PROJECT-TITLE

A STUDY ON NUTRITION DIET FOR PREGNANT WOMEN

MOHIT KUMAR

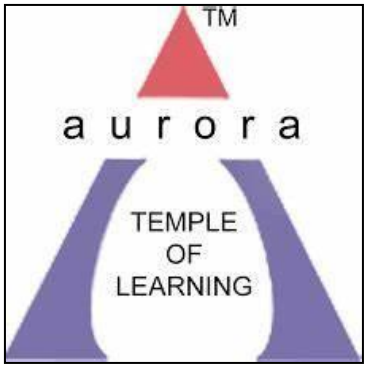
1051-20-467-120

Project submitted in partial fulfillment for the award of the degree of

BACHELOR OF SCIENCE

By

Osmania University, Hyderabad- 500007



CERTIFICATE

This is to certify that the project work entitled

A STUDY ON NUTRITION DIET FOR PREGNANT WOMEN

Submitted by,

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During the Third year of BSc (2022-2023)

As a part of their curriculum in the Department of Statistics

AURORA'S DEGREE AND PG COLLEGE, CHIKKADPALLY, HYDERABAD

HEAD OF THE DEPARTMENT — PROJECT MENTOR

MS. VINITA — MS. RAJYALAKSHMI

ANNEXURE-1

DECLARATION

I hereby declare that the project entitled **A STUDY ON NUTRITION DIET FOR PREGNANT WOMEN** is an original work done by us and has been submitted to the Department of Statistics, Osmania University, Hyderabad in partial fulfillment of the award of Bachelor of Science. This report has not been submitted anywhere else for the award of any other degree or diploma or certificate.

STUDENT NAME	SIGNATURE
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ANNEXURE-2

CERTIFICATION

This is to certify that the project report titled **A STUDY ON NUTRITION DIET FOR PREGNANT WOMEN** submitted in partial fulfillment for the award of Degree of Bachelor of Science, Osmania University, Hyderabad, was carried out by MOHIT KUMAR bearing roll no: 1051-20-467-120, RAHUL BIRADER bearing roll no: 1051-20-467-119, THUMMETI ARAVIND REDDY bearing roll no: 1051-20-467-073, GAJULAPALLY ROHITH REDDY bearing roll no: 1051-20-467-117, VUDIGA SANJAY bearing roll no: 1051-20-467-121 under my guidance. This has not been submitted to any other University or Institution for the award of any degree or diploma or certificate.

Name of the Mentor

MS. RAJYALAKSHMI

Signature of the mentor

Acknowledgement

My profound thanks to **DR. VISWANADHAN BULUSU**, Principal of Aurora's Degree and P.G College Chikkadpally for extending his support and guidance in executing my project.

I also wish to thank our Head of the Department **MS. VINITA** for providing me the opportunity to do a project that will build up my career.

I would like to extend my deepest gratitude to my Mentor **MS. RAJYALAKSHMI** for the constant support and guidance during my project.

As well as our college management who allowed us to make this project on the topic **A STUDY ON NUTRITION DIET FOR PREGNANT WOMEN** helped us in doing research and we came to know about new things.

Finally, we would like to thank our team members who were supportive and helped each other in doing this project within a limited frame of time.

INDEX

❖SOURCE OF DATA: -

DANGORIA CHARITABLE TRUST, RTC X ROAD, HYDERABAD.

TITLE: A STUDY ON NUTRITION DIET FOR PREGNANT WOMEN

ABSTRACT

In Indian villages, lots of women do not have proper knowledge of the Nutrition which they consume during pregnancy. We did some research on the knowledge of the women, and what type of food they are consuming during and post-pregnancy. And to improve their eating habits NGOs and many social services provide training so that they get a proper and perfect knowledge of diet during their pregnancy and post-pregnancy period.

As a part of this project, we collaborated with a Charitable Trust, where we got data on the food habits of rural area women of Telangana state and how they are improving their diet by conducting free training for them. Based on this, we have initial and final datasets. Initial data is about the initial or basic common knowledge of women about nutrition to be consumed. This data is collected before conducting the training. The final data is post-training data which tells us whether the training is useful or not.

The project will utilize various analysis tools, including Microsoft Excel for Data Analysis and Minitab Software. For qualitative data, we use a “Test for two proportions” to determine whether the sample proportion of an event for two groups differs significantly. For numeric data, we are using “T-test: Two-sample Assuming Equal Variances” in Excel.

The project’s outcomes will provide insights that give a big picture of the food habits and health of women in the rural areas of Telangana State. And tells us whether the training of the Trust is impactful or not. Also tells, how initial and final data differ significantly.

INTRODUCTION

In Indian villages, lots of women do not have proper knowledge of the Nutrition which they consume during pregnancy. We did some research on the knowledge of the women, and what type of food they are consuming during and post-pregnancy. And to improve their eating habits NGOs and many social services provide training so that they get a proper and perfect knowledge of diet during their pregnancy and post-pregnancy period.

Nutrition knowledge is essential in creating cognizance of ample nutrition intake among pregnant women. Lack of knowledge of sufficient nutrition is stated as an instant cause of malnutrition. To maintain a healthy pregnancy, approximately 300 extra calories are needed each day. These calories should come from a balanced diet of protein, fruits, vegetables, and whole grains. Sweets and fats should be kept minimum.

Lean meats and poultry, fish, eggs, soya, nuts and seeds, and legumes/beans, pulses. These are good sources of protein and iron. Include at least one serving of whole beans and legumes (moong, moth, chana, rajma, lobia, green peas, etc.). Have 1-2 servings of fish a week to get essential omega-3 fatty acids.

The Nutritional needs of a baby reach their peak during this time of rapid growth. This trimester still calls for higher levels of iron as well as protein. They are crucial to maintaining increased blood volume, the growth and cellular development of the baby, and a healthy placenta.

A pregnant woman needs to choose a variety of healthy foods and beverages to provide the important nutrition that her baby needs for growth and development. A pregnant woman needs more calcium, folic acid, iron, and protein than a woman who is not expecting. It is difficult to get the amount of folate recommended for a healthy

pregnancy from food alone, which is why it's important to take a folic acid supplement. Here are why these four nutrients are important.

Folic Acid:

When Folic acid is found in food, it is known as folate. It is a b vitamin that helps to prevent birth defects in your baby's brain and spinal cord. It may be hard to get the recommended amount from diet alone, so it is a good idea to take a prenatal vitamin with 600mg of folic acid.

Foods that have Folic Acid:

The following are good sources of folic acid:

- Leafy green vegetables (GLVs)
- Fortified or enriched cereals
- Bread and pasta
- Beans
- Broccoli
- Juices (many apple and orange juices)
- Eggs
- Nuts
- Citrus fruits.

Calcium:

Calcium is a mineral used to build the baby's bones and teeth. If a woman does not consume enough calcium during pregnancy, the mineral will be drawn from the reserves in her bones and given to the baby. Vitamin D is another nutrient that works with calcium to develop a baby's bones and teeth, many dairy products are fortified with it. The recommended amount of calcium for pregnant women over the of age 19 is 1000mg a day; pregnant teens, ages 14 to 18 will need 1300mg daily.

Foods that have calcium:

The following are good sources of calcium:

- Milk
- Yogurt
- Cheese
- Calcium-fortified juices and foods
- Sardines or salmon with bones
- Some leafy greens (kale, bok choy).
- Milk products
- Soya drinks with added calcium

Iron:

During pregnancy, a woman needs 27mg of iron a day. This is twice the amount of what she needs when not pregnant. This is because more iron is needed to make more blood to supply her baby with oxygen. Low levels of iron during pregnancy can lead to **anemia.** This condition results in fatigue and an increased risk of infections. Be sure to include a good source of vitamin C when eating iron-rich foods, as it will help with the absorption of iron.

Foods that have iron:

The following are good sources of iron:

- Meat, poultry, fish
- Dried beans and peas
- Iron-fortified cereal

Protein:

A pregnant woman will need to ensure she eats more protein during her pregnancy. Thankfully, most women are able to get enough protein-rich foods in their diets. Proteins are described as “a builder nutrient” because

it helps to build important organs in a baby, such as the brain and heart.

Foods that have protein:

The following are good sources of protein:

- Meat, poultry, fish
- Dried beans and peas
- Eggs
- Nuts
- Tofu

Calcium, Folic Acid, Iron, and protein are important nutrients to wat while pregnant because they help with the development of a healthy baby. Make sure she is eating a varied diet by striving to include items from the food sources listed above along with taking prenatal vitamins. This will help her body nourish her baby throughout the pregnancy.

What not to eat during pregnancy?

The main foods to avoid include:

- Soft cheeses
- Undercooked or raw meat, fish, and seafood.
- Pre-prepared or unwashed fruits and vegetables
- Soft-serve ice cream
- Undercooked and raw eggs
- Unpasteurized milk
- Alcohol.

Methodology

In this project we used Statistical Method **Two Sample Z-test of Proportions or Two Proportions Test (Minitab),** it is the test to determine whether the two proportions differ significantly on specific characteristics to study data and draw conclusions. We also used data visualization tools of Microsoft Excel to show the food habits of rural area pregnant women of Telangana State.

In other words, compare the proportion of two different populations that have some single characteristic. It calculates the range of values that is likely to include the difference between the populations.

What's Two Proportions Test?

The Two Proportions Test is a hypothesis test that can be used to determine whether the proportion defective of one strata of a process is statistically different from the proportion of another strata of a process. It is useful for determining whether a particular strata or group could provide insight into the root cause of process issues.

When to use Two Sample Z proportion test:

The purpose of two sample Z test is to compare the random Samples of two populations. Use two sample Z test of proportion for large sample size and Fisher exact probability test is an excellent non-parametric test for small sample sizes.

