

VIDYASAGAR UNIVERSITY

A Project Work
On

*A Comparative microbiological study on kitchen
utensils between rural and urban kitchen*

This project work submitted for the partial fulfillment for the award of degree
of B.Sc (Hons) from Vidyasagar University



Submitted by-
Sumitra Das

Roll: 31217129; No:0114

En. No.:1290857 of Session: 2016-17

Dept. of Nutrition

Mugberia Gangadhar Mahavidyalaya

PO-Bhupatinagar; Dist Purba Medinipur

West Bengal; Pin-721425

Supervised by -

Dr. Apurba Giri

Assistant Professor and Head

Dept. of Nutrition

Mugberia Gangadhar Mahavidyalaya

Dept. of Nutrition
Mugberia Gangadhar Mahavidyalaya



Head
Dept. of Nutrition
Mugberia Gangadhar Mahavidyalaya

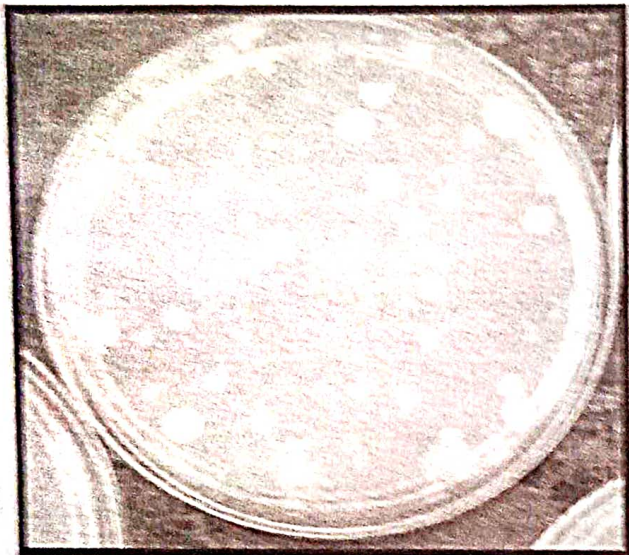
VIDYASAGAR UNIVERSITY

A Project Work

On

A Comparative microbiological study on kitchen utensils between rural and urban kitchen

This project work submitted for the partial fulfillment for the award of degree of B.Sc (Hons) from Vidyasagar University



Submitted by-
Sumitra Das

Roll: 31217129; No:0114

Regn. No.:1290857 of Session: 2016-17

Dept. of Nutrition

Mugberia Gangadhar Mahavidyalaya

Bhupatinagar; Dist Purba Medinipur

West Bengal; Pin-721425

Supervised by -

Dr. Apurba Giri

Assistant Professor and Head

Dept. of Nutrition

Mugberia Gangadhar Mahavidyalaya

Dept. of Nutrition
Mugberia Gangadhar Mahavidyalaya

Certificate

Mugberia Gangadhar Mahavidyalaya

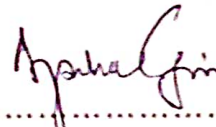
PO-Bhupatinagar, DistPurbaMedinipur
West Bengal; Pin-721425
(Affiliated to Vidyasagar University)

TO WHOM IT MAY CONCERN

This is to certify that Sumitra Das(Roll:31217129; No:0114; Regn No:1290857 of Session 2016-2017) a student of B.Sc. Part -III , Dept. of Nutrition, under Vidyasagar University, PaschimMedinipur, has completed her project work under my guidance on the topics 'A Comparative microbiological study on kitchen utensils between rural and urban kitchen' for partial fulfillment for the award of degree of B.Sc. from Vidyasagar University.

I am satisfied for her performance. She is energetic and up to date in her work. I wish success in her life.

Date: 20.02.19



.....
Dr. Apurba Giri
Assistant Professor and Head
Dept. of Nutrition
Mugberia Gangadhar Mahavidyalaya

ACKNOWLEDGEMENT

First and foremost, I would like to pay my obeisance to God almighty for always bestowing me with his blessings without which I could not have achieved anything that I have today.

I express my deep sense of gratitude to Dr. Swapan Kumar Misra, Principal, Mugberia Gangadhar Mahavidyalaya, for providing necessary facilities to carry out the present investigation.

