



## **Guide for Facilitators:**

*MAMA Project format for introducing Nora Lynne Micronutrients to village women's groups.*

Background Information:

- **The Importance of Micronutrients**

In good soil, with good rainfall, there are usually abundant minerals, and all of the building blocks for life. When an environment is stripped of its natural resources, the nutrients in the soil are also lost. In some parts of the world, the soil is deficient in important minerals such as iodine, zinc and iron. Communities experiencing deforestation, erosion, leaching and other environmentally harmful events are victims. It is a cycle that damages the soil causing nutritional depletion for plants, animals, and humans. The harmful effects of micronutrient depletion cause the sons and daughters of the soil hardships of many kinds. It has become increasingly evident that micronutrients are a key component to health and wellness, both of the land and the humans that live on it. Health experts have found that in-home micronutrient fortification is an effective means to survival and health, especially in children and child-bearing women.

- **What are micronutrients?**

Micronutrients are an important part of our nutrition, making our bodies healthy and strong. Though they only need to be consumed in very small amounts, these elements play a large role in overall body wellness and functioning. Nora Lynne micronutrient powder contains 21 of these essential vitamins and minerals and can help families to supplement their nutrition.

**Note:** *There are other nutrients such as fat, carbohydrates, protein, calcium, magnesium, potassium, and phosphorus that are "macro" nutrients. They are vital for life also.*

# Facilitator's Guide for Village Demonstration:



*Nora Lynne*  
Micronutrient Powder

## How do Micronutrients Impact Life and Health?

	Immune Deficiency More vulnerable to illness and death from serious infections - pneumonia, diarrhea, malaria, measles, TB, HIV "Nutritional AIDS"	Nutritional Anemia	Mental / Neurological Disease or Delay	Bleeding	Growth Stunting Slow healing and poor tissue	Nutritional Blindness	Noma Oral tissues, immunity	Birth Defects	Beriberi	Pellagra	Bone Weakness Rickets / Osteoporosis	Thyroid Disease Hypothyroidism / Goiter	Scurvy
A: Retinol	◆	◆			◆	◆	◆	◆					
B1: Thiamin		◆					◆	◆	◆				
B2: Riboflavin	◆	◆			◆		◆	◆		◆			
B3: Niacin	◆	◆	◆				◆	◆		◆			
B5: Pantothenic Acid		◆	◆										
B6: Pyridoxine		◆						◆		◆			
B9: Folic Acid	◆	◆					◆	◆					
B12: Cyanocobalamin		◆	◆	◆	◆		◆	◆					
C: Ascorbic Acid	◆			◆	◆		◆	◆					◆
D3: Calciferol	◆			◆	◆		◆				◆		
E: Tocopherol	◆	◆	◆		◆								
H: Biotin								◆					
K: Phylloquinone				◆	◆		◆				◆		
Iron	◆	◆	◆					◆		◆			
Iodine			◆		◆			◆				◆	
Selenium	◆	◆			◆		◆					◆	
Copper		◆						◆		◆	◆	◆	
Zinc	◆	◆	◆		◆	◆	◆						

Disease caused by deficiency of more than one micronutrient are best prevented/treated by replenishing all necessary nutrients.

Other micronutrients that are not usually associated with a specific deficiency disease include three essential minerals: Chromium which is involved in metabolism; Manganese which plays a role in wound healing, cartilage and bone development, acts as an antioxidant and activates important enzymes; Molybdenum which is involved in many enzyme pathways.

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This event will usually take place at the beginning of a child survival village brigade event (generally includes deworming, vitamin A distribution, weights and measurements of children, etc.).

### Preparation for Village Demonstration of Micronutrient Powder (MNP):

#### Check List for Event:

- Hard boiled eggs: One per woman at event
  - Oil: 1 liter bottle per 100 women
  - Nora Lynne Micronutrient Powder: One bag per woman
  - Micronutrient yellow flip-top container with 0.15 cc mini-scoop: One per woman
  - Iodized Salt: One bag
  - Plastic spoons (5 cc): One per woman
  - Paper plates
  - Supplies to wash own hands and children's hands & faces: Poured water and soap; not a basin
  - Projection Screen or TV
  - "A Micronutrient Story" DVD, DVD Player or Projector
  - Table
  - Trash Bag
  - Kitchen knife: One for group
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- Set up table for training where women and children are waiting for the events to begin. (For example, they may be waiting in line for the brigade to start.)
  - Greetings and introductions. Introduce leaders, teachers, and health guardians.
  - Welcome all women (over 15) or whoever is the child caregiver present at event.
  - Invite volunteers to help with demonstration (distribute spoons, eggs, plates).