Assumptions of the Two Sample Z Proportion Hypothesis Tests:

- The data are simple random values from both the populations

- Both populations follow a Binomial Distribution
- Samples are independent of each other
- Test results are accurate when np and n(1-p) are greater than 5.

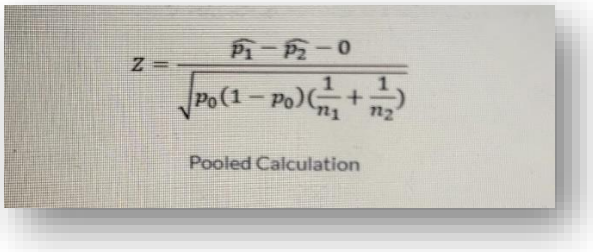
Hypothesis of two sample Z proportion test:

- Null Hypothesis: The difference between population proportions is equal to hypothesized difference
- Alternative hypothesis: The difference between population proportions is not equal to hypothesized difference(two-tailed)
- The difference between population proportions is greater than hypothesized difference (right-tailed)
- The difference between population proportions is less than hypothesized difference (left-tailed)

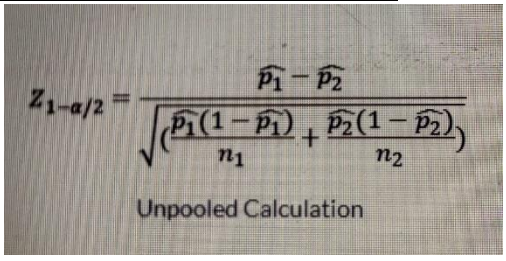
Two sample Z Test of Proportions variations:

There are 2 ways to compute the two sample Z test of proportions i.e., pooled or un-pooled.

Pooled Z test of proportions Formula:



Un-pooled Z test for Proportions Formula:



Procedure to Execute Two sample Proportion Hypothesis Test:

- State the null hypothesis and alternative hypothesis
- State alpha, in other words determine the significance level
- Compute the test statistic
- Determine the critical value (from table)
- Define the rejection criteria
- Finally, interpret the result. If the test falls in critical region, reject the null hypothesis

How to Run a Two Proportions Test in Minitab:

1. Enter the data into Minitab. We can enter the data in two ways: either manually by typing it into a Minitab worksheet or by importing it from a spreadsheet.

2. Select "Stat" from the main menu and choose "Basic Statistics" and then "2 Proportions" from the dropdown menu.

3. In the dialog box that appears, enter the column names for the two groups we wish to compare and select test options as pooled estimate.

4. Click "ok" to run the test. Minitab will calculate the test statistics and p-values.

5. Interpret the results. The p-value indicates the probability of obtaining results by chance alone.

If p-value<0.05 it is significant

DATA ANALYSIS

A data analysis was performed for both initial and final data using **Two Proportions test** in **Minitab**. This Analysis contains around 20 different questions with detailed summary table and p-values. Based on the **p-value**, an **Analysis report** is designed which shows the significance of each question which compares initial and final data significancy. It will tell us, whether the training given by Ngo's if useful or not. The following are the summary tables of the questions prepared from the data given below,

Q-1 Respondent's Education up to 7th

Test and CI for Two Proportions: Recoded Respondents … education_1

Method

Event: 1

p_1: proportion where Recoded Respondents education = 1

p_2: proportion where Recoded Respondents education_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Respondents education	80	1	0.012500
Recoded Respondents education_1	80	1	0.012500

Estimation for Difference

Difference	95% CI for Difference
0	(-0.034430, 0.034430)

CI based on normal approximation

Test

Null hypothesis	$H_0: p_1 - p_2 = 0$
Alternative hypothesis	$H_1: p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	0.00	1.000
Fisher's exact		1.000

The pooled estimate of the proportion (0.0125) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-1 8th to 10th

Test and CI for Two Proportions: Recoded Respondents ... education_1

Method

Event: 1

p_1: proportion where Recoded Respondents education = 1

p_2: proportion where Recoded Respondents education_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Respondents education	80	68	0.850000
Recoded Respondents education_1	80	75	0.937500

Estimation for Difference

Difference	95% CI for Difference
-0.0875	(-0.182030, 0.007030)

CI based on normal approximation

Test

Null hypothesis	$H_0: p_1 - p_2 = 0$
Alternative hypothesis	$H_1: p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-1.80	0.073
Fisher's exact		0.122

The pooled estimate of the proportion (0.89375) is used for the tests.

Q-1 College (11th and above)

Test and CI for Two Proportions: Recoded Respondents ... education_1

Method

Event: 1

p_1: proportion where Recoded Respondents education = 1

p_2: proportion where Recoded Respondents education_1 = 1

Difference: p_1 - p_2

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Respondents education	80	9	0.112500
Recoded Respondents education_1	80	2	0.025000

Estimation for Difference

Difference	95% CI for Difference
0.0875	(0.010268, 0.164732)

CI based on normal approximation

Test

Null hypothesis	H_0: p_1 - p_2 = 0
Alternative hypothesis	H_1: p_1 - p_2 ≠ 0

Method	Z-Value	P-Value
Normal approximation	2.19	0.029
Fisher's exact		0.056

The pooled estimate of the proportion (0.06875) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-2 Husband's Education up to 7th

Test and CI for Two Proportions: Recoded Husbands ... ds education_1

Method

Event: 1

p_1: proportion where Recoded Husbands education = 1

p_2: proportion where Recoded Husbands education_1 = 1

Difference: p_1 - p_2

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Husbands education	80	3	0.037500
Recoded Husbands education_1	80	3	0.037500

Estimation for Difference

Difference	95% CI for Difference

0	(-0.058875, 0.058875)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	0.00	1.000
Fisher's exact		1.000

The pooled estimate of the proportion (0.0375) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-2 8th to 10th

Test and CI for Two Proportions: Recoded Husbands ... ds education_1

Method

Event: 1

p_1: proportion where Recoded Husbands education = 1

p_2: proportion where Recoded Husbands education_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Husbands education	80	52	0.650000
Recoded Husbands education_1	80	46	0.575000

Estimation for Difference

Difference	95% CI for Difference
0.075	(-0.075528, 0.225528)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	0.97	0.330
Fisher's exact		0.417

The pooled estimate of the proportion (0.6125) is used for the tests.

Q-2 College (11th and above)

Test and CI for Two Proportions: Recoded Husbands ... ds education_1

Method

Event: 1

p_1: proportion where Recoded Husbands education = 1

p_2: proportion where Recoded Husbands education_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Husbands education	80	22	0.275000
Recoded Husbands education_1	80	27	0.337500

Estimation for Difference

Difference	95% CI for Difference
-0.0625	(-0.205014, 0.080014)

CI based on normal approximation

Test

Null hypothesis	$H_0: p_1 - p_2 = 0$
Alternative hypothesis	$H_1: p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-0.86	0.391
Fisher's exact		0.493

The pooled estimate of the proportion (0.30625) is used for the tests.

Q-4 Poverty Status –BPL White Card

Test and CI for Two Proportions: Recoded Poverty status, ... ty status_1

Method

Event: 1

p_1: proportion where Recoded Poverty status = 1

p_2: proportion where Recoded Poverty status_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Poverty status	80	66	0.825000
Recoded Poverty status_1	80	79	0.987500

Estimation for Difference

Difference	95% CI for Difference
-0.1625	(-0.249249, -0.075751)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-3.53	0.000
Fisher's exact		0.001

The pooled estimate of the proportion (0.90625) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-5 Food consumed during pregnancy (More)

Test and CI for Two Proportions: Recoded Food ... Consumed during _1

Method

Event: 1

p_1: proportion where Recoded Food Consumed during pr = 1

p_2: proportion where Recoded Food Consumed during _1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Food Consumed during pr	80	3	0.037500
Recoded Food Consumed during _1	80	79	0.987500

Estimation for Difference

Difference	95% CI for Difference
-0.95	(-0.998227, -0.901773)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-12.02	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.5125) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-6 Papaya avoided during pregnancy (yes)

Test and CI for Two Proportions: Recoded Papaya, Recoded Papaya_1

Method

Event: 1

p_1: proportion where Recoded Papaya = 1

p_2: proportion where Recoded Papaya_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Papaya	80	75	0.937500
Recoded Papaya_1	77	4	0.051948

Estimation for Difference

Difference	95% CI for Difference
0.885552	(0.812953, 0.958151)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	11.09	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.503185) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-6 Banana avoided during pregnancy (yes)

Test and CI for Two Proportions: Recoded Banana, Recoded Banana_1

Method

Event: 1

p_1: proportion where Recoded Banana = 1

p_2: proportion where Recoded Banana_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Banana	80	55	0.687500
Recoded Banana_1	77	1	0.012987

Estimation for Difference

Difference	95% CI for Difference
0.674513	(0.569842, 0.779183)

CI based on normal approximation

Test

Null hypothesis	$H_0: p_1 - p_2 = 0$
Alternative hypothesis	$H_1: p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	8.82	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.356688) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-6 Yellow Pumpkin avoided during pregnancy (yes)

Test and CI for Two Proportions: Recoded YELLOW ... LOW PUPMKIN_1

Method

Event: 1

p_1: proportion where Recoded YELLOW PUPMKIN = 1

p_2: proportion where Recoded YELLOW PUPMKIN_1 = 1

Difference: p_1 - p_2

Descriptive Statistics

Sample	N	Event	Sample p
Recoded YELLOW PUPMKIN	80	34	0.425000
Recoded YELLOW PUPMKIN_1	77	62	0.805195

Estimation for Difference

Difference	95% CI for Difference
-0.380195	(-0.520051, -0.240338)

CI based on normal approximation

Test

Null hypothesis	H_0: p_1 - p_2 = 0
Alternative hypothesis	H_1: p_1 - p_2 ≠ 0

Method	Z-Value	P-Value
Normal approximation	-4.89	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.611465) is used for the tests.

