

## **NUTRITIONAL RECOVERY AND IMPACT OF THE CONSUMPTION OF *MORINGA OLEIFERA* POWDER IN PRIMARY AND CURATIVE CONSULTATION**

*Mansaly S.*

State-registered nurse, Santhiaba Clinic in Ziguinchor, Senegal

### **I. INTRODUCTION**

Our health as human beings depends to a large extent on how we eat. The old adage says that we must eat to live. But this implies that we must be able to eat, and "know how" to eat, for an unbalanced diet can be as harmful as not having enough to eat.

This imbalance represents a real health problem in both under-developed and developed countries. It may involve over-eating which can lead to obesity, diabetes, and heart disorders, on the one hand, and, on the other, not eating enough, which causes malnutrition.

In Africa, 20-25 million children suffer from malnutrition. In Senegal, between 1986 and 1993, the level rose from 5.8% to 12%; added to this was the devaluation of the CFA franc in 1994, which further increased the number of children affected.

### **II. THERE ARE MANY CAUSES OF MALNUTRITION AMONG CHILDREN**

a) The main cause of infant malnutrition in Africa is poverty.

This is followed by:

b) ignorance: women are not acquainted with food groups that are of use to the body, especially for the growth of the child.

c) social factors, with the various conflicts and wars in Africa in general. In Senegal, in particular at Ziguinchor, the problem of refugees and displaced persons in outlying districts aggravates unbalanced diets.

d) Food taboos: for example, mothers refuse to give their children eggs, for fear that they will become dumb. Some mothers believe that if children eat fish they will become prey to parasites.

e) Forms of diarrhoea represent the prime cause of consultation and hospitalization in our services. Among sick people, these conditions are aggravated by severe malnutrition and anaemia. A malnourished child will have at least seven episodes of diarrhoea a year.

f) Acute Respiratory Infections [ARI]. Malnutrition is very common among newborn babies and children suffering from ARI. It sometimes causes problems in dealing with the infection.

g) Malaria: the frequency of malaria further weakens children.

h) Parasitosis: more than 90% of children suffer from parasites.

i) Poor weaning methods. Breast-feeding infants are abruptly taken off the mother's breast, but without any preparation for their new diet. This brutal weaning gives rise to emotional shock, which affects the appetite.

### **III. THE MANY DIFFERENT CAUSES OF MALNUTRITION, THE LIST OF WHICH IS NOT EXHAUSTIVE, LEAD TO HARMFUL CONSEQUENCES.**

a) Kwashiorkor is a dietary imbalance involving protein deficiency. It appears at the age of 18 months (at weaning).

b) Marasmus, which consists in a reduction of the food ration, especially in terms of calories, starts at a very early age, usually in about the third month, with maximum frequency at about seven months. These two pictures are rarely isolated and are usually associated, giving rise to the intermediate form of marasmic kwashiorkor or, alternatively, protein-calcium malnutrition.

c) Geophagy: malnourished children will look for complements to their food in sand, which lays them open to parasitosis, and then anaemia.

#### **IV. NUTRITIONAL RECOVERY BEFORE THE ADVENT OF *MORINGA OLEIFERA***

The steps followed by health clinics to treat malnutrition were:

- a) Evaluate the degree of malnutrition.
- b) Evaluate underlying disorders
- c) Check the vaccination calendar.
- d) Remedy and treat with a hyperprotidic diet.
- e) Give vitamin A supplement.
- f) Advise mothers about the importance of breast-feeding their babies exclusively for the first six months and to introduce enriched gruel from the sixth month with different food groups.
- g) Prepare home monitoring and follow-up schedules.

With *Moringa oleifera*, nutritional recovery and the fight against malnutrition are nowadays effective in certain health establishments, and at lower cost.

From May 1999 to July 2001, 320 children were given *Moringa oleifera* supplements to their diets at the Santiaba clinic in Ziguinchor.

220 of the children were classified as green (normal), 70 yellow and 21 red (malnutrition indicators). The recovery of yellow children was very evident, and those in the red group are on the path to recovery (8/21) with satisfactory weight increase. The other 13 were given other forms of treatment such as vitamin A, iron, and antibiotics because they were suffering from other disorders.

The health of the children suffering from ARIs, measles, malaria and diarrhoea has improved a lot. Where the latter is concerned, wrong diets, caused by poor hygiene, have been greatly reduced thanks to advice given to mothers.

Today, the use of *Moringa oleifera* by women in our services--more precisely at Santiaba--has remedied certain cases of malnutrition. Use is straightforward: a teaspoon added to every child's meal for malnourished children, and a teaspoon three times daily for maintenance treatment.

Raising awareness, on a wide scale, about the properties of this tree has born fruit in Primary Curative Consultations [PCC].

These consultations are available to one and all, and in particular to children from birth to five years. It is recommended for mothers to take *Moringa oleifera* powder and breast-feed their children; as soon as the child is six months old, they are advised to start adding powder to the child's food, at a dose of one teaspoon per meal every day. For children suffering from parasites and geophagy, the same treatment is applied and has produced excellent results.

For malaria, the problem of hypoglycaemia is dealt with by using a *Moringa oleifera* leaf juice prepared for this purpose.

#### **V. HOW TO PREVENT MALNUTRITION**

- a) Reduce poverty by introducing small income-generating projects, micro-gardens, poultry runs etc.
- b) Educate mothers about the importance of food groups, food hygiene, water and the environment.
- c) Prevent measles by vaccination.
- d) Prevent conflicts.

#### **VI. CONCLUSION**

Child survival programmes must deal with increased risks created by malnutrition.

To achieve this, health organizations, NGOs, the State, and volunteers must all pool their efforts to raise people's awareness about this tree of life by establishing large numbers of plantations, dispensing much more information, and introducing *Moringa oleifera* products at lots of sales outlets.

*Moringa oleifera* is a product that is helping to solve the problem of malnutrition in a lasting and sustainable way, because of its local availability.