

**Summer Training at  
Bal Pharma Ltd., Bangalore**

**To Study the Micro Nutrient Formulation of MNF Tablet for Mother  
and Foetus in Pregnancy**

**By  
Hemant Nagar**

**Under the guidance of  
Dr. Sandeep Narula**

**MBA-Pharmaceutical Management (MBA-PM)  
2013-2015**



**The IIHMR University, Jaipur  
2014**

**INSTITUTE OF HEALTH  
MANAGEMENT RESEARCH**

1, Prabhu Dayal Marg  
Sanganer Airport, JAIPUR - 302 029, INDIA  
Tel. : 3924700, 2791431-32  
Fax : 91-141-3924738  
E-mail : [iihmr@iihmr.org](mailto:iihmr@iihmr.org)  
URL : <http://www.iihmr.org>  
Gram : HEALTHINST

CERTIFICATE

This is to certify that Mr. Hemant Nagar student of Institute of Health Management Research University; Jaipur has undergone summer training at BAL Pharmaceutical Ltd., Bangalore from April 09, 2014 to June 04, 2014.

The candidate has successfully carried out the project "MNF Tablet for Mother & Foetus In Pregnancy" assigned to him during summer training & his approach to study has been sincere scientific & analytical.

This summer training is in partial fulfillment of the course requirements.

We wish him success in all his future endeavors.



Dr. Sandeep Narula  
Associate Professor  
IIHMR University, Jaipur

Col. (Dr.) Ashok Kaushik  
Dean Academics & Student Affairs  
IIHMR University, Jaipur



# Bal Pharma Limited

## CERTIFICATE

This is to certify that **Mr.Hemant Nagar** ,a bonafide student from M/s. Institute of Health Management Research, Jaipur , presently pursuing Post Graduation in Pharmaceutical Management course under IIHMR University he as completed his "**Project Work**" in the field of "Pharmaceutical Marketing" Titled as "**MNF Tablet for mother and Foetus**" at Bal Pharma Limited, Bangalore -560 052 from 09<sup>th</sup> April 2014 to 04<sup>th</sup> June 2014.

During her Project work in our Company, we found his Character & Conduct was Satisfactory.

We wish her all the best in him future endeavors.

For Bal Pharma Limited.

  
Pradeep P.  
Manager Human Resources



CORPORATE OFFICE : 5th Floor, Lakshmi Narayan Complex, 10/1, Palace Road, Bangalore - 560 052. India  
Ph. : 91 - 80 - 41379500 Fax : 91 - 80 - 22354057 / 58  
Email : balpharma@vsnl.com Website : www.balpharma.com

REGD. OFFICE & FACTORY : 21 & 22, Bommasandra Industrial Area, Bangalore - 560 099. Ph: 41570813 / 19 Fax: 41570820

### **ACKNOWLEDGEMENT**

We express our sincere gratitude to our mentor in organization Mrs. Sadiya Tabrez, Product Management Team (PMT) department (Vibrant division) and Mr. Pradeep, HR Manager, BAL Pharma Ltd, for permitting us to execute the project in their esteemed organization.

We would also like to special thanks to Associate vice president Mr. D.L.Bhatt, Head of sales & marketing (vibrant & balvedic division) and General Manager Mr. R.V.N. Rajan & The whole PMT, sales & marketing team members for providing indispensable assistance during the tenure of our project.

We are very grateful to our academic mentor Dr. Sandeep Narula, Associate professor & HOD of pharmaceutical marketing management and all the faculty members of IIHMR University for their valuable guidance and co-operation.

In addition, we express our affection to our beloved parents and all the staff members of BAL Pharma Ltd., for being so encouraging and supportive throughout the study.

Thank you,

(            )

## **“MNF Tablet For Mother & Foetus”**

### **CONTENTS**

| <b>S.no</b>                         | <b>Topic name</b>                                                                                                                                                                                                                                                                           | <b>Page no.</b>                                          |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
|                                     |                                                                                                                                                                                                                                                                                             |                                                          |
| 1.                                  | <b><u>CHAPTER 1</u></b><br><b>Introduction</b><br><b>Part A- Company's Profile</b><br><b>Part B- MNF Tablet for Mother &amp; Foetus</b>                                                                                                                                                     | <b>9-15</b><br><b>16-20</b>                              |
| 2.                                  | <b><u>CHAPTER 2</u></b><br><b>Research Questions</b>                                                                                                                                                                                                                                        | <b>22</b>                                                |
| 3.                                  | <b><u>CHAPTER 3</u></b><br><b>Objectives</b>                                                                                                                                                                                                                                                | <b>24</b>                                                |
| 4.                                  | <b><u>CHAPTER 4</u></b><br><b>Research design</b>                                                                                                                                                                                                                                           | <b>26</b>                                                |
| 5.                                  | <b><u>CHAPTER 5</u></b><br><b>Methodology</b>                                                                                                                                                                                                                                               | <b>28</b>                                                |
| 6.                                  | <b><u>CHAPTER 6</u></b><br><b>Timeline</b>                                                                                                                                                                                                                                                  | <b>30</b>                                                |
| 7.                                  | <b><u>CHAPTER 7</u></b><br><b>Results &amp; findings</b>                                                                                                                                                                                                                                    | <b>32-69</b>                                             |
| 8.                                  | <b><u>CHAPTER 8</u></b><br><b>Conclusion</b>                                                                                                                                                                                                                                                | <b>71</b>                                                |
| 9.                                  | <b><u>CHAPTER 9</u></b><br><b>Ethical consideration</b>                                                                                                                                                                                                                                     | <b>73</b>                                                |
| 10.                                 | <b><u>CHAPTER 10</u></b><br><b>References</b>                                                                                                                                                                                                                                               | <b>75-76</b>                                             |
| 11.                                 | <b><u>CHAPTER 11</u></b><br><b>Annexure</b>                                                                                                                                                                                                                                                 | <b>78-79</b>                                             |
| 12.                                 | <b><u>Concept pages of MNF Tablets</u></b>                                                                                                                                                                                                                                                  | <b>80-87</b>                                             |
| 13.<br>(A)<br>(B)<br>(C)<br><br>(D) | <b><u>EXTRA PROJECTS:</u></b><br><b>Nutritional Supplementation In Male</b><br><b>Vitawiz-G Tablet</b><br><b>Current Market Opportunities &amp; Challenges of OTC Products In India</b><br><b>(Worked on power point presentation)</b><br><br><b><u>Concept pages of Extra Projects</u></b> | <br><br><br><br><br><br><br><b>88-89</b><br><b>90-92</b> |

## **“MNF Tablet For Mother & Foetus”**

### **LIST OF TABLES**

| <b>Table no</b> | <b>Topic name</b>                                                                                                                 | <b>Page no</b> |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>1.0</b>      | <b>API Product list</b>                                                                                                           | <b>12</b>      |
| <b>2.0</b>      | <b>List of ingredients</b>                                                                                                        | <b>22</b>      |
| <b>3.0</b>      | <b>Combination of MNF Tablet</b>                                                                                                  | <b>32</b>      |
| <b>4.0</b>      | <b>Response of doctors Is this Best combination for pregnancy. (See table no 3.0)</b>                                             | <b>33</b>      |
| <b>5.0</b>      | <b>Response of doctors which any four ingredients best for pregnancy (See table no 3.0)</b>                                       | <b>34</b>      |
| <b>6.0</b>      | <b>Response of doctors that would you like to prescribe this combination in other area also besides pregnancy &amp; lactation</b> | <b>37</b>      |
| <b>7.0</b>      | <b>Response for Folic acid by chemists:</b>                                                                                       |                |
| <b>7.1</b>      | <b>Most associated brand</b>                                                                                                      | <b>38</b>      |
| <b>7.2</b>      | <b>Most associated company</b>                                                                                                    | <b>39</b>      |
| <b>7.3</b>      | <b>MRP (Maximum retail price)</b>                                                                                                 | <b>40</b>      |
| <b>7.4</b>      | <b>Any unique feature among price, packaging, marketing, other specify</b>                                                        | <b>41</b>      |
| <b>8.0</b>      | <b>Response for Vitamin C by chemists:</b>                                                                                        |                |
| <b>8.1</b>      | <b>Most associated brand</b>                                                                                                      | <b>42</b>      |
| <b>8.2</b>      | <b>Most associated company</b>                                                                                                    | <b>43</b>      |
| <b>8.3</b>      | <b>MRP (maximum retail price)</b>                                                                                                 | <b>44</b>      |
| <b>8.4</b>      | <b>Any unique feature</b>                                                                                                         | <b>45</b>      |
| <b>9.0</b>      | <b>Response for Pyridoxine by chemists:</b>                                                                                       |                |
| <b>9.1</b>      | <b>Most associated brand</b>                                                                                                      | <b>46</b>      |
| <b>9.2</b>      | <b>Most associated company</b>                                                                                                    | <b>47</b>      |
| <b>9.3</b>      | <b>MRP (Maximum Retail Price)</b>                                                                                                 | <b>48</b>      |
| <b>9.4</b>      | <b>Any unique feature</b>                                                                                                         | <b>49</b>      |
| <b>10.0</b>     | <b>Response for Cyanocobalamine by chemists:</b>                                                                                  |                |
| <b>10.1</b>     | <b>Most associated brand</b>                                                                                                      | <b>50</b>      |
| <b>10.2</b>     | <b>Most associated company</b>                                                                                                    | <b>51</b>      |
| <b>10.3</b>     | <b>MRP (Maximum Retail Price)</b>                                                                                                 | <b>52</b>      |
| <b>10.4</b>     | <b>Any unique feature</b>                                                                                                         | <b>53</b>      |

## “MNF Tablet For Mother & Foetus”

|             |                                                 |           |
|-------------|-------------------------------------------------|-----------|
| <b>11.0</b> | <b>Response for Elemental zinc by chemists:</b> |           |
| <b>11.1</b> | <b>Most associated brand</b>                    | <b>54</b> |
| <b>11.2</b> | <b>Most associated company</b>                  | <b>55</b> |
| <b>11.3</b> | <b>MRP (Maximum Retail Price)</b>               | <b>56</b> |
| <b>11.4</b> | <b>Any unique feature</b>                       | <b>57</b> |
| <b>12.0</b> | <b>Response for L-Isoluciene by chemists:</b>   |           |
| <b>12.1</b> | <b>Most associated brand</b>                    | <b>58</b> |
| <b>12.2</b> | <b>Most associated company</b>                  | <b>59</b> |
| <b>12.3</b> | <b>MRP (Maximum Retail Price)</b>               | <b>60</b> |
| <b>12.4</b> | <b>Any unique feature</b>                       | <b>61</b> |
| <b>13.0</b> | <b>Response for DL-Methionine by chemists:</b>  |           |
| <b>13.1</b> | <b>Most associated brand</b>                    | <b>62</b> |
| <b>13.2</b> | <b>Most associated company</b>                  | <b>63</b> |
| <b>13.3</b> | <b>MRP (Maximum Retail price)</b>               | <b>64</b> |
| <b>13.4</b> | <b>Any unique feature</b>                       | <b>65</b> |
| <b>14.0</b> | <b>Response for L-Tryptophan by chemists:</b>   |           |
| <b>14.1</b> | <b>Most associated brand</b>                    | <b>66</b> |
| <b>14.2</b> | <b>Most associated company</b>                  | <b>67</b> |
| <b>14.3</b> | <b>MRP (Maximum Retail Price)</b>               | <b>68</b> |
| <b>14.4</b> | <b>Any unique feature</b>                       | <b>69</b> |

## **“MNF Tablet For Mother & Foetus”**

### **LIST OF GRAPHS**

| <b>Graph no.</b> | <b>Topic name</b>                                                                                   | <b>. Page no</b> |
|------------------|-----------------------------------------------------------------------------------------------------|------------------|
| <b>4.0</b>       | <b>Response graph for Best combination in pregnancy (See table no 3.0)</b>                          | <b>33</b>        |
| <b>5.0</b>       | <b>Response graph for Best important ingredient in combination for pregnancy (See table no 3.0)</b> | <b>35</b>        |
| <b>6.0</b>       | <b>Response graph for prescribe any other area besides pregnancy &amp; lactation</b>                | <b>37</b>        |
| <b>7.0</b>       | <b>Response graph for folic acid regarding:</b>                                                     |                  |
| <b>7.1</b>       | <b>Most associated brand</b>                                                                        | <b>38</b>        |
| <b>7.2</b>       | <b>Most associated company</b>                                                                      | <b>39</b>        |
| <b>7.3</b>       | <b>MRP (Maximum Retail Price)</b>                                                                   | <b>40</b>        |
| <b>7.4</b>       | <b>Any unique feature</b>                                                                           | <b>41</b>        |
| <b>8.0</b>       | <b>Response graph for vitamin C regarding:</b>                                                      |                  |
| <b>8.1</b>       | <b>Most associated brand</b>                                                                        | <b>42</b>        |
| <b>8.2</b>       | <b>Most associated company</b>                                                                      | <b>43</b>        |
| <b>8.3</b>       | <b>MRP (Maximum retail price)</b>                                                                   | <b>44</b>        |
| <b>8.4</b>       | <b>Any unique feature</b>                                                                           | <b>45</b>        |
| <b>9.0</b>       | <b>Response graph for pyridoxine regarding:</b>                                                     |                  |
| <b>9.1</b>       | <b>Most associated brand</b>                                                                        | <b>46</b>        |
| <b>9.2</b>       | <b>Most associated company</b>                                                                      | <b>47</b>        |
| <b>9.3</b>       | <b>MRP (Maximum Retail price)</b>                                                                   | <b>48</b>        |
| <b>9.4</b>       | <b>Any unique feature</b>                                                                           | <b>49</b>        |
| <b>10.0</b>      | <b>Response graph for Cyanocobalamine regarding:</b>                                                |                  |
| <b>10.1</b>      | <b>Most associated brand</b>                                                                        | <b>50</b>        |
| <b>10.2</b>      | <b>Most associated company</b>                                                                      | <b>51</b>        |
| <b>10.3</b>      | <b>MRP (Maximum Retail Price)</b>                                                                   | <b>52</b>        |
| <b>10.4</b>      | <b>Any unique feature</b>                                                                           | <b>53</b>        |
| <b>11.0</b>      | <b>Response graph for elemental zinc regarding:</b>                                                 |                  |
| <b>11.1</b>      | <b>Most associated brand</b>                                                                        | <b>54</b>        |

## **“MNF Tablet For Mother & Foetus”**

|             |                                                    |           |
|-------------|----------------------------------------------------|-----------|
| <b>11.2</b> | <b>Most associated company</b>                     | <b>55</b> |
| <b>11.3</b> | <b>MRP (Maximum Retail Price)</b>                  | <b>56</b> |
| <b>11.4</b> | <b>Any unique feature</b>                          | <b>57</b> |
| <b>12.0</b> | <b>Response graph for L-Luciene regarding:</b>     |           |
| <b>12.1</b> | <b>Most associated brand</b>                       | <b>58</b> |
| <b>12.2</b> | <b>Most associated company</b>                     | <b>59</b> |
| <b>12.3</b> | <b>MRP (Maximum Retail Price)</b>                  | <b>60</b> |
| <b>12.4</b> | <b>Any unique feature</b>                          | <b>61</b> |
| <b>13.0</b> | <b>Response graph for DL-Methionine regarding:</b> |           |
| <b>13.1</b> | <b>Most associated brand</b>                       | <b>62</b> |
| <b>13.2</b> | <b>Most associated company</b>                     | <b>63</b> |
| <b>13.3</b> | <b>MRP (Maximum Retail Price)</b>                  | <b>64</b> |
| <b>13.4</b> | <b>Any unique feature</b>                          | <b>65</b> |
| <b>14.0</b> | <b>Response graph for L-Tryptophan regarding:</b>  |           |
| <b>14.1</b> | <b>Most associated brand</b>                       | <b>66</b> |
| <b>14.2</b> | <b>Most associated company</b>                     | <b>67</b> |
| <b>14.3</b> | <b>MRP (Maximum Retail Price)</b>                  | <b>68</b> |
| <b>14.4</b> | <b>Any unique feature</b>                          | <b>69</b> |

# **CHAPTER**

# **1**

## **(1) INTRODUCTION**

### **PART-A**

#### **Company's profile**

**BAL Pharma** is a leading Indian Pharmaceutical Company specializing in Prescription drugs, Generics, OTC products, Intravenous Infusion and Bulk Actives with almost 19 years of experience behind it.

Successful operations in Domestic and various International markets, backed by strengths in Research and strong Infrastructure frame work have accelerated Bal pharma's growth from oblivience to reach a turnover of USD 25 million today. Buoyed by the past, the group has put in motion a fast track growth target and has set its sight on sales in excess of USD 150 million by 2012.

The main focus is to improve the quality of life for patients by providing them with products which are Safe, Effective, High Quality and Affordable price.

Bal Pharma's, API's and Formulations are produced at world class manufacturing facilities.

API's are exported to Europe, Latin America, Africa, Middle East and Asian markets.

Formulation products are exported to Semi-Regulated and Non Regulated markets and s strong contender for Tender business in various markets especially Asian markets.

#### **Vision**

To be Global Research Driven Company with a strong R & D pipeline.

#### **Mission**

Is dedicated to the pursuit of providing better and healthy lifestyle through quality products and innovation.

### **Businesses**

- API / Intermediates
- Finished Formulations
- Ayurvedic
- Research and Development

**Bal Pharma operates its domestic marketing through 5 divisions :**

### **Multi-Speciality**

Multi-Specialty has a wide range of products focusing on Antibiotics, Dermatological, Gynaecological, Gastrointestinal and Others.

### **Glyduz**

India has amongst the highest number of diabetics in the world. Glyduz, A Diabetic division, dedicated to Diabetes care, with almost covering every class of segment.

### **Servetus**

Cardiac division, focuses on giving the best therapeutic care in the Cardiology segment, devised with a distinctive product range which takes care of Cardiac as well as related complications.

### **Bal Vedics**

Ayurveda is India's traditional, natural system of medicine that has been practiced for more than 5,000 years. Ayurveda is a Sanskrit word that literally translated means "science of life" or "practices of longevity." Ayurveda provides an integrated approach to preventing and treating illness through lifestyle interventions and natural therapies.

### **Zennova**

The Generic of Bal Pharma was launched with an intention of making a mark in the Generic Industry without compromising the Quality of the Medicine. Zennova means innovation through Generics and the division focuses and it is expanding its operation by Generating Generics for the Next Generation. The division offers wide range of formulations namely Tablets, Capsules, Ointments, Injectables, Eye & Ear Drops, IV fluids, Syrups, Dry Syrups and Suspensions.

Bal Pharma Limited is also dedicated to Institutional sales and supplies to various health departments across the country. It has acquired at all India level covering top Govt Institutions like **CGHS, GMSD, Railways, DGAfms, AFMSD, ESIC, State Govt** & also covering large private sector hospitals.

### **Certification**

- **ISO 9001 – 2000**
- **Approval from EDQM for Gliclazide**
- **TGA approval for Gliclazide**
- **Plant approved by MOH Iran and MOH Canada**
- **Only Indian company to be granted a COS for Gliclazide**
- **One of the first Indian companies to successfully file and receive approval by MHLW Japan.**

### **Products**

Bal Pharma caters into all segments of medicines which include:

- **Tablets**
- **Bulk Drugs**
- **Liquids**
- **Ointments**
- **Ear/Eye Drops**

## **“MNF Tablet For Mother & Foetus”**

**TABLE NO 1.0**

**API PRODUCT LIST**

| <b>PRODUCTS AVAILABLE</b> | <b>THERAPEUTIC USAGE</b> | <b>CASE NO.</b> | <b>DMF STATUS</b> |
|---------------------------|--------------------------|-----------------|-------------------|
| Adapalene                 | Acne treatment           | 106685-40-9     | -                 |
| Amiloride HCL             | Diuretic                 | 17440-83-4      | DMF               |
| Bepotastine               | Anti-Histamine           | 190786-44-8     | DMF               |
| Benzydamine HCL           | Anti-Inflammatory        | 132-69-4        | DMF               |
| Ebastine                  | Anti-Histamine           | 90729-43-4      | DMF               |
| Gliclazide                | Anti-Diabetic            | 21187-98-4      | COS               |
| Levobunolol               | Sedative / Hypnotic      | 27912-14-7      | TDP               |
| Nateglanide               | Anti-Diabetic            | 105816-04-4     | TDP               |
| Tranilast                 | Anti-Allergy             | 53902-12-8      | -                 |
| Pregabalin                | Neuropathic Pain         | 148883508       | TDP               |
| Tolterodine Tartrate      | Urinary Incontinence     | 124937-52-6     | DMF               |
| Topiramate                | Anti-Convulsant          | 97240-79-4      | DMF               |
| Voglibose                 | Ant diabetic             | 83480 29 9      | TDP               |
| Zolpidem Tartarate        | Insomnia                 | 99294 93 6      | -                 |

### Ayurveda

Ayurveda is India's traditional, natural system of medicine that has been practiced for more than 5,000 years. Ayurveda is a Sanskrit word that literally translated means "science of life" or "practices of longevity." Ayurveda provides an integrated approach to preventing and treating illness through lifestyle interventions and natural therapies.

Bal Pharma's objective of providing “**Good life to all**” launched its Ayurvedic Division – BAL Vedic's in 2003. Bal Vedic's is dedicated to bringing out nature's best through International Quality Natural formulations that combine traditional Indian Wisdom of medicine with Scientific Manufacturing.

Some of the ayurvedic products are:-

- **ANARSHA**  
Regularize Bowl Movement
- **AYURSULIN**  
Manages Diabetes Naturally
- **IMMUWIN**  
The Natural Immune Building Supplement
- **LIPIVED**  
Reduces Cholesterol Effectively
- **PROLIFE**  
Provides Life To Ailing Liver
- **STONEX**  
For Expulsion Of Kidney Stones
- **SUJIRNA**  
A Natural Support For Better Digestion
- **SUSWAS**  
Ant allergic/Anti asthmatic
- **BALVAC**  
A Mild Laxative

## **ORGANISATION CHART/SETUP**

### **UNIT (1)**

Bal Pharma Unit - 1, finished dosage facility for manufacturing Tablets, Capsules, and Ointments. The manufacturing plant is WHO-GMP approved and has obtained the ISO 9001:2000 accreditations.

The products are exported to South East Asian countries, African countries, and Middle East, and Latin American markets. The plant also caters to the needs of companies for Contract Manufacturing both in India and Abroad.

The manufacturing facility is approved by the Ministry of Health – Ethiopia, MCAZ-Zimbabwe, Tanzania Food and Drug Authority and the plant is awaiting approval from Kenya - Pharmacy and Poisons Board, Ministry of Health – Malawi.

### **UNIT (2)**

**Bal Pharma Unit - 2**, is involved in the manufacturing of API's. All activities connected with production of bulk actives are carried out here. A well-equipped R&D laboratory, a good Kilo laboratory and quality control facilities form the other spheres of activity here. A well-trained team of about 40 personnel man the different departments of the facility.

Many of the processes that have been developed in the laboratory have been scaled up and have attained bulk production levels. Or export of Gliclazide to Europe, Bal Pharma's facility has obtained the approval from Europe's EDQM and the Certificate of Suitability has been received.

Over the years, we have gained experience in carrying out different kinds of reactions, a concise list of which is appended at the end. At our facility the emphasis has been on producing important high value-low volume category of drugs and their intermediates. Our expertise in benzodiazepinones, steroidal drugs, nutraceuticals, antidepressants, antihistamines and cardiovascular drugs has been well recognized. We now are making an initial foray into the chiral molecule segment; stereo specific synthesis is on the agenda.

The API products are being exported to Japan, Australia, Spain, UK, Canada, Nigeria,

## **“MNF Tablet For Mother & Foetus”**

---

Iceland, Slovenia, Romania, Argentina, Brazil, Pakistan, Germany, South Africa, Serbia, Taiwan, Malaysia, Thailand, Turkey, Egypt, Korea, Venezuela, Italy, Portugal, Morocco, Poland, Netherlands, Syria, Bangladesh, and Indonesia etc.

### **UNIT (3)**

The Bal Pharma Unit - 3, manufacturers Liquid Oral preparations, Large Volume Parenterals and Small Volume Parenterals using FFS technology. The manufacturing plant is designed as per WHO-GMP guidelines.

The LVP and SVP are being exported to many African and Asian countries and also cater to the needs of companies for Contract Manufacturing both in India and Abroad.

The manufacturing facility is approved by the Ministry of Health – Ethiopia, MCAZ- Zimbabwe and the plant is awaiting approval from NAFDAC - Nigeria, PPB – Kenya and FDB – Ghana.

### **UNIT(4)**

The Bal Pharma Unit - 4, is a new manufacturing plant build at the cost of USD 8 Million. The plant is designed as per the USFDA and MHRA guidelines. The plant has ultramodern machineries for the manufacturing of Tablets, Capsules and Ointments.

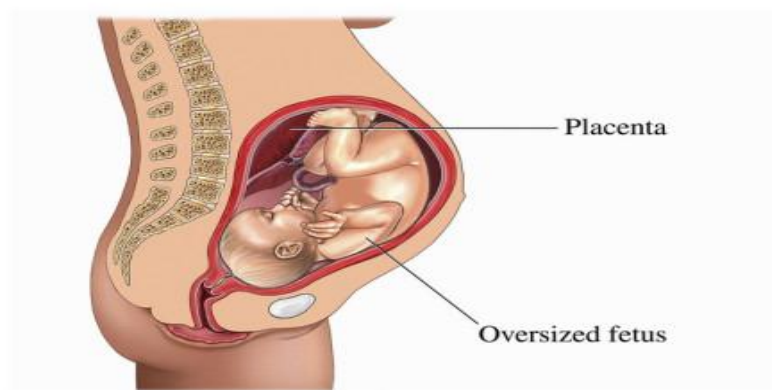
### **Achievements/Awards**

- Bal Pharma has received the prestigious “INDIA CHEM AWARD FOR 2004-2005”
- Bal Pharma Ltd has achieved the best “SUPPLIERS CONVENTION FOR STATE PHARMACEUTICAL CORPORATION FOR 2004-2005”
- Bal Pharma Ltd had achieved the “ADVANT Technologies INC BEST MEDI STOCK for 2007-2008”
- Bal Pharma Ltd has achieved the SRI PHARMACEUTICAL CORPURATION FOR BEST SUPPLIER FOR 2011-2012.
- Bal Pharma Ltd had a drastic growth from a 100 crores worth company to a 150 crores one, within 2 years.

### **PART-B**

#### **MNF TABLET FOR MOTHER & FOETUS**

**Pregnancy** is the fertilization and development of one or more offspring, known as an embryo or foetus, in a woman's uterus. In a pregnancy, there can be multiple gestations, as in the case of twins or triplets. Childbirth usually occurs about 38 weeks after conception.



AllPosters

The term embryo is used to describe the developing offspring during the first eight weeks following conception; the term foetus is used from eight weeks until birth.

The first trimester carries the highest risk of miscarriage (natural death of embryo or foetus). During the second trimester, the development of the foetus can be more easily monitored and diagnosed. The beginning of the third trimester often approximates the point of viability, or the ability of the foetus to survive, with or without medical help, outside of the uterus.



