

**Based on work by Dr
Paluku Bahwere –
Valid International**

Nutritional support to HIV positive adults using chickpea/sesame/maize recipe RUTF

- 3 months nutritional support
 - 500 g /day of RUTF (Chickpea-Sesame recipe)
 - 2600 kcal/day
 - 70g protein/day
- Routine cotrimoxazole
- Delivered through existing HBC structures



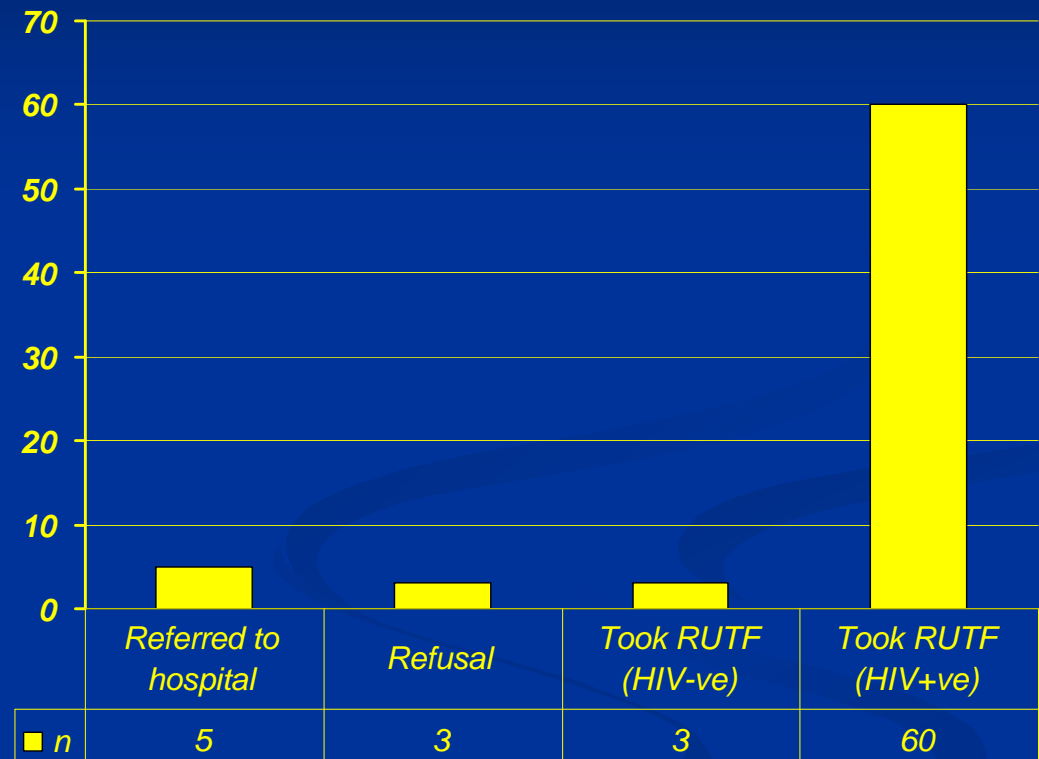
Characteristics at admission

- Clinical WHO stages (n=60)
 - WHO stage 3 = 25%
 - WHO stage 4 = 75%
- Nutritional status: means (SD) (n=60)
 - BMI = 16.1(1.7)
 - MUAC = 19.5(1.8)
- CD4 count (n=51)
 - <50 = 7 (13.7%)
 - <200 = 21 (41.3%)
 - 200-350 = 12 (23.5%)
 - \geq 350 = 11 (21.5%)

