



## Feeding Program – Project Overview and Monitoring

### Research

D2D has contacted other hospitals, nutritionists, and NGOs running feeding programs in Malawi.

Organization	Likuni Phala fortified maize	Quantities
<b>WFP</b>	Yes	50g of fortified maize per child per day
<b>World Vision</b>	?	No response
<b>Feed the Children</b>	?	No response
<b>Mary's Meals</b>	Yes	50g Likuni Phala per child per day; 100g maize per child; 50g beans per child; 10ml oil per child; 3g salt; No measurement on sugar as Likuni Phala already includes this (along with milk).
<b>Save the Children</b>	?	No response
<b>Red Cross</b>	?	Referred us to Chilumba Hospital (who referred us to Karonga hospital)
<b>African Vision Malawi (Landirani)</b>	Yes	No response
<b>Likuni Hospital, Lilongwe</b>	-	If Likuni Phala: 50g per day; If maize: 45g, 7.5g sugar, 10ml cooking oil per day
<b>Independent Nutritionist</b>	-	10g sugar per liter of porridge, 10g salt per liter of porridge, 300g maize per liter

<b>Karonga Hospital</b>	-	No response
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### Results:

Based on the findings from our research, there are three options. The first is to continue using maize/salt/sugar; the second would be to start using Likuni Phala (fortified maize/soya); the third option takes into account the current moringa project being run by D2D in Sangilo. This project is assessing the nutritional impact of adding moringa to fortify maize and provide extra vitamins and minerals to children through the feeding program. This program is scheduled to finish in July 2015, with results available in December 2015. If moringa is found to be effective it could be incorporated into the feeding programs.

We have found that many organizations running feeding programs use Likuni Phala, a maize/soya blend, which comes with added sugar and is fortified with vitamins and minerals. The wholesale cost of Likuni Phala (from Rab Processors, a local producer) is 50kg for K20, 000 (1kg = K400) (K20 per child per day).

Moringa is available at a wholesale price of K1000 per 1kg. Currently the project is giving approx. 1.7g or K1.7 per child per day. This amount may be reassessed as part of the project.

Maize, with added sugar and salt would be used at the quantities provided by the hospitals and nutritionist:

	<b>Maize</b>	<b>Sugar</b>	<b>Salt</b>	<b>Total (MK)</b>
<b>Recommended QTY per child (grams)</b>	45	7.5	1.5	-
<b>Cost (MK) per child per day</b>	5.94	3.9	0.34	10.18

## Summary

Product	Cost per child per day (MK)	Cost per year (MK) (210 school days)
Likuni Phala	K20 – \$04.7	7,043,400.00 - \$16,600*
Maize, sugar & salt	K10.18 - \$02.4	3,585,090.60 - \$8,500*
Maize, sugar & salt + moringa	K11.88 - \$02.8	4,183,779.60 - \$9,900*

\*Exchange rate of 420 USD = 1 MK

## Recommendations

We recommend that D2D moves to using Likuni Phala for its feeding programs. Although this is a more expensive option, it ensures the children are gaining nutritional benefits from the feeding programs, as opposed to just a full stomach. The World Food Program states that the stunting rate for children under 5 in Malawi is 42%, there is a high prevalence of under-nutrition and widespread micronutrient deficiencies. Using a product that has added nutritional value helps to fight this and ensures we are focusing on the long-term issues as opposed to just the immediate need. This would also bring us in line with leading organizations in school feeding programs, such as Mary's Meals (who feed over 740,000 children in Malawi per day), and the WFP (World Food Program). Using Likuni Phala would mean we would be able to measure exactly how much each child is gaining nutritionally from the feeding programs and the quantity per child is verified by a number of sources.

We recommend Likuni Phala be implemented in stages. If it is financially viable, we suggest moving to Likuni Phala for the two nursery schools immediately. This also means we can reassess the number of children in the schools and adjust our quantities accordingly without concern of cultural backlash to reducing quantities. (It has been noted that the nursery schools are being given too much maize and sugar currently and also have over reported the number of students, which will lead to cuts).