Q-6 GLV avoided during pregnancy (yes)

Test and CI for Two Proportions: Recoded GLV, Recoded GLV_1

Method

Event: 0

p_1: proportion where Recoded GLV = 0

p_2: proportion where Recoded GLV_1 = 0

Difference: p_1 - p_2

Descriptive Statistics

Sample	N	Event	Sample p
Recoded GLV	80	80	1.000000
Recoded GLV_1	77	77	1.000000

Estimation for Difference

Difference	95% CI for Difference
0	(*, *)

CI based on normal approximation

Test

Null hypothesis	H_0: p_1 - p_2 = 0

Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	*	*
Fisher's exact		1.000

The pooled estimate of the proportion (1) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-7 What do you do with Ganji? (Consume)

Test and CI for Two Proportions: Recoded What do you ... do with g_1

Method

Event: 1

p_1: proportion where Recoded What do you do with gan = 1

p_2: proportion where Recoded What do you do with g_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded What do you do with gan	80	0	0.000000
Recoded What do you do with g_1	80	34	0.425000

Estimation for Difference

Difference	95% CI for Difference
-0.425	(-0.533326, -0.316674)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-6.57	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.2125) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-8 Vegetable wash before cutting

Test and CI for Two Proportions: Recoded Vegetables ... bles washed_1

Method

Event: 1

p_1: proportion where Recoded Vegetables washed = 1

p_2: proportion where Recoded Vegetables washed_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Vegetables washed	80	19	0.237500
Recoded Vegetables washed_1	80	76	0.950000

Estimation for Difference

Difference	95% CI for Difference
-0.7125	(-0.817270, -0.607730)

CI based on normal approximation

Test

Null hypothesis	$H_0: p_1 - p_2 = 0$
Alternative hypothesis	$H_1: p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-9.18	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.59375) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-9 initiation of breast feeding-within one hour

Test and CI for Two Proportions: Recoded Time of ... e of initiation of_1

Method

Event: 1

p_1: proportion where Recoded Time of initiation of b = 1

p_2: proportion where Recoded Time of initiation of_1 = 1

Difference: p_1 - p_2

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Time of initiation of b	80	78	0.975000
Recoded Time of initiation of_1	80	77	0.962500

Estimation for Difference

Difference	95% CI for Difference
0.0125	(-0.041385, 0.066385)

CI based on normal approximation

Test

Null hypothesis	H_0: p_1 - p_2 = 0
Alternative hypothesis	H_1: p_1 - p_2 ≠ 0

Method	Z-Value	P-Value
Normal approximation	0.45	0.650
Fisher's exact		1.000

The pooled estimate of the proportion (0.96875) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-10 Pre-lacteals Given (NO)

Test and CI for Two Proportions: Recoded Pre-lacteals ... cteals Given_1

Method

Event: 0

p_1: proportion where Recoded Pre-lacteals Given = 0

p_2: proportion where Recoded Pre-lacteals Given_1 = 0

Difference: p_1 - p_2

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Pre-lacteals Given	80	80	1.000000
Recoded Pre-lacteals Given_1	80	80	1.000000

Estimation for Difference

Difference	95% CI for Difference

0	(*, *)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	*	*
Fisher's exact		1.000

The pooled estimate of the proportion (1) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-11 Complementary food started around 7 months of age

Test and CI for Two Proportions: Recoded Age(months) ... at compli_1

Method

Event: 1

p_1: proportion where Recoded Age(months) at complime = 1

p_2: proportion where Recoded Age(months) at compli_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Age(months) at complime	80	75	0.937500
Recoded Age(months) at compli_1	80	75	0.937500

Estimation for Difference

Difference	95% CI for Difference
0	(-0.075014, 0.075014)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	0.00	1.000
Fisher's exact		1.000

The pooled estimate of the proportion (0.9375) is used for the tests.

Q-11 Complementary food started at 8 months and above

Test and CI for Two Proportions: Recoded Age(months) ... at compli_1

Method

Event: 1

p_1: proportion where Recoded Age(months) at complime = 1

p_2: proportion where Recoded Age(months) at compli_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Age(months) at complime	80	5	0.062500
Recoded Age(months) at compli_1	80	5	0.062500

Estimation for Difference

Difference	95% CI for Difference
0	(-0.075014, 0.075014)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	0.00	1.000
Fisher's exact		1.000

The pooled estimate of the proportion (0.0625) is used for the tests.

Q-12 Consumption of roti

Test and CI for Two Proportions: Recoded Roti, Recoded Roti_1

Method

Event: 1

p_1: proportion where Recoded Roti = 1

p_2: proportion where Recoded Roti_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Roti	80	12	0.150000
Recoded Roti_1	80	1	0.012500

Estimation for Difference

Difference	95% CI for Difference
0.1375	(0.055555, 0.219445)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	3.18	0.001
Fisher's exact		0.002

The pooled estimate of the proportion (0.08125) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-12 consumption of rice

Test and CI for Two Proportions: Recoded Rice, Recoded Rice_1

Method

Event: 1

p_1: proportion where Recoded Rice = 1

p_2: proportion where Recoded Rice_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Rice	80	64	0.800000
Recoded Rice_1	80	80	1.000000

Estimation for Difference

Difference	95% CI for Difference
-0.2	(-0.287652, -0.112348)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-4.22	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.9) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-12 Consumption of dal

Test and CI for Two Proportions: Recoded Dal, Recoded Dal_1

Method

Event: 1

p_1: proportion where Recoded Dal = 1

p_2: proportion where Recoded Dal_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Dal	80	20	0.250000
Recoded Dal_1	80	22	0.275000

Estimation for Difference

Difference	95% CI for Difference
-0.025	(-0.161298, 0.111298)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-0.36	0.719
Fisher's exact		0.858

The pooled estimate of the proportion (0.2625) is used for the tests.

Q-12 consumption of egg

Test and CI for Two Proportions: Recoded Egg, Recoded Egg_1

Method

Event: 1

p_1: proportion where Recoded Egg = 1

p_2: proportion where Recoded Egg_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Egg	80	71	0.887500
Recoded Egg_1	80	69	0.862500

Estimation for Difference

Difference	95% CI for Difference
0.025	(-0.077416, 0.127416)

CI based on normal approximation

Test

Null hypothesis	$H_0: p_1 - p_2 = 0$
Alternative hypothesis	$H_1: p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	0.48	0.633
Fisher's exact		0.812

The pooled estimate of the proportion (0.875) is used for the tests.

Q-12 Consumption of Milk & Milk products

Test and CI for Two Proportions: Recoded Milk and Milk ... k Products_

Method

Event: 1

p_1: proportion where Recoded Milk and Milk Products = 1

p_2: proportion where Recoded Milk and Milk Products_ = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Milk and Milk Products	80	64	0.800000
Recoded Milk and Milk Products_	80	80	1.000000

Estimation for Difference

Difference	95% CI for Difference
-0.2	(-0.287652, -0.112348)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-4.22	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.9) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-12 consumption of vegetables

Test and CI for Two Proportions: Recoded Vegetables, ... Vegetables_1

Method

Event: 1

p_1: proportion where Recoded Vegetables = 1

p_2: proportion where Recoded Vegetables_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Vegetables	80	32	0.400000
Recoded Vegetables_1	80	17	0.212500

Estimation for Difference

Difference	95% CI for Difference
0.1875	(0.047643, 0.327357)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	2.57	0.010
Fisher's exact		0.016

The pooled estimate of the proportion (0.30625) is used for the tests.

Q-12 consumption of GLV

Test and CI for Two Proportions: Recoded GLV, Recoded GLV_1

Method

Event: 1

p_1: proportion where Recoded GLV = 1

p_2: proportion where Recoded GLV_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded GLV	80	53	0.662500
Recoded GLV_1	80	77	0.962500

Estimation for Difference

Difference	95% CI for Difference
-0.3	(-0.411668, -0.188332)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-4.86	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.8125) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-13 consumption of yellow egg (YES)

Test and CI for Two Proportions: Recoded If Egg is given, ... ven, do y_1

Method

Event: 1

p_1: proportion where Recoded If Egg is given, do you = 1

p_2: proportion where Recoded If Egg is given, do y_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded If Egg is given, do you	80	43	0.537500
Recoded If Egg is given, do y_1	80	75	0.937500

Estimation for Difference

Difference	95% CI for Difference
-0.4	(-0.521452, -0.278548)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-5.75	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.7375) is used for the tests.

Q-14 Hand washing water with soap before feeding

Test and CI for Two Proportions: Recoded Hand washing ... before f_1

Method

Event: 1

p_1: proportion where Recoded Hand washing before fee = 1

p_2: proportion where Recoded Hand washing before f_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Hand washing before fee	80	61	0.762500
Recoded Hand washing before f_1	80	80	1.000000

Estimation for Difference

Difference	95% CI for Difference
-0.2375	(-0.330751, -0.144249)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-4.64	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.88125) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-15 Antenatal Checkups done (no.) -9

Test and CI for Two Proportions: Recoded Antenatal ... l check ups d_1

Method

Event: 1

p_1: proportion where Recoded Antenatal check ups don = 1

p_2: proportion where Recoded Antenatal check ups d_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Antenatal check ups don	80	80	1.000000
Recoded Antenatal check ups d_1	80	75	0.937500

Estimation for Difference

Difference	95% CI for Difference
0.0625	(0.009457, 0.115543)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	2.27	0.023
Fisher's exact		0.059

The pooled estimate of the proportion (0.96875) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-16 consumption of Iron &Folic acid tables –yes

Test and CI for Two Proportions: Recoded Iron and folic ... folic acid t_1

Method

Event: 1

p_1: proportion where Recoded Iron and folic acid tab = 1

p_2: proportion where Recoded Iron and folic acid t_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Iron and folic acid tab	80	80	1.000000
Recoded Iron and folic acid t_1	80	80	1.000000

Estimation for Difference

Difference	95% CI for Difference
0	(*, *)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	*	*
Fisher's exact		1.000

The pooled estimate of the proportion (1) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-17 If Yes-regular

Test and CI for Two Proportions: Recoded If 1, Recoded If 1_1

Method

Event: 1

p_1: proportion where Recoded If 1 = 1

p_2: proportion where Recoded If 1_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded If 1	80	67	0.837500
Recoded If 1_1	80	62	0.775000

Estimation for Difference

Difference	95% CI for Difference
0.0625	(-0.059599, 0.184599)

CI based on normal approximation

Test

Null hypothesis	$H_0: p_1 - p_2 = 0$
Alternative hypothesis	$H_1: p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	1.00	0.317
Fisher's exact		0.424

The pooled estimate of the proportion (0.80625) is used for the tests.