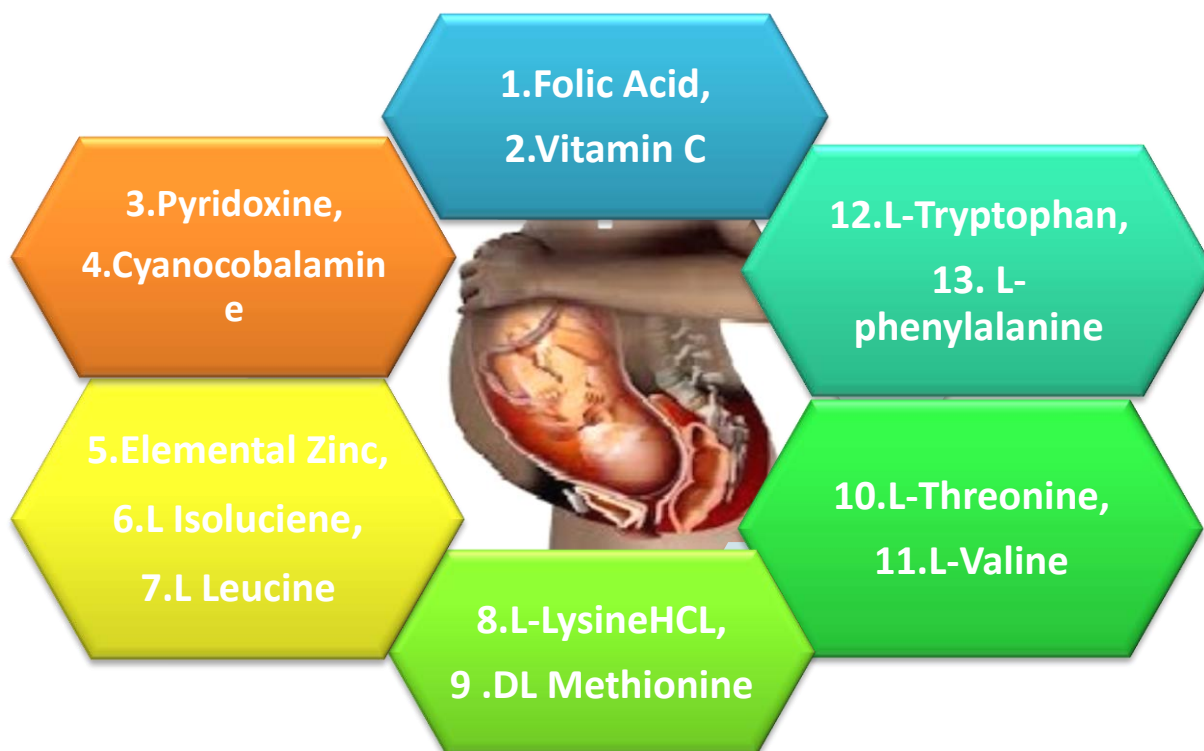
## **“MNF Tablet For Mother & Foetus”**

During pregnancy, it is important to eat foods that provide all of the nutrients required for the increased needs of mothers and babies during pregnancy.

It is important to take in enough calories, vitamins and nutrients to support the growing baby and to meet mothers' demands experienced as a result of pregnancy.

Good nutrition in pregnancy involves more than calories alone. Pregnancy increases the demand for protein, amino acids, omega-3 fatty acids, folic acid, iron, copper and other minerals. While are the best way to get the additional nutrients, vitamin and mineral supplements are often required to help mothers reach the recommended levels. Prenatal vitamins contain recommended nutrient levels needed during pregnancy. Ideally, women should begin taking a multivitamin or prenatal vitamin at least one month prior to pregnancy.

### **MNF Tablet for Mother & Foetus**



## **“MNF Tablet For Mother & Foetus”**

---

### **(1) Folic Acid (5 mg)**

#### **Indications**

- Folic acid is a Vitamin B. Also called: Folacin, Folate.
- Folic acid is required to maintain normal erythropoiesis and nucleoprotein synthesis, DNA replication.
- Reduce risk of megaloblastic anemia ,Helps in oocyte maturation, implantation, placentation.
- Reduce risk of Congenital malformation (Neural tube defects,Spina bifida)

### **(2) Vitamin C (75 mg)**

#### **Indications**

- Vitamin C also commonly known as ascorbic acid
- It helps in Oxygen transport in foetus after the iron metabolism.
- The vitamin C is involved in Carbohydrate metabolism occur during pregnancy to ensure a continuous supply of nutrients to the growing foetus despite intermittent maternal food intake.
- It helps in support the immune system during pregnancy

### **(3) Pyridoxine (5mg)**

#### **Indications**

- Pyridoxine also commonly known as Vitamin B6
- Pyridoxine is used for preventing and treating morning sickness (nausea and vomiting) in early pregnancy.
- Pyridoxine is used for DNA synthesis

### **(4) Cyanocobalamine (1mcg)**

#### **Indications**

- Cyanocobalamine also commonly known as Vitamin B12.
- Vitamin B12 is a nutrient that helps keep the body's nerve and blood cells healthy.
- It is helps make DNA, the genetic material in all cells.
- B12 deficiency may raise risk of Spina Bifida and Other Neural Tube Defects.

## **“MNF Tablet For Mother & Foetus”**

---

- B12 is essential for the production of haemoglobin, the substances that carries oxygen in red blood cells.

### **(5) Elemental Zinc (61.5mg)**

#### **Indications**

- Elemental Zinc is essential for reduce risk of premature birth during pregnancy.
- Elemental Zinc is required for proper cell division which is providing support her rapidly growing baby.
- Elemental Zinc is needed for reduce risk of low birth weight babies.

### **(6) L Isoluciene (05.90 mg)**

#### **Indications**

- It is important in haemoglobin synthesis
- It is provide ingredients for the manufacturing of other essential biochemical components in the body.

### **(7) L-Leucine (18.30mg)**

#### **Indications**

- This amino acid is also useful in producing haemoglobin.
- An essential amino acid is used in growth hormone production.
- It is yields NADH and FADH<sub>2</sub> which can be utilized for ATP generation.

### **(8) L-Lysine HCL (25.0mg)**

#### **Indications**

- L-lysine may facilitate the absorption of calcium from the small intestine.
- This is decreasing the risk of developing hypertensive disorders during pregnancy.
- Insures the adequate absorption of calcium helps form collagen

(This makes up bone cartilage & connective tissues)

## **“MNF Tablet For Mother & Foetus”**

---

### **(9) DL Methionine (5.0mg)**

#### **Indications**

- DL Methionine is beneficial for regulating the availability of folic acid, which is essential during pregnancy.
- Amino acids are the building blocks of protein in the body and are necessary for the synthesis of enzymes, structural protein and some hormones.

### **(10)L-Threonine (4.20mg)**

#### **Indications**

- L-Threonine is an essential amino acid that helps to maintain the proper protein balance in the body.
- L-Threonine makes up collagen, elastin, and enamel protein.
- Nutrients are more readily absorbed when threonine is present.

### **(11)L–Valine (6.7mg)**

#### **Indications**

- L –Valine (6.7mg): L-Valine is commonly found in health supplements and body building supplements.
- Because of this amino acids effect on the body's ability to produce new muscle mass and increase healthy brain function, it is a highly coveted food additive.
- It has also been shown to help regulate the immune system.

### **(12)L- Tryptophan (5.0mg)**

#### **Indications**

- Tryptophan may be useful in increasing serotonin production, promoting healthy sleep, managing depression by enhancing mental and emotional well-being.

### **(13)L-Phenylalanine (5.0mg)**

#### **Indications**

- It is used by the brain to produce norepinephrine, a chemical that transmits signals between nerve cells and the brain; keeps you awake and alert.
- Its precursor role in the synthesis of the neurotransmitters nor epinephrine and dopamine & building block for various proteins produced in the body.

# **CHAPTER**

# **2**

### **(2) RESEARCH QUESTIONS**

In the following table name of combination of the drug of MNF Tablet given:-

**Table no 2.0**

| <b>S.no</b> | <b>Name of ingredients</b> |
|-------------|----------------------------|
| <b>1.</b>   | <b>Folic acid</b>          |
| <b>2.</b>   | <b>Vitamin C</b>           |
| <b>3.</b>   | <b>Pyridoxine</b>          |
| <b>4.</b>   | <b>Cyanocobalamine</b>     |
| <b>5.</b>   | <b>Elemental zinc</b>      |
| <b>6.</b>   | <b>L-Isoluciene</b>        |
| <b>7.</b>   | <b>L-luciene</b>           |
| <b>8.</b>   | <b>L-lysineHCL</b>         |
| <b>9.</b>   | <b>DL-methionine</b>       |
| <b>10.</b>  | <b>L-valine</b>            |
| <b>11.</b>  | <b>L-threonine</b>         |
| <b>12.</b>  | <b>L-tryptophan</b>        |
| <b>13.</b>  | <b>L-phenylalanine</b>     |

- 1. In above table (table no 2.0) given combination is the best combination for pregnancy?**
- 2. Which any four ingredients are beneficial in pregnancy?**
- 3. Would you like to prescribe this combination in other area also besides Pregnancy and lactation?**
- 4. According to this combination which is most associated brand, most associated Company, their MRP and what is the reason behind that of highest selling brand in the market?**

# **CHAPTER**

# **3**

### **(3) OBJECTIVES**

1. To study is there any type of brand/competitor available in the market or not regarding pregnancy or related mother & foetus, if available than what's their name (company's name) their brand name, what's their MRP & what is their unique feature?
2. To get the feedback from doctors is this combination of MNF tablet (see table no 3.0) is useful for mother & foetus and which ingredients are most important during pregnancy for mother & foetus.

# **CHAPTER**

# **4**

### **(4) RESEARCH DESIGN**

Regarding the study a market survey is designed which will be moreover an exploratory study for comparison of various existing brands related to this combination (see table no 3.0) or the other various companies brands related to pregnancy and newly launching product of MNF tablets in market. This study will further help to me, how to design the marketing strategies for sales and marketing & launching strategies (how it is launch, when it is launch) towards various pharmaceutical companies' products which already exist in the market. This study also helps me to know how prepared the LBL & different types of visual aids regarding new product which is more understandable & make a more clear of doctor's thought towards new product.

# **CHAPTER**

# **5**

### **(5) METHODOLOGY**

This study was a quantitative study with non-probability convenience sampling. 12 doctors and 11 chemists were taken as study sample in Bangalore and a semi structured questionnaire containing questions regarding MNF tablet. I had also prepared design of visual aids, LBL and technical print inputs of new MNF tablet brand of the company and I also learn how to make the launching strategies of new product. It was a quantitative study and analysis was carries around using ms-excel.

# **CHAPTER**

# **6**

### **(6) TIMELINE**

The study has been done in two stages first stage was the market survey to collect primary data from doctors & chemists which was expected to be completed in six to seven working days and one month for research proposal writing & presentation. Over all three to four presentation has been given. Fifteen days worked for another assigned Brand “Vitawiz-G” tablet presentation. I had also prepared the design of visual aids, LBL and Technical print inputs for MNF and Vitawiz-G tablet. Four days for complete report submission. The totals fifty five days were obtained for complete analysis for the respective exploratory study.

# **CHAPTER**

# **7**

## **“MNF Tablet For Mother & Foetus”**

### **(7) Results & Findings**

**Table no 3.0**  
**COMBINATION OF MNF TABLET**

| <b>S. No</b> | <b>Name of ingredients</b> | <b>Quantity</b> |
|--------------|----------------------------|-----------------|
| <b>1</b>     | <b>Folic acid</b>          | <b>5.0 mg</b>   |
| <b>2</b>     | <b>Vitamin c</b>           | <b>75.0 mg</b>  |
| <b>3</b>     | <b>Pyridoxine</b>          | <b>5.0 mg</b>   |
| <b>4</b>     | <b>Cyanocobalamine</b>     | <b>1.0 mcg</b>  |
| <b>5</b>     | <b>Elemental zinc</b>      | <b>61.50 mg</b> |
| <b>6</b>     | <b>L-Isoluciene</b>        | <b>5.90 mg</b>  |
| <b>7</b>     | <b>L-Luciene</b>           | <b>18.30 mg</b> |
| <b>8</b>     | <b>DL-Methionine</b>       | <b>5.0 mg</b>   |
| <b>9</b>     | <b>L-Threonine</b>         | <b>4.20 mg</b>  |
| <b>10</b>    | <b>L-LysineHCL</b>         | <b>25.0 mg</b>  |
| <b>11</b>    | <b>L-Valine</b>            | <b>6.70 mg</b>  |
| <b>12</b>    | <b>L-Tryptophan</b>        | <b>5.0 mg</b>   |
| <b>13</b>    | <b>L-Phenylalanine</b>     | <b>5.0 mg</b>   |

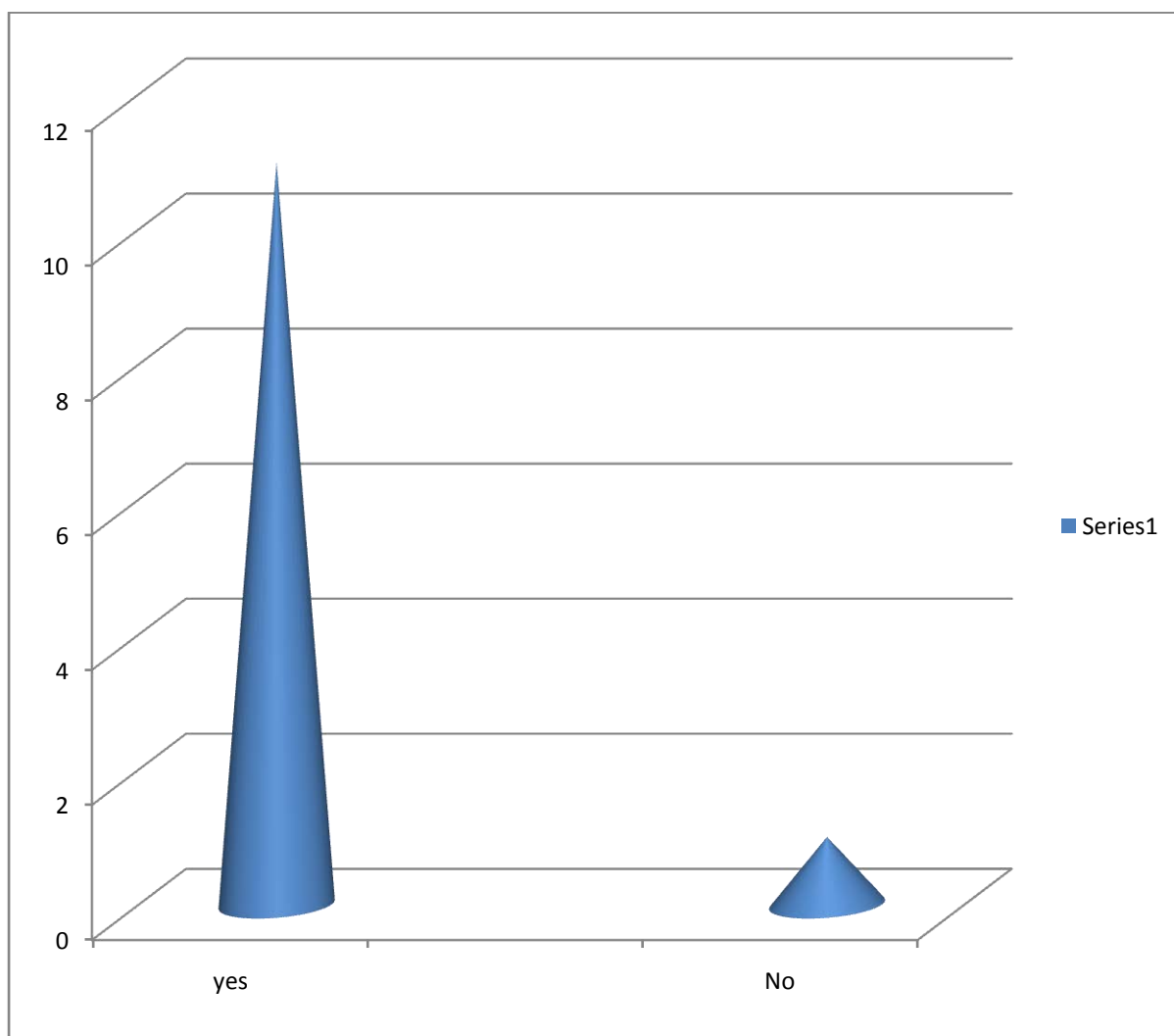
## “MNF Tablet For Mother & Foetus”

(4) Best combination for pregnancy.(See table no 3.0)

**Table no 4.0**

| Total respondents | Yes | No |
|-------------------|-----|----|
| 12                | 11  | 1  |

**Findings:-**



**Graph no 4.0**

**Analysis:-**

As per the analysis of given above graph 4.0, out of 12 doctors, 11 doctors had approved that this (table no 3.0) combination is the best combination for pregnant womens. In other way only one doctor had disagreed with this combination. According to him this combination has more ingredients which are not required.

## **“MNF Tablet For Mother & Foetus”**

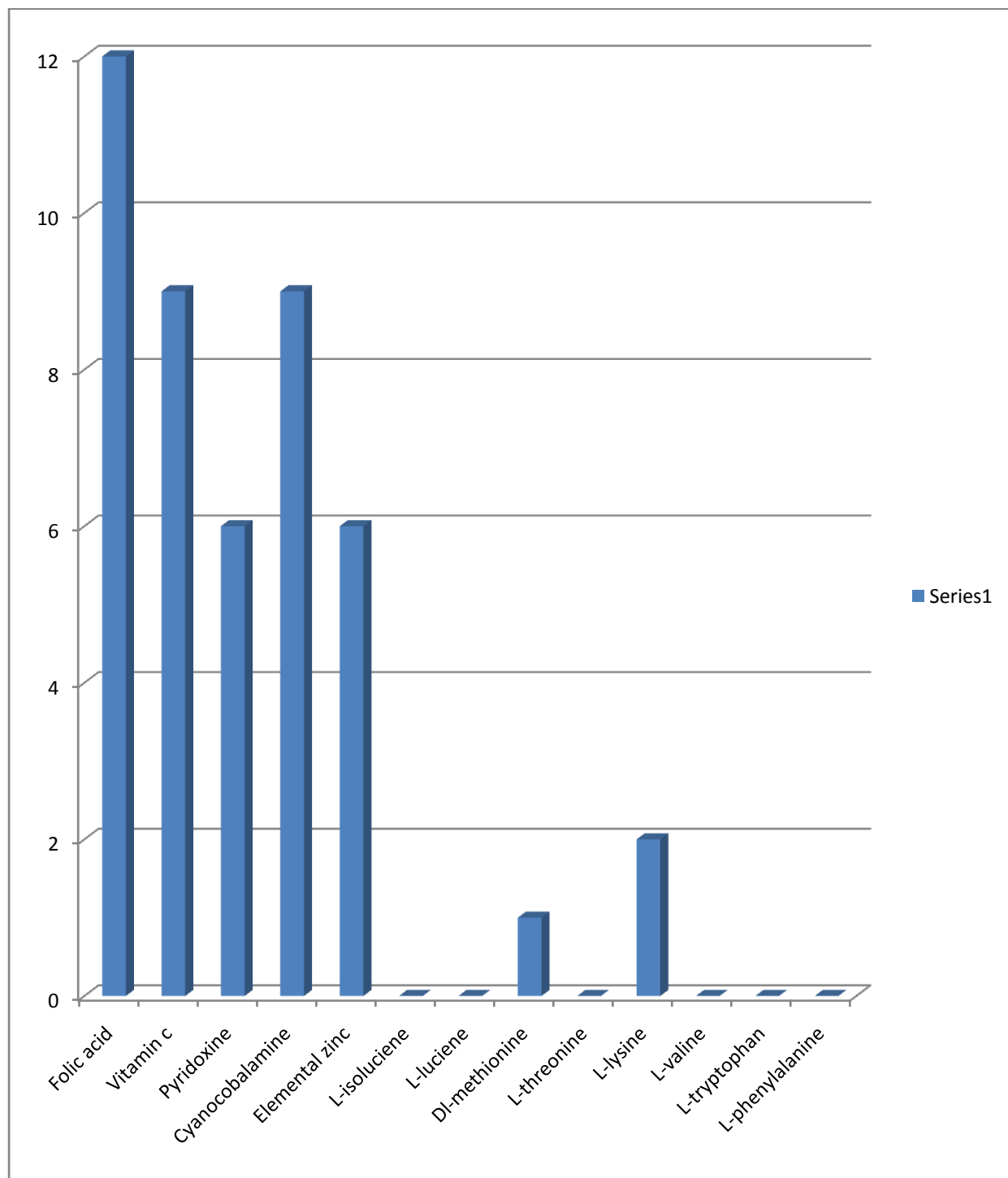
**(5) Most beneficial ingredients during pregnancy.(See Table no 3.0)**

**Table no 5.0**

| <b>S.No</b> | <b>No of responses<br/>(Out of 12)</b> | <b>Ingredients name</b> |
|-------------|----------------------------------------|-------------------------|
| <b>1.</b>   | <b>12</b>                              | <b>Folic acid</b>       |
| <b>2.</b>   | <b>9</b>                               | <b>Vitamin C</b>        |
| <b>3.</b>   | <b>6</b>                               | <b>Pyridoxine</b>       |
| <b>4.</b>   | <b>9</b>                               | <b>Cyanocobalamine</b>  |
| <b>5.</b>   | <b>6</b>                               | <b>Elemental zinc</b>   |
| <b>6.</b>   | <b>0</b>                               | <b>L isoluciene</b>     |
| <b>7.</b>   | <b>0</b>                               | <b>L luciene</b>        |
| <b>8.</b>   | <b>1</b>                               | <b>DL-methionine</b>    |
| <b>9.</b>   | <b>0</b>                               | <b>L threonine</b>      |
| <b>10.</b>  | <b>2</b>                               | <b>L lysineHCL</b>      |
| <b>11.</b>  | <b>0</b>                               | <b>L valine</b>         |
| <b>12.</b>  | <b>0</b>                               | <b>L tryptophan</b>     |
| <b>13.</b>  | <b>0</b>                               | <b>L phenylalanine</b>  |

## “MNF Tablet For Mother & Foetus”

### Findings:-



Graph 5.0

## “MNF Tablet For Mother & Foetus”

---

### Analysis:-

As per the analysis of graph no 5.0, all ingredients analysis were following:-

1. **Folic acid:-** Out of 12 respondents, all the doctors had approved that folic acid is most important & essential ingredient because it reduce neural tube defect in foetus during pregnancy.
2. **Vitamin C:-** 9 doctors had approved out of total 12 that vitamin c is essential during pregnancy because its helps to transport oxygenated blood in foetus & in mother it works as a immunomodulator or immune booster . In other way 3 had disagreed from this.
3. **Pyridoxine:-** 6 doctors had approved that pyridoxine is essential ingredient during pregnancy because it reduce morning sickness like nousea vomitting etc during pregnancy. In other way same 6 doctors had disagreed with this.
4. **Cyanocobalamine:-** Same as vitamin c, 9 doctors out of 12 had approved that cyanocobalamine is most essential element during pregnancy because it reduce spina bifida in foetus & in mother its keep maintain nerve cells & blood vessels healthy.
5. **Elemental zinc:-** Six doctors had approved out of twelve doctors that zinc is essential element because it reduce pre-eclampcia & helps in a proper cell division in foetus & in mother it reduce pre-mature birth. In other way six doctors had not agreed with this.
6. **L- lysine:-** Two doctors had approved out of twelve doctors with Lysine because it helps in the formation of bone cartilage in foetus & in mother, it reduce hypertensive disorder & increase calcium absorption during pregnancy. Remaining ten doctors had not agreed with this.
7. **DL-Methionine:-** one doctor had approved the methionine that it is an essential ingredient during pregnancy because it helps in formation of protien building block in foetus.

There were only seven ingredients highly beneficial in pregnancy according to the doctors, other ingredients were also very much essential but these elements should be added on priority in combination.

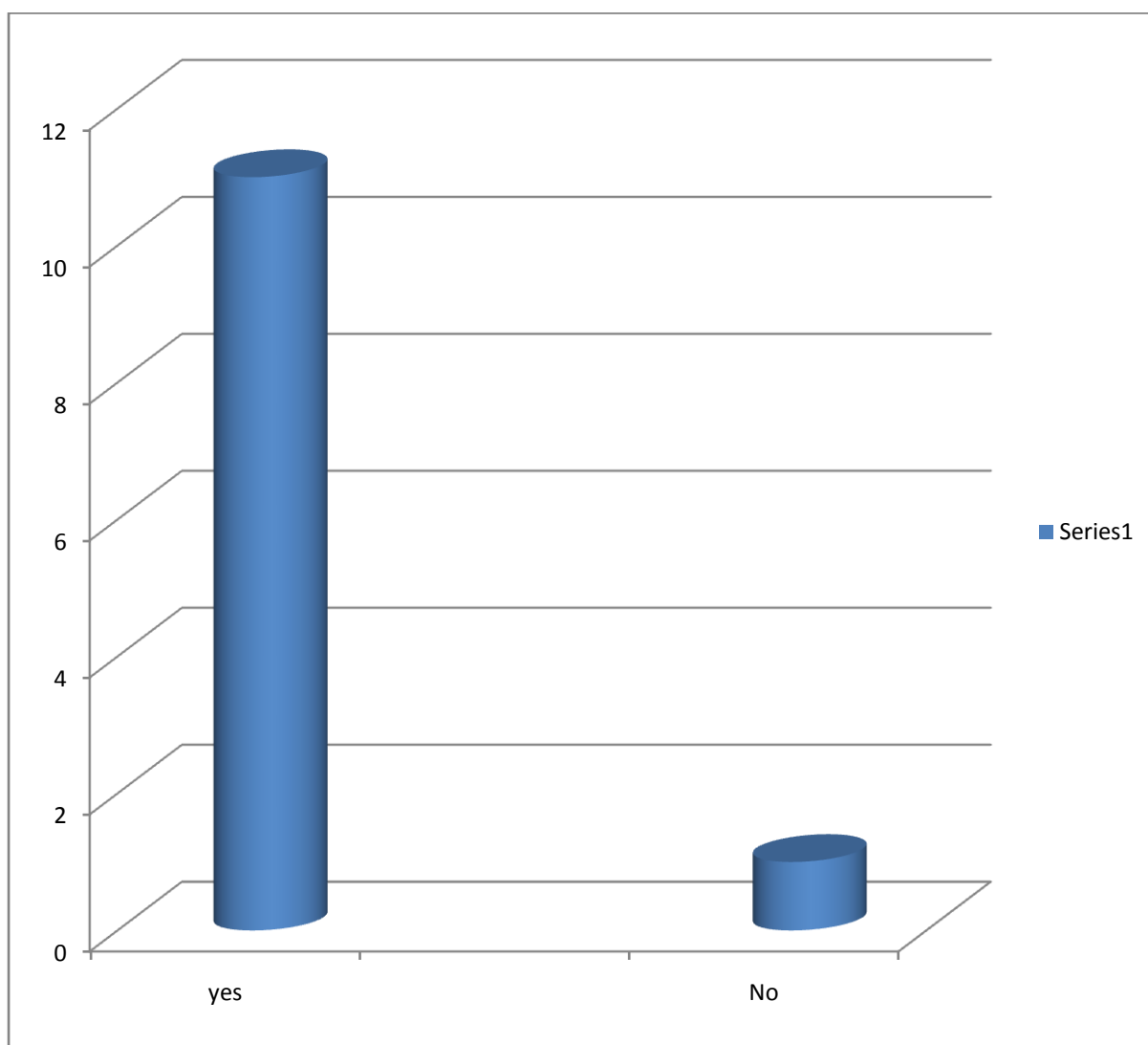
## “MNF Tablet For Mother & Foetus”

(6) Prescribe any other area besides pregnancy & lactation:-

**Table no 6.0**

| Total respondents | Yes | No |
|-------------------|-----|----|
| 12                | 11  | 1  |

**Findings:-**



**Graph 6.0**

**Analysis:-**

As per the analysis of above graph no 6.0, eleven doctors had agreed out of twelve that they would like to prescribe this combination besides pregnancy & lactation. But one doctor had disagreed with this.

