



A Report on Consultancy Activity

Microbiological Analysis of Milk and Milk Products

1. Introduction:

A consultancy Activity had been taken up by the Dept. of Microbiology, Asutosh College, regarding the Microbiological Testing of Milk and milk products as dahi and paneer, of, Marti Mission 'O' Mandir Seva Trust, Shree Shree Adya Mandir, A-9/155, Kalyani, Nadia-741235.

A team of students of this Dept., under the guidance of Dr. Pranab Kumar Das, Asst. Professor of Microbiology, performed the analysis and detailed report is provided to the Ashram.

DEPARTMENT OF MICROBIOLOGY
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2. Letter by the Ashram, requesting analysis



MATRI MISSION 'O' MANDIR SEVA TRUST

Shree Shree Adya Mandir

A-9/155, Kalyani, Nadia-741235, W.B.

Ph.: 033 2582 6679 / 9831881090 E-mail : matrimission@gmail.com

To,
The Vice Principal,
Asutosh College,
92, S.P. Mukherjee Road,
Kolkata 26.

10th Mar 2022

Kind Attention to The Head, Dept. of Microbiology.

Sub.: Request for testing Milk and Milk Products.

Dear Sir,

Matri Mission 'O' Mandir Seva Trust is a Sannyasi concern engaged in different religious and social activities performing social responsibilities amid realization of the Almighty.

We have a Dairy Department where pure and nutritious milk and milk products like Ghee and Paneer is prepared and distributed from the Mission. We are pleased to know that your esteemed department will render assistance in enhancing the production and determining the nutritious values of these products.

This will be extremely beneficial for both the society and the Mission.

Thanking you,

Sincerely yours,
President

Swami Sarveswarananda Puri

Swami Sarveswarananda Puri



3. Analysis Report

3.1 Date of sample collection: 09 April 2022

3.2 Date of report: 18 April 2022

Sl No.	Name of Sample	Microbiological Parameters	Test Procedure followed	Observation	FSSAI Limits	Result
1	Raw milk	Methylene blue reduction test (MBRT)	IS : 1479, Part 1	Did not decolorize	Should not decolorize in 5 hr. *	Complies
2		<i>E coli</i>	IS: 5887, Part 1	Absent/0.1 ml	Absent / 0.1 ml *	Complies
3		<i>Salmonella</i>	IS: 5887, Part 3	Absent/25 ml	Absent / 25 ml *	Complies
4		Aerobic Plate Count	IS: 5402	1.26X10 ⁸ cfu/ml	30X10 ³ to 50X10 ³ cfu/ml *	----
5	Paneer	Aerobic Plate Count	IS: 5402	16X10 ⁴ cfu/gm	15X10 ⁴ to 35X10 ⁴ cfu/gm	Complies
6		Yeast and mold count	IS: 5403	65 cfu/gm	50-150 cfu/gm	Complies
7		<i>E coli</i>	IS: 5887, Part 1	Absent/0.1 gm	Absent / 0.1 gm	Complies
8		<i>Salmonella</i>	IS: 5887, Part 3	Absent/gm	Absent/gm	Complies
9	Dahi	Yeast and mold count	IS: 5403	90 cfu/gm	50-100 cfu/gm	Complies
10		<i>E coli</i>	IS: 5887, Part 1	Absent/gm	Absent/gm	Complies
11		<i>Salmonella</i>	IS: 5887, Part 3	Absent/25 gm	Absent/25 gm	Complies

* These FSSAI Limits are for Pasteurized Milk/Flavored Milk only

Priyadarshini Mallick

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3

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4. Pictures of Some Test

4.1 Salmonella Enrichment in BSCP



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4.2 *E coli* Culture on Mac Conkey agar Plates



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4.3 Salmonella Enrichment in RV Medium





5. Students Participated in the Analysis

5.1	Subhradeep Ghosh	Sem 4	B.Sc. Microbiology (Hons.)
5.2	Sayan Mondal	Sem 4	B.Sc. Microbiology (Hons.)
5.3	Suhani Gupta	Sem 4	B.Sc. Microbiology (Hons.)
5.4	Biswarup Saha	Sem 4	B.Sc. Microbiology (Hons.)

Report Prepared by:

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18/4/22