Q-17 If Yes- Irregular

Test and CI for Two Proportions: Recoded If 1, Recoded If 1_1

Method

Event: 1

p_1: proportion where Recoded If 1 = 1

p_2: proportion where Recoded If 1_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded If 1	80	12	0.150000
Recoded If 1_1	80	11	0.137500

Estimation for Difference

Difference	95% CI for Difference
0.0125	(-0.096206, 0.121206)

CI based on normal approximation

Test

Null hypothesis	$H_0: p_1 - p_2 = 0$
Alternative hypothesis	$H_1: p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	0.23	0.822
Fisher's exact		1.000

The pooled estimate of the proportion (0.14375) is used for the tests.

Q-18 Components of Balance Diet- Rice

Test and CI for Two Proportions: Recoded Rice, Recoded Rice_1

Method

Event: 1

p_1: proportion where Recoded Rice = 1

p_2: proportion where Recoded Rice_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Rice	80	79	0.987500
Recoded Rice_1	80	80	1.000000

Estimation for Difference

Difference	95% CI for Difference
-0.0125	(-0.036846, 0.011846)

CI based on normal approximation

Test

Null hypothesis	$H_0: p_1 - p_2 = 0$
Alternative hypothesis	$H_1: p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-1.00	0.316
Fisher's exact		1.000

The pooled estimate of the proportion (0.99375) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-18 Roti

Test and CI for Two Proportions: Recoded Roti, Recoded Roti_1

Method

Event: 1

p_1: proportion where Recoded Roti = 1

p_2: proportion where Recoded Roti_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Roti	80	25	0.312500
Recoded Roti_1	80	56	0.700000

Estimation for Difference

Difference	95% CI for Difference
-0.3875	(-0.530329, -0.244671)

CI based on normal approximation

Test

Null hypothesis	$H_0: p_1 - p_2 = 0$
Alternative hypothesis	$H_1: p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-4.90	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.50625) is used for the tests.

Q-18 Dal

Test and CI for Two Proportions: Recoded Dal, Recoded Dal_1

Method

Event: 1

p_1: proportion where Recoded Dal = 1

p_2: proportion where Recoded Dal_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Dal	80	51	0.637500
Recoded Dal_1	80	76	0.950000

Estimation for Difference

Difference	95% CI for Difference
-0.3125	(-0.428161, -0.196839)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-4.88	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.79375) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-18 Vegetables

Test and CI for Two Proportions: Recoded Veg, Recoded Veg_1

Method

Event: 1

p_1: proportion where Recoded Veg = 1

p_2: proportion where Recoded Veg_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Veg	80	55	0.687500
Recoded Veg_1	80	35	0.437500

Estimation for Difference

Difference	95% CI for Difference
0.25	(0.101227, 0.398773)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	3.19	0.001
Fisher's exact		0.002

The pooled estimate of the proportion (0.5625) is used for the tests.

Q-18 GLV

Test and CI for Two Proportions: Recoded GLV, Recoded GLV_1

Method

Event: 1

p_1: proportion where Recoded GLV = 1

p_2: proportion where Recoded GLV_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded GLV	80	68	0.850000
Recoded GLV_1	80	75	0.937500

Estimation for Difference

Difference	95% CI for Difference
-0.0875	(-0.182030, 0.007030)

CI based on normal approximation

Test

Null hypothesis	$H_0: p_1 - p_2 = 0$
Alternative hypothesis	$H_1: p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-1.80	0.073
Fisher's exact		0.122

The pooled estimate of the proportion (0.89375) is used for the tests.

Q-18 Milk and Milk Products

Test and CI for Two Proportions: Recoded Milk and Milk ... k products_

Method

Event: 1

p_1: proportion where Recoded Milk and Milk products = 1

p_2: proportion where Recoded Milk and Milk products_ = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Milk and Milk products	80	18	0.225000
Recoded Milk and Milk products_	80	38	0.475000

Estimation for Difference

Difference	95% CI for Difference
-0.25	(-0.392645, -0.107355)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-3.31	0.001
Fisher's exact		0.002

The pooled estimate of the proportion (0.35) is used for the tests.

Q-18 Egg

Test and CI for Two Proportions: Recoded Egg, Recoded Egg_1

Method

Event: 1

p_1: proportion where Recoded Egg = 1

p_2: proportion where Recoded Egg_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Egg	80	56	0.700000
Recoded Egg_1	80	74	0.925000

Estimation for Difference

Difference	95% CI for Difference
-0.225	(-0.340824, -0.109176)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-3.65	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.8125) is used for the tests.

Q-18 Fruits

Test and CI for Two Proportions: Recoded Fruits, Recoded Fruits_1

Method

Event: 1

p_1: proportion where Recoded Fruits = 1

p_2: proportion where Recoded Fruits_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Fruits	80	18	0.225000
Recoded Fruits_1	80	15	0.187500

Estimation for Difference

Difference	95% CI for Difference
0.0375	(-0.087754, 0.162754)

CI based on normal approximation

Test

Null hypothesis	$H_0: p_1 - p_2 = 0$
Alternative hypothesis	$H_1: p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	0.59	0.558
Fisher's exact		0.696

The pooled estimate of the proportion (0.20625) is used for the tests.

Q-18 Meat and Fish

Test and CI for Two Proportions: Recoded Meat/Fish, ... ed Meat/Fish_1

Method

Event: 1

p_1: proportion where Recoded Meat/Fish = 1

p_2: proportion where Recoded Meat/Fish_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded Meat/Fish	80	53	0.662500
Recoded Meat/Fish_1	80	43	0.537500

Estimation for Difference

Difference	95% CI for Difference
0.125	(-0.025578, 0.275578)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	1.61	0.107
Fisher's exact		0.146

The pooled estimate of the proportion (0.6) is used for the tests.

Q-19 Nutrients present In Food—carbohydrates

Test and CI for Two Proportions: Recoded ... oded CARBOHYDRATES_1

Method

Event: 1

p_1: proportion where Recoded CARBOHYDRATES = 1

p_2: proportion where Recoded CARBOHYDRATES_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded CARBOHYDRATES	80	0	0.000000
Recoded CARBOHYDRATES_1	80	55	0.687500

Estimation for Difference

Difference	95% CI for Difference
-0.6875	(-0.789070, -0.585930)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-9.15	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.34375) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-19 Proteins

Test and CI for Two Proportions: Recoded PROTEINS, ... d PROTEINS_1

Method

Event: 1

p_1: proportion where Recoded PROTEINS = 1

p_2: proportion where Recoded PROTEINS_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded PROTEINS	80	0	0.000000
Recoded PROTEINS_1	80	2	0.025000

Estimation for Difference

Difference	95% CI for Difference
-0.025	(-0.059212, 0.009212)

CI based on normal approximation

Test

Null hypothesis	$H_0: p_1 - p_2 = 0$
Alternative hypothesis	$H_1: p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-1.42	0.155
Fisher's exact		0.497

The pooled estimate of the proportion (0.0125) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-19 Vitamins

Test and CI for Two Proportions: Recoded VITAMINS, ... d VITAMINS_1

Method

Event: 1

p_1: proportion where Recoded VITAMINS = 1

p_2: proportion where Recoded VITAMINS_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded VITAMINS	80	0	0.000000
Recoded VITAMINS_1	80	62	0.775000

Estimation for Difference

Difference	95% CI for Difference
-0.775	(-0.866505, -0.683495)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-10.06	0.000
Fisher's exact		0.000

The pooled estimate of the proportion (0.3875) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-19 Minerals

Test and CI for Two Proportions: Recoded MINERALS, ... MINERALS_1

Method

Event: 0

p_1: proportion where Recoded MINERALS = 0

p_2: proportion where Recoded MINERALS_1 = 0

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded MINERALS	80	80	1.000000
Recoded MINERALS_1	80	80	1.000000

Estimation for Difference

Difference	95% CI for Difference
0	(*, *)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$

Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	*	*
Fisher's exact		1.000

The pooled estimate of the proportion (1) is used for the tests.
The normal approximation may be inaccurate for small samples.

Q-19 Fats

Test and CI for Two Proportions: Recoded FATS, Recoded FATS_1

Method

Event: 1

p_1: proportion where Recoded FATS = 1

p_2: proportion where Recoded FATS_1 = 1

Difference: $p_1 - p_2$

Descriptive Statistics

Sample	N	Event	Sample p
Recoded FATS	80	0	0.000000
Recoded FATS_1	80	3	0.037500

Estimation for Difference

Difference	95% CI for Difference
-0.0375	(-0.079131, 0.004131)

CI based on normal approximation

Test

Null hypothesis	H_0: $p_1 - p_2 = 0$
Alternative hypothesis	H_1: $p_1 - p_2 \neq 0$

Method	Z-Value	P-Value
Normal approximation	-1.75	0.080
Fisher's exact		0.245

The pooled estimate of the proportion (0.01875) is used for the tests.
The normal approximation may be inaccurate for small samples.