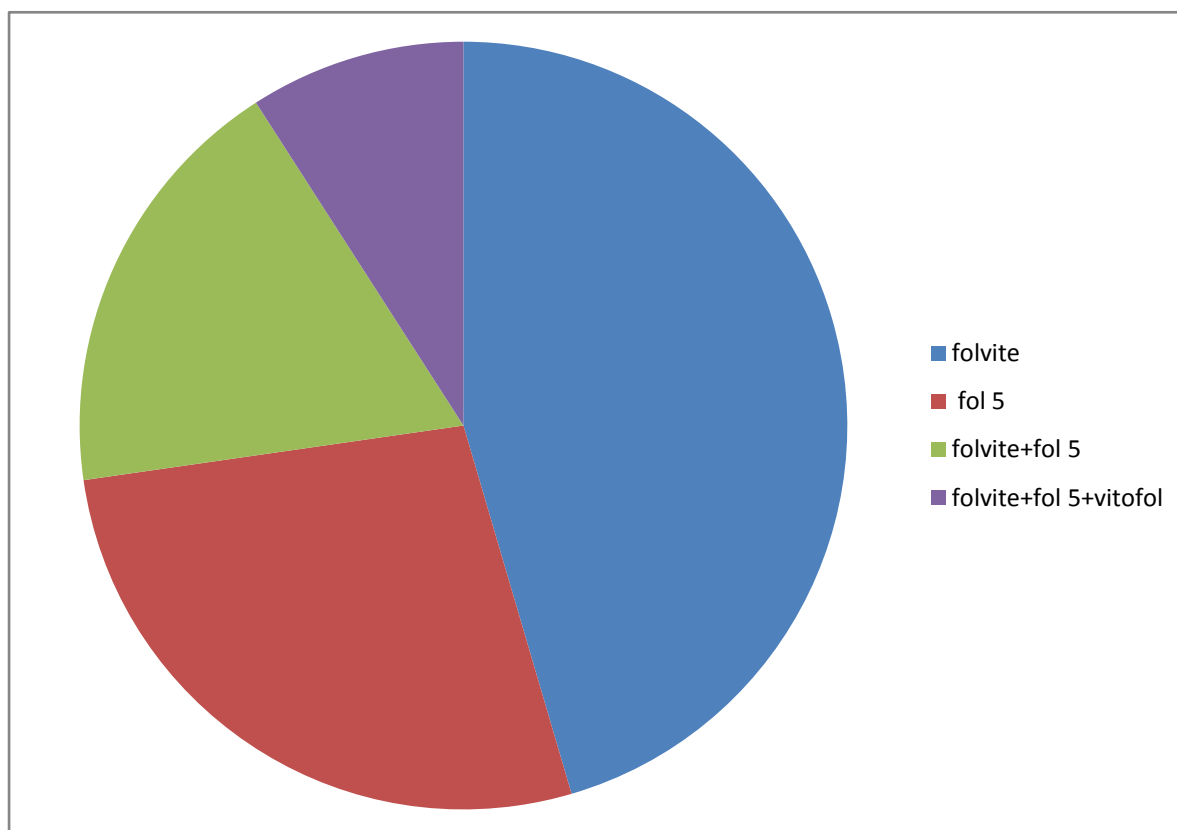
## “MNF Tablet For Mother & Foetus”

### (7.0) Folic acid

**Most associated brand**  
**Table no 7.1**

| Total respondents | Folvite | Fol-5 | Folvite+fol-5 | Folvite + fol-5 +vitofol |
|-------------------|---------|-------|---------------|--------------------------|
| 11                | 5       | 3     | 2             | 1                        |

**Findings:-**



**Graph 7.1**

**Analysis:-**

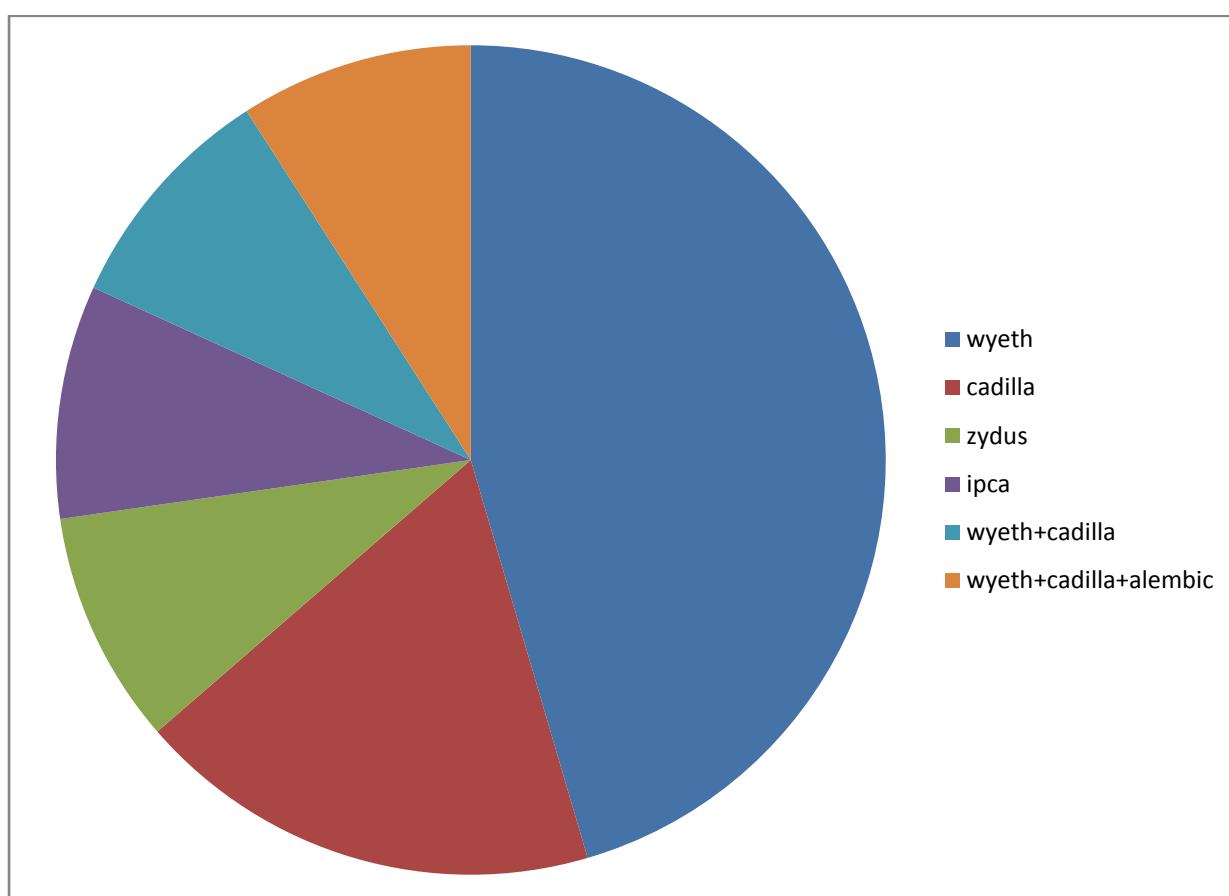
As per the analysis of given above graph 7.1, Out of 11 chemist respondents, 5 chemists had approved the single folvite brand that folvite was the most selling brand in market, 3 for fol-5 brand, 2 for both folvite & fol 5 & 1 for all three folvite, fol 5 & vitofol so folvite was one of the top brands in market with folic acid as combination taken in pregnancy.

## **“MNF Tablet For Mother & Foetus”**

**Most associated company**  
**Table no 7.2**

| <b>Total respondents</b> | <b>Wyeth</b> | <b>Cadilla</b> | <b>Zydus</b> | <b>Ipca</b> | <b>Wyeth + cadilla</b> | <b>Cipla + Wyeth + Cadilla</b> |
|--------------------------|--------------|----------------|--------------|-------------|------------------------|--------------------------------|
| <b>11</b>                | <b>5</b>     | <b>2</b>       | <b>1</b>     | <b>1</b>    | <b>1</b>               | <b>1</b>                       |

**Findings:-**



**Graph 7.2**

**Analysis:-**

As per the analysis of given above graph 7.2, Out of 11 respondents, 5 has approved that Wyeth was leading Company in the market, second stands Cadilla remaining four each are Zydus, Ipca, both Wyeth, Cadilla, Wyeth + cadilla + Alembic. So Wyeth was the most leading company in the market according to my survey with folic acid combinations.

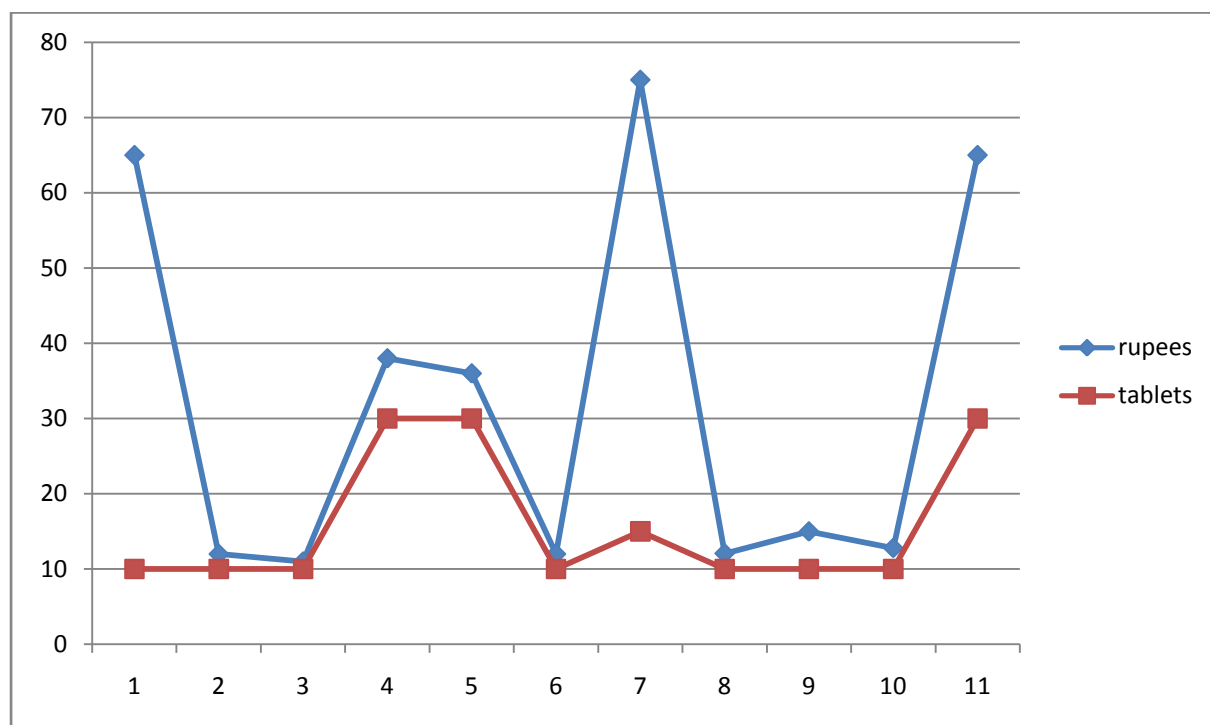
## “MNF Tablet For Mother & Foetus”

### MRP (Maximum Retail Price)

Table no 7.3

| Total respondents | Rupees | Tablets |
|-------------------|--------|---------|
| 1.                | 65     | 10      |
| 2.                | 12     | 10      |
| 3.                | 11     | 10      |
| 4.                | 38     | 30      |
| 5.                | 36     | 30      |
| 6.                | 12     | 10      |
| 7.                | 75     | 15      |
| 8.                | 12.08  | 10      |
| 9.                | 15     | 10      |
| 10.               | 12.8   | 10      |
| 11.               | 65     | 30      |

### Findings:-



Graph 7.3

### Analysis:-

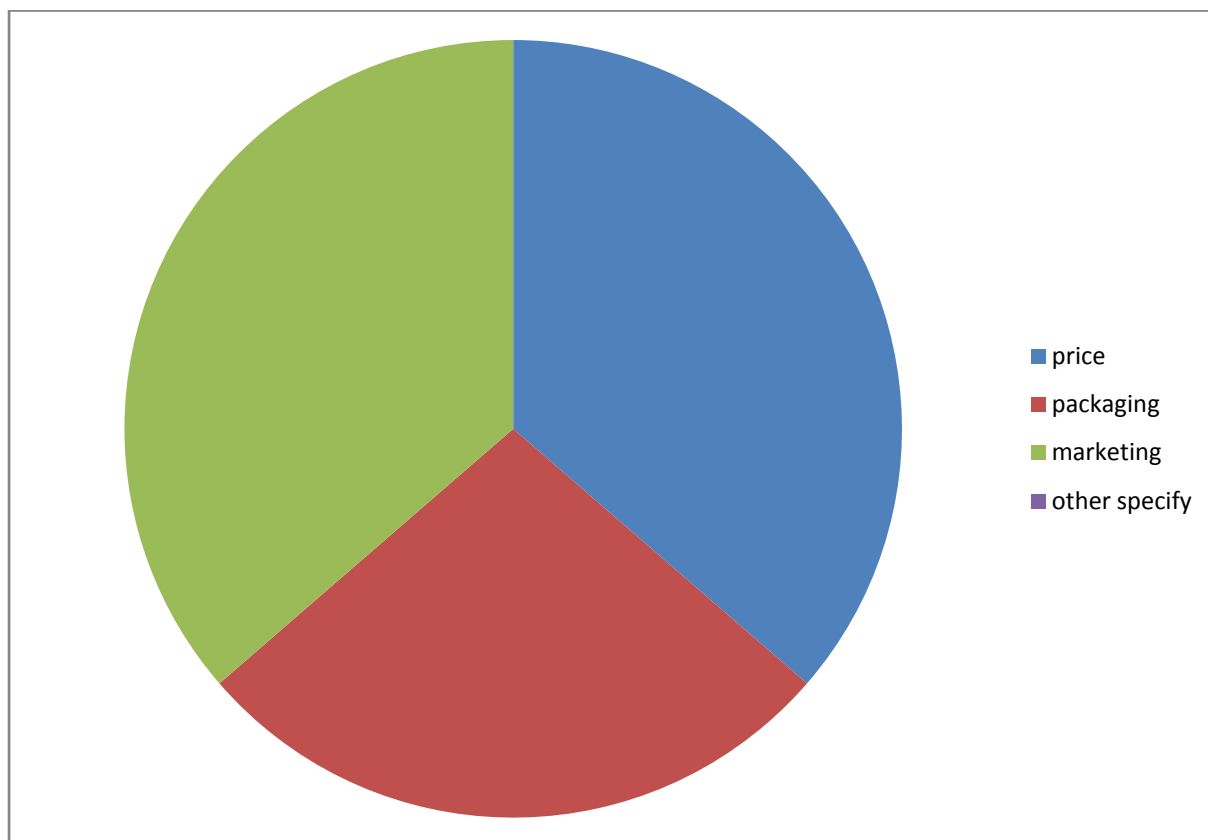
As per the analysis of given above graph 7.3, Out of 11 respondents, every chemist gave a different-different response of different product of folic acid. But in all responses I got the highest price of three products according to their sale.

## “MNF Tablet For Mother & Foetus”

Unique feature  
Table no 7.4

| Total respondents | Price | Packaging | Marketing | Other specify |
|-------------------|-------|-----------|-----------|---------------|
| 11                | 4     | 3         | 4         | 0             |

**Findings:-**



**Graph 7.4**

**Analysis:-**

As per the analysis of given above graph 7.4, Out of 11 respondents, 4 chemist has agreed with price means according to them price is a main factor behind brand's highly selling because some brands having very less price as per customers affordability, third one with packaging means they have agreed that some brands highly selling because of their attractive packaging, and remaining 4 had agreed with marketing means Brand popularity is main reason behind their excessive market demand and sales growth.

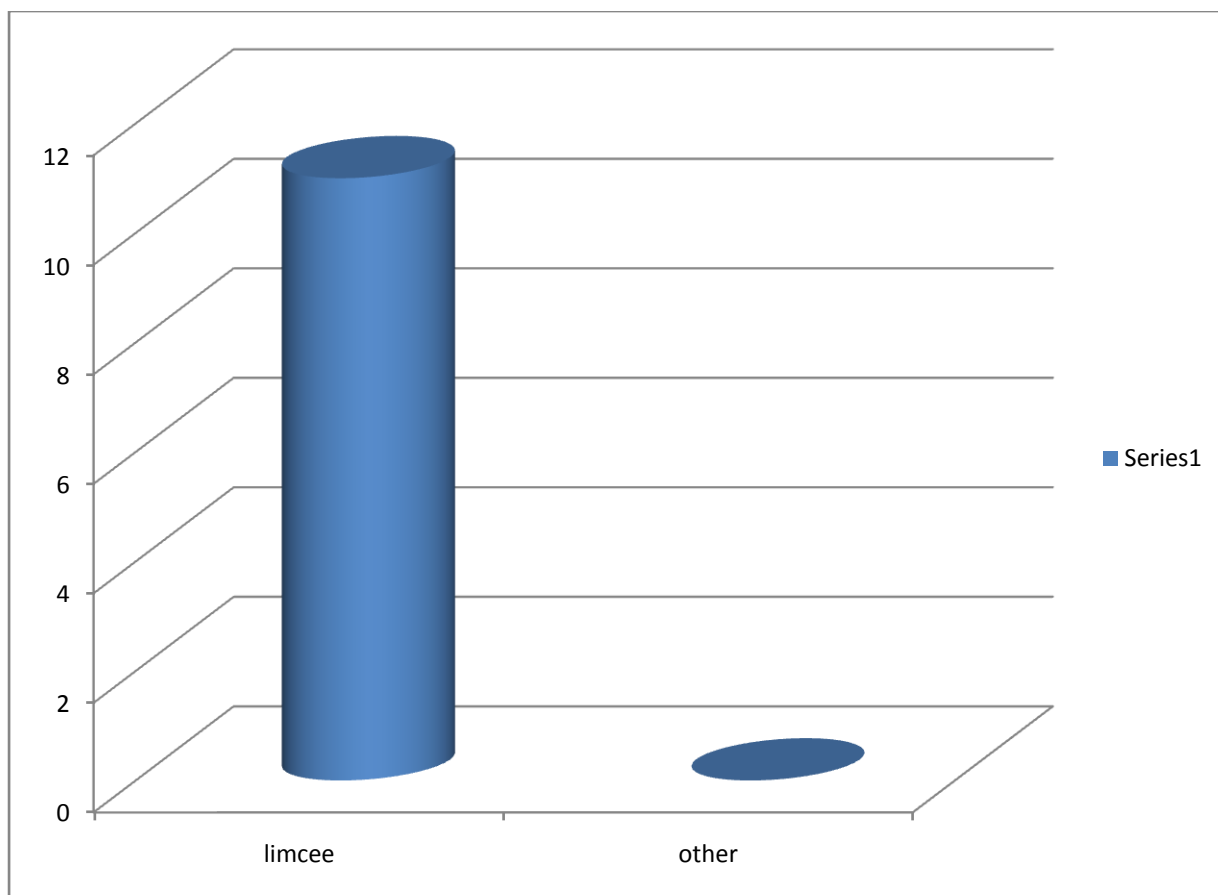
## “MNF Tablet For Mother & Foetus”

### (8.0) Vitamin C

**Most associated brand**  
**Table no 8.1**

| Total respondents | Limcee | Others |
|-------------------|--------|--------|
| 11                | 11     | 0      |

#### **Findings:-**



**Graph 8.1**

#### **Analysis:-**

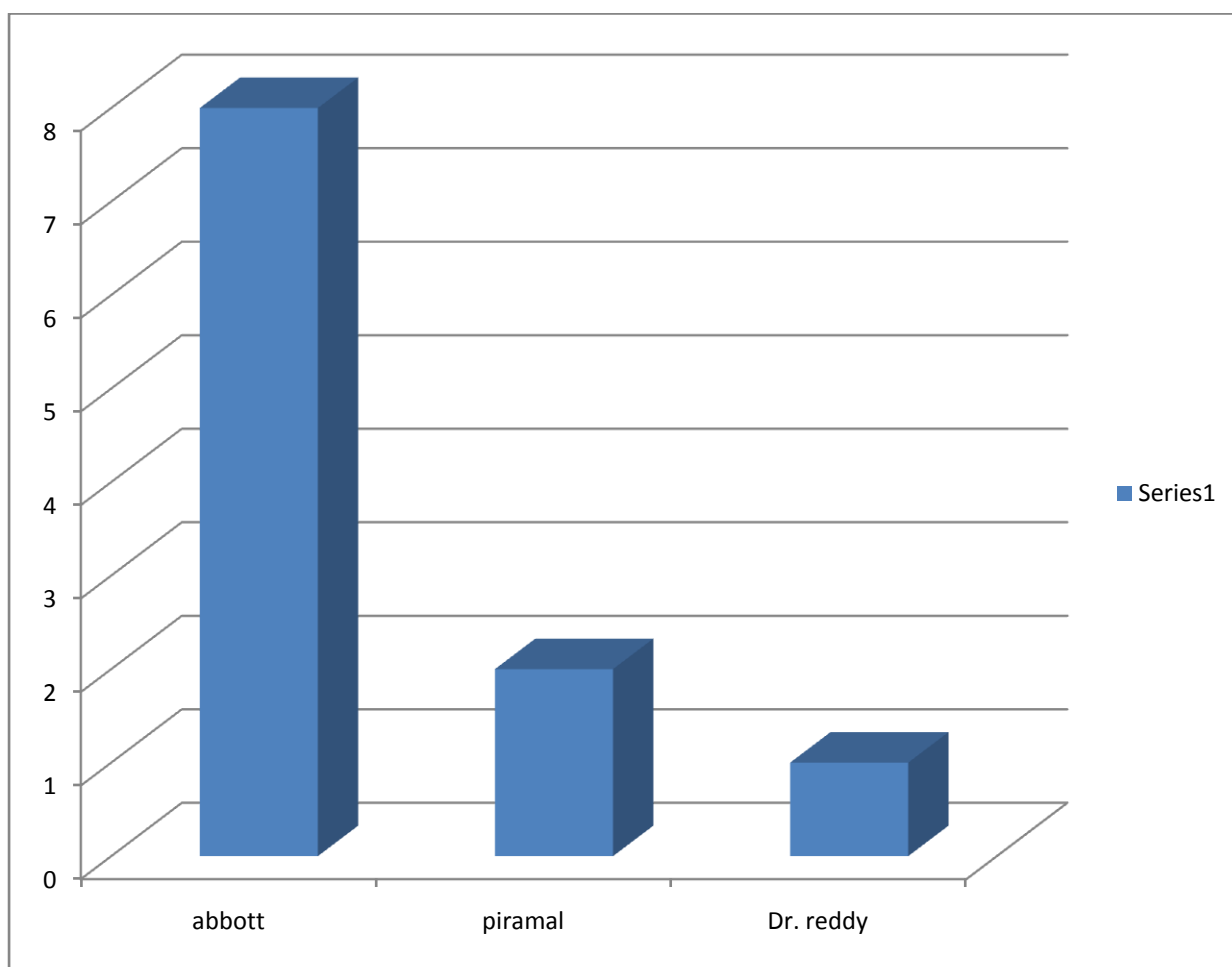
As per the analysis of above graph 8.1, Out of 11 respondents, all the chemist have agreed the brand of limcee that means limcee was the highest selling brand with vitamin c as one of the basic molecule in the current market.

## “MNF Tablet For Mother & Foetus”

**Most Associated Company**  
**Table no 8.2**

| Total respondents | Abbott | Piramal | Dr.Reddy |
|-------------------|--------|---------|----------|
| 11                | 8      | 2       | 1        |

**Findings:-**



**Graph 8.2**

**Analysis:-**

As per the analysis of given above graph 8.2, Out of 11 respondents, 8 chemists have agreed that Abbott was the most leading company in the market, in other way only 2 chemist with the Piramal was the second most leading company in current market.& remaining 1 had agreed with Dr. Reddy.