The guidance of one's teachers is of paramount importance in his/her academic life. In this regard my deeply indebted to Dr. Apurba Giri, Assistance professor and Head of Dept. of Nutrition, Mugberia Gangadhar Mahavidyalaya, for his valuable advice and guidance.

I am really obliged to other faculty members of the Dept. of Nutrition Ms. Moumita Samanta, Ms. Keya Dashi, Prof. Chandan Khanra , Ms. Pranati Bera and Ms. Rikta Jana for their valuable suggestion and lab attendant Mr. Prabal Das for his assistance.

Vocabulary finds no appropriateness to express my heartfelt love and thanks from the very core of my heart to my classmates and juniors for their constant encouragement and help throughout the study.

Sumitra Das
.....

Sumitra Das

Date:..20.02.19.

ABSTRACT

In the present study rural and urban kitchen utensils were compared on hygienic condition with respect of microbial quality. The sample of large bowel, small bowel, table spoon, tea spoon, plate, knife/banti were collected in the area of rural and urban kitchen and the total plate count, coliform, yeast & mold count were evaluated. The study showed that there was no significant ($P>0.05$) difference of large bowel, small bowel, table spoon in the kitchen between rural and urban kitchen on all microbial quality. But there was significant difference ($P<0.05$) of tea spoon between rural and urban kitchen on total plate count, coliform count and yeast and mold count. In case of plate & knife/banti there was significant ($P<0.05$) difference on SPC count but no significant ($P>0.05$) difference was found yeast and mould count and coliform count in between rural and urban kitchen.

CONTENT

SL. NO.	SUBJECT	PAGE NO.
1.	Introduction	1 - 2
2.	Review of Literature	3 - 9
3.	Aims & Objective	10
4.	Materials & Methods	11-13
5.	Results & Discussion	14-19
6.	Conclusion	20
7.	References	21- 26



Plate1: Before conducting the project work a seminar regarding plan of work was presented by the student in front of faculty members and students of Dept. of Nutrition, Mugberia Gangadhar Mahavidyalaya

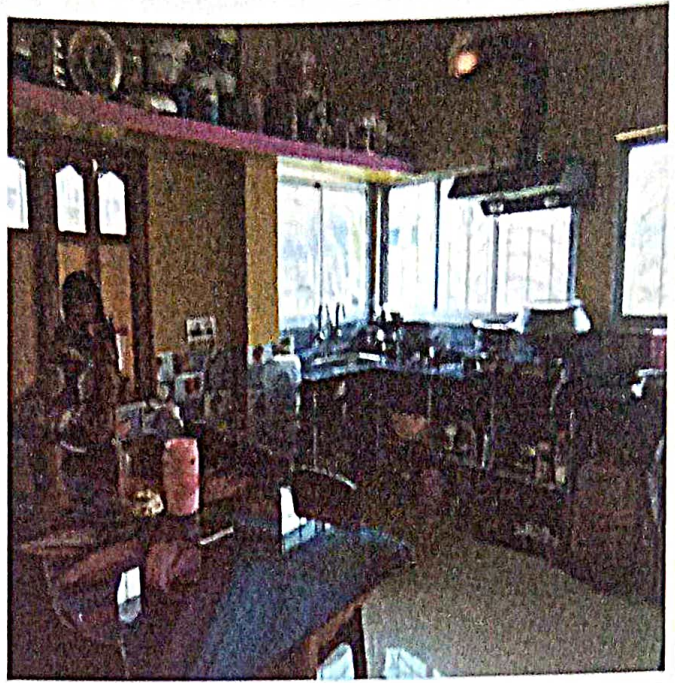
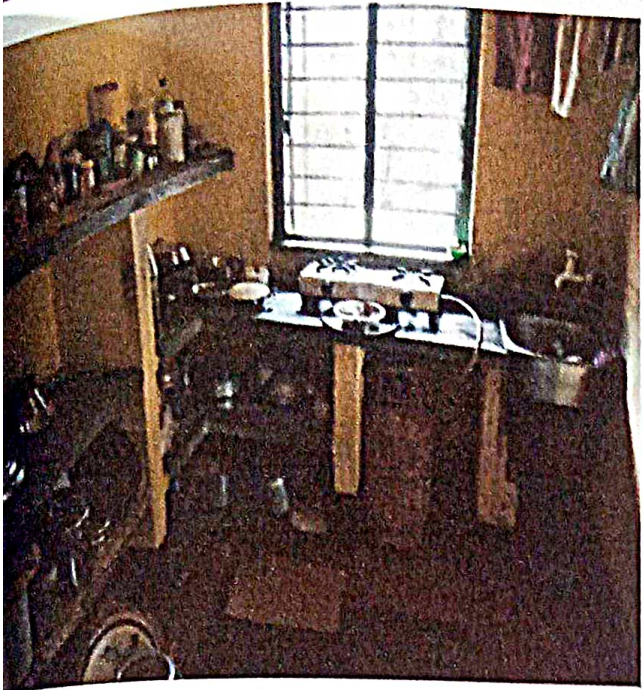