Analysis Report

Knowledge, Attitude, and Practice of food Consumption						
S. no.	**Question no.**	**Practice**	**Initial-Group**	**Final-Group**	**P-value**	**Result**
1	No. of respondents ---------->		80	80		
2	Q1	**Respondent's education** up to 7th	1.25	1.25	1	Insignificant
3		8th to 10th	85	93.75	0.073	Insignificant
4		College (11th and above)	11.25	2.5	0.029	Significant
5	Q2	**Husband's education** up to 7th	3.75	3.75	1	Insignificant
6		8th to 10th	65	57.5	0.33	Insignificant
7		College (11th and above)	27.5	33.7 5	0.391	Insignificant
8	Q3	**Caste** (ST)	0	0	1	Insignificant
9	Q4	**Poverty status** -BPL White card	82.5	98.75	**0**	Significant
10	Q5	**Food consumed during pregnancy** (More)	3.75	98.75	**0**	Significant
11	Q6	Papaya avoided during pregnancy(yes)	93.75	5.1948	**0**	Significant
12		Banana avoided during pregnancy(yes)	68.75	1.2987	**0**	Significant
13		Yellow Pumpkin avoided during pregnancy(yes)	42.5	80.5195	**0**	Significant
14		GLV avoided during pregnancy(yes)	0	0	*	
15	Q7	What do you do with Ganji? (Consume)	0	42.5	**0**	Significant
16	Q8	Vegetable wash before cutting	23.75	95	**0**	Significant
17	Q9	initiation of breast feeding-within one hour	97.5	96.25	**0.65**	Insignificant
18	Q10	Pre-lacteals Given (NO)	100	100	*	
19	Q11	Complementary food started around 7 months of age	93.75	93.75	**1**	Insignificant
20		Complementary food started at 8 months and above	6.25	6.25	1	Insignificant

21	Q12	consumption of roti	15	1.25	0.001	Significant
22		consumption of rice	80	100	0	Significant
23		consumption of dal	25	27.5	**0.719**	Insignificant
24		consumption of egg	88.75	86.25	**0.633**	Insignificant
25		consumption of Milk & Milk products	80	100	**0**	Significant
26		consumption of vegetables	40	21.25	**0.01**	Significant
27		consumption of GLV	66.25	96.25	**0**	Significant
28	Q13	consumption of yellow egg (YES)	53.75	93.75	**0**	Significant
29	Q14	Hand washing water with soap before feeding	76.25	100	**0**	Significant
30	Q15	Antenatal Check-ups done -9	100	93.75	**0.023**	Significant
31	Q16	consumption of Iron &Folic acid tables –yes	100	100	*	
32	Q17	If Yes- Regular	83.75	77.5	0.317	Insignificant
33		If Yes-irregular	15	13.75	**0.822**	Insignificant
34	Q18	**Components of balanced diet**-rice	98.75	100	**0.316**	Insignificant
35		Roti	31.25	70	**0**	Significant
36		DAL	63.75	95	**0**	Significant
37		Vegetables	68.75	43.75	**0.001**	Significant
38		GLV	85	93.75	**0.073**	Insignificant
39		milk and milk products	22.5	47.5	**0.001**	Significant
40		Egg	70	92.5	**0**	Significant
41		Fruits	22.5	18.75	**0.558**	Insignificant
42		Meat Fish	66.25	53.75	**0.107**	Insignificant
43	Q19	**Nutrients present in food** - carbohydrates	0	68.75	**0**	Significant
44		proteins	0	2.5	**0.155**	Insignificant
45		vitamins	0	77.5	**0**	Significant
46		Minerals	0	0	*	
47		Fats	0	3.75	**0.8**	Insignificant

Note: If P< 0.05 it is significant

Visual Representation

Food Consumed During Pregnancy Initial and Final:

Figure 1.1

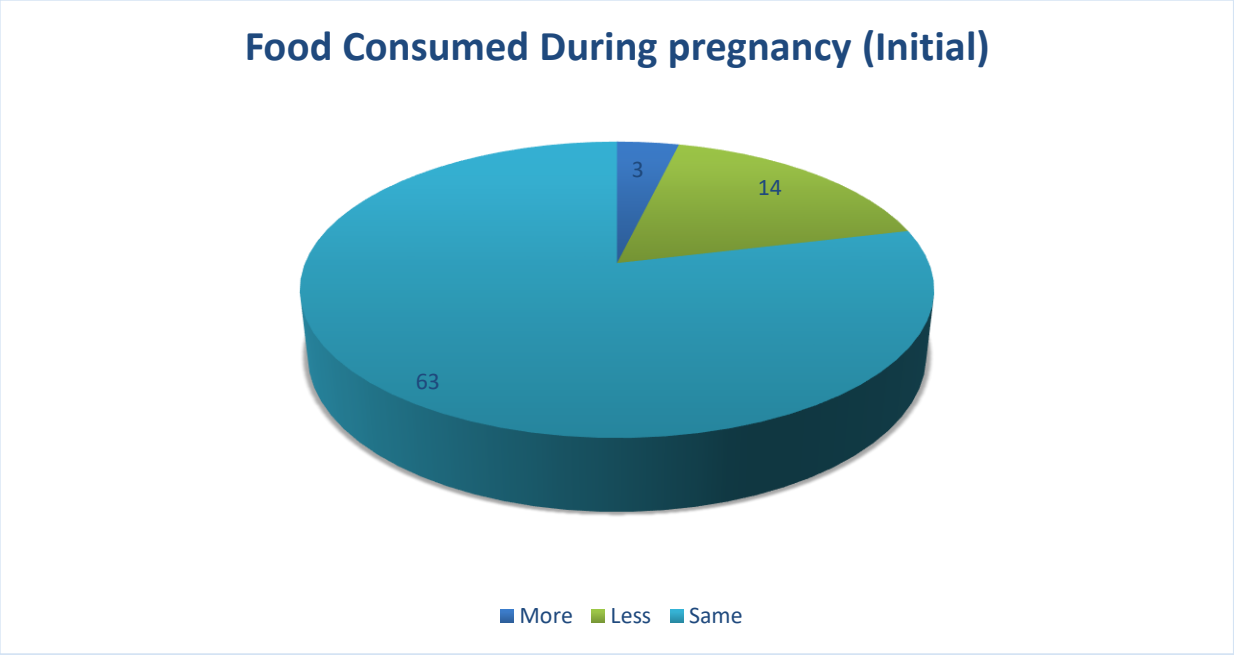
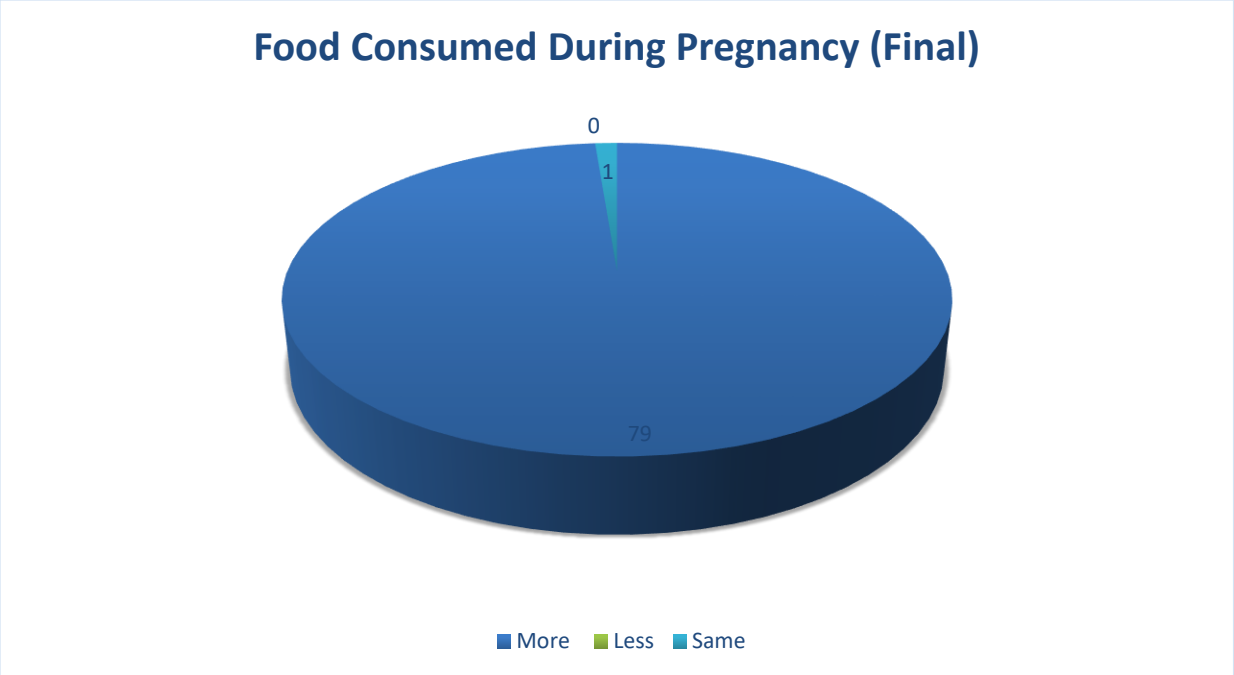


Figure 1.2



Food Avoided During Pregnancy-Yes:

Figure 2.1

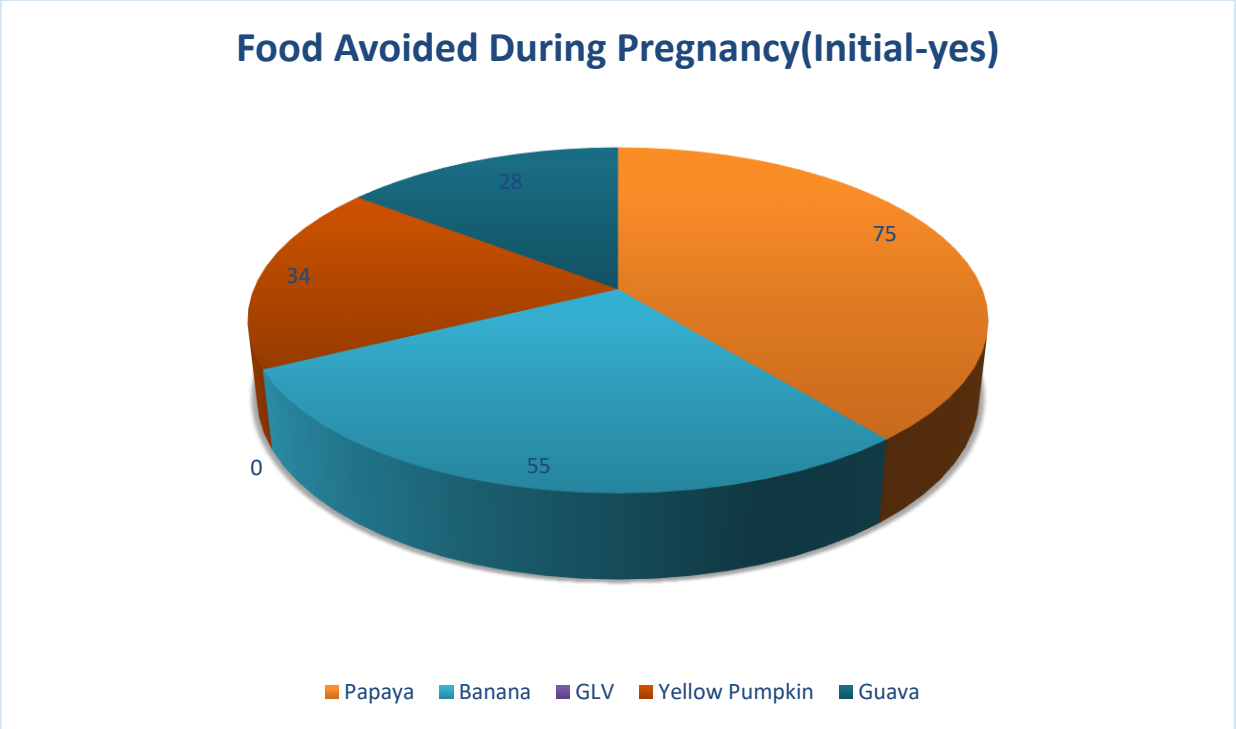
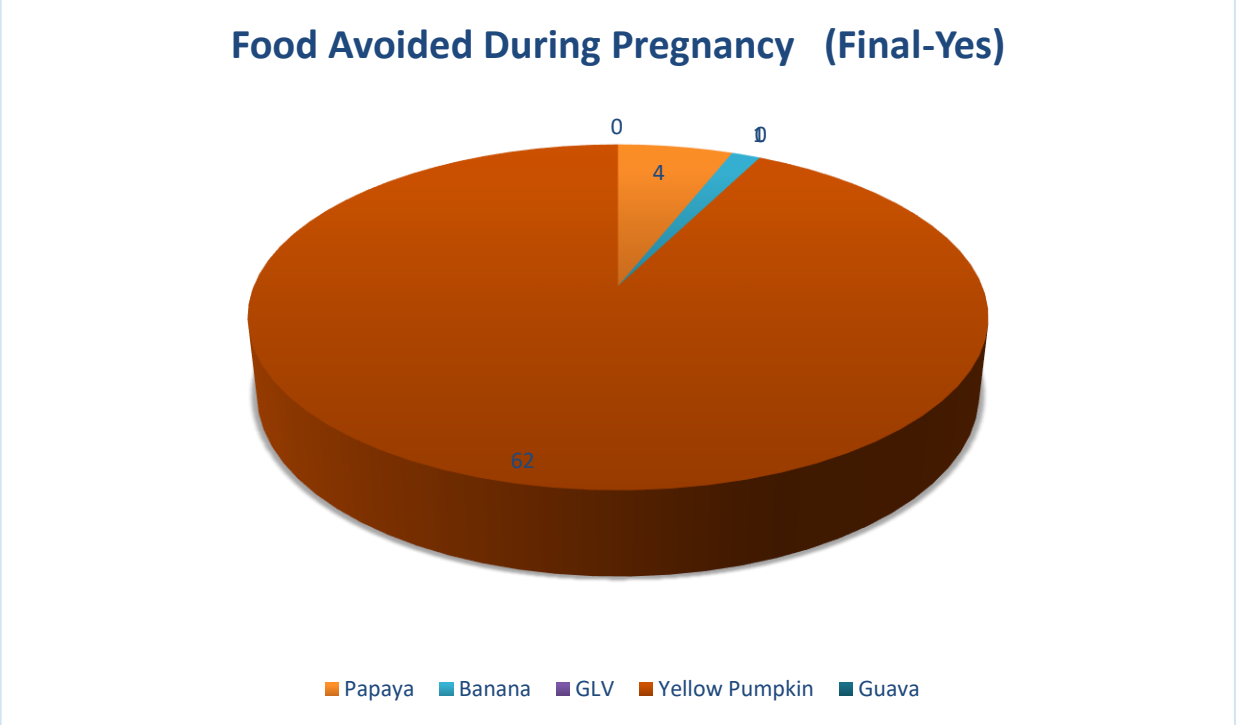


Figure 2.2



Iron and Folic Acid Tablets Consumed-Yes:

Figure 3.1

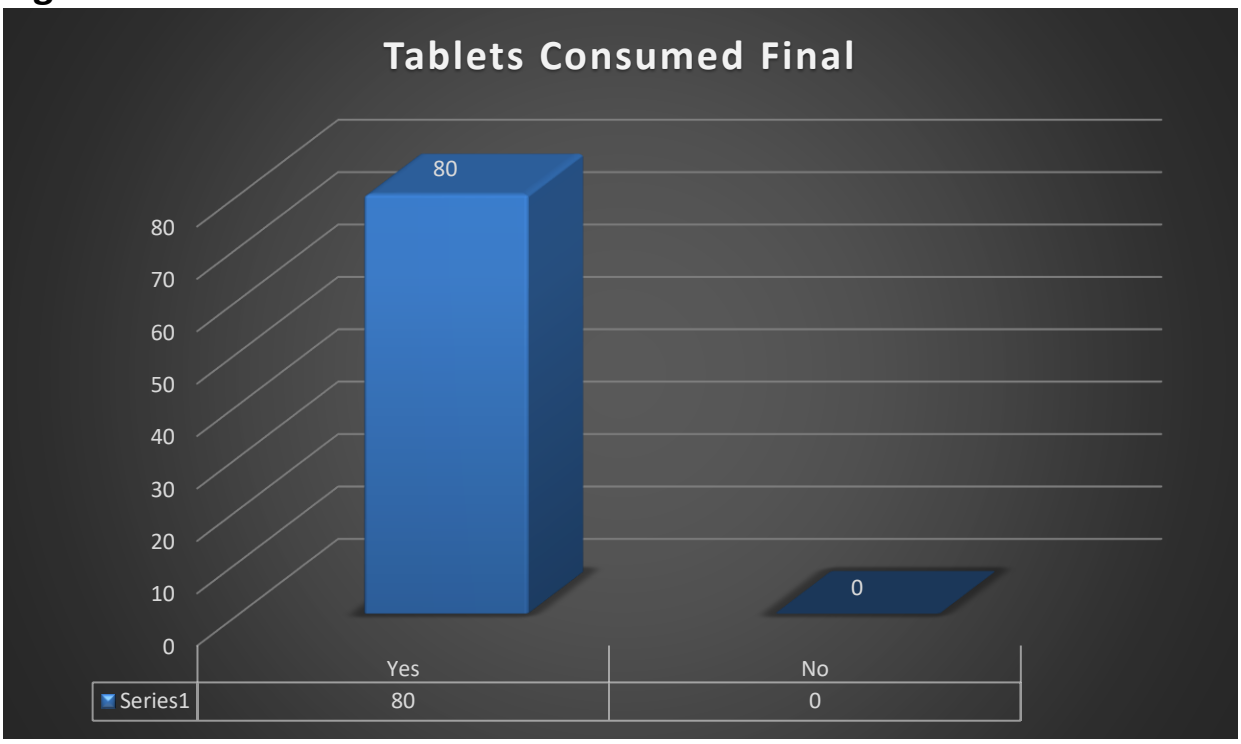
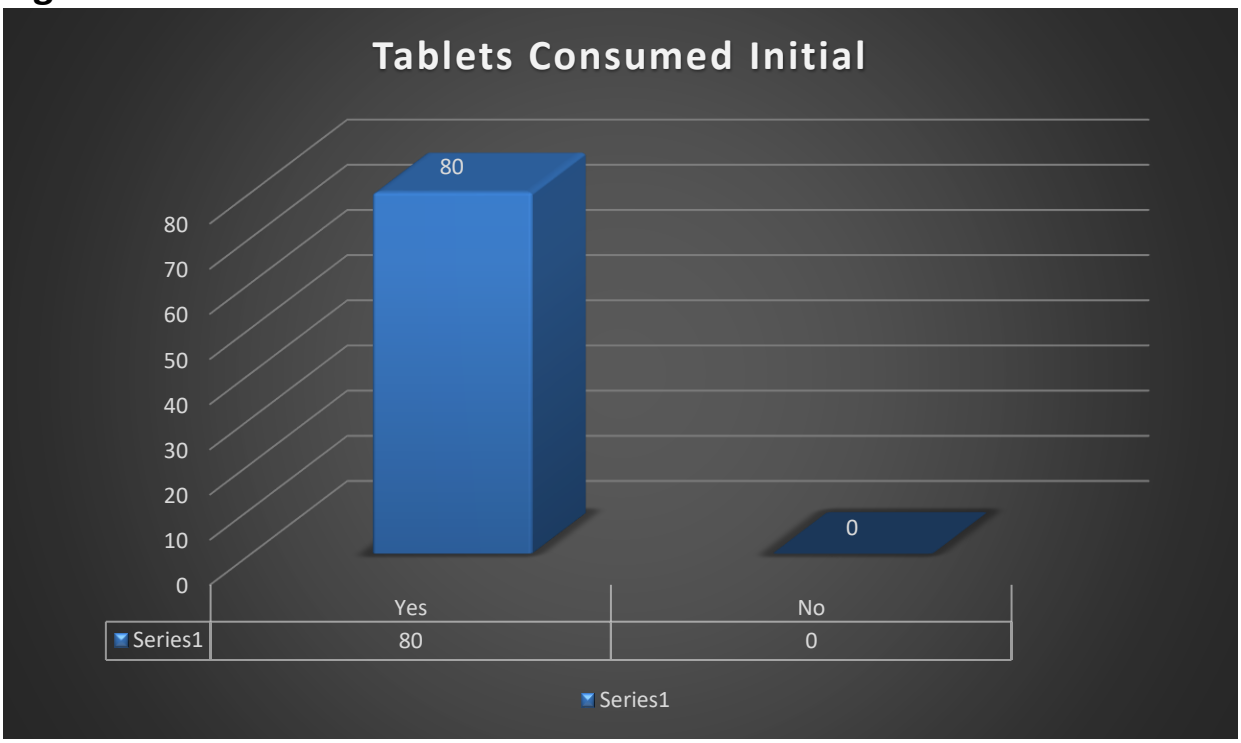