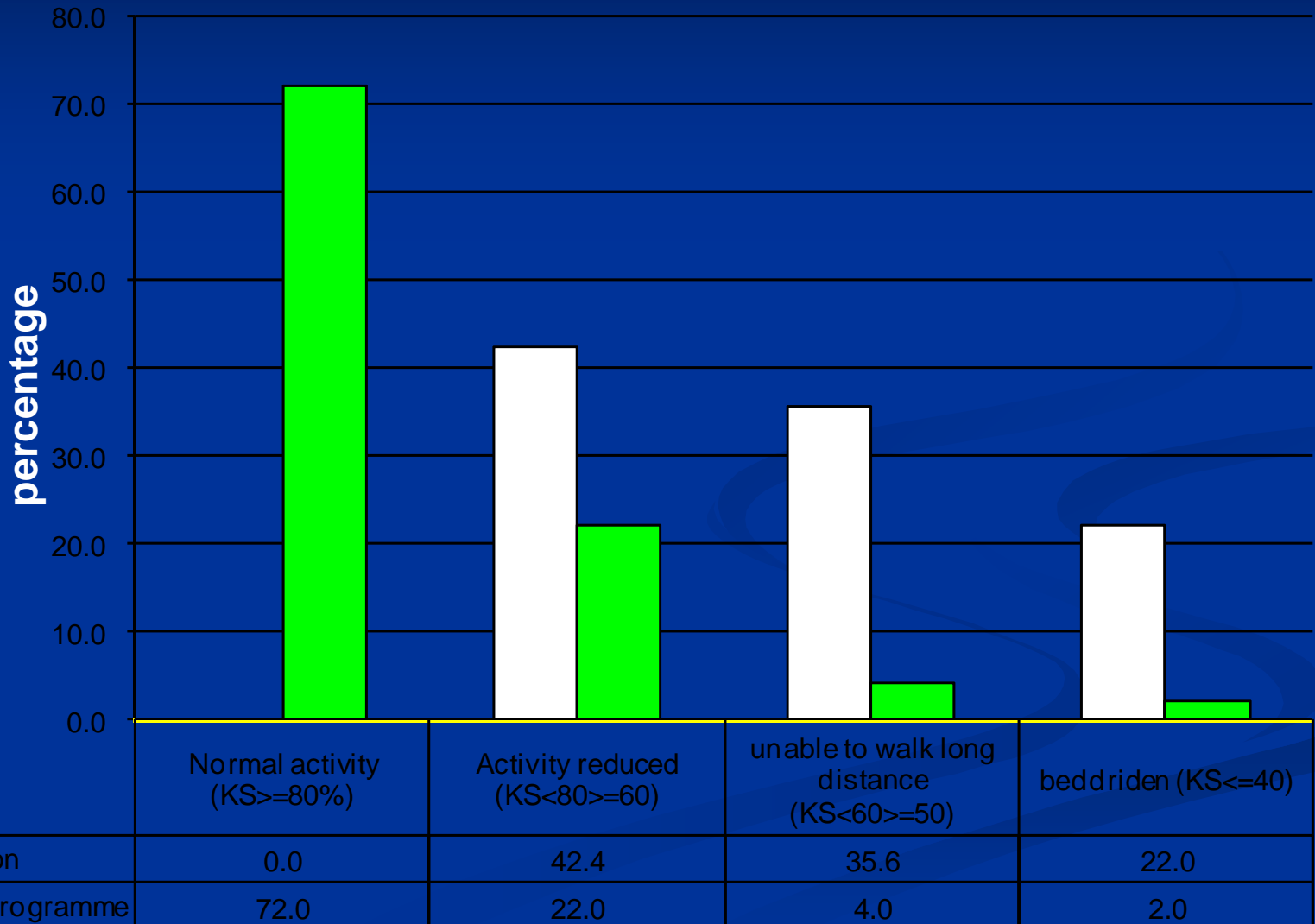


RUTF Acceptability

- 71 subjects referred by volunteers
 - 63 (89%) consumed RUTF (including 3 HIV-ve)
- Average RUTF intake
 - 300 g/day
 - 1600 Kcal/day
 - 40 g of proteins



Activity performance evolution



Median (IQR) weight gain in Kg

NASO/SASO PILOT

2 WEEKS

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1 MONTH (n=53/87)

2.0 (0.0-3.5)

2 MONTHS (n=45/42)

2.5 (0.0-6.0)

3 MONTHS (n=38)

3.0 (2.0-7.0)

Body composition changes with CS-RUTF (subsequent larger scale programme in Malawi)

	n	Mean (SD)	Median (IQR)
Total body lean mass	42	2.9 (3.9)	1.7(-1.4-5.1)
Total body fat	42	-0.3 (2.0)	0.1 (-1.2-0.8)