Stage two would be to move to using Likuni Phala in primary schools in the new school year (September 2015). This means there will be no negative effect on the current moringa project. Once the moringa project results have been analyzed, D2D could assess moving to its own form of fortified maize, using a mix of sugar, salt, maize and moringa in the long-term, which would be a cheaper option if it could provide the same levels of nutrients for children. The level of moringa may need to be increased which means it would be a more expensive option than is indicated above. In the interim, standardized amounts based on the quantities ascertained should be adhered to – following a check on the number of students in the schools.

An issue considered in regards to using Likuni Phala is the impact on exit strategies- one considered exit strategy from the current feeding program support would be to have organizations grow maize. However, this does not solve the issue of sugar or salt. Exit strategies should rely on financial contributions from students to cover the costs of feeding programs.

### Actions

- Assess number of children attending each school and nursery
- Hold a meeting with the Mother's groups, committees etc. to explain changes
- Implement Likuni Phala at nursery schools and standardized quantities in primary schools
- Make Moringa project aware that they may need to adjust the amounts of moringa going to Sangilo Primary School and that the changes in the amount of porridge will need to be noted in their project.
- Updates to monitoring of feeding programs should include:
  - Quantity, types and source of food used
  - Distribution data if applicable
  - Enrolment changes by gender
  - Attendance by gender and class
  - Drop out rates by gender and class
  - End of term student performance by gender and class
  - Periodic student health indicators by gender and class
  - Orphans / non-orphans

- Monitoring must also include a monthly check on the number of pupils attending nursery School/Primary School. An average should be taken and this will determine the amount of food the school/nursery receives in the following month. ICS volunteers can check registers daily in nursery schools to ensure they are correct.
- Consider monitoring growth of nursery school children

## Monitoring

### Nursery School Spot Checks for Feeding Program Numbers

Nursery	Date of Spot Check	Checked by	Observed #	Reported #
Tilipo	13 May 2015	Thandie	113 both classes	115
Tipilo	18 May 2015	Songe	101	101
Phulano	21 May 2015	Thandie	48 both classes	41
Tiyezge	25 May 2015	Songe	37 beginners 19 Juniors	55
	13 May 2015	Thandie	50 both Classes	46
Luvilimbo	20 May 2015	Thandie, Declan, Clemmie	51 both classes	51
Luvilimbo	18 August 2015	Johnny, Opan	66 both lasses	54
Tilipo	24 August 2015	Johnny	121 both Classes	118
Tiyezge	28 August 2015	Johnny, Opan	89	94
Luvilimbo	7 October 2015	Johnny	59	59
Tilipo	13 October 2015	Johnny, Ponelo	130	132
Phulano	26 October 2015	Johnny	45 some kids were already gone because the school knocked off earlier	86

<b>Tilipo</b>	28 October 2015	Alex & Kettie(ICS)	136	132
<b>Tiyezge</b>	30 October 2015	Johnny, Clemmie, Rob	85	84
<b>Tilipo</b>	12 November 2015	Frackson	114	116
<b>Tiyezge</b>	13 November 2015	Frackson	91	91
<b>Phulano</b>	17 November 2015	Frackson	49	82
<b>Luvilimbo</b>	18 November 2015	Frackson	82	82
<b>Luvilimbo</b>	2 December 2015	Frackson	82	86
<b>Phulano</b>	9 December 2015	Frackson	53	65
<b>Tiyezge</b>	14 December 2015	Frackson	85	94
<b>Tilipo</b>	15 December 2015	Frackson	88	
<b>Tilipo</b>	26 January 2016	Ellie, Ponelo, Frackson, Callum	111 both classes	119
<b>Tiyezge</b>	26 January 2016	Ellie, Ponelo, Frackson, Callum		101
<b>Phulano</b>	27 <sup>th</sup> January 2016	Ellie, Ponelo, Frackson, Callum	29 Juniors 20 Beginners	52
<b>Luvilimbo</b>	29 <sup>th</sup> January 2016	Frackson, Callum	9 Juniors 10 Beginners	