Plate2: Some rural kitchens from which the samples were collected.

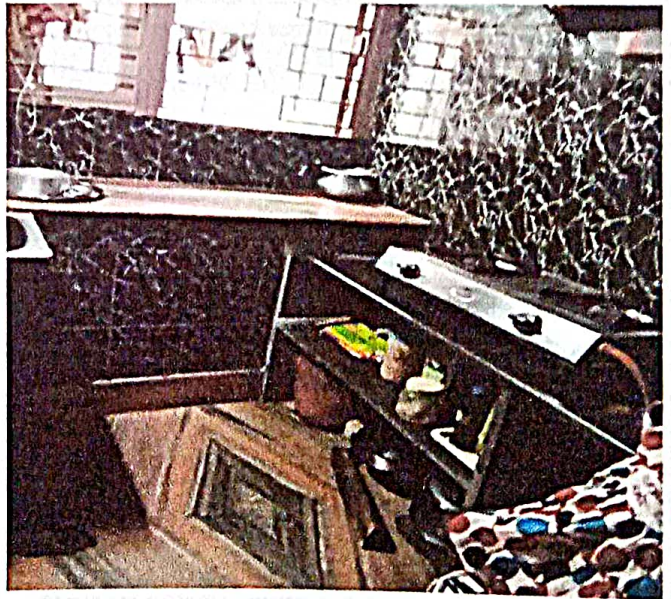
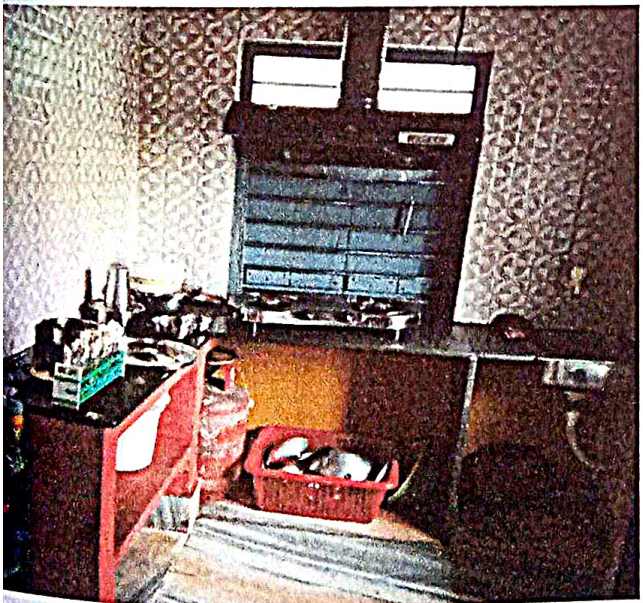
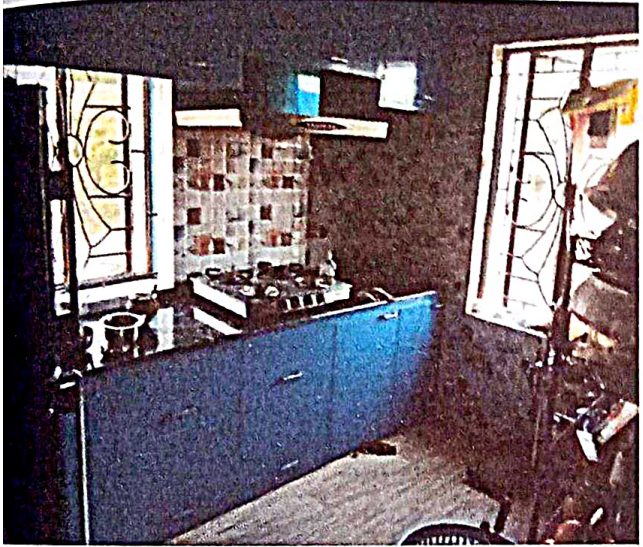