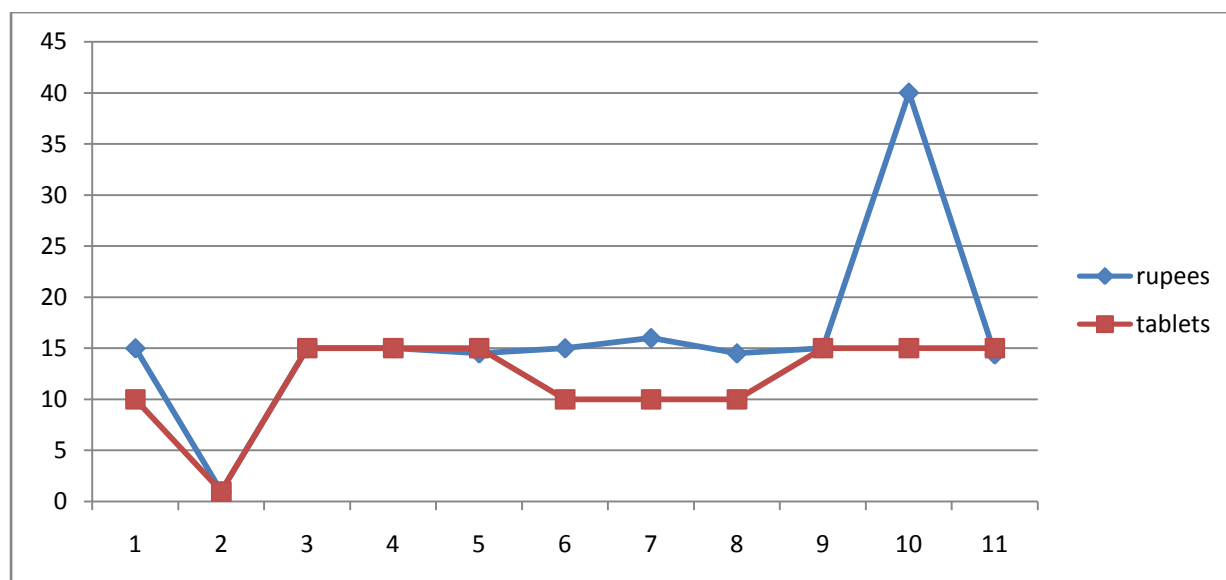
## “MNF Tablet For Mother & Foetus”

### MRP (Maximum Retail Price)

Table no 8.3

| Total respondents | Rupees | Tablets |
|-------------------|--------|---------|
| 1.                | 15     | 10      |
| 2.                | 1      | 1       |
| 3.                | 15     | 15      |
| 4.                | 15     | 15      |
| 5.                | 14.5   | 15      |
| 6.                | 15     | 10      |
| 7.                | 16     | 10      |
| 8.                | 14.5   | 10      |
| 9.                | 15     | 15      |
| 10.               | 40     | 15      |
| 11.               | 14.4   | 15      |

### Findings:-



Graph 8.3

### Analysis:-

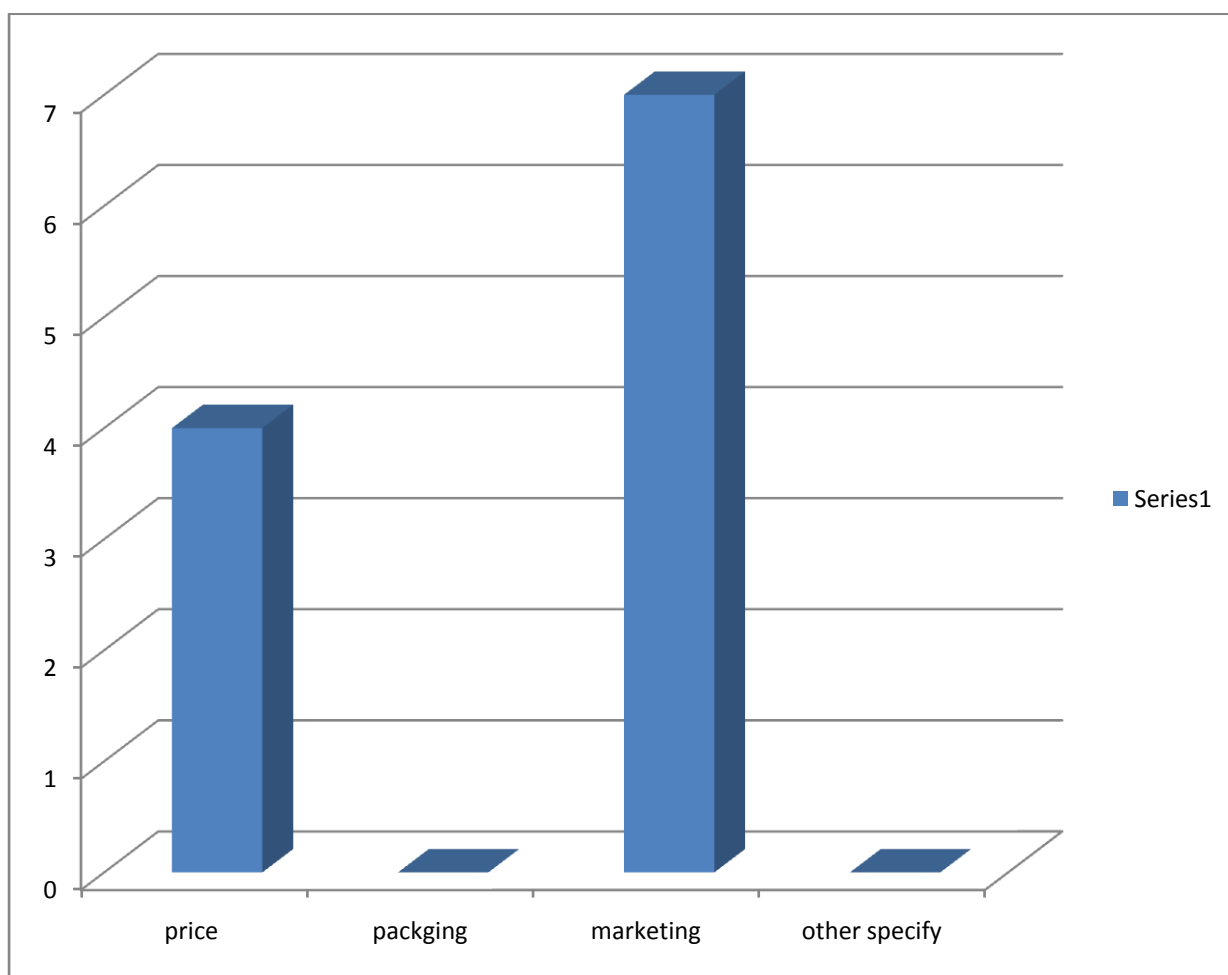
As per the analysis of given above graph 8.3, Out of 11 respondents, every chemist gave the different-different prices of various brands related to vitamin C as a molecule & in these entire products one product was the highest sale.

## “MNF Tablet For Mother & Foetus”

**Unique feature**  
**Table no 8.4**

| Total respondents | Price | Packaging | Marketing | Other specify |
|-------------------|-------|-----------|-----------|---------------|
| 11                | 4     | 0         | 7         | 0             |

**Findings:-**



**Graph 8.4**

**Analysis:-**

As per the analysis of given above graph 8.4, Out of 11 respondents, 4 chemists had agreed the Brand with vitamin c as main molecule , price was the main factor behind its highest selling. In other way highest 7 chemist had agreed with brand marketing means awareness of the brand was highly responsible for its excessive selling in the market & no chemist has agreed with brand packaging and other specification.

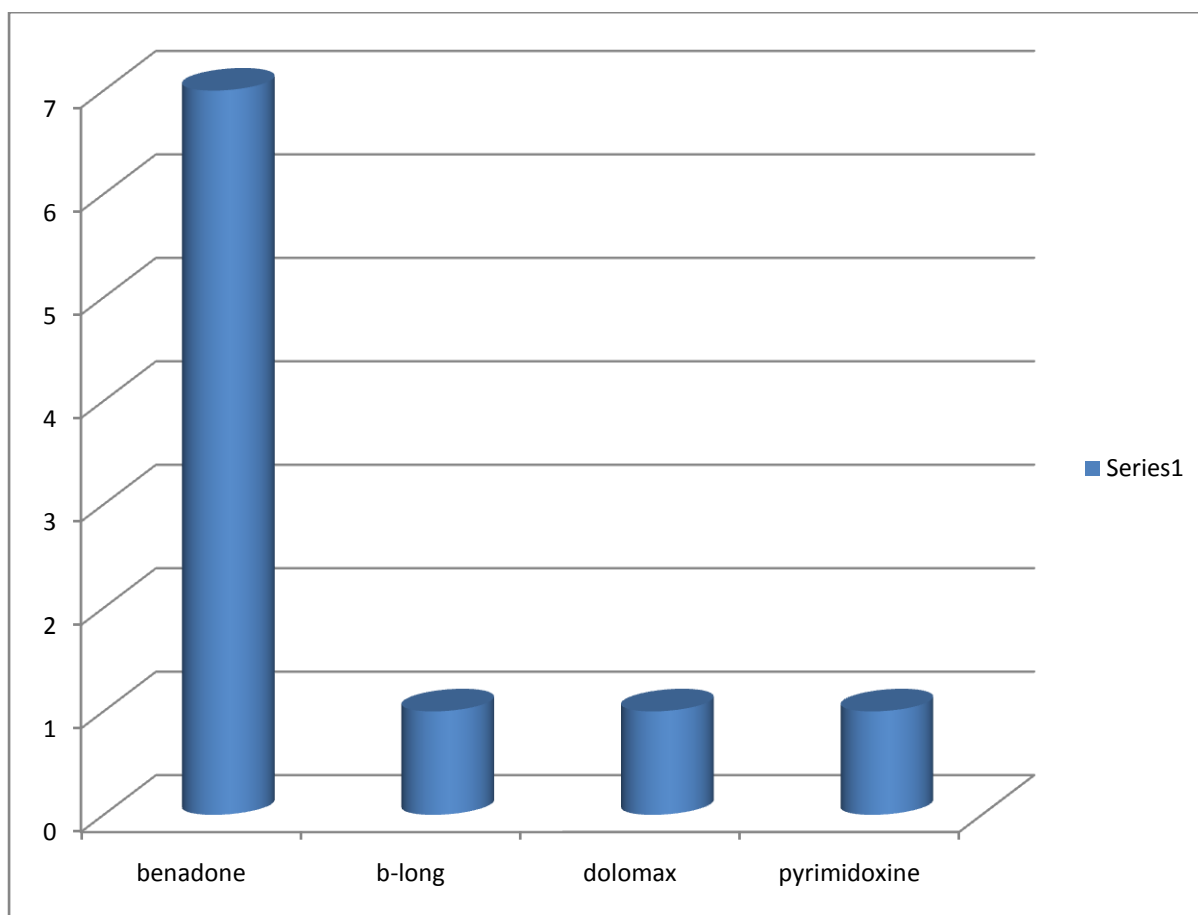
## “MNF Tablet For Mother & Foetus”

### (9.0) Pyridoxine

**Most Associated Brands**  
**Table no 9.1**

| Total respondents | Benadone | B-long | Dolomax | Pyrimidoxine |
|-------------------|----------|--------|---------|--------------|
| 11                | 7        | 1      | 1       | 1            |

#### Findings:-



**Graph 9.1**

#### Analysis:-

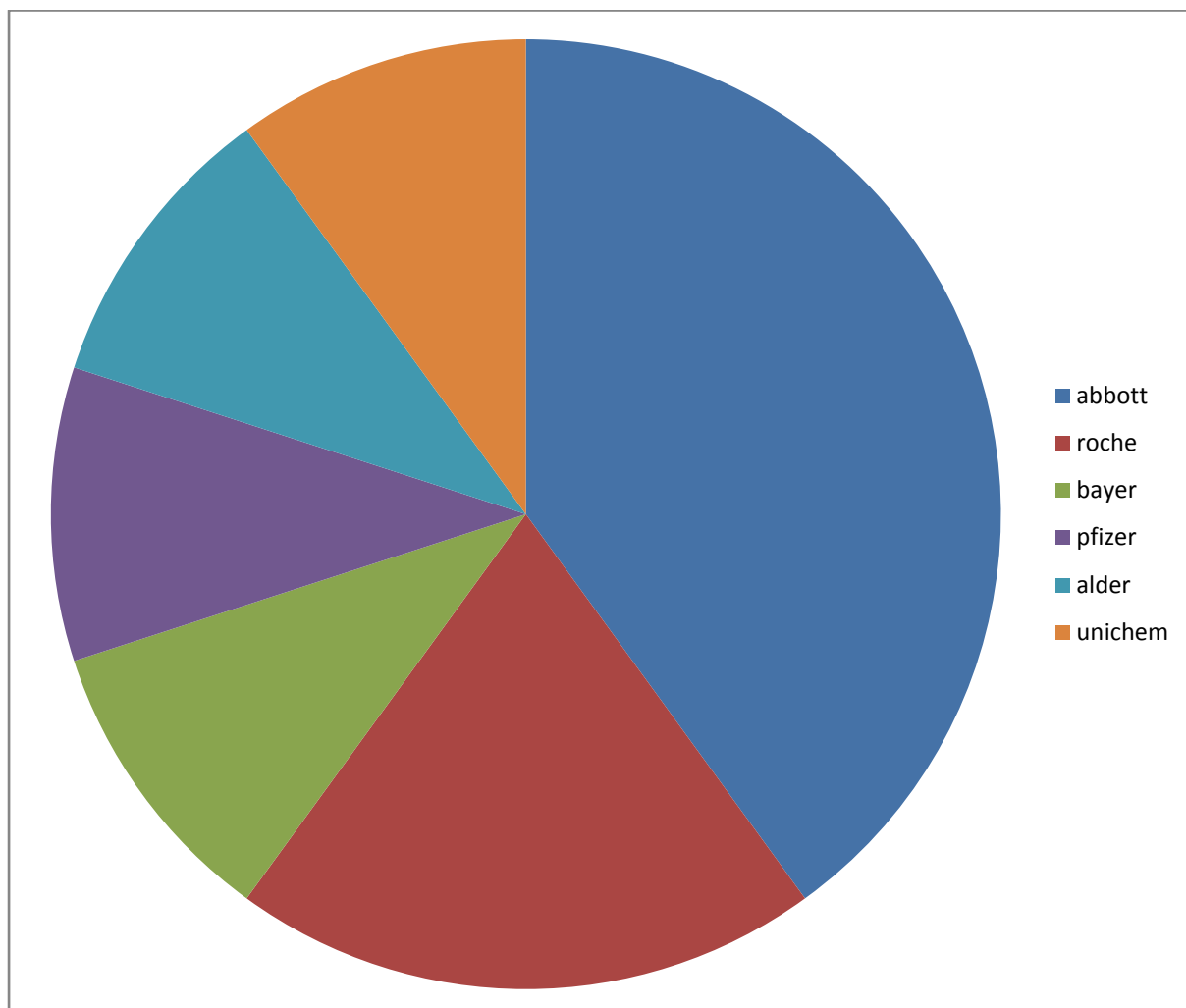
As per the analysis of given above graph 9.1, Out of 11 respondents, 7 chemists had agreed that Benadone was the most leading brand in the current market with pyridoxine. In other way remaining 3, each of one had agreed with B-long, Dolomax, pyrimidoxine second one most leading brands in the market. One chemist has not responded.

## “MNF Tablet For Mother & Foetus”

**Most Associated Company**  
**Table no 9.2**

| Total respondents | Abbott | Roche | Bayer | Pfizer | Alder | Unichem |
|-------------------|--------|-------|-------|--------|-------|---------|
| 11                | 4      | 2     | 1     | 1      | 1     | 1       |

**Findings:-**



**Graph 9.2**

**Analysis:-**

As per the analysis of given above graph 9.2, Out of 11 respondents, 4 had agreed that Abbott was the most leading company in current market with combination pyridoxine. In other way 2 chemists had agreed with Roche that Roche was the second most leading company and remaining 3 each one of them had agreed that Bayer, Pfizer, Alder & Unichem were one of the leading company in the market. Remaining has not responded.

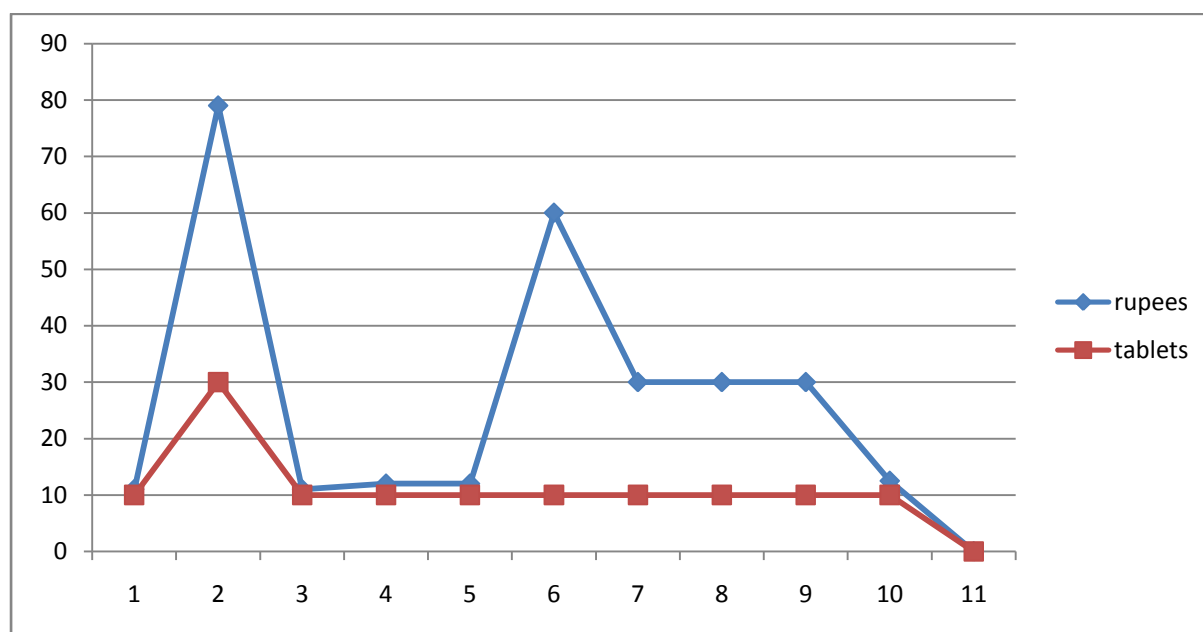
## “MNF Tablet For Mother & Foetus”

### MRP (Maximum Retail Price)

Table no 9.3

| Total respondents | Rupees | Tablets |
|-------------------|--------|---------|
| 1.                | 11     | 10      |
| 2.                | 79     | 30      |
| 3.                | 11     | 10      |
| 4.                | 12     | 10      |
| 5.                | 12     | 10      |
| 6.                | 60     | 10      |
| 7.                | 30     | 10      |
| 8.                | 30     | 10      |
| 9.                | 30     | 10      |
| 10.               | 12.5   | 10      |
| 11.               | 0      | 0       |

### Findings:-



Graph 9.3

### Analysis:-

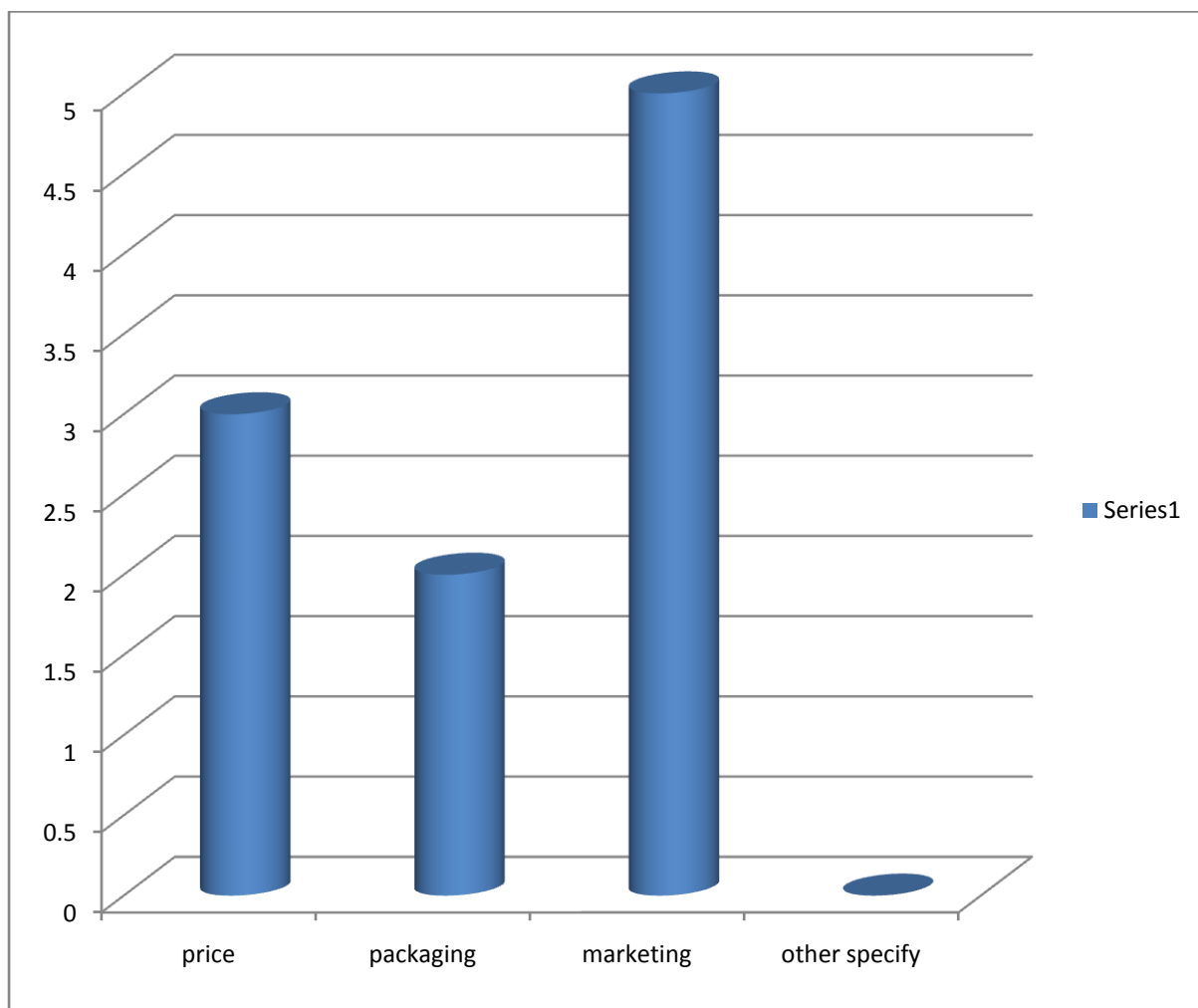
As per the analysis of given above graph 9.3, Out of 11 respondents, every chemist gave different price (MRP) of different brand with pyridoxine. Only 2 brands were having the highest price and other according to the customer affordability. One chemist had not responded.

## “MNF Tablet For Mother & Foetus”

Unique feature  
Table no 9.4

| Total respondents | Price | Packaging | Marketing | Other specify |
|-------------------|-------|-----------|-----------|---------------|
| 11                | 3     | 2         | 5         | 0             |

### Findings:-



**Graph 9.4**

### Analysis:-

As per the analysis of given above graph 9.4, Out of 11 respondents, 3 chemists had agreed that price was main factor behind the highest selling of brand in the market. In other way 2 chemists had agreed that packaging was the main factor for selling and 5 chemists; maximum chemists had agreed with marketing means awareness about the brand was the main factor behind the highest selling. Remaining one chemist had not responded.

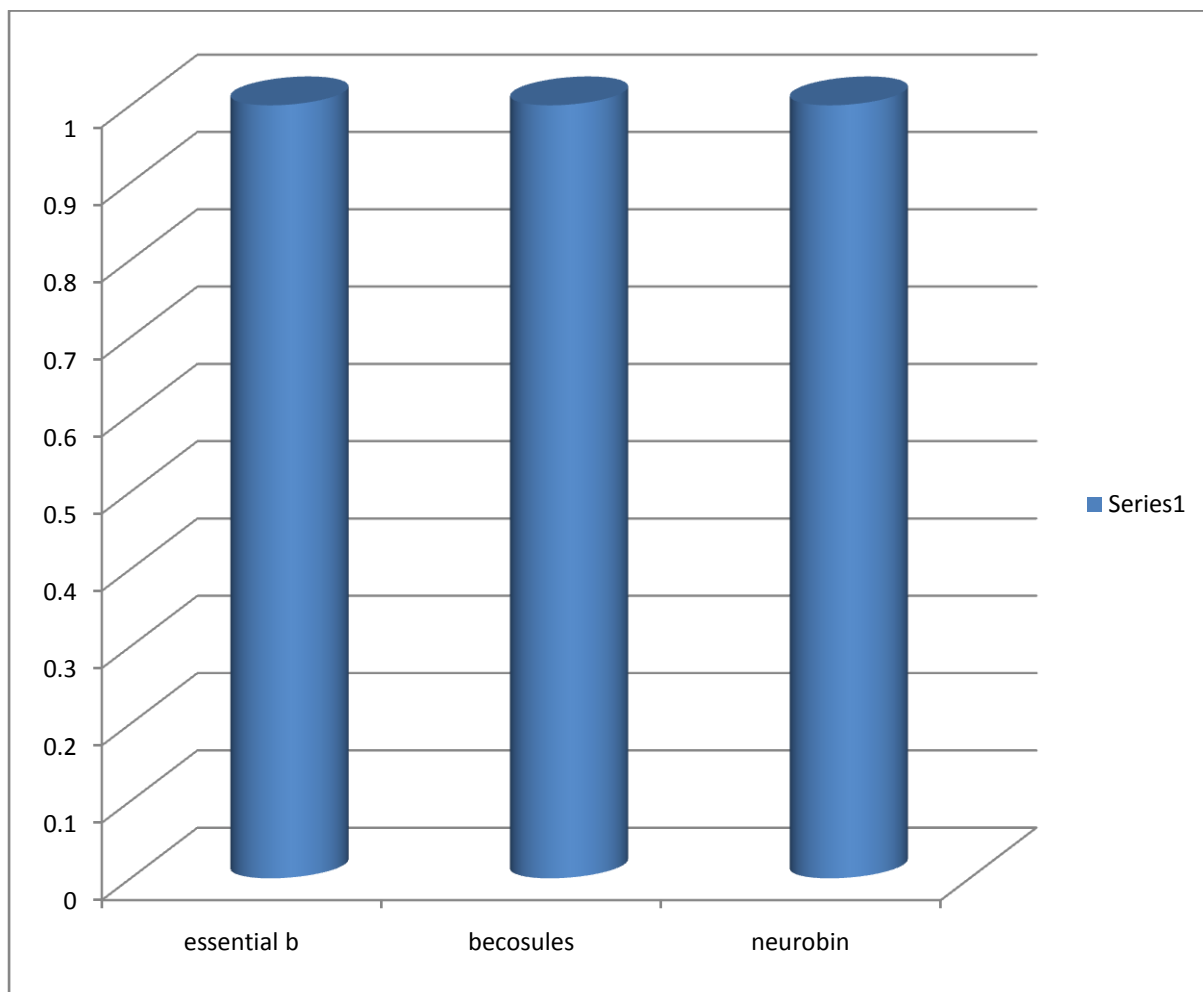
## “MNF Tablet For Mother & Foetus”

### (10.0) Cyanocobalamine

Most associated brand  
Table no 10.1

| Total respondents | Essential-B | Becosules | Neurobin |
|-------------------|-------------|-----------|----------|
| 11                | 1           | 1         | 1        |

#### Findings:-



**Graph 10.1**

#### Analysis:-

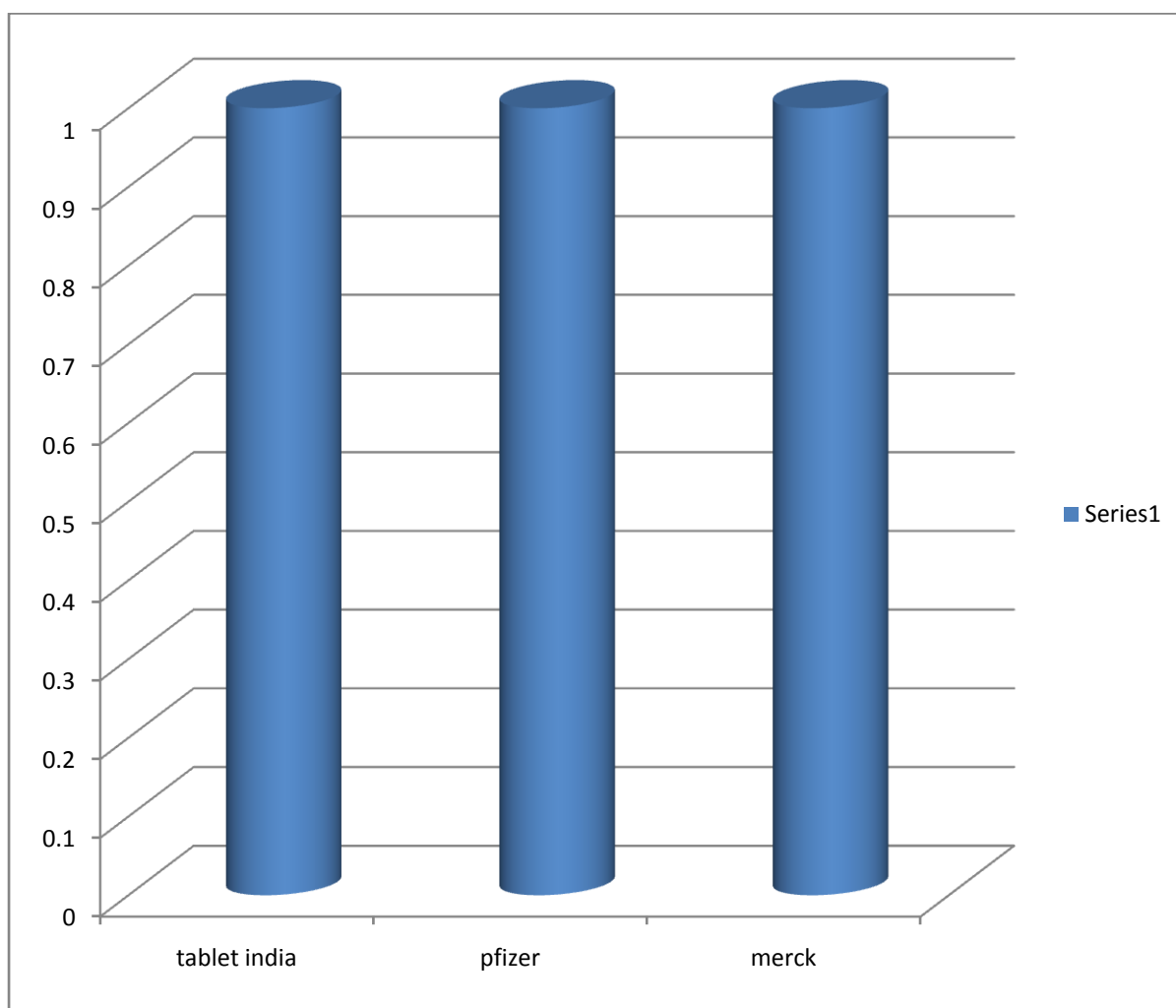
As per the analysis of given above graph 10.1, Out of 11 respondents, 3 chemists gave responses and all three had agreed with different-different brands. One of them had agreed with Essential-b, second one with Becosules and the third one had agreed with Neurobin brand with cyanocobalamine. Remaining 8 chemists had not responded.

