UNIVERSITY OF LJUBLJANA
BIOTECHNICAL FACULTY
DEPARTMENT OF ANIMAL SCIENCE
CHAIR OF DAIRY SCIENCE

MILK ANALYSIS

PRACTICUM NOTES

NAME

_____

Domžale, 8 - 9 May, 2018

MILK DENSITY

1. Measurement

Measured density: _____ g/ml

Measured temperature: _____ °C

2. Result

Calculated milk density at 20 °C:_____ g/ml

NOTES _____

_____

_____

FAT CONTENT IN MILK

1. Measurement / result

Fat content: _____ %

NOTES _____

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_____

Assist. prof. dr. Andreja Čanžek Majhenič
UL, Biotechnical faculty, Dept. of Animal Science, Chair of Dairy Science

MILK FRESHNESS

1. TITRATABLE ACIDITY - Soxhlet Henkel (SH) method

Titration with 0,25 M NaOH

1.1 Measurement

Amount of 0,25 M NaOH used: _____ml

1.2 Result

Calculated titratable acidity: AC = × 2 = _____ SH

NOTES _____

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2. ALCOHOL TEST

NOTES _____

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3. ALIZAROL TEST

NOTES _____

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PROTEIN CONTENT IN MILK

Formaldehyde titration (method described by Schulz)

1. Measurement

Amount of 1/7 M NaOH used:_____ ml

1.2 Result

Calculated % of protein = × = %

NOTES _____

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HEAT TREATMENT OF MILK

1. PHOSPHATASE TEST

NOTES _____

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_____

_____

2. PEROXIDASE TEST

NOTES _____

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MILK SOLIDS

CALCULATION BY USING FLEISHMANN EQUATION

$$\% \text{ solids} = 1{,}2 \times \qquad + 2{,}665 \times \frac{\qquad \times 100 \quad - 100}{\qquad\qquad\qquad\qquad} = \qquad \%$$

1.1 CALCULATION OF **FAT-IN-SOLIDS** (FiS)

$$\text{FiS} = \frac{\qquad\qquad\qquad}{\qquad\qquad\qquad} \times 100 \quad = \qquad\qquad \%$$

NOTES _____

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1.2 CALCULATION OF **SOLIDS-NON-FAT** (SNF)

SNF = % solids - % fat = %

NOTES _____

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PRODUCTION OF FERMENTED MILK PRODUCT – natural cup set yoghurt

Describe the process of cup set yoghurt production!

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