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### MAMA Project Nora Lynne Micronutrient Powder Fortification:

**Demonstration:** Go through demonstration in this order; step by step. Explain the “Whats and Whys”. Have each woman follow the steps and move on after everyone has completed the steps.

#### What:

#### Why:

1. Wash hands, wash child's hands/face	Hygiene is very important to prevent the spread of infection or contamination of food.
2. Demo: Cutting bag open vs. tearing. Each person opens bag and pours into bottle.	Powder must be kept dry and clean in the flip top containers. Otherwise powder will become hard and difficult to use.
3. Crack hardboiled eggs and mash with spoon.	Eggs are a super food containing proteins, minerals, and Omega 3s (good fats).
4. Measure oil with spoon and add to egg mixture; add small sprinkle of salt.	This mixture will promote brain and intellectual development. If eggs are not available in home, supplement with protein rich foods: mixed grains, beans, cheese, or meat.
5. Measure MNP with 0.15 cc mini-scoop: fill heaping scoop of MNP and press/pack against side of container, turn scoop over food and tap empty.	This nutrient rich fine powder is used in small volumes. It is important to ensure the 0.15 scoop is distributed properly. Protect this fine powder from blowing wind when outside.
6. Mix egg compound with MNP.	Each individual needs their own portion of egg mixture because each person has their own individualized nutrition needs.
7. Hold child on lap and spoon feed. Lovingly talk to baby.	Important to engage child by spoon feeding while talking to them. Never leave child alone to eat.
8. Eat and enjoy.	Take this time to discuss how it tastes and address questions about Nora Lynne MNP.

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Village Demonstration:



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**Micronutrient Powder Dosing:**

Age	Eggs	Oil (tsp)	Iodized Salt	MNP 0.15cc mini-scoop
<b>Growing Child: Older than 6 mos.</b>	2	4	Sprinkle	2
<b>Women: 15-49 years</b>	3	6	Sprinkle	3
<b>Men over 19 years; Women over 50 years</b>	1 or more	2	Sprinkle	1

\*There should be 2 tsp/10 cc of oil for each egg.



\*\* Each scoop of MNP is 0.15cc

# Facilitator's Guide for Village Demonstration:



## *Nora Lynne* Micronutrient Powder

**Instruction Sheet Enclosed in Micronutrient Powder:** Each woman receives a bag of MAMA Project Nora Lynne Micronutrient Powder, yellow flip top container, 0.15 cc mini-scoop, and the following instruction sheet.

**Why do I need vitamins and minerals?**

- Growth, healing, & repair
- Strong bones, muscles, & heart
- Mental alertness & energy
- Healthy blood and immune system

**My family is healthier since I started fortifying our food with Nora Lynne Micronutrients EVERY DAY!**

I am feeding my baby fruits, vegetables, and mashed, boiled eggs with iodized salt and oil, fortified with micronutrients.

In communities striving to improve family nutrition, mashed, boiled eggs are an ideal food to fortify:

- 2 eggs a day for growing children
- 3 eggs for women 15-49
- at least 1 egg for men over age 19 and women over 49

Sprinkle with iodized salt & add 2 teaspoons of oil per egg. If eggs are unavailable use other high protein food such as mixed grains, beans, cheese, or meat.

1. Separate a portion of cooked food for each person
2. With 0.15cc mini scoop, take a heaping serving of micronutrient mixture, and compress it against container wall.
3. Be careful not to let any blow away.
4. Turn the scoop over the food, tap until empty, mix and serve.

Use daily:  
 2 scoops for growing children over 6 months  
 3 scoops for women 15-49 years old  
 1 scoop for men over 19 and women over 49




# Facilitator's Guide for Village Demonstration:



*Nora Lynne*  
Micronutrient Powder

**Volunteer Pocket Guide:** a quick and convenient reference for volunteers to utilize for MAMA village demonstrations.


Pocket Guide for Village Demonstration



*Nora Lynne*  
Micronutrient Powder

**Checklist for Presentation:**

<input type="checkbox"/> Hard Boiled Eggs	<input type="checkbox"/> Soap, Water & Pitcher
<input type="checkbox"/> Iodized Salt	<input type="checkbox"/> Spoons & Kitchen Knife
<input type="checkbox"/> Oil	<input type="checkbox"/> Plates
<input type="checkbox"/> Micronutrient Powder (MNP) & Bags	<input type="checkbox"/> Table
<input type="checkbox"/> Mini-Scoop (0.15cc)	<input type="checkbox"/> Projection Screen or TV
<input type="checkbox"/> Yellow Flip-Top Bottle	<input type="checkbox"/> "A Micronutrient Story" DVD, DVD Player or Projector



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**MNP - Tips for Teaching:**

- Helpful in 1st food of the day.**
- Pour water when washing:** Do not wash from basin.
- Exclusive breastfeeding:** BEST nutrition for babies under 6 months.
- Do not cook MNP:** Cooking "kills" some vitamins.
- Do not mix in water, milk, or any liquids:** Sinks to bottom.
- Keep out of reach of children:** Avoid accidental ingestion.