## “MNF Tablet For Mother & Foetus”

**Most Associated Company**  
**Table no 10.2**

| Total respondents | Tablet India | Pfizer | Merck |
|-------------------|--------------|--------|-------|
| 11                | 1            | 1      | 1     |

### Findings:-



**Graph 10.2**

### Analysis:-

As per the analysis of given above graph 10.2, Out of 11 respondents, only 3 chemists gave responses and each one of them had agreed with a different company. One had gone with Tablet India; second one with Pfizer and third one had gone with Merck. All three had an individual choice. Remaining 8 chemists had not responded.

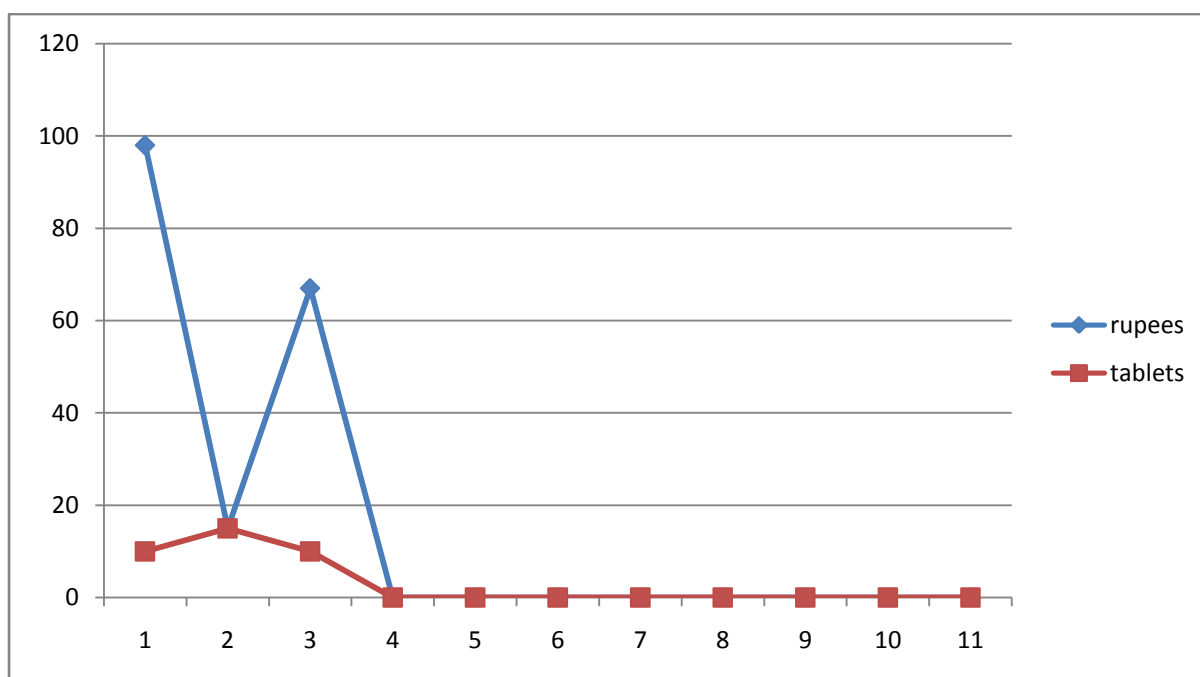
## “MNF Tablet For Mother & Foetus”

### MRP (Maximum Retail Price)

Table no 10.3

| Total respondents | Rupees | Tablets |
|-------------------|--------|---------|
| 1.                | 98     | 10      |
| 2.                | 15     | 15      |
| 3.                | 67     | 10      |
| 4.                | 0      | 0       |
| 5.                | 0      | 0       |
| 6.                | 0      | 0       |
| 7.                | 0      | 0       |
| 8.                | 0      | 0       |
| 9.                | 0      | 0       |
| 10.               | 0      | 0       |
| 11.               | 0      | 0       |

### Findings:-



Graph 10.3

### Analysis:-

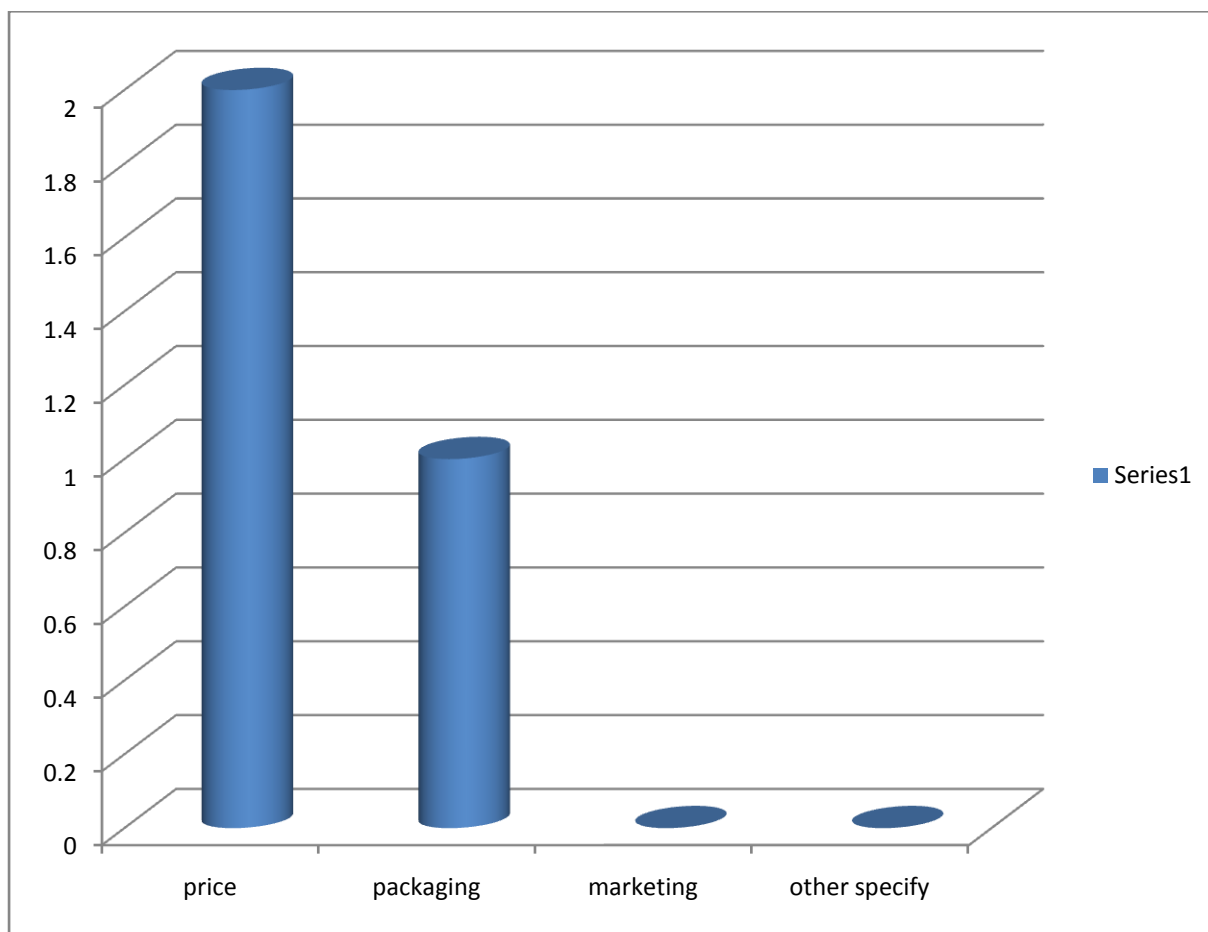
As per the analysis of given above graph 10.3, Out of 11 respondents, only 3 chemists gave response with different MRP of different brand. All of them 2 brands had highest selling and one had fewer prices according to customer affordability. Remaining 8 chemists had not responded.

## “MNF Tablet For Mother & Foetus”

Unique feature  
Table no 10.4

| Total respondents | Price | Packaging | Marketing | Other specify |
|-------------------|-------|-----------|-----------|---------------|
| 11                | 2     | 1         | 0         | 0             |

### Findings:-



**Graph 10.4**

### Analysis:-

As per the analysis of given above graph 10.4, Out of 11 respondents, 3 chemists gave response and 2 of them had agreed that price was the big factor behind the highest selling or uniqueness of the brand and 1 had agreed with packaging, according to him packaging was the big factor behind the highest selling of the brand with Cyanocobalamine. Remaining 8 chemists had not responded.

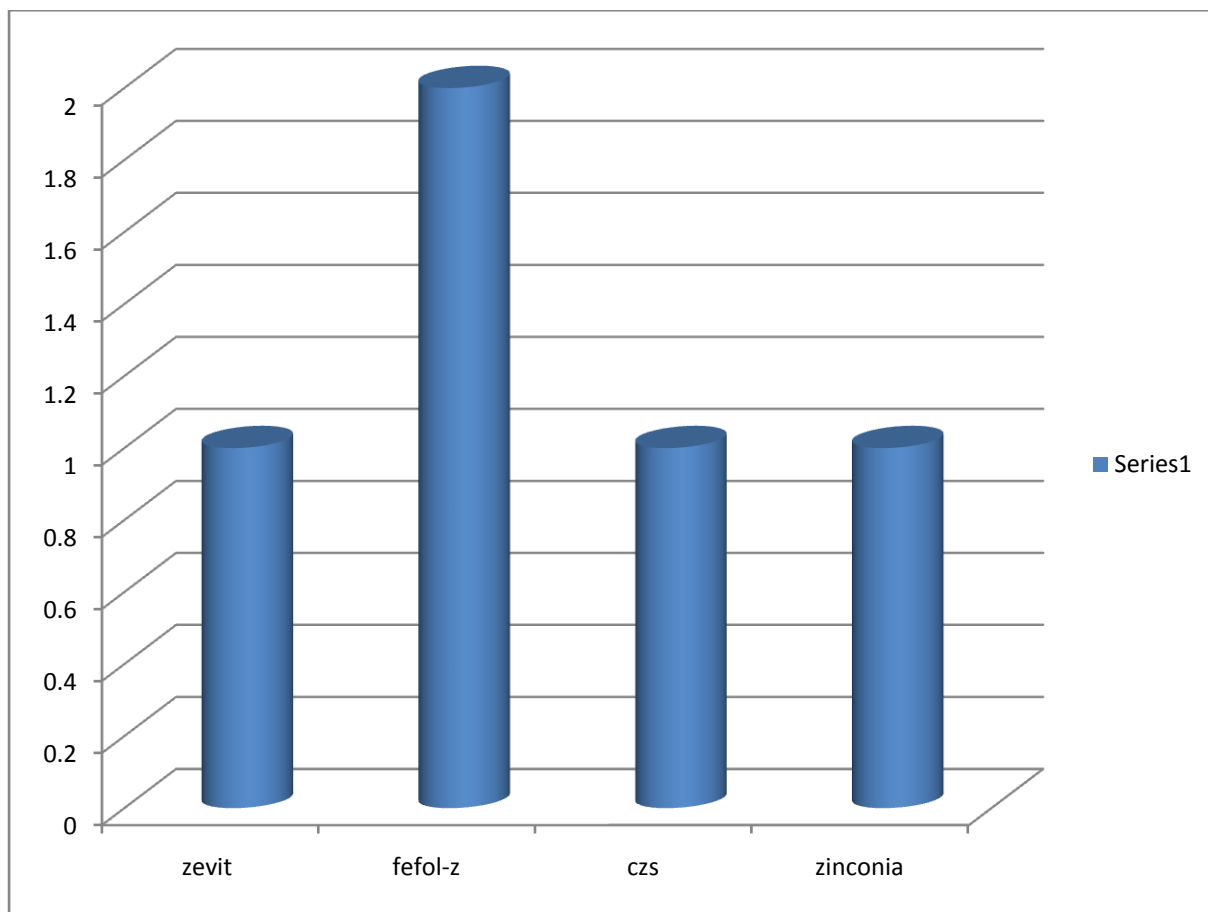
## “MNF Tablet For Mother & Foetus”

### (11.0) Elemental zinc

**Most associated brand**  
**Table no 11.1**

| Total respondents | Zevit | Fefol-z | Czs | Zinconia |
|-------------------|-------|---------|-----|----------|
| 11                | 1     | 2       | 1   | 1        |

#### Findings:-



**Graph 11.1**

#### Analysis:-

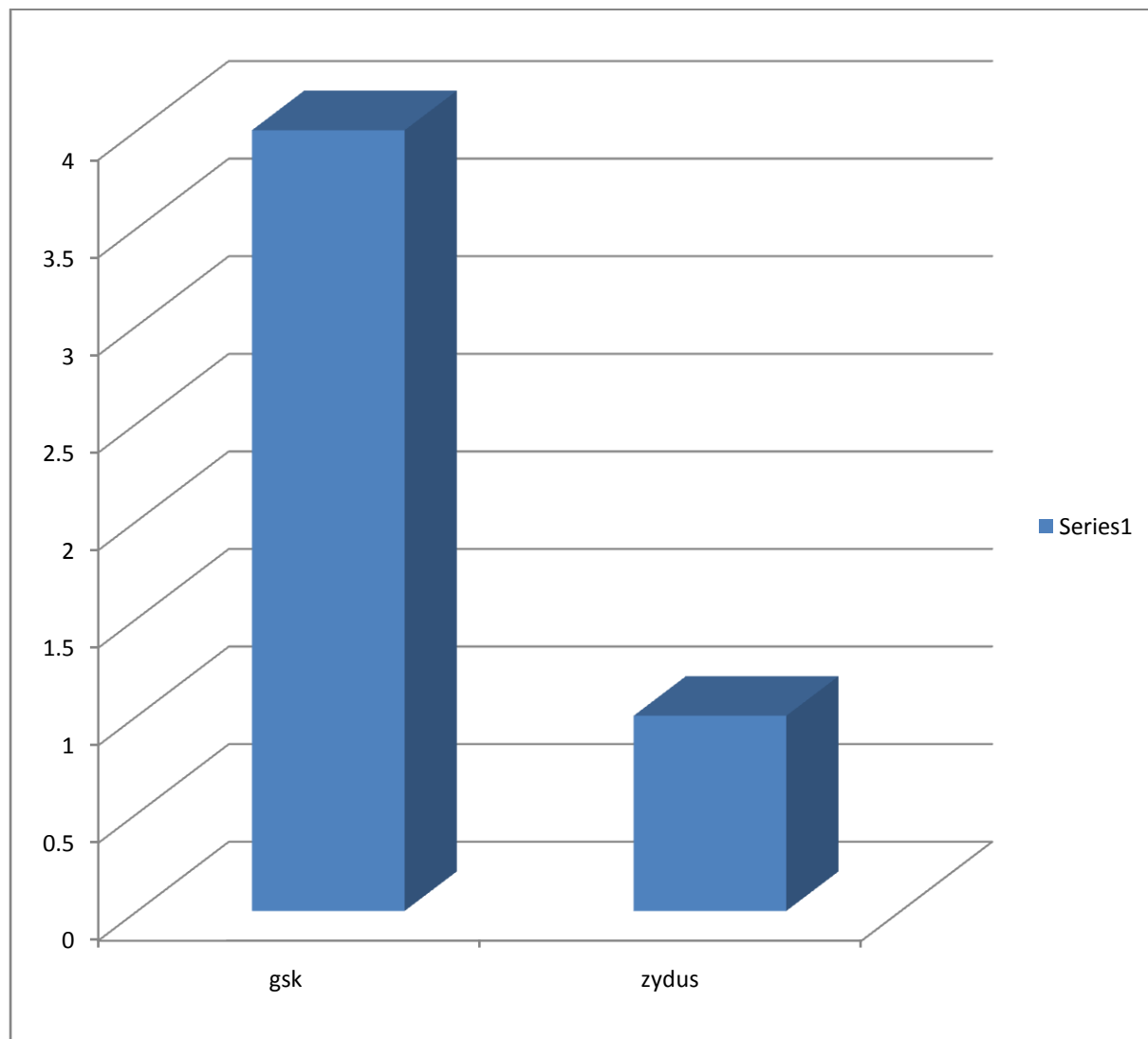
As per the analysis of given above graph 11.1, Out of 11 chemist respondents, 2 chemists had agreed with Fefol-z brand, According to them Fefol-z was the most leading brand in the market. Other remaining 3 chemists, each of them had agreed with respectively: zevit, czs and zinconia brand. Remaining 6 chemists had not responded.

## “MNF Tablet For Mother & Foetus”

**Most Associated Company**  
**Table no 11.2**

| Total respondents | GSK | Zydus |
|-------------------|-----|-------|
| 11                | 4   | 1     |

**Findings:-**



**Graph 11.2**

**Analysis:-**

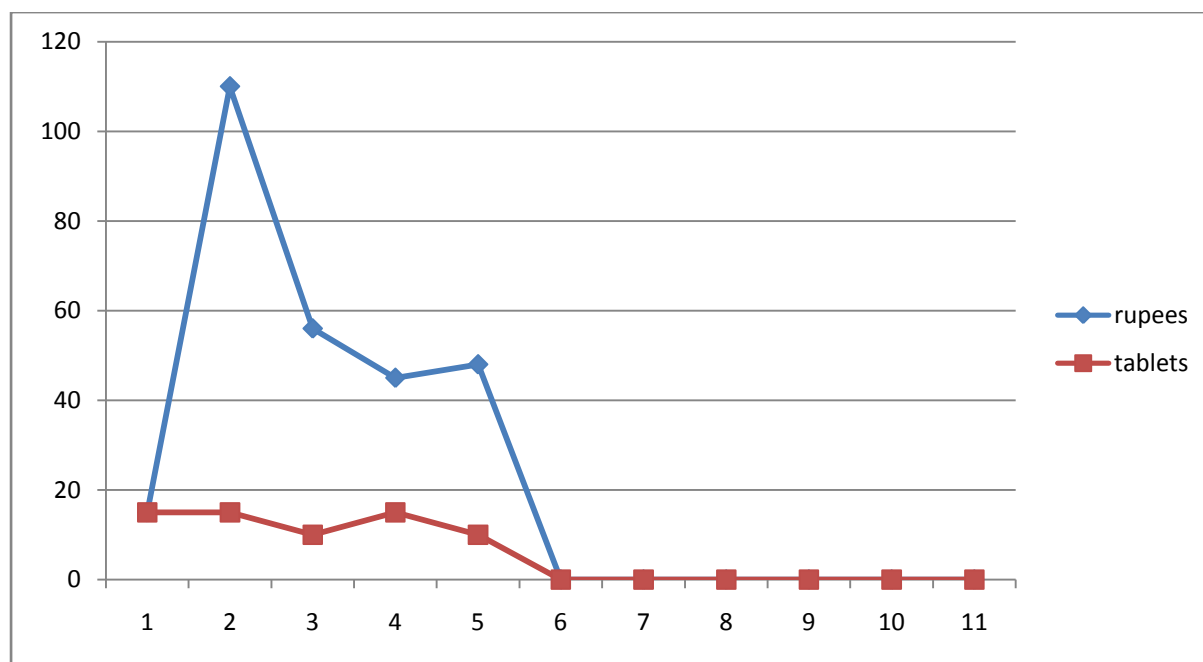
As per the analysis of given above graph 11.2, Out of 11 chemist respondents, maximum 4 chemists had agreed with GSK company, according to them GSK was most leading company in market and one of them had agreed with zydus. Remaining 6 chemists had not responded.

## “MNF Tablet For Mother & Foetus”

**MRP (Maximum Retail Price)**  
**Table no 11.3**

| Total respondents | Rupees | Tablets |
|-------------------|--------|---------|
| 1.                | 15     | 15      |
| 2.                | 110    | 15      |
| 3.                | 56     | 10      |
| 4.                | 45     | 15      |
| 5.                | 48     | 10      |
| 6.                | 0      | 0       |
| 7.                | 0      | 0       |
| 8.                | 0      | 0       |
| 9.                | 0      | 0       |
| 10.               | 0      | 0       |
| 11.               | 0      | 0       |

### Findings:-



**Graph 11.3**

### Analysis:-

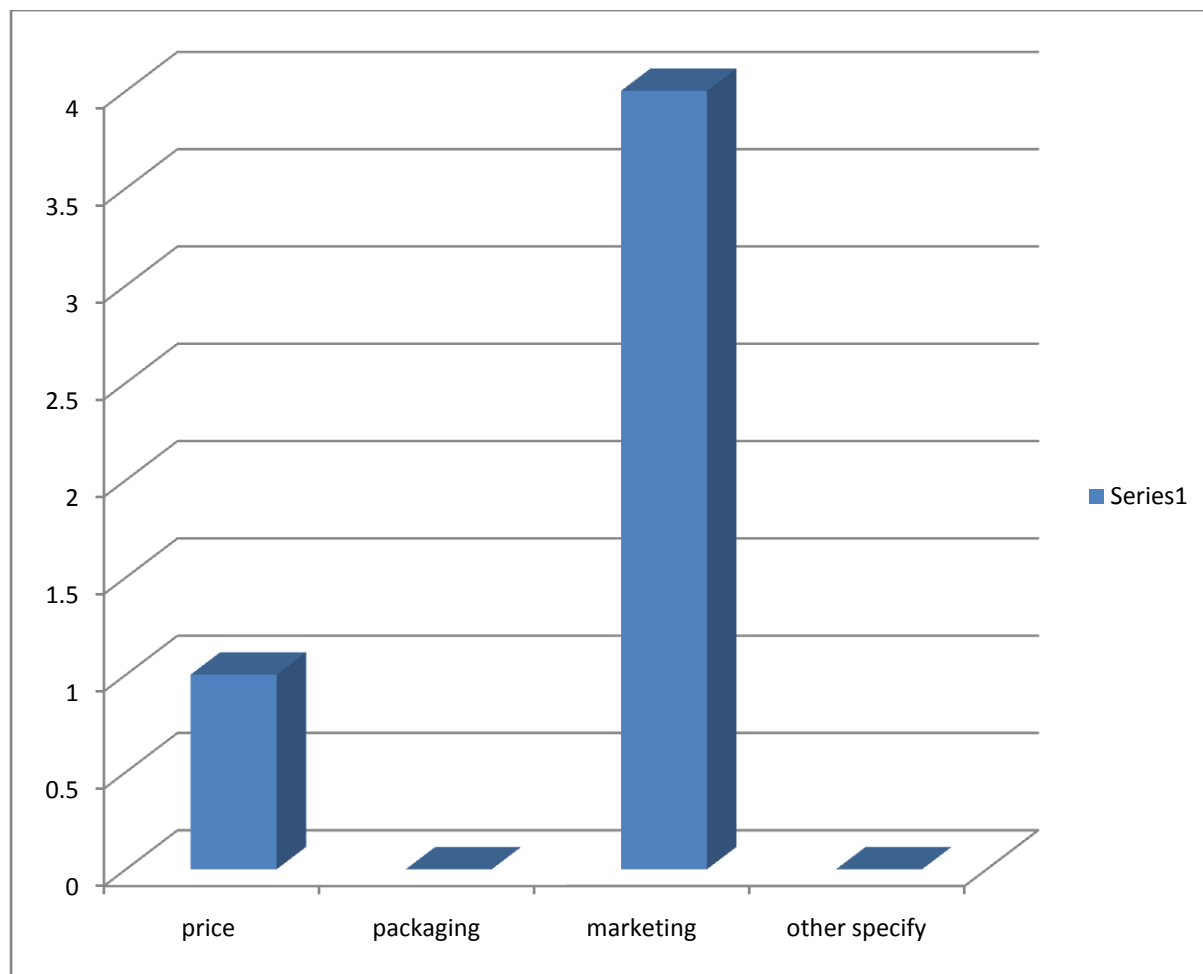
As per the analysis of given above graph 11.3, Out of 11 respondents, 5 chemists gave the response on MRP of different brands in the market with elemental zinc. Given out of 5 responses only one brand MRP was high that was expensive according to the customer affordability. Remaining 6 chemists had not responded on MRP with elemental zinc brand.

## “MNF Tablet For Mother & Foetus”

**Unique feature**  
**Table no 11.4**

| Total respondents | Price | Packaging | Marketing | Other specify |
|-------------------|-------|-----------|-----------|---------------|
| 11                | 1     | 0         | 4         | 0             |

### Findings:-



**Graph 11.4**

### Analysis:-

As per the analysis of given above graph 11.4, Out of 11 respondents, maximum 4 chemists had agreed with marketing means according to them awareness about the brand among customers main factor behind the highest selling of the product. In other way 1 chemist had agreed with price means according to him price or MRP was the main factor for brands selling. Remaining 6 chemists had not responded.