Plate 3: Some urban kitchens from which the samples were collected

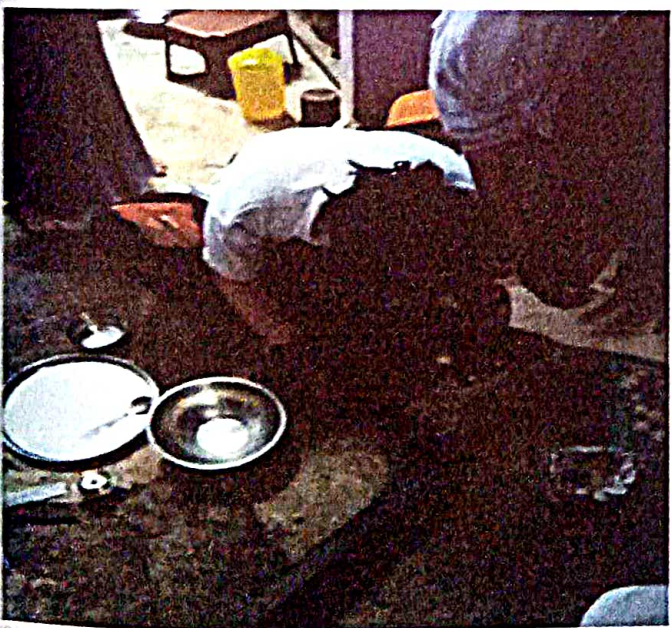
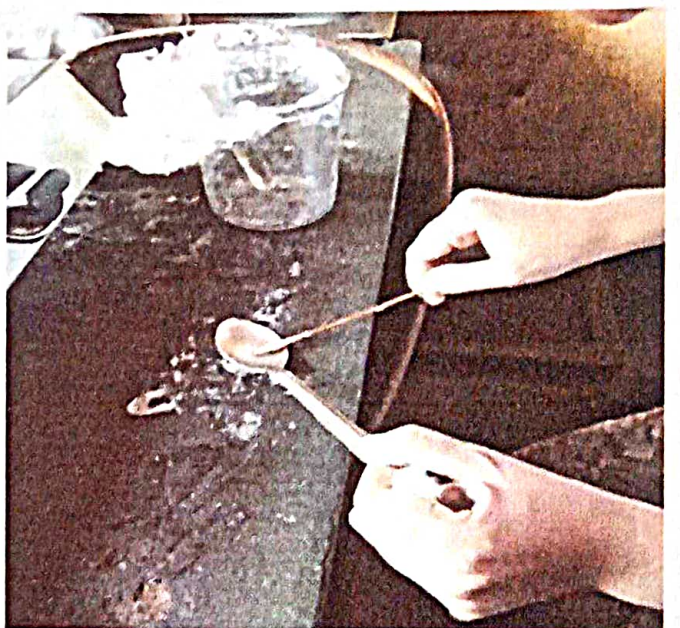
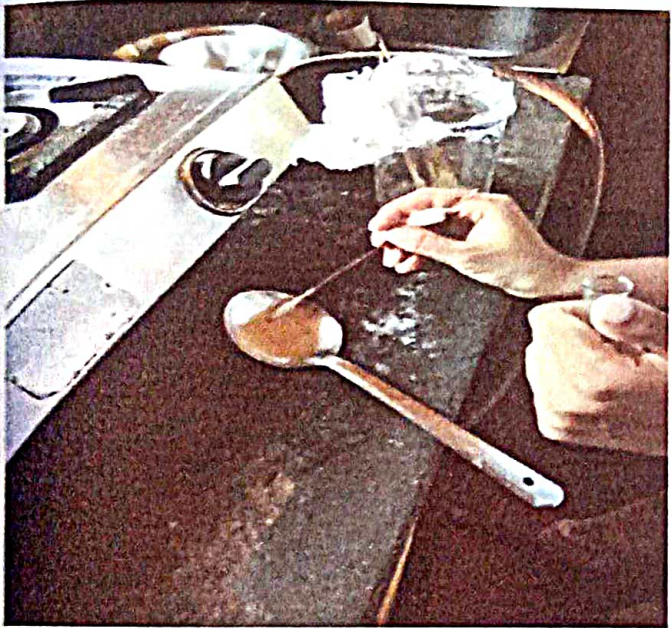


Plate4 : Different activities during the survey of sample collection in rural and urban kitchen.



