## VIDYASAGAR UNIVERSITY

A Project Work

A comparative microbiological study on working surface, oven, water tap, sink & refrigerator between rural & urban kitchen

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





### Submitted by

Roll- 31217129 No-0097

Regn. No. - 32907129 of Session: 2016-17

Dept. of Nutrition: Mugberia Gangadhar Mahavidyalaya

PO-Bhupatinagar; Dist Purba Medinipur

West Bengal; Pin-721425

Supervised by -

Mugberia Gangadhar Mahayidyalaya

Head Dept. of Nutrition Assistant Professor and Head, Mughana Gangadhar Mahavidyalaya

Dent of Nurring Dept. of Nutrition

Dept. of Nutrition

Dept. of Nutrition

Dept. of Nutrition

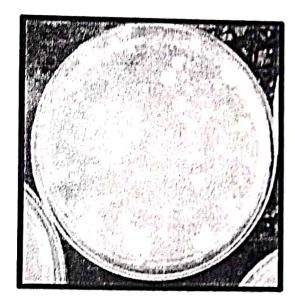


# WIDYASAGAR UNIVERSITY

A Project Work.

A comparative microbiological study on working surface, oven, water tap, sink & refrigerator between rural & urban kitchen

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





Jo-0097

Jorden Session: 26

Jugition: Mugberia Gangadhar Ma

Jugition: Mugberia Gangadhar Ma

Medinipur

West Bengal; Pin-721425

Supervised by

Dir ' Regn. No. - 32907129 of Session: 2016-17

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 Nirupama Barman (Roll: 3121712; No: 0097) a student of B.Sc. Part –III, Dept. of Nutrition, under Vidyasagar University, Paschim Medinipur, has completed her project work under my guidance on the topics'A comparative microbiological study on working surface, oven, water tap, sink & refrigerator between rural & 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: 70.02.18

(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 her 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, Assistant Professor and Head, Dept. of Nutrition Mugberia Gangadhar Mahavidyalaya, for his valuable advice and guidance.

I am really obliged to other faculty members of the prof. Moumita Samanta, guest lecturer Dept. of Nutrition, Mr. Chandan Khanra, Ms. Keya Dash, Ms. Pranati Bera and Mrs. 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.

Date	Nirupama [ (Nirupama Ba
------	----------------------------

#### **ABSTRACT**

In the present study rural and urban kitchen was compared with microbial quality. The sample of floor, oven, sink, tap, refrigerator (handle), refrigerator (inner-self) were collected in the area of rural and urban kitchen and the total plate count, coliform, yeast and mold count were evaluated. The study showed that there was no significant (P>0.05) difference of sink, tap, refrigerator (handle) and refrigerator (inner-self) in the kitchen between rural and urban kitchen on all microbial quality. But there was significant difference (p<0.05) of floor between rural and urban kitchen. In case of oven there was significant (p<0.05) difference on SPC and Yeast and mold count but no significant (P>0.05) difference was found on coliform count in between rural and urban kitchen.

### **CONTENT**

SL. NO.	SUBJECTS	PAGE NO.
1.	Introduction	1-2
2.	Review of Literature	3-8
3.	Aims & Objective	9
4.	Materials & Methods	10-18
5.	Results & Discussion	19-24
6.	Conclusion	25
7.	References	26-28

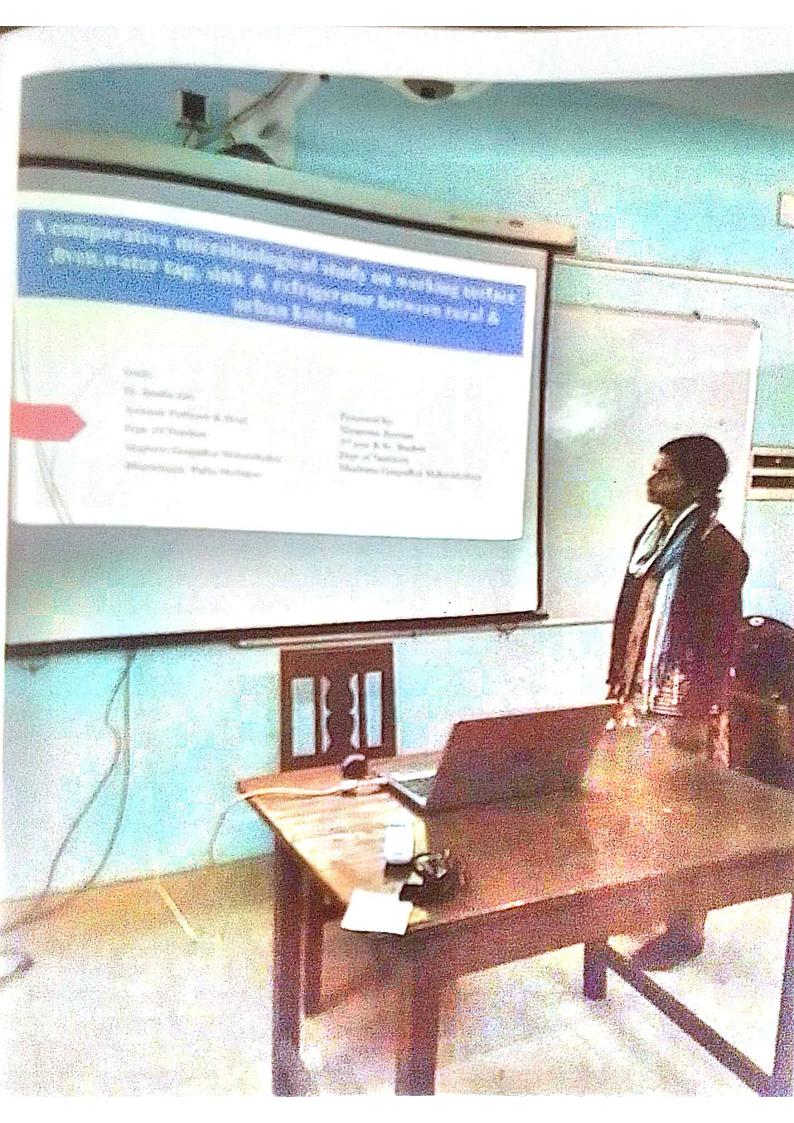






Plate2: Some rural kitchens from which the samples were collected





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

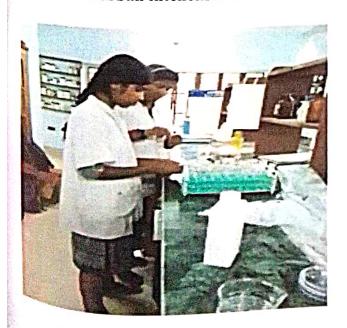


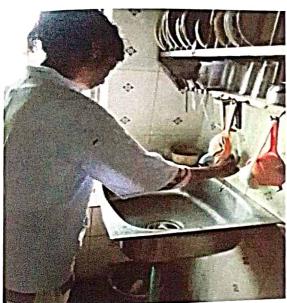


Plate 4: Arrangement before Platting

Barman, Dept. of Nutrition, Mugberia Gangadhar Mahari G. C.









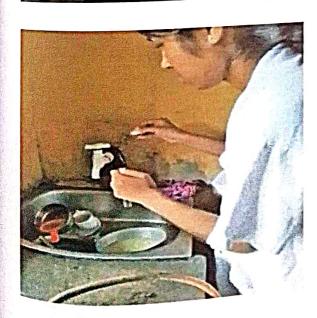




Plate 5: Different activities of sample collection in rural and urban kitchen





Plate 6: Different activities during making microbial media





Plate 7: Different activities during platting





Plate 8: During plate counting