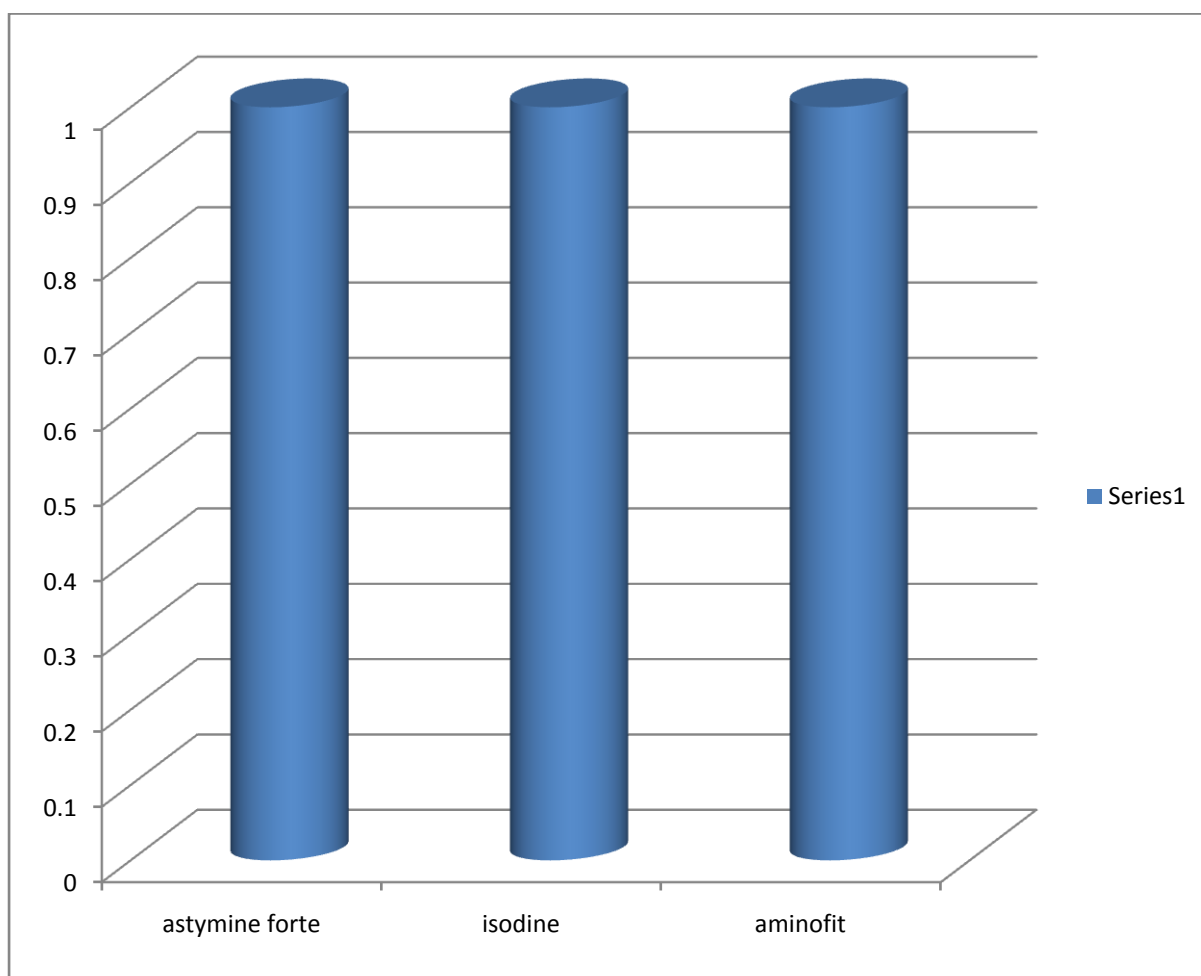
## “MNF Tablet For Mother & Foetus”

### (12.0) L-Isoluciene

**Most associated brand**  
**Table no 12.1**

| Total respondents | Astymine forte | Isodine | Amino fit |
|-------------------|----------------|---------|-----------|
| 11                | 1              | 1       | 1         |

#### **Findings:-**



**Graph 12.1**

#### **Analysis:-**

As per the analysis of given above graph 12.1, Out of 11 respondents, 3 chemists gave their responses and each one of them had agreed with respectively: Astymine forte, Isodine and Amino fit. According to them all 3 brands were most leading brands in the market.

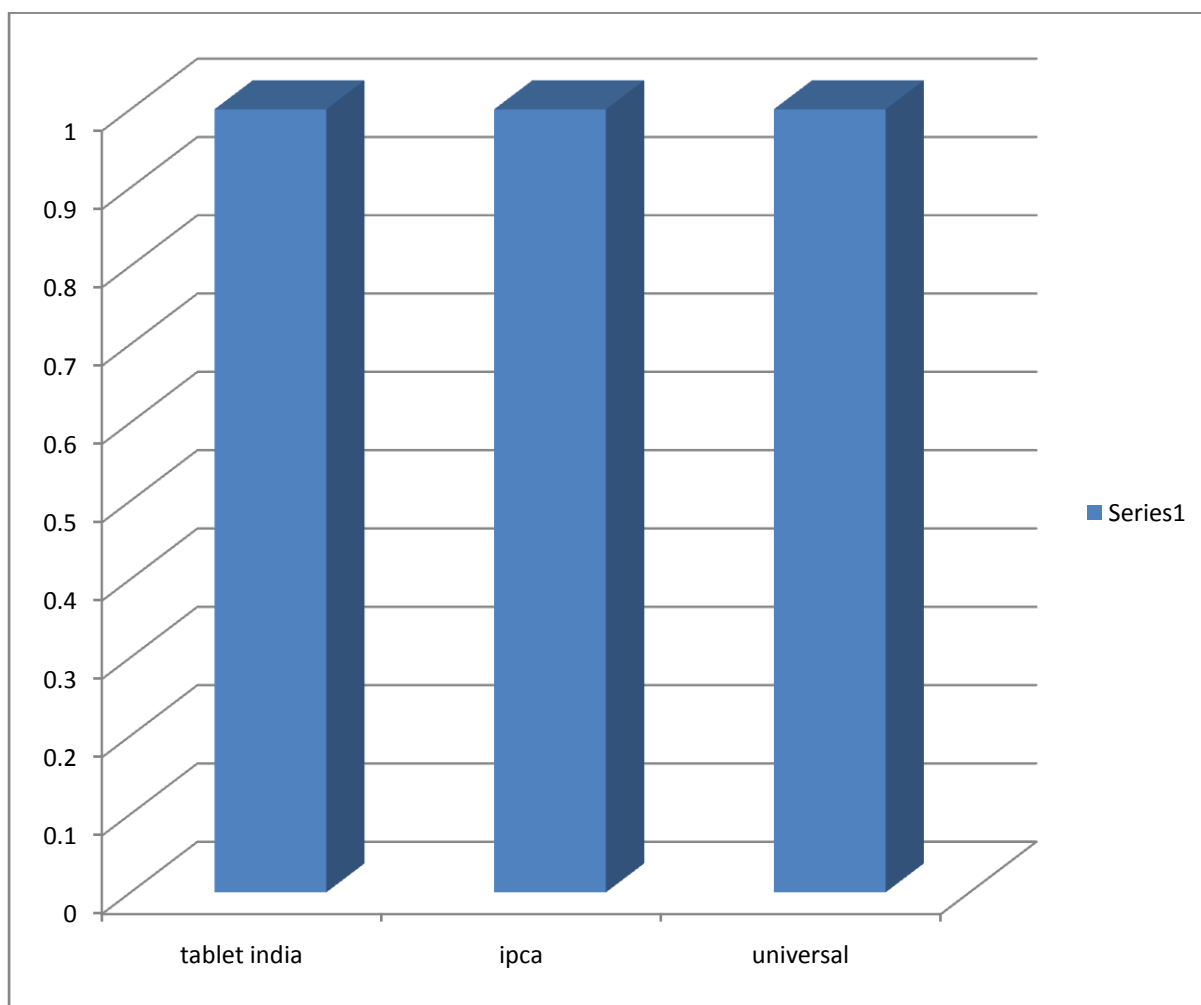
## “MNF Tablet For Mother & Foetus”

### Most associated company

Table no 12.2

| Total respondents | Tablet India | Ipca | Universal |
|-------------------|--------------|------|-----------|
| 11                | 1            | 1    | 1         |

#### Findings:-



Graph 12.2

#### Analysis:-

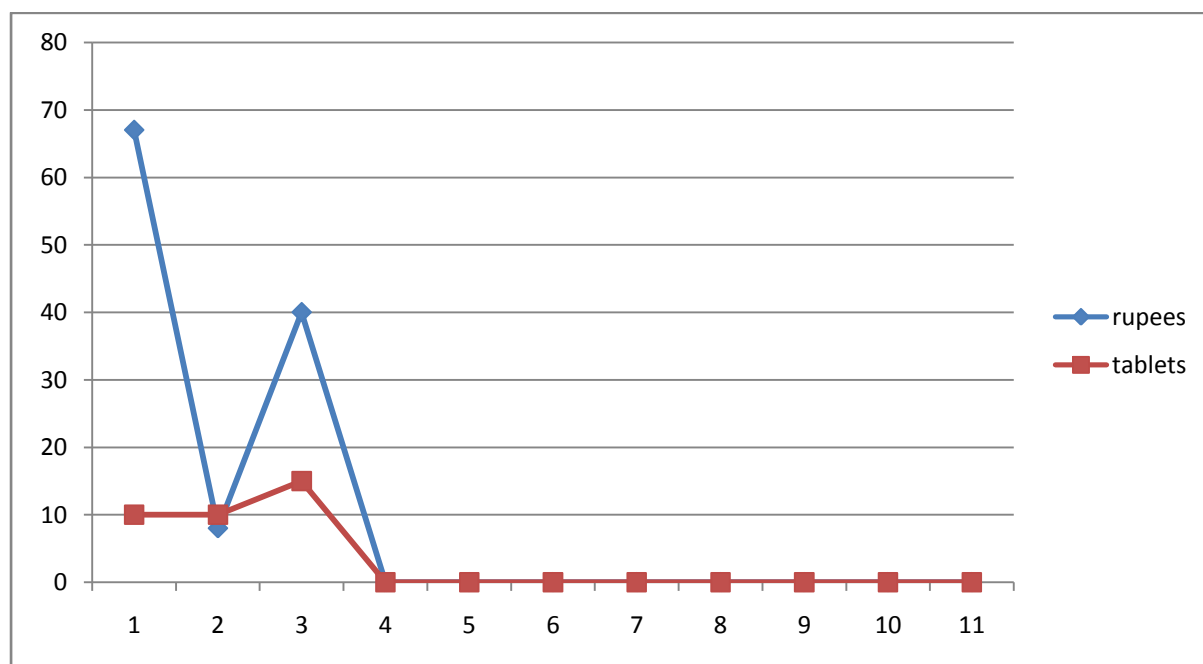
As per the analysis of given above graph 12.2, Out of 11 respondents, 3 chemists gave their response and each one of them had agreed with respectively: Tablet India, Ipca and Universal company. According to each one of them these 3 companies were best leading companies in the market with L-isoluciene. Remaining 6 chemists had not responded.

## “MNF Tablet For Mother & Foetus”

**MRP (Maximum Retail Price)**  
**Table no 12.3**

| Total respondents | Rupees | Tablets |
|-------------------|--------|---------|
| 1.                | 67     | 10      |
| 2.                | 8      | 10      |
| 3.                | 40     | 15      |
| 4.                | 0      | 0       |
| 5.                | 0      | 0       |
| 6.                | 0      | 0       |
| 7.                | 0      | 0       |
| 8.                | 0      | 0       |
| 9.                | 0      | 0       |
| 10.               | 0      | 0       |
| 11.               | 0      | 0       |

### Findings:-



**Graph 12.3**

### Analysis:-

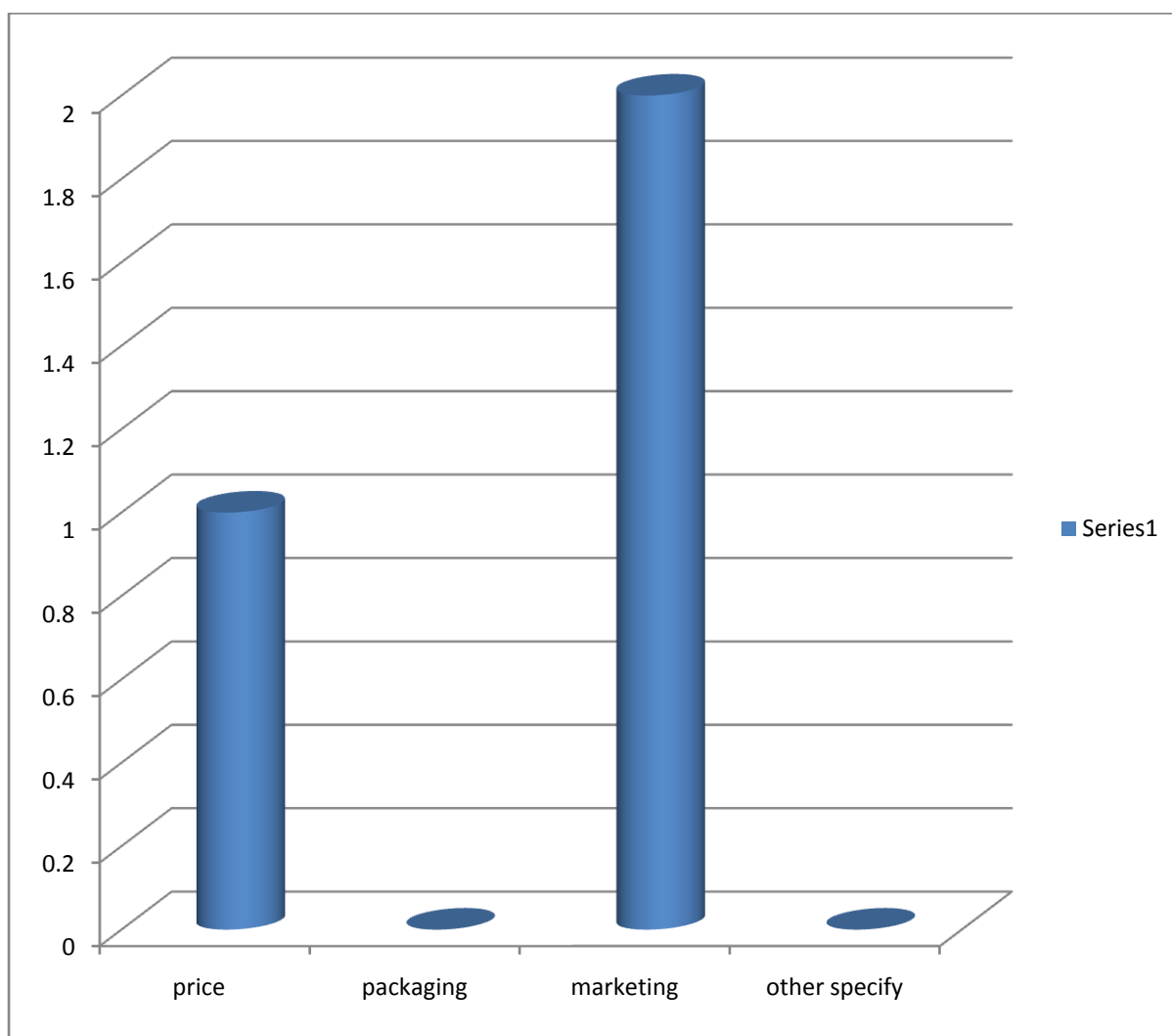
As per the analysis of given above graph 12.3, Out of 11 respondents, 3 chemists gave their responses towards L-isoluciene brands and each one of them was give different response about MRP's of product. Remaining 8 chemists had not responded.

## “MNF Tablet For Mother & Foetus”

**Unique feature**  
**Table no 12.4**

| Total respondents | Price | Packaging | Marketing | Other specify |
|-------------------|-------|-----------|-----------|---------------|
| 11                | 1     | 0         | 2         | 0             |

### **Findings:-**



**Graph 12.4**

### **Analysis:-**

As per the analysis of given above graph 12.4, Out of 11 respondents, 3 chemists gave their responses towards unique feature. Maximum 2 chemists had agreed with marketing means according to them awareness about their brands among people was main factor behind highest selling of the brand. Remaining 8 chemists had not responded.

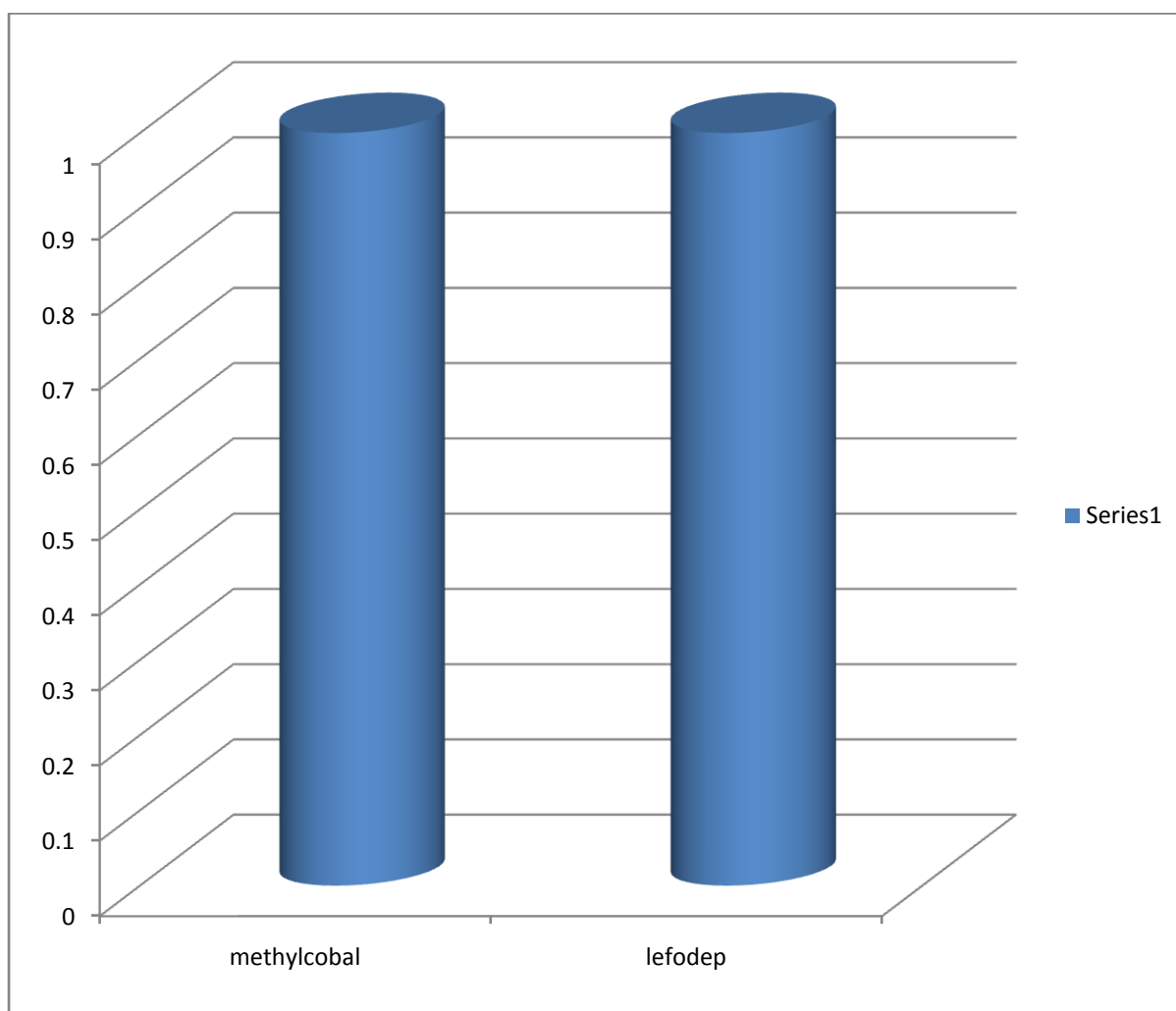
## “MNF Tablet For Mother & Foetus”

### (13.0) DL-Methionine

**Most Associated Brand**  
**Table no 13.1**

| Total respondents | Methylcobal | Lefodep |
|-------------------|-------------|---------|
| 11                | 1           | 1       |

#### Findings:-



**Graph 13.1**

#### Analysis:-

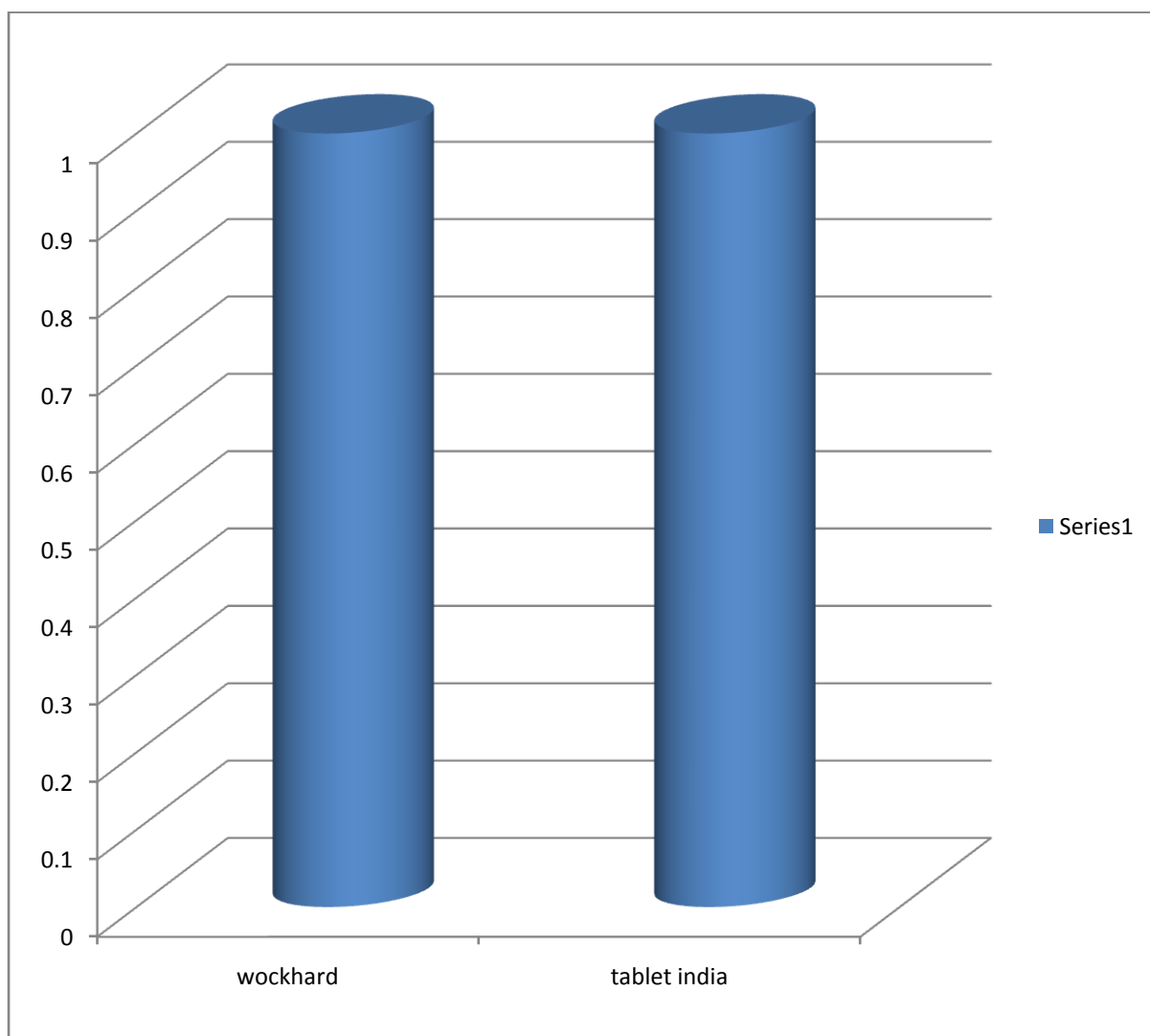
As per the analysis of given above graph 13.1, Out of 11 respondents, only 2 chemists were give their responses towards associated brands and each one of them had agreed with respectively Methylcobal and lefodep. According to each one of them both products were most leading brands in the market. Remaining 9 chemists had not responded.

## “MNF Tablet For Mother & Foetus”

**Most Associated Company**  
**Table no 13.2**

| Total respondents | Wockhard | Tablet India |
|-------------------|----------|--------------|
| 11                | 1        | 1            |

### Findings:-



**Graph 13.2**

### Analysis:-

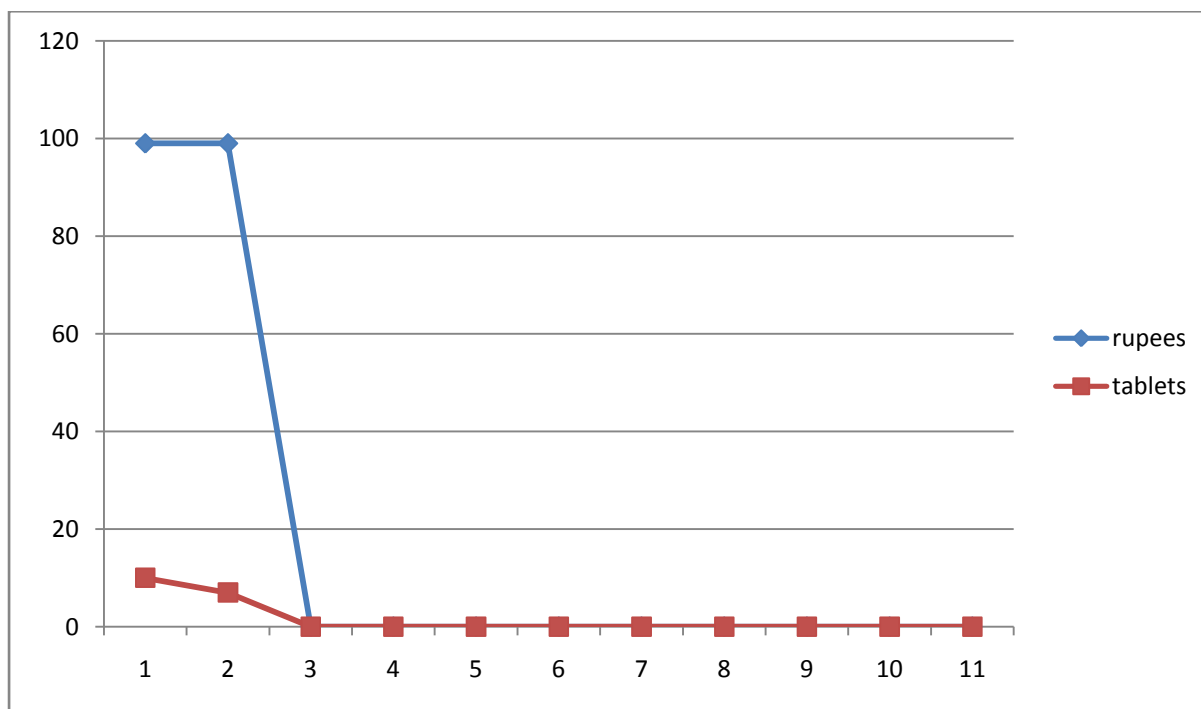
As per the analysis of given above graph 13.2, Out of 11 chemist respondents, only 2 chemists had given their individual choice respectively Wockhard and Tablet India. According to them these both were most leading company in the market. Remaining 9 chemists had not responded towards brands of DI methionine.

## “MNF Tablet For Mother & Foetus”

**MRP (Maximum Retail Price)**  
**Table no 13.3**

| Total respondents | Rupees | Tablets |
|-------------------|--------|---------|
| 1                 | 99     | 10      |
| 2                 | 99     | 7       |
| 3                 | 0      | 0       |
| 4                 | 0      | 0       |
| 5                 | 0      | 0       |
| 6                 | 0      | 0       |
| 7                 | 0      | 0       |
| 8                 | 0      | 0       |
| 9                 | 0      | 0       |
| 10                | 0      | 0       |
| 11                | 0      | 0       |

### Findings:-



**Graph 13.3**

### Analysis:-

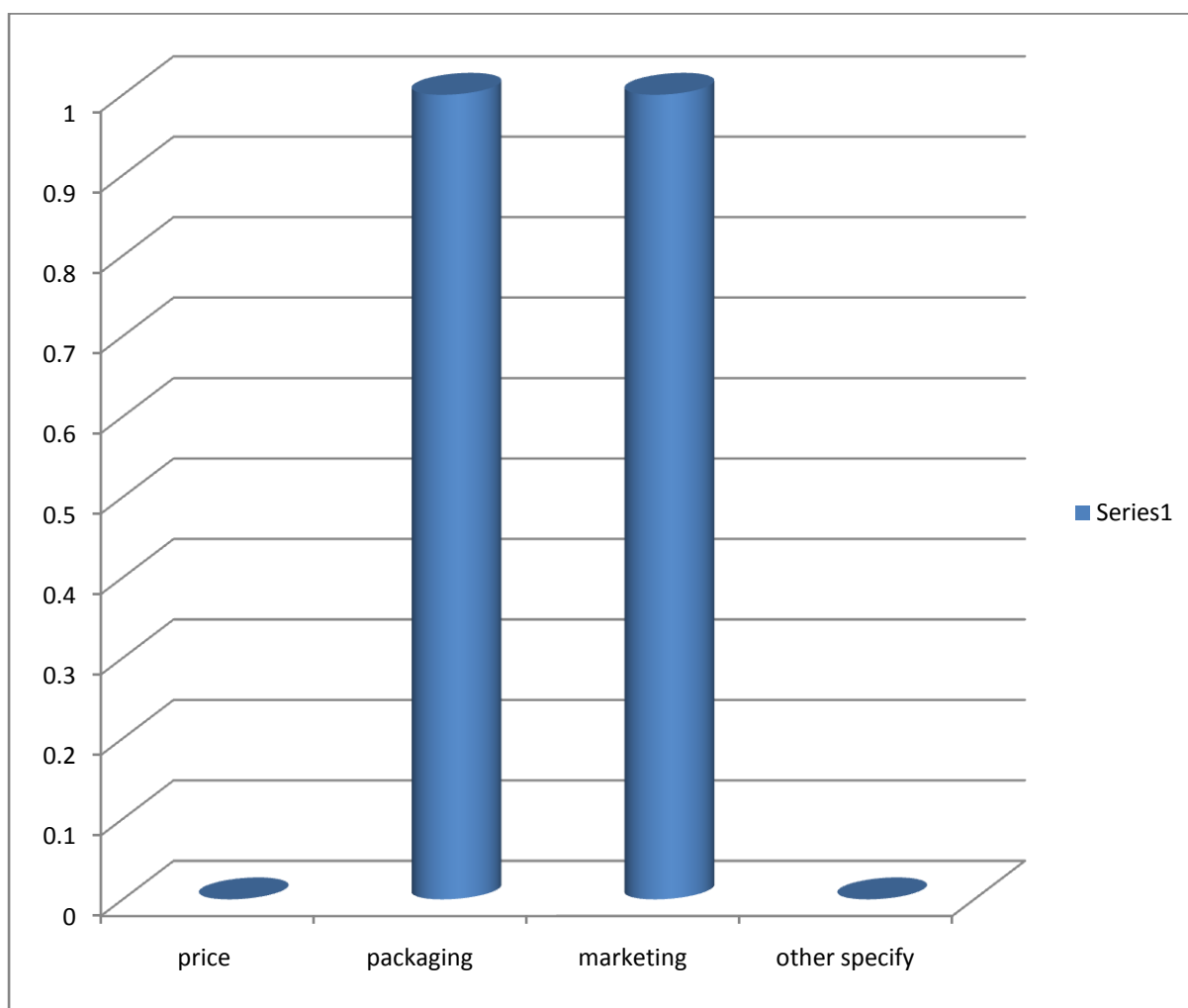
As per the analysis of given above graph 13.3, Out of 11 respondents, only 2 chemists had given their responses towards MRP's of the brands with dl-methionine and both brands had high prices which was not according to the customers. Remaining 9 had not responded.

## “MNF Tablet For Mother & Foetus”

Unique feature  
Table no 13.4

| Total respondents | Price | Packaging | Marketing | Other specify |
|-------------------|-------|-----------|-----------|---------------|
| 11                | 0     | 1         | 1         | 0             |

### Findings:-



Graph 13.4

### Analysis:-

As per the analysis of given above graph 13.4, Out of 11 respondents, only 2 chemists had given their response towards the unique feature of the product. out of 2 one had gone with packaging and second one with marketing means according to them both reason were majorly responsible for unique feature. Remaining 9 chemists had not responded.

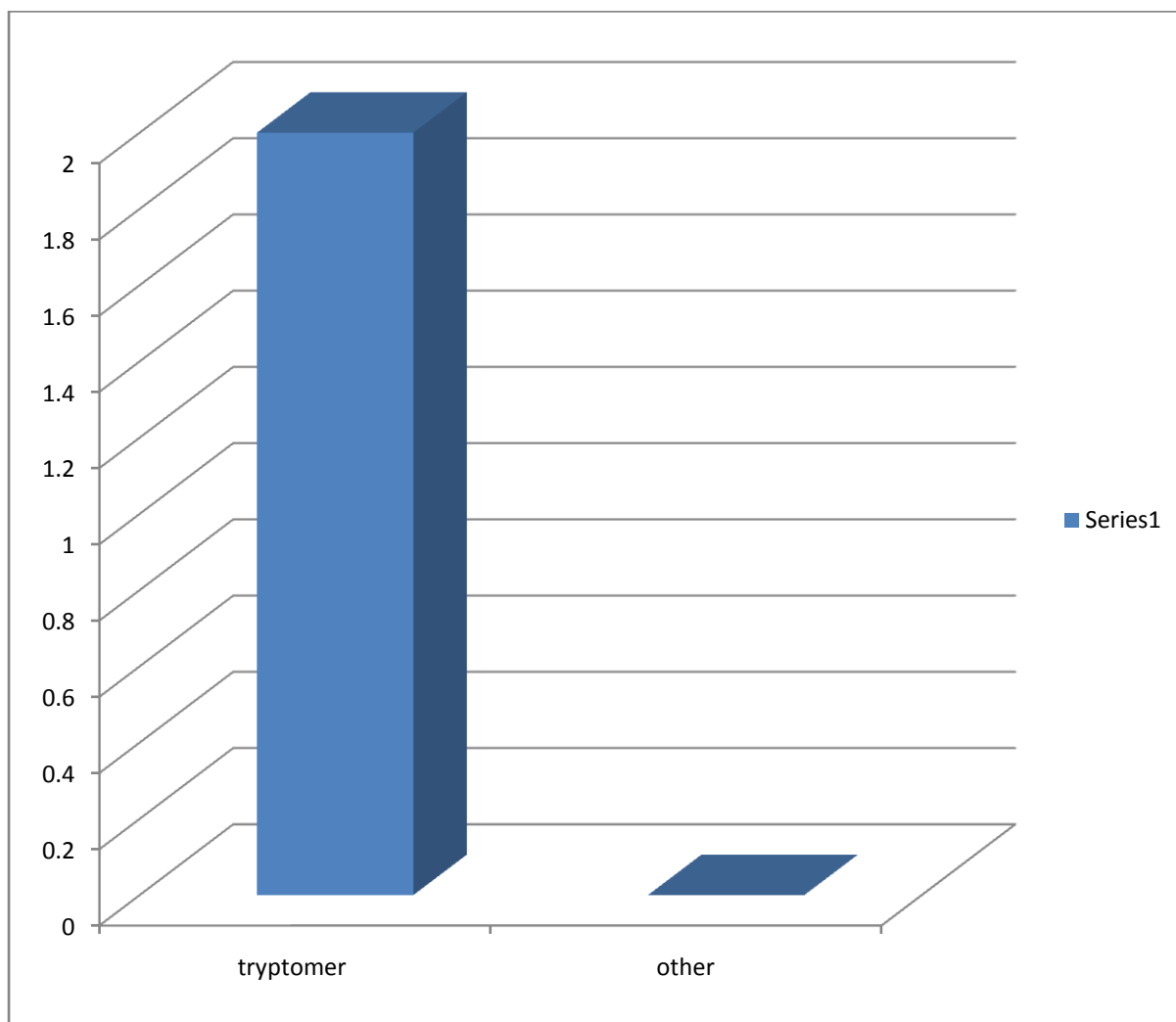
## “MNF Tablet For Mother & Foetus”

### (14.0) L-Tryptophan

Most associated brand  
Table no 14.1

| Total respondents | Tryptomer | Other |
|-------------------|-----------|-------|
| 11                | 2         | 0     |

**Findings:-**



**Graph 14.1**

**Analysis:-**

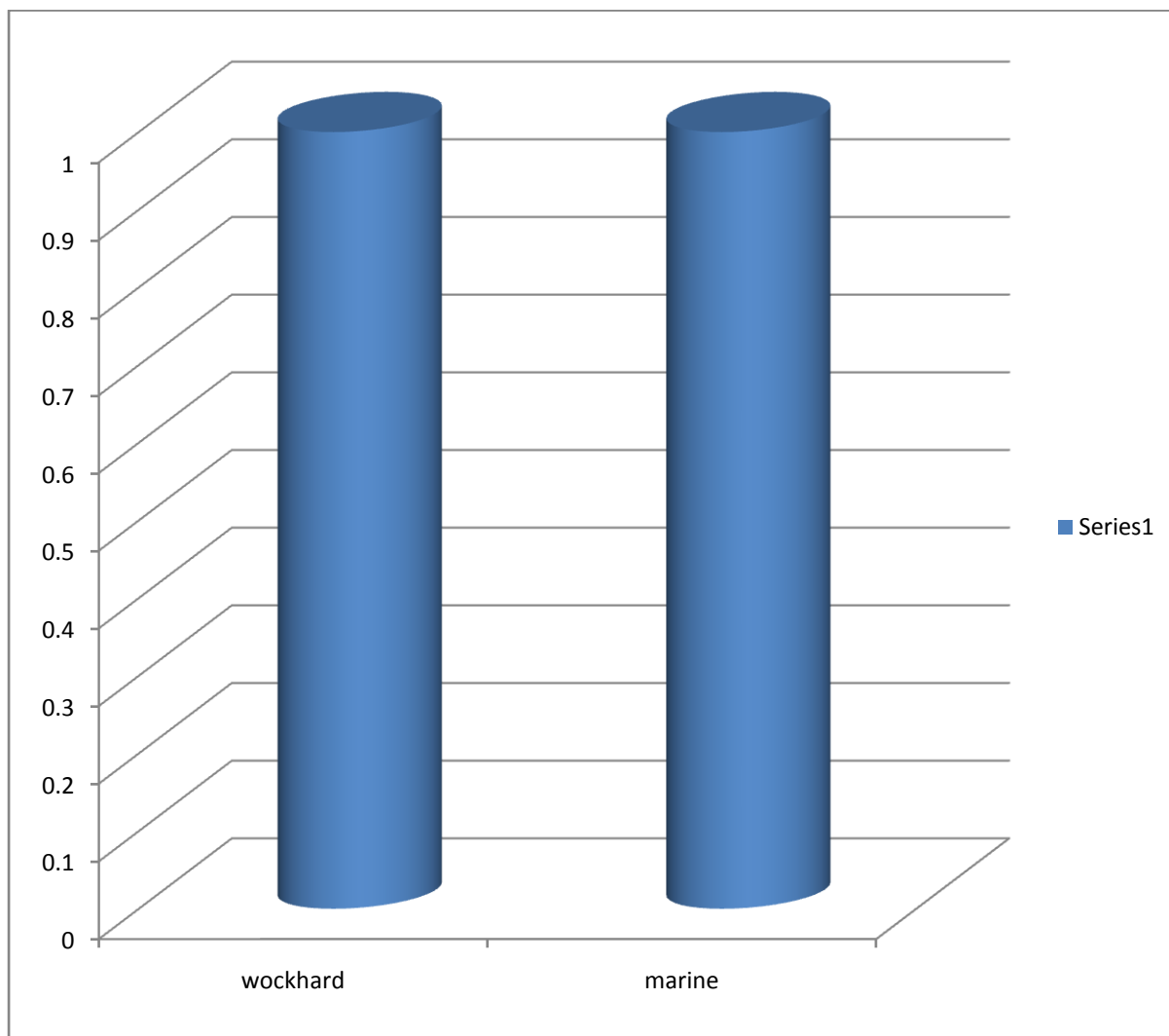
As per the analysis of given above graph 14.1, Out of 11 respondents, only 2 chemists had given their responses and both were go with same brand tryptomer. According to them tryptomer was most leading brand in the market with L-tryptophan. Remaining 9 had not responded any brand of L-tryptophan.

## “MNF Tablet For Mother & Foetus”

**Most Associated Company**  
**Table no 14.2**

| Total respondents | Wockhard | Marine |
|-------------------|----------|--------|
| 11                | 1        | 1      |

**Findings:-**



**Graph 14.2**

**Analysis:-**

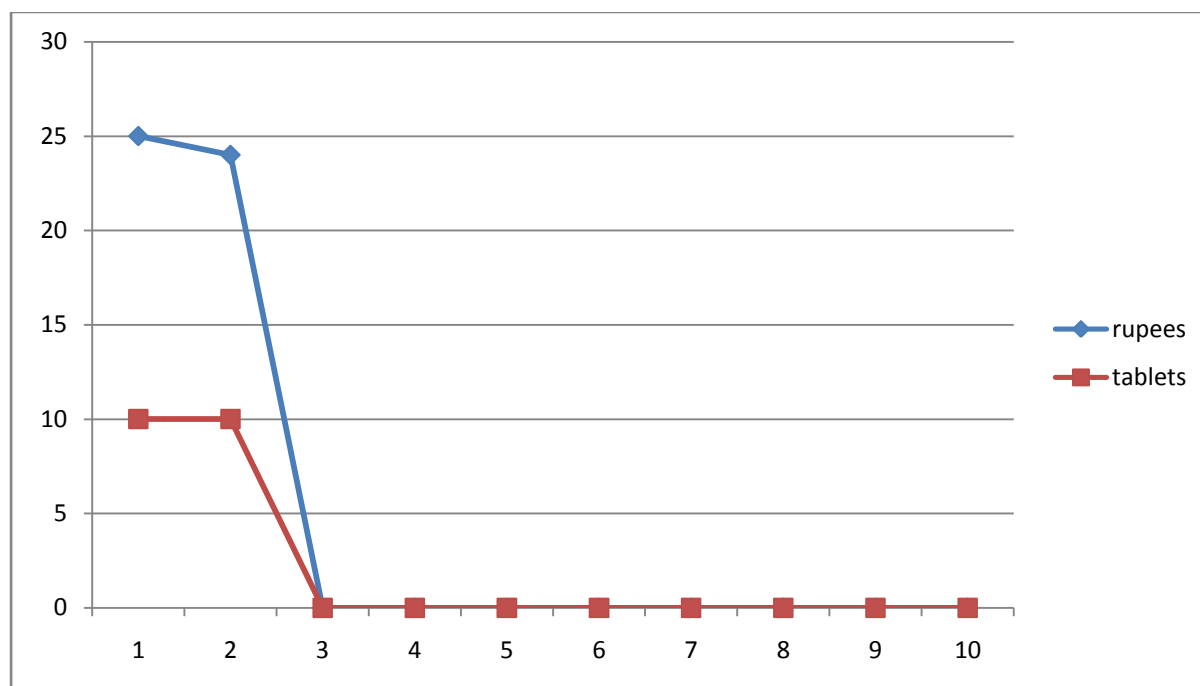
As per the analysis of given above graph 14.2, Out of 11 respondents, 2 chemists had given their responses and out of 2, one had gone with wockhard and second one with marine company. According to them both these companies were most leading companies in the market. Remaining 9 chemists had not responded towards L-tryptophan.

## “MNF Tablet For Mother & Foetus”

**MRP (Maximum Retail Price)**  
**Table no 14.3**

| Total respondents | Rupees | Tablets |
|-------------------|--------|---------|
| 1                 | 25     | 10      |
| 2                 | 24     | 10      |
| 3                 | 0      | 0       |
| 4                 | 0      | 0       |
| 5                 | 0      | 0       |
| 6                 | 0      | 0       |
| 7                 | 0      | 0       |
| 8                 | 0      | 0       |
| 9                 | 0      | 0       |
| 10                | 0      | 0       |
| 11                | 0      | 0       |

### Findings:-



**Graph 14.3**

### Analysis:-

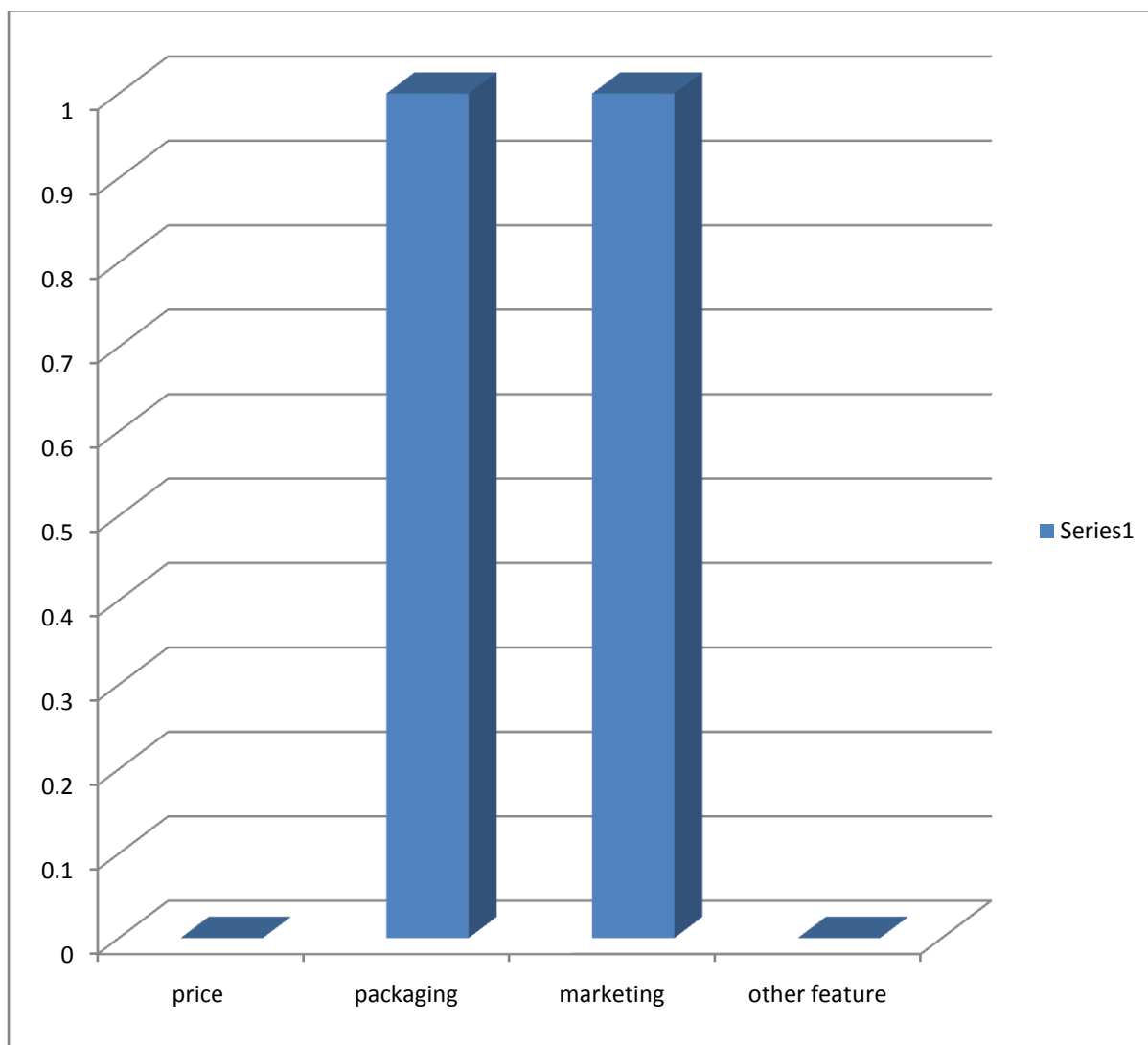
As per the analysis of given above graph 14.3, Out of 11 respondents, only 2 chemists had given their responses and both had given different MRP of same brand & Both were affordable for customers. Remaining 9 chemists had not responded.

## “MNF Tablet For Mother & Foetus”

Unique feature  
Table no 14.4

| Total respondents | Price | Packaging | Marketing | Other specify |
|-------------------|-------|-----------|-----------|---------------|
| 11                | 0     | 1         | 1         | 0             |

### Findings:-



**Graph 14.4**

### Analysis:-

As per the analysis of given above graph 14.4, Out of 11 respondents, 2 chemists had given their responses and both in them one had gone with packaging and other one with marketing. One of them thought that packaging was main factor behind brand selling and other one was think that awareness about the product main factor behind good selling of brand.

# **CHAPTER**

# **8**

### **(8) Conclusion**

MNF Tablet is essential for mother and foetus (during pregnancy). According to the 92% of doctors MNF Tablet is 100% safe for pregnant women & foetus growth. It is reduce the risk of various types of serious complications like neural tube defect, spina bifida in foetus during pregnancy. MNF Tablet combination is really very useful in DNA synthesis, erythropoiesis and nucleoprotein synthesis & also reduces pre-eclampsia in growing foetus & preventing and treating morning sickness (nausea and vomiting) in womens during early pregnancy. Hemoglobin synthesis, regulate the immune system synthesis of the neurotransmitters nor epinephrine and dopamine.

Its long term benefit (after birth) reduce risk of ADH Syndrome, immunological abnormalities etc. in the child.

According to the doctor MNF Tablet is also beneficial for Post Operative Period, Surgical Condition, Anemia, Hypo protenamia and General Weakness.

So we can say that this brand (MNF Tablet) is a synergist brand.

# **CHAPTER**

# **9**

**(9) ETHICAL CONSIDERATION**

- The identity of all doctors & chemists will be kept confidential.
- The data collected will only be used for study purpose.
- Irrational use of data will be prevented.

# **CHAPTER 10**

### **(10)References**

- (1) Haas, Amy V. (1995). Nutrition during Pregnancy. Having a Baby Today, Issue 5.
- (2) Gatsa, Katie Gates (1997). Internal Ecosystem Health. Midwifery Today, Issue 42, pgs. 28-29.
- (3) Hernandez Diaz, M. M. Werler, C. Louik, and A. A. Mitchell, “Risk of gestational hypertension in relation to folic acid supplementation during pregnancy,” American Journal of Epidemiology, vol. 156, no. 9, pp. 806–812, 2002
- (4) Blount, Darynee (2005). Growing a Baby: Diet and Nutrition in Pregnancy. The Birth kit, Issue 46.
- (5) W. Herrmann, S. Isber, R. Obeid, M. Herrmann, and M. Jouma, “Concentrations of homocysteine, related metabolites and asymmetric di methyl arginine in preeclampsia women with poor nutritional status,” Clinical Chemistry and Laboratory Medicine, vol. 43, no. 10, pp. 1139–1146, 2005.
- (6) The Bradley Birth Method, Retrieved July 2006.
- (7) Nutrition for Pregnant Women. Retrieved July 2006.
- (8) L. M. Bodnar, G. Tang, R. B. Ness, G. Harger, and J. M. Roberts, “Periconceptional multivitamin use reduces the risk of preeclampsia,” American Journal of Epidemiology, vol. 164, no. 5, pp. 470–477, 2006. .
- (9) S. W. Wen, X. Chen, M. Rodger et al., “Folic acid supplementation in early second trimester and the risk of preeclampsia,” American Journal of Obstetrics and Gynaecology, vol. 198, no. 1, pp. 45.e1–45.e7, 2008.
- (10) S. W. Wen, J. Zhou, Q. Yang, W. Fraser, O. Olatunbosun, and M. Walker, “Maternal exposure to folic acid antagonists and placenta-mediated adverse pregnancy outcomes,” Canadian Medical Association Journal, vol. 179, no. 12, pp. 1263–1268, 2008.

(11) M. Catov, E. A. Nohr, L. M. Bodnar, V. K. Knudson, S. F. Olsen, and J. Olsen,

“Association of pre conceptional multivitamin use with reduced risk of preeclampsia among normal-weight women in the Danish National Birth Cohort,” American Journal of Epidemiology, vol. 169, no. 11, pp. 1304–1311, 2009.

(12) S. Timmermans, V. W. V. Jaddoe, L. M. Silva et al., “Folic acid is

Positively associated with uteroplacental vascular resistance: The Generation R Study,” Nutrition, Metabolism and Cardiovascular Diseases, vol. 21, no. 1, pp. 54-61, 2011.

(13) Z. Li, R. Ye, L. Zhang, H. Li, J. Liu, and A. Ren, “Folic acid supplementation during early pregnancy and the risk of gestational hypertension and preeclampsia,”

Hypertension, vol. 61, no. 4, pp. 873–879, 2013.

# **CHAPTER**

# **II**

## **Annexure**

## “MNF Tablet For Mother & Foetus”

Stockiest/chemist name: - \_\_\_\_\_

Address:- \_\_\_\_\_

### MNF tablet prescribed by doctor in pregnancy (Mother & Foetus)

| SN<br>O | Molecules           | Most associated<br>brands & forms | Most<br>associated<br>company | MRP | Unique feature which make more<br>selling from other.                                 |
|---------|---------------------|-----------------------------------|-------------------------------|-----|---------------------------------------------------------------------------------------|
| 1       | Folic Acid          |                                   |                               |     | (1)Price (2)Packaging (3)Marketing<br>(4)Other specify-                      Ans. ( ) |
| 2       | Vitamin C           |                                   |                               |     | (1)Price (2)Packaging (3)Marketing<br>(4)Other specify-                      Ans. ( ) |
| 3       | Pyridoxine          |                                   |                               |     | (1)Price (2)Packaging (3)Marketing<br>(4)Other specify-                      Ans. ( ) |
| 4       | Cyanocobal<br>amine |                                   |                               |     | (1)Price (2)Packaging (3)Marketing<br>(4)Other specify-                      Ans. ( ) |
| 5       | Elemental Zinc      |                                   |                               |     | (1)Price (2)Packaging (3)Marketing<br>(4)Other specify-                      Ans. ( ) |
| 6       | L-Isoluciene        |                                   |                               |     | (1)Price (2)Packaging (3)Marketing<br>(4)Other specify-                      Ans. ( ) |
| 7       | L-Leucine           |                                   |                               |     | (1)Price (2)Packaging (3)Marketing<br>(4)Other specify-                      Ans. ( ) |
| 8       | L-Lysine            |                                   |                               |     | (1)Price (2)Packaging (3)Marketing<br>(4)Other specify-                      Ans. ( ) |
| 9       | DL-<br>Methionine   |                                   |                               |     | (1)Price (2)Packaging (3)Marketing<br>(4)Other specify-                      Ans. ( ) |
| 10      | L-Threonine         |                                   |                               |     | (1)Price (2)Packaging (3)Marketing<br>(4)Other specify-                      Ans. ( ) |
| 11      | L-Valine            |                                   |                               |     | (1)Price (2)Packaging (3)Marketing<br>(4)Other specify-                      Ans. ( ) |
| 12      | L-Tryptophan        |                                   |                               |     | (1)Price (2)Packaging (3)Marketing<br>(4)Other specify-                      Ans. ( ) |
| 13      | L-<br>Phenylalanine |                                   |                               |     | (1)Price (2)Packaging (3)Marketing<br>(4)Other specify-                      Ans. ( ) |

“THANK YOU FOR GIVING US YOUR VALUABLE TIME

## **“MNF Tablet For Mother & Foetus”**

**“Doctor is like as a God who saves the life”**

**Your Good Name Sir/Mam** \_\_\_\_\_

**Q.1 is the following nutrient combination the best combination for pregnancy?**

**Yes** \_\_\_\_\_ **No** \_\_\_\_\_

**Why?** \_\_\_\_\_

| <b>S.no</b> | <b>Name of ingredients</b> |
|-------------|----------------------------|
| <b>1.</b>   | <b>Folic acid</b>          |
| <b>2.</b>   | <b>Vitamin C</b>           |
| <b>3.</b>   | <b>Pyridoxine</b>          |
| <b>4.</b>   | <b>Cyanocobalamine</b>     |
| <b>5.</b>   | <b>Elemental zinc</b>      |
| <b>6.</b>   | <b>L Isoluciene</b>        |
| <b>7.</b>   | <b>L luciene</b>           |
| <b>8.</b>   | <b>L lysine</b>            |
| <b>9.</b>   | <b>DI methionine</b>       |
| <b>10.</b>  | <b>L valine</b>            |
| <b>11</b>   | <b>L threonine</b>         |
| <b>12</b>   | <b>L tryptophan</b>        |
| <b>13</b>   | <b>L phenylalanine</b>     |

**Q.2 which any four ingredients, you considering mostly as beneficial for pregnancy?**

\_\_\_\_\_

**Q.3 would you like to prescribe this combination in other area also besides pregnancy & lactation?**

**(a) Yes**      **(b) No**

**Specific Indications** \_\_\_\_\_

**Thank you so much Sir/Mam, for giving us your valuable time.**

**Concept Pages  
OR  
Visual Aids  
Of  
MNF Tablet**

## “MNF Tablet For Mother & Foetus”



**MNF TABLET  
DURING PREGNANCY  
A SAFE BIRTH IS TOP  
PRIORITY**

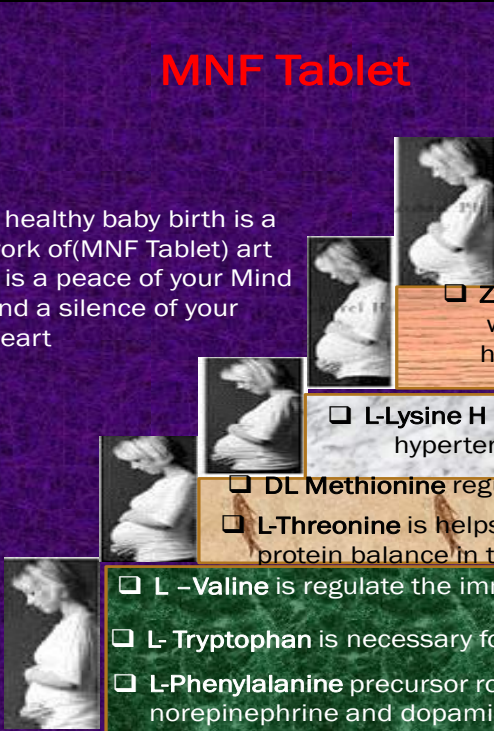



**MNF Tablet**

- ❑ **Folic acid** is required to maintain normal erythropoiesis and nucleoprotein synthesis.
- ❑ **Vitamin C** Oxygen transport in fetus after the iron metabolism.
- ❑ **Vitamin B6** is used for preventing and treating morning sickness in early pregnancy.
- ❑ **Vitamin B12** is reduce risk of Neural Tube Defect.
- ❑ **Zinc** is needed for reduce risk of low birth weight babies.
- ❑ **L Isoluciene** is important in hemoglobin synthesis .
- ❑ **L-Leucine** is used in growth hormone production
- ❑ **L-LysineHCL** is decreasing the risk of developinghypertensive disorders during pregnancy.
- ❑ **DL Methionine** regulating the availability of folic acid
- ❑ **L-Threonine** is helps to maintain the proper protein balance in the body.
- ❑ **L -Valine** is regulate the immune system.
- ❑ **L- Tryptophan** is necessary for normal growth .
- ❑ **L-Phenylalanine** precursor role in the synthesis of the neurotransmitters norepinephrine and dopamine.

**MNF Tablet**

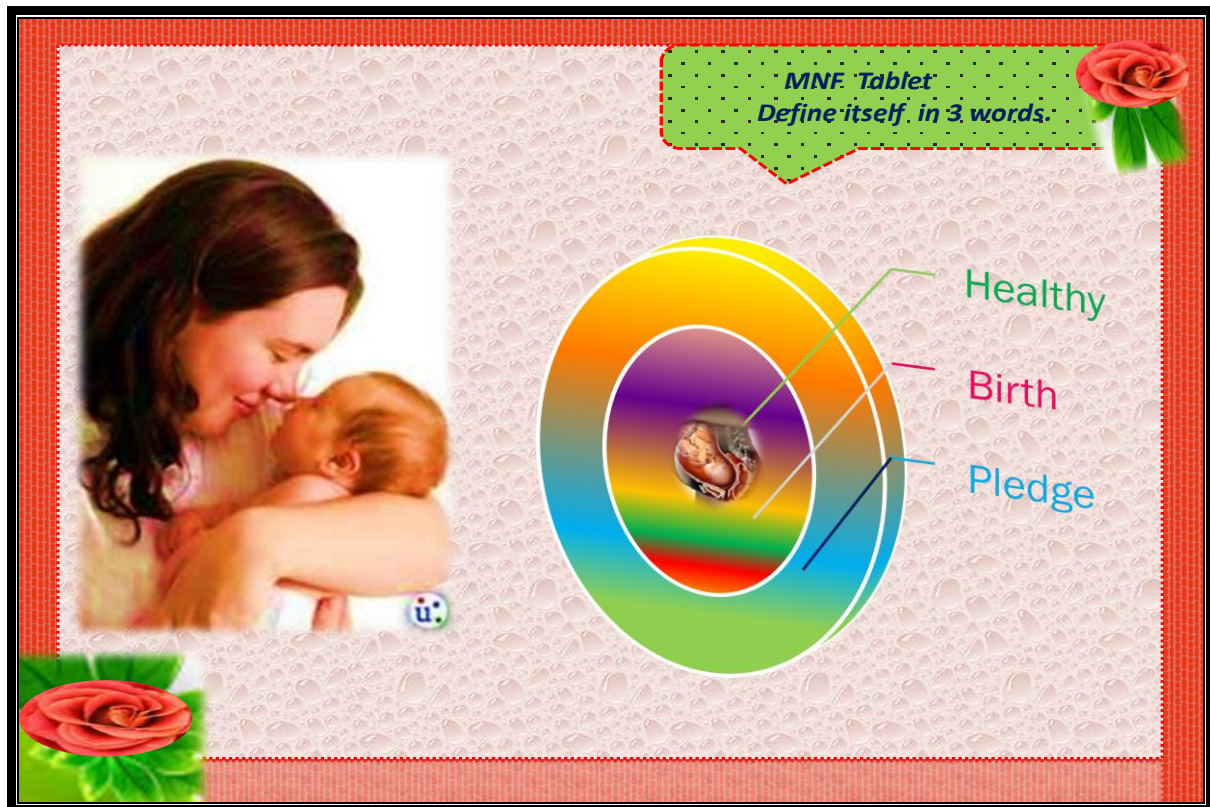
A healthy baby birth is a work of(MNF Tablet) art  
It is a peace of your Mind  
And a silence of your Heart



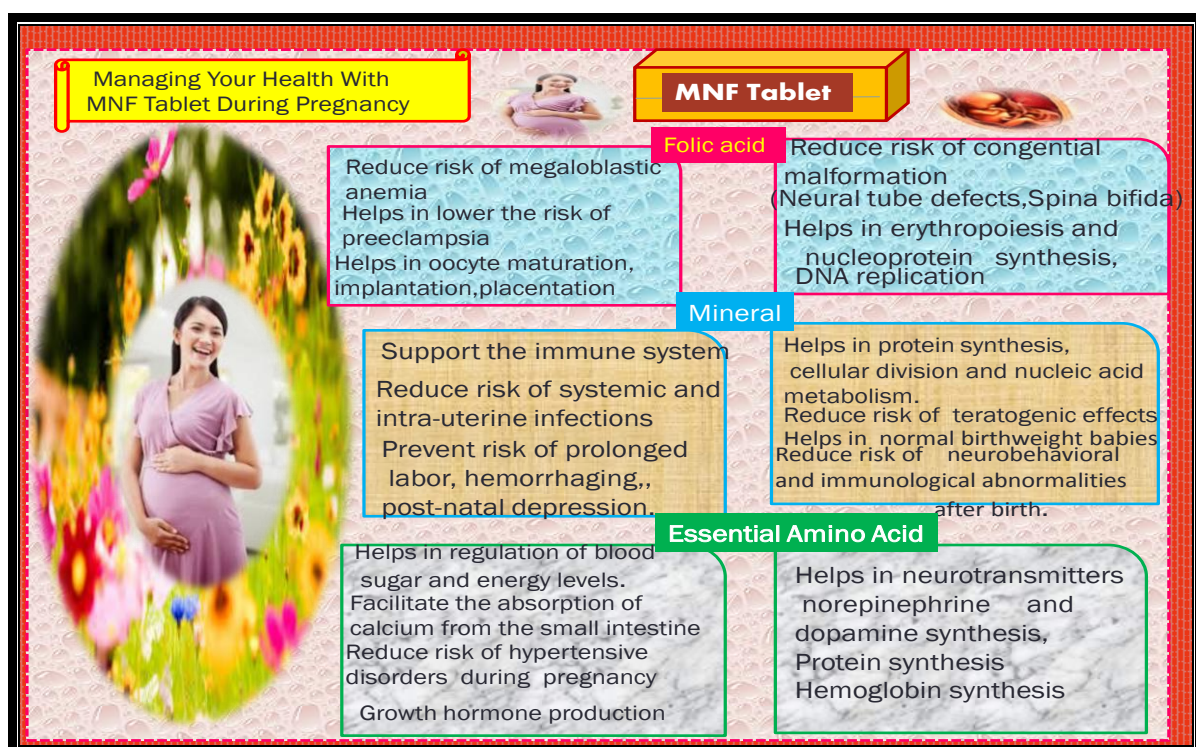
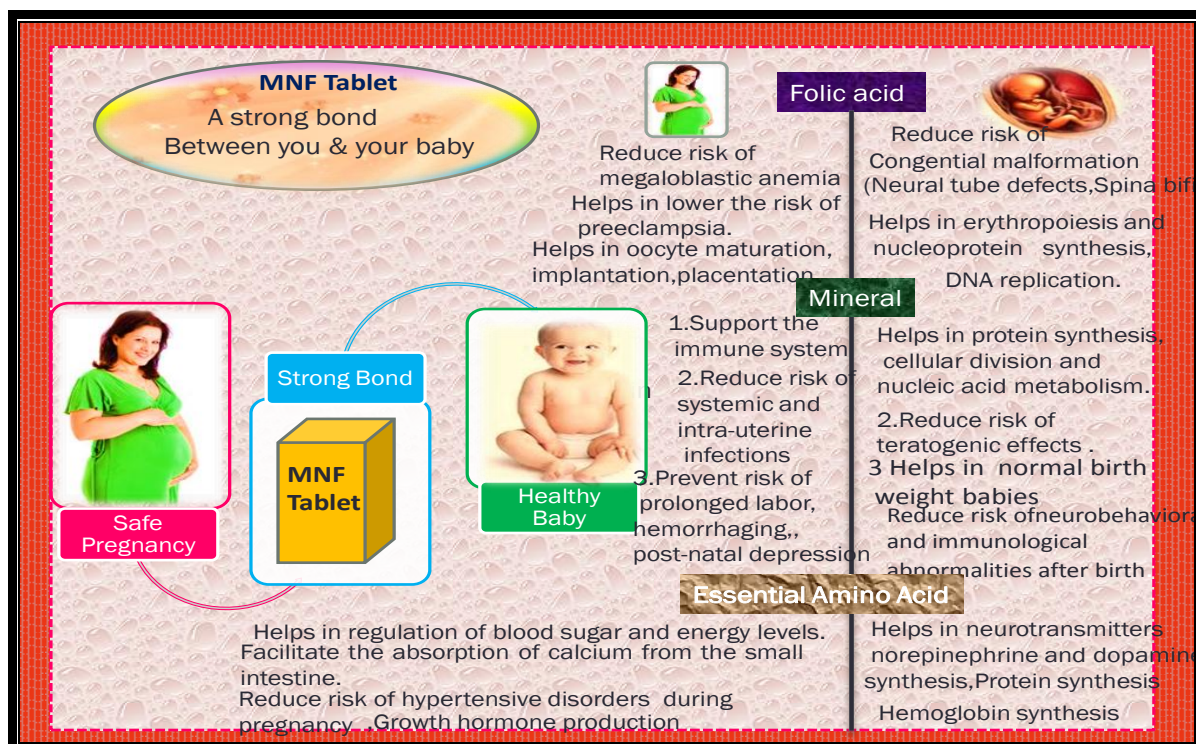
**MNF Tablet**

- ❑ **Folic acid** is required to maintain normal erythropoiesis and nucleoprotein synthesis.
- ❑ **Vitamin C** Oxygen transport in fetus after the iron metabolism.
- ❑ **Vitamin B6** is used for preventing and treating morning sickness in early pregnancy. **Vitamin B12** is reduce risk of Neural Tube Defect.
- ❑ **Zinc** is needed for reduce risk of low birth weight babies. **L Isoluciene** is important in hemoglobin synthesis . **L-Leucine** is used in growth hormone construction
- ❑ **L-Lysine H C I** is decreasing the risk of developing hypertensive disorders during pregnancy.
- ❑ **DL Methionine** regulating the availability of folic acid.
- ❑ **L-Threonine** is helps to maintain the proper protein balance in the body.
- ❑ **L -Valine** is regulate the immune system.
- ❑ **L- Tryptophan** is necessary for normal growth
- ❑ **L-Phenylalanine** precursor role in the synthesis of the neurotransmitters norepinephrine and dopamine

## “MNF Tablet For Mother & Foetus”



## “MNF Tablet For Mother & Foetus”



## “MNF Tablet For Mother & Foetus”





**MNF Tablet**

“A great joy is coming  
So keep your joy healthy by  
MNF Tablet.”



**Folic acid**

- Reduce risk of megaloblastic anemia
- Helps in lower the risk of preeclampsia
- Helps in oocyte maturation, implantation, placentation

**Mineral**

- Support the immune system
- Reduce risk of systemic and intra-uterine infections
- Prevent risk of prolonged labor, hemorrhaging, post-natal depression.

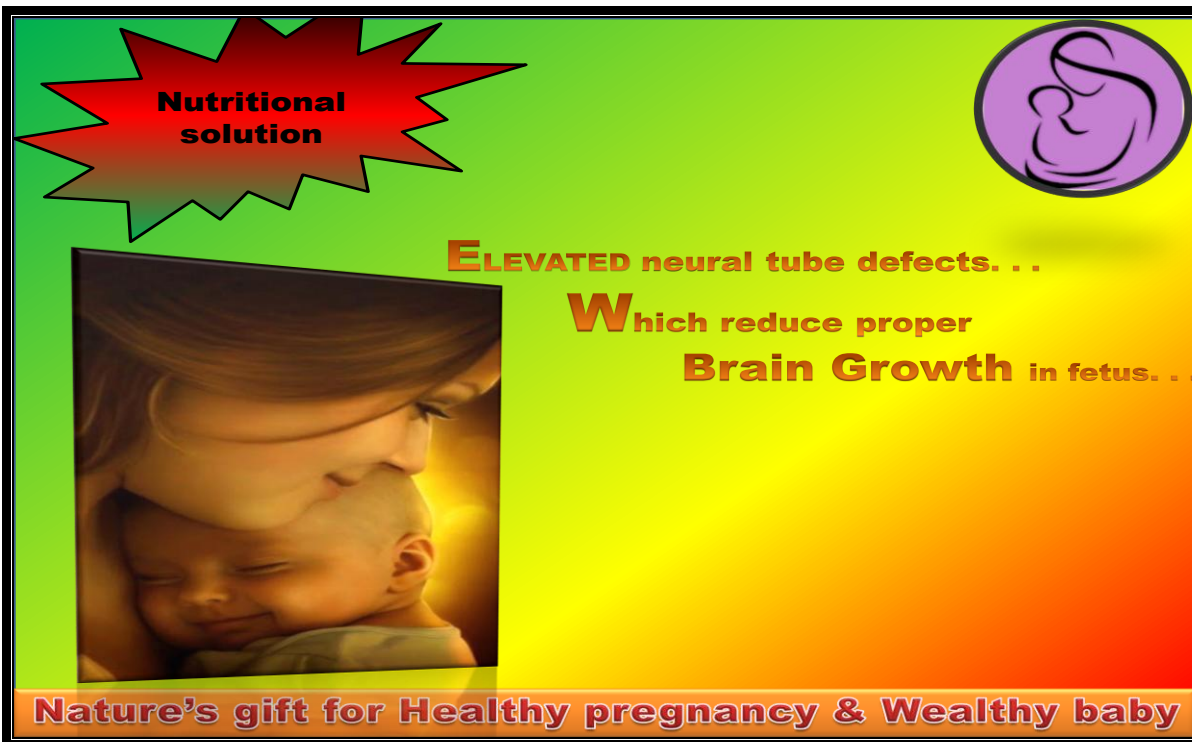
**Essential Amino Acid**

- Helps in regulation of blood sugar and energy levels.
- Facilitate the absorption of calcium from the small intestine
- Reduce risk of hypertensive disorders during pregnancy
- Growth hormone production

- Reduce risk of congenital malformation (Neural tube defects, Spina)
- Helps in erythropoiesis and nucleoprotein synthesis, DNA replication
- Helps in protein synthesis, cellular division and nucleic acid metabolism.
- Reduce risk of teratogenic effects
- Reduce risk of neurobehavioral and immunological abnormalities after birth.
- Helps in neurotransmitter norepinephrine and dopamine synthesis, Protein synthesis, Hemoglobin synthesis

“You are the plant of your flower & his healthy  
Growth depend on your nutritional value  
So keep your flower (baby) growth with  
MNF Tablet.”

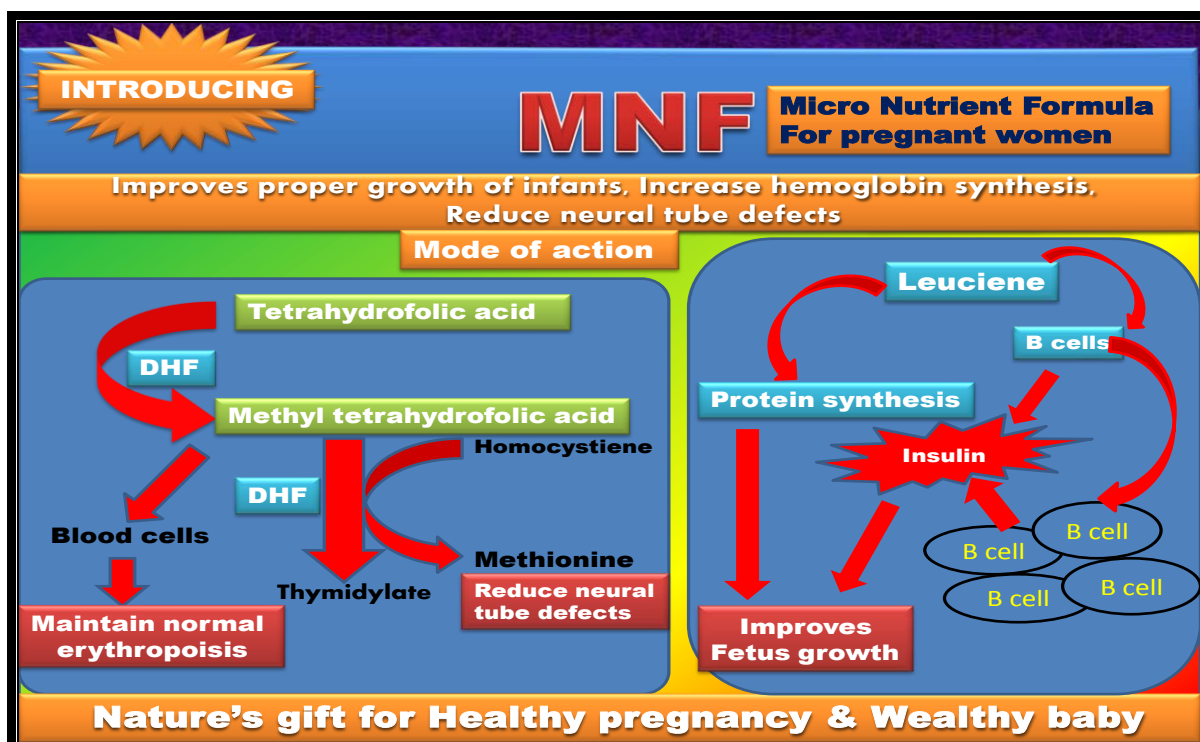
## **LBL (Leave Behind Literature) ON MNF TABLET**



**Nutritional solution**

**ELEVATED neural tube defects. . .**  
**Which reduce proper Brain Growth in fetus. . .**

**Nature's gift for Healthy pregnancy & Wealthy baby**



## “MNF Tablet For Mother & Foetus”

**INTRODUCING**

# MNF

**Micro Nutrient Formula  
For pregnant women**

**Improves proper growth of infants, increase hemoglobin synthesis,  
Reduce neural tube defects**



- (1) **Folic acid**- Maintain normal erythropoiesis nucleoprotein Synthesis.  
Reduce risk of premature delivery
- (2) **Vitamin c**- maintain blood pressure
- (3) **Pyridoxine**- Reduce morning sickness
- (4) **cyanocobalamine**- DNA methylation
- (5) **Elemental zinc**- reduce risk of low weight birth baby
- (6) **L isoluciene**- hemoglobin synthesis
- (7) **L luciene**- hormone production growth
- (8) **L lysine**- increase calcium absorption
- (9) **DI methionine**- formation of building block protein helps in synthesis of enzyme & structural protein.
- (10) **L threonine**- helps absorption of nutrients
- (11) **L valine**- maintain active healthy brain
- (12) **L tryptophan**- maintain nitrogen balance
- (13) **L phenylalanine**- maintain proper connection between nerve & brain which keeps awake & alert.

**Nature's gift for Healthy pregnancy & Wealthy baby**



**INTRODUCING**

# MNF

**Micro Nutrient Formula  
For pregnant women**

**Improves proper growth of infants , increase hemoglobin synthesis,  
Reduce neural tube defects**

**Cyanocobalamine**  
Reduce spina bifida

**L tryptophan**  
Normal growth

**L phenylalanine**  
synthesis of neurotransmitters



**Folic acid**  
Reduce neural tube defects

**Vitamin C**  
Transport oxygenated blood & proper nutrients

**Elemental Zinc**  
Reduce pre-eclampsia

**L valine**  
Healthy brain Function

**L luciene**  
Fetus growth

**Pyridoxine**  
Helps in DNA synthesis

**L lysine**  
Formation of Tissues & bone

**DI methionine**  
Transport synthesis

**Nature's gift for Healthy pregnancy & Wealthy baby**



## “MNF Tablet For Mother & Foetus”

**INTRODUCING**

**MNF** **Micro Nutrient Formula  
For pregnant women**

**Improves healthy brain function in fetus**

**Reduce neural tube defects**

**Improves proper absorption of nutrients**

**Reduce risk of low weight birth baby**

Product pic

**Nature's gift**  
for Healthy pregnancy & Wealthy baby



**BAL PHARMA LIMITED**  
5<sup>th</sup> floor, laxminarayan complex, 10/1, palace road,bangalore-560052  
Ph.+91-80-41379500 Fax: +91-80-22354057/2235 4058  
Website:www.balpharma.com

**Concept Pages  
Of  
Nutritional  
Supplementation  
In  
Male**

## “MNF Tablet For Mother & Foetus”

**WHEN** **Nutrition** **Requirement Is The**  
**Question For Young Age...**

**Young Generation**

- Release stress
- Release extra fat
- Improve Health
- Provide energy

**L IsoLuciene**  
**L Luciene**  
**L Lysine hcl**  
**DL-Methionine**  
**L-Threonine**  
**L-Valine**  
**L-Tryptophan**  
**L-Phenylalanine**

**Best Healthy Food Supplement For Cell Integrity  
With All Essential Eight Amino Acids**

**WHEN** **Nutrition** **Requirement Is The**  
**Question For Older Age...**

**Older Generation**

- Reducing Risk of Heart Stroke
- Maintain sugar level
- Relief from joint pain

**L Isoluciene**  
**L luciene**  
**L Lysine hcl**  
**DL Methionine**  
**L-threonine**  
**L-Valine**  
**L-Tryptophan**  
**L-Phenylalanine**

**Best Healthy Food Supplement For Cell Integrity  
With All Essential Eight Amino Acids**

**Concept Pages  
Of  
Vitawiz-G  
Tablet**

## “MNF Tablet For Mother & Foetus”

**Vitawiz-G Tablet**

- Reduce Hyper Homocytinemia
- Prevent miscarriage
- Reduce Neural Tube Defects
- Reduce Mental Retardation
- Reduce Morning Sickness
- Maintain blood pressure

**All essential Amino acids, Vitamins & Antioxidants with Advanced Healthy Formula**

**Healthy Mother, Healthy Baby**  
For pregnant women only with zero side effect

**Womens Safety is First Priority, We Believe Healthy Women Healthy India**

**Vitawiz-G Tablets (For women's)**

**Complete Solution with No Side Effects**

- Reduce hot flushes
- Reduce risk of breast, colon & Prostate cancer pre & post women
- Reduce premenstrual syndrome

**Pre & Post Menopausal women**

- Reduce menstrual cramps
- iron deficiency anemia
- Ovarian tumors
- Uterine tumors

**Reproductive Women**

- Reduce Cervical dysplasia
- Reduce Cervical tumors

**Adolescent Girl**

**With Essential Amino Acids, Vitamins & Flaxseed Powder**

**Vitawiz-G**  
Tablet

**Best Vitamin Tablet For Men with Advanced Active Free Radical Formula**

**All The Essential Amino acids, Vitamins, Antioxidants and Flax Seed Powder with Extra energy.**

**Extra Immunity power**

**Adolescent boy**

Reduce Sleep disorder  
Infertility  
Reduce depression

**Reproductive Men**

Formation of Spermatozoa (male reproductive cells)  
Reduce the extreme Stress  
Helping to quit smoking

**Older Men**

Reduce heart stroke  
Maintain sugar level  
Reduce osteoarthritis  
Maintain healthy blood vessels  
Maintain cholesterol level