**MNP - Instructions for Teaching for Teaching:**

**GREETINGS & INTRODUCTIONS:**  
Invite women older than 15yrs or child caregivers.

**STEP BY STEP DEMONSTRATION:**  
Discuss and demonstrate the "What and Why" of MNP.

What:	Why:
1. Wash hands, wash child's hands/face	Good hygiene will prevent infection.
2. Demo: Cutting bag open vs. tearing. Each person opens bag and pours into bottle.	Powder must be kept dry and clean; otherwise it will become hard and difficult to use.
3. Crack hardboiled eggs and mash with spoon.	Eggs are a super food containing protein, Omega 3s (good fats), vitamins and minerals.
4. Measure oil with spoon and add to egg mixture; add small sprinkle of salt.	If eggs are unavailable, use protein rich foods: mixed grains, beans, cheese, or meat.
5. Measure MNP with 0.15 cc mini-scoop: fill heaping scoop of MNP and press/pack against side of container, turn scoop over food and tap empty.	MNP is rich in nutrients; use only small volumes. Protect this fine powder from blowing away in the wind.
6. Mix egg compound with MNP.	Use dosing chart to determine each person's nutritional needs.
7. Hold child on lap and spoon feed. Lovingly talk to baby.	Engage child in experience. Never leave alone to eat.
8. Eat and enjoy.	Discuss comments and questions.

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### **Frequently Asked Questions about Nora Lynne Micronutrient Powder:**

#### **Why does MNP need to be in the first meal of the day?**

It is important to incorporate into first food of the day because it promotes a routine for the family. It creates the opportunity for the caregiver to fortify the first meal of the day to meet each individual's needs.

#### **Can MNP be added to a meal as it is prepared?**

No, MNP needs to be added to each person's individual portion. It can't be stirred into the family's pot of food nor can it be cooked.

#### **Why is MNP stored in the yellow flip top container?**

The MNP and scoop needs to be kept dry and clean. The container helps to keep moisture out. Moisture would cause the fine powder to harden which would make it difficult to accurately measure. The micro scoop should never touch the food. Use the scoop only to measure, not to stir or mix the powder into food. Always store scoop inside of yellow flip top container.

#### **What else can MNP be mixed in?**

It can't be mixed in milk, water, or other liquids; the minerals will sink to the bottom. The egg, oil, salt combination is a tasty and nutritious mixture for use with the MNP. If these foods are not accessible, MNP can also be added to other high protein foods such as mixed grains, beans, cheese, or meat. Foods like these can prevent and treat malnutrition in the community. It is necessary that the entire portion for each individual be consumed for full nutritional effect.

#### **Why is MNP important to take as directed?**

Every kind of nutrient should be taken in the correct amount, regularly. The daily use of multiple vitamin and mineral mixtures is usually recommended, and people should always limit their use to the amount recommended for them. It is not true that "If a little is good, a lot is better". Just as there is danger in lack of good nutrients in the diet, there is real danger of overdosing if people do not follow directions, and do not keep vitamin and mineral supplements out of the reach of children. Micronutrients can be found in a well-balanced diet but when an individual does not have access to these types of foods, micronutrient powder is an excellent way to supplement daily nutrition.



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### **Why is the dosing different for various ages?**

Developing children need additional vitamins and minerals from early childhood to age 19 to maximize their growth and development, both physically and cognitively. Women ages 15-49 require a more highly enriched diet because these are the childbearing and breast-feeding years. During these times, their bodies need additional nourishment as they are supporting their child's nutrition, also.

### **What do babies under 6 months need for appropriate nutrition?**

Children under 6 months do not need micronutrient powder. At this age they should be exclusively breastfeeding, which fulfills all of their nutritional needs. Babies do not need any tea or sugar water, only the precious nourishment of their mother's breast milk. When the baby is between the ages of 6 months and 1 year, it is appropriate to begin introducing eggs and other mashed foods to transition child to solids. It is not recommended to make weaning foods, or special meals of starchy foods for baby. It is most helpful for the child to participate in family mealtime by being spoon fed the same foods (mashed) as the family is eating. This will provide the child with a well rounded meal while introducing diverse tastes and textures. Continue breastfeeding until 2 years of age.

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