

## Acceptability and Use of Maní+, a Ready to Use Supplementary Food, in Guatemala

Maní+ is a Ready to Use Supplementary Food (RUSF) specifically developed to address the nutritional deficiencies of Guatemala children suffering from chronic malnutrition. Almost half of all Guatemalan children are malnourished. A daily 40g dosage of Maní+ provides 225 calories, 6g protein, 16g of fat, 14g of carbohydrates, and a proprietary formulation of micronutrients developed with the Central American Nutrition Institute (INCAP) to meet the needs of rural Guatemalan children from 6 to 24 months old.

Studies from Africa and other parts of the world have demonstrated the efficacy of RUSFs like Maní+ in preventing chronic malnutrition.<sup>1</sup> We have found that the most effective interventions are paired with educational training for mothers that stresses overall family nutrition. What is less clear from previous studies is the actual effectiveness of RUSFs in daily home usage.

### This Study

Working with the Fundación contra el Hambre (FH) and Vanderbilt University, we conducted a study to gauge the acceptability and use of the Maní+ RUSF in the community of Paapa, Alta Verapaz, Guatemala. We enrolled 43 children from 6 to 24 months of age (and their mothers), who were covered by existing FH programs. The study consisted of 8 weeks of direct intervention (February-April 2013). The average age of mothers was 28 years and 100% were native Q'eqchi' Mayan speakers. Educational materials and focus groups were presented in Q'eqchi'.



### Results

The acceptability rate of Maní+ (defined as voluntary daily consumption) was 100% among the enrolled children. The average quantity consumed was 31.6 grams per day (of a 40g dose). Children aged 12 months and above consumed an average of 84% of the recommended dose, but in children between 6 and 12 months average consumption was 76.5%. As a result of these findings, we are developing an alternative 30g dose.

**Table 1: Acceptability of Maní+ among children in Paapa (n = 43)**

Aceptabilidad el niño	Sí	% (n)
		100% (43)

**Table 2: Average daily quantities of Maní+ consumed (n=43)**

	Average consumed per day, % of dose (weight)
6-12 months	76.5% (30.6g)
13- 18 months	76% (30.5g)
> 18 months	83.7% (33.5g)
Total	79% (31.6g)

<sup>1</sup> Ver Gates Foundation 2009; Phuka et al. 2009; Isanaka et al. 2010; Maleta et al. 2004; Matilsky et al. 2009; Karakochuk et al 2012

## Preliminary Anthropometric Results

Table 3: Antropometría

		X =lbs. (DE)
Weight (n= 41)	Initial Weight	19.9 (0.7)
	Weight after 2 month intervention	21.16 (0.5)
	<b>Difference, post-intervention</b>	<b>1.26lbs 6.3% increase</b>
		X = Cms. (DE)
Height (n= 47)	Height <u>2 months prior to study</u>	65.8 (2.2)
	Height after 2 month intervention	73.8 (0.8)
	<b>Difference, post-intervention</b>	<b>8cms 12.2% increase*</b>

\*Los datos iniciales de talla son de 2 meses antes de la comienzo del estudio y el 12.2% refleja crecimiento durante ese periodo también