COSTS

■ CSB + oil

- 10 \$US/patient/month
- 40 \$US/Household ration
- 50 \$US/MT logistic costs

■ CS-RUTF

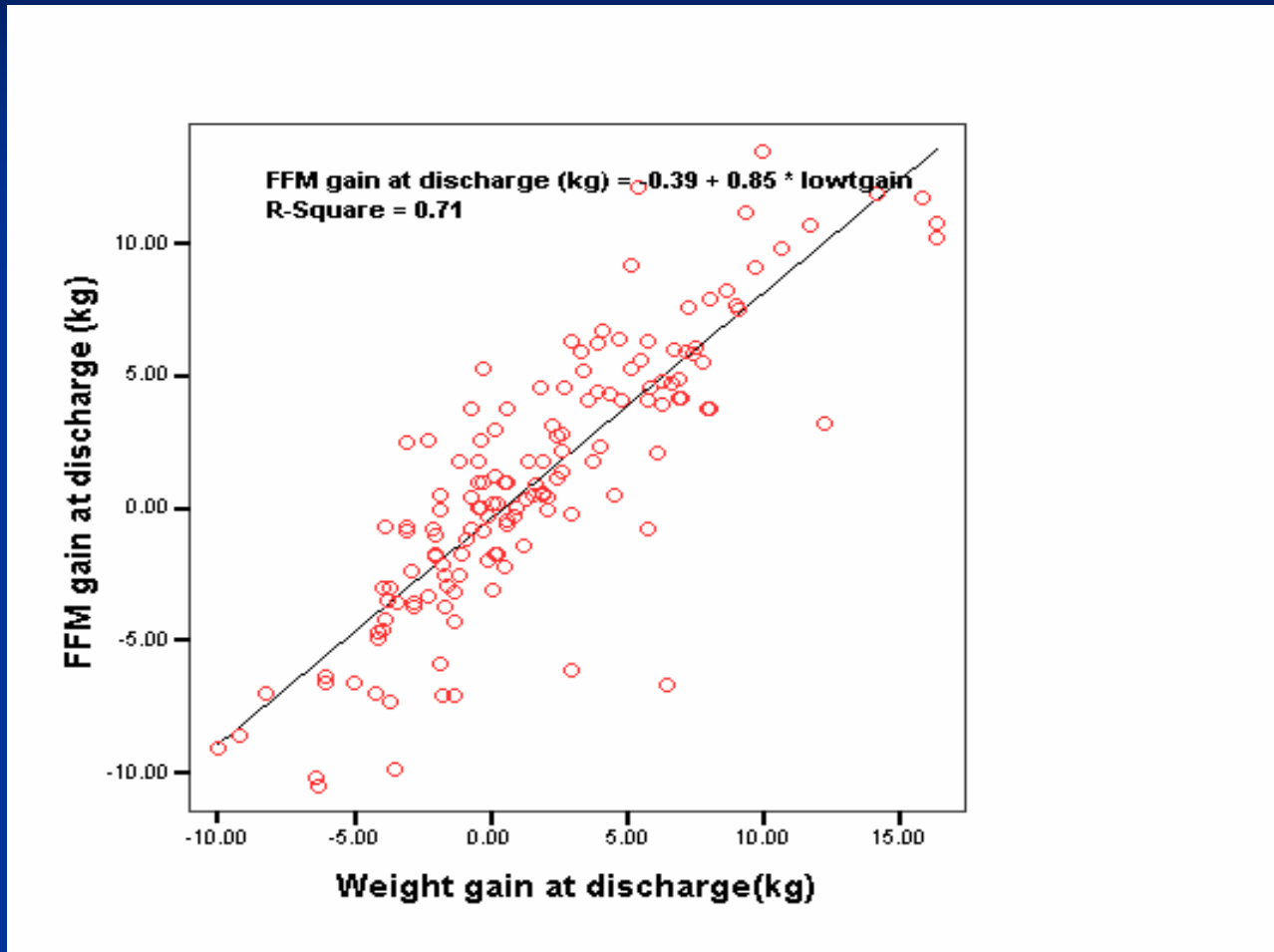
- 37.5 \$US/patient/month
- No household ration
- 50 \$US/MT logistic costs

	Bowie et al, 2005 (n=22)	Gakenia et al, 2005 (n=69)	CS-RUTF pilot (n=42)
Product	CSB+ oil	CSB + oil	CS-RUTF
Duration	12 months	9 months