Figure 3.2



Nutrients Present in the Food- Yes:

Figure 4.1

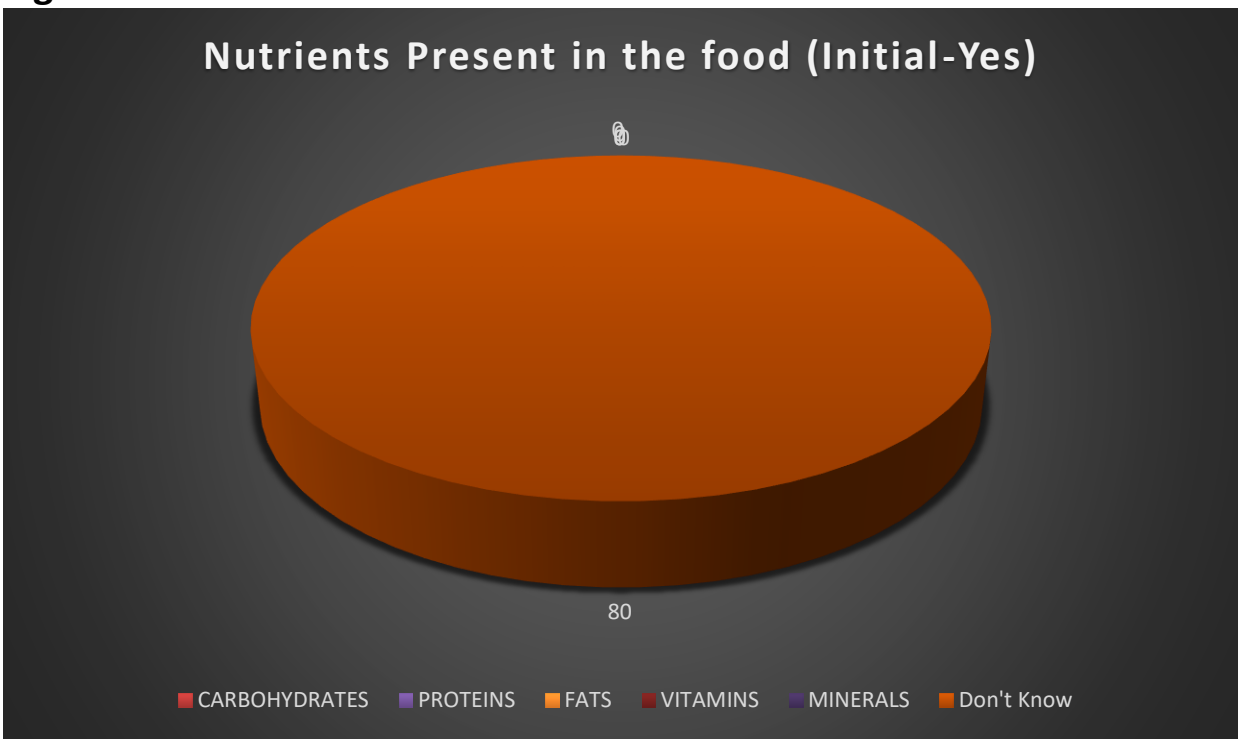
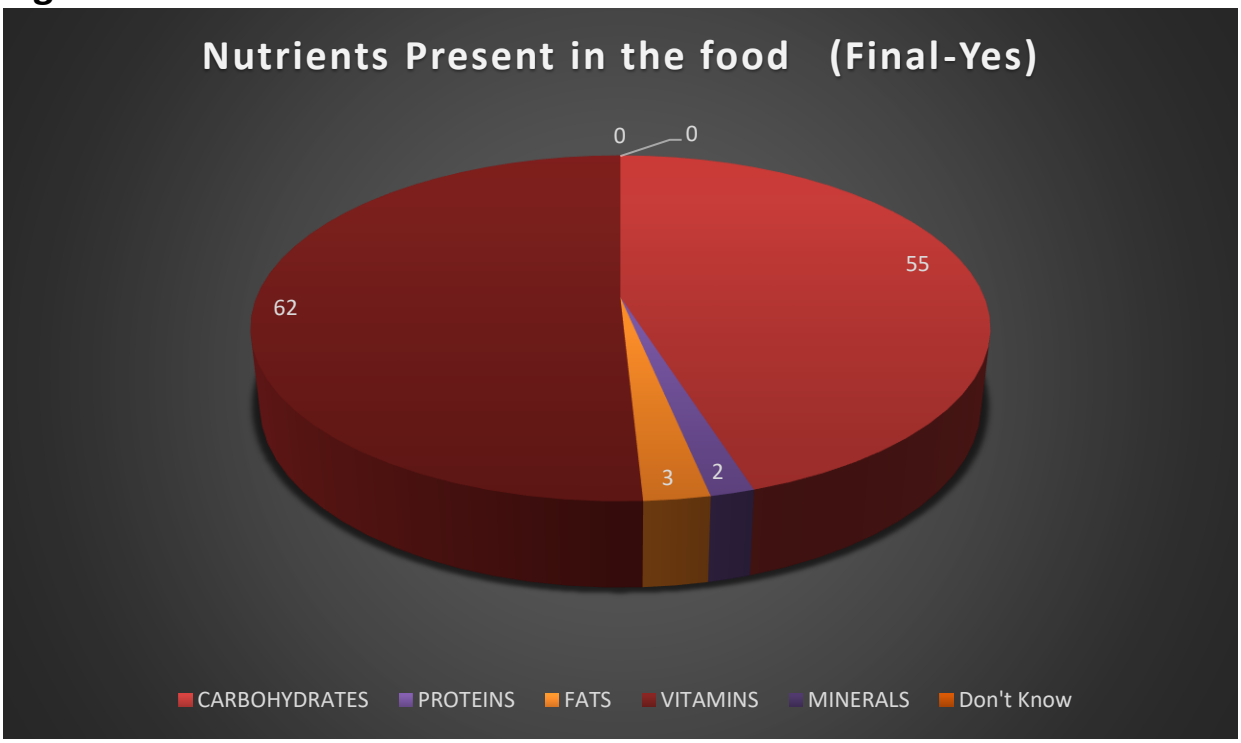


Figure 4.2



Components of balanced diet-Yes:

Figure 5.1

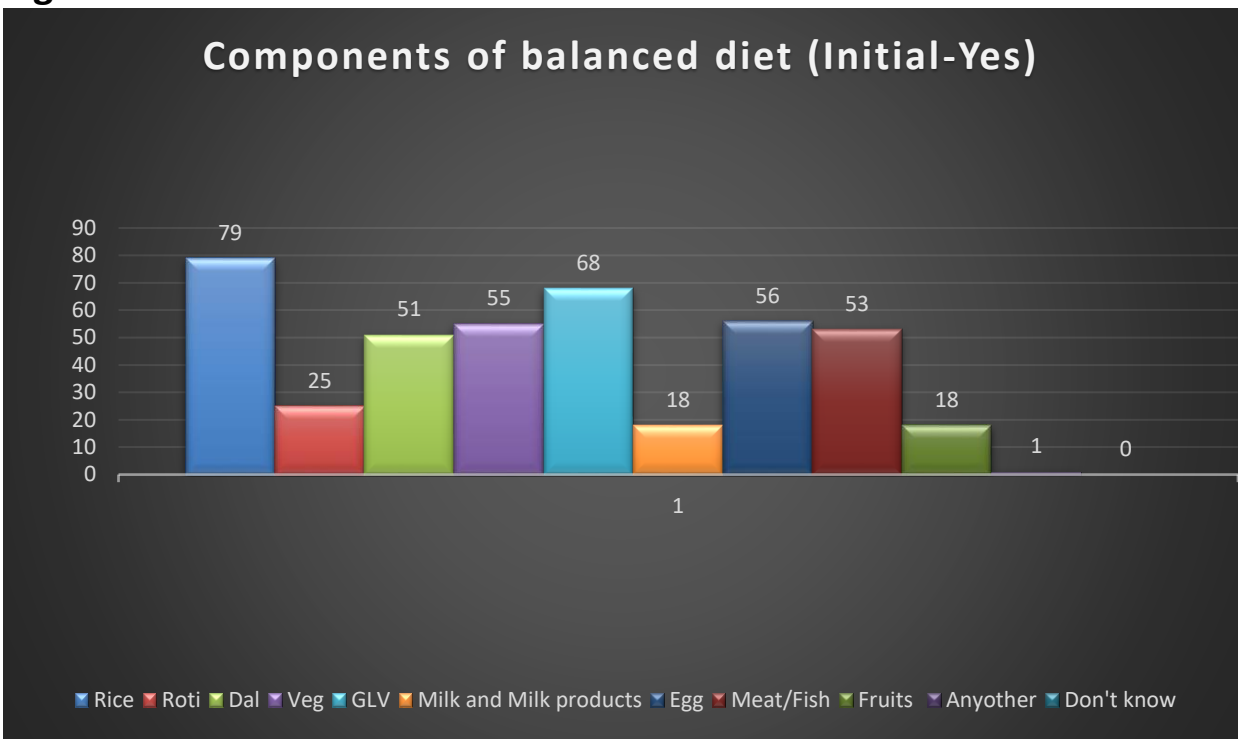
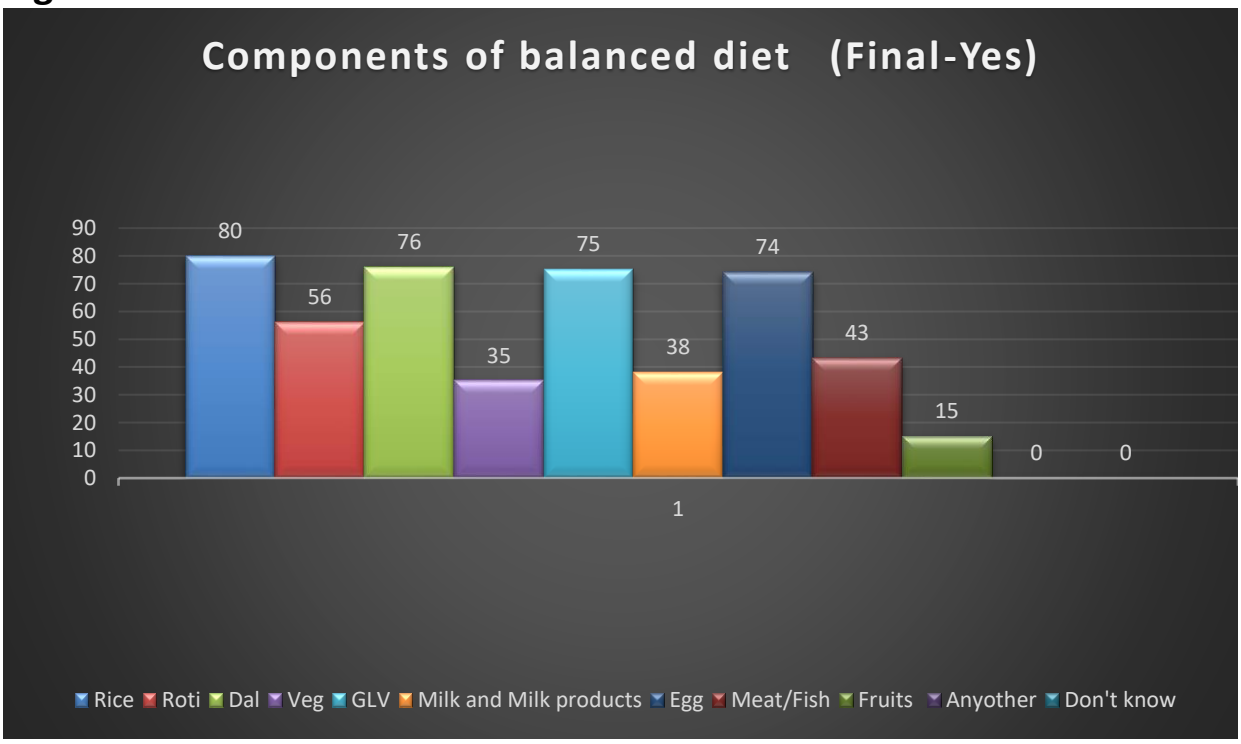
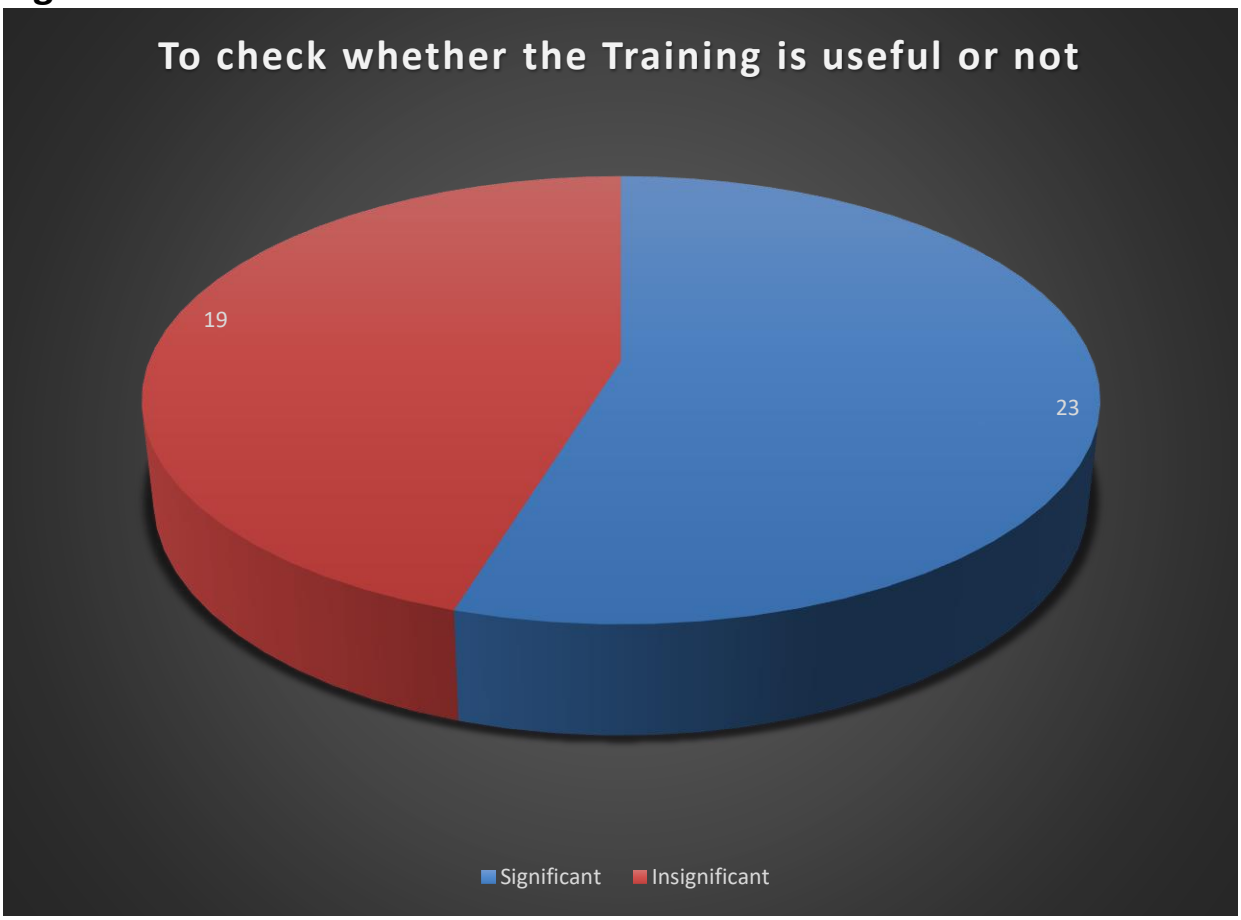


Figure 5.2



To check whether Training is useful or Not:

Figure 6.0



The above pie chart i.e., **figure 6.0** tells that the training given by the NGO's is useful for the rural area women of Telangana State.

The Visual representation of initial and final data gives an accurate picture about the knowledge of pregnant women. Also tells that how Free NGO trainings gives them complete and accurate knowledge of nutrition diet during pregnancy period. The visual representation gives the insights of data analysis and analysis report. When we convert data into graphical representation, it is easy for us to understand it completely. When we represent data into graphical format a non-statistician also can get the rough idea about the data. In other words, it becomes easier to conclude than non-graphical data.

Conclusion

In Conclusion, this project has successfully achieved its objectives. Through extensive research and testing, we have demonstrated the knowledge about nutrition diet of rural area women of Telangana during pregnancy. The project's outcomes provided insights that gave a big picture of the food habits and health of women in the rural areas of Telangana State.

From figure 1.1 and figure 1.2, we can tell that a pregnant woman should eat more food during pregnancy and most of the women didn't know about it that's what initial pie chart showed. But after the NGO training they changed their answers completely. According to figure 2.1, around 93 percent women thought that they should avoid papaya during pregnancy. But from figure2.2 i.e., post-training they get to know that they must avoid yellow pumpkin during child- bearing period. Figure 4.1 tells that during this survey around 100 percent women were unable to tell what type of nutrients are present in the food, they simply said that they don't know. But post-training they were able to answer the same question confidently. Figure 5.1 and 5.2 gives a complete picture that Indian women already know the components of a balanced diet.

Figure 6.0 tells us, how NGOs improved the knowledge and attitude of women towards their food habits during child-bearing period. The training was successful in giving the complete and accurate knowledge of nutrition diet for the pregnant woman and how these types of trainings by NGOs and other government funded organizations helping in developing INDIA's health. We are confident that the project will have a positive impact on the health industry as well. Overall, this project represents a significant contribution to the field of healthcare, improvement in food habits of Indian women, and we are proud to have been a part of it.