Plate 5: Group photo during survey



Plate6: Different activities during the making of microbial media and preparation of physiological solution.



Plate7: Some activities during plating.

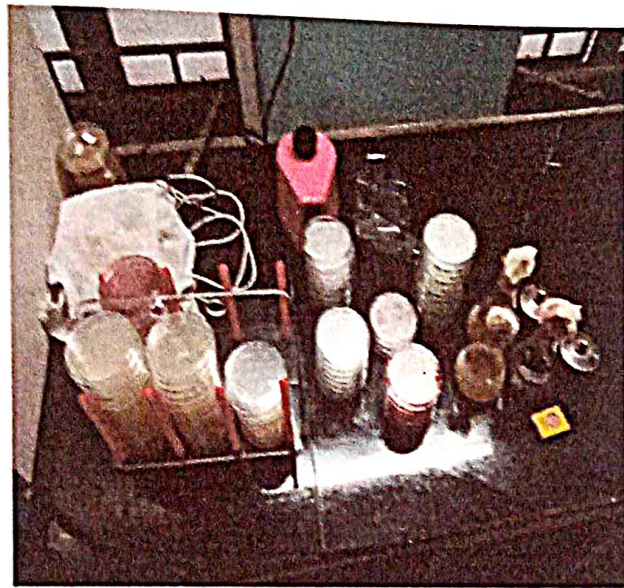
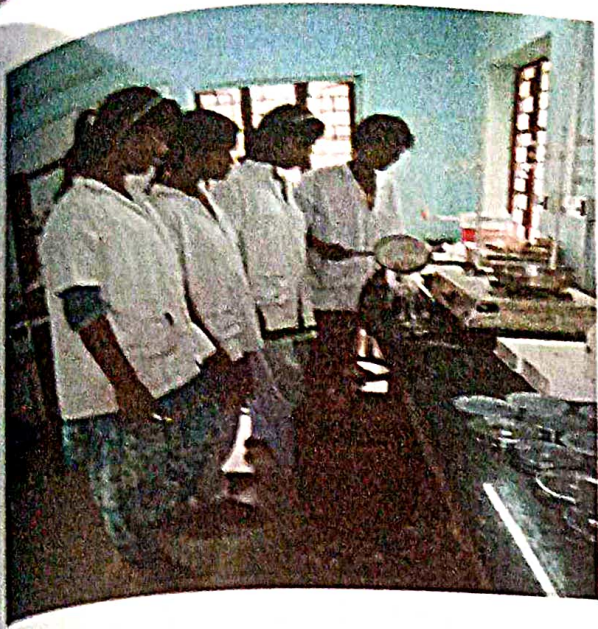


Plate8: Some activities during plating.

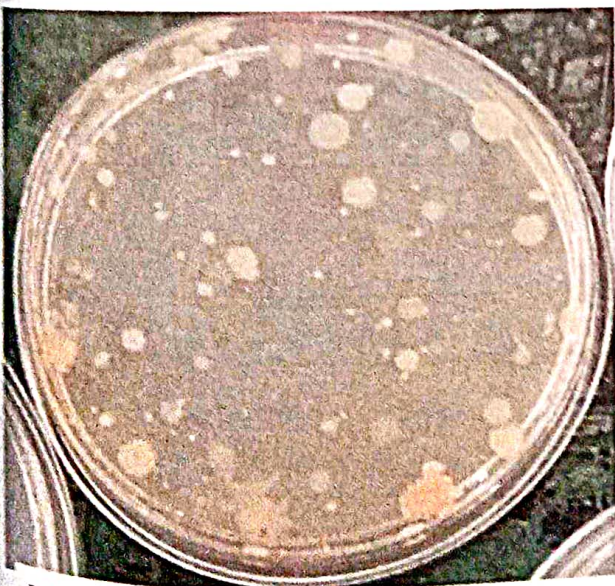


Plate 9: Plate counting