download to citation manager C Get Permissions Citing Articles Liting Articles via HighWire Citing Articles via Google Scholar Articles by Yun, J. J. Articles by Kindstedt, P. S. Search for Related Content PubMed Articles by Yun, J. J.

Articles by Kindstedt, P. S.

This article has been cited by other articles:



Day Science

Journal of Dairy Science

▶HOME

E. P. Feeney, T. P. Guinee, and P. F. Fox Effect of pH and Calcium Concentration on Proteolysis in Mozzarella Cheese

J Dairy Sci, July 1, 2002; 85(7): 1646 - 1654.

[Abstract] [Full Text] [PDF]

HOME HELP FEEDBACK SUBSCRIPTIONS ARCHIVE SEARCH TABLE OF CONTENTS

Copyright © 1993 by the American Dairy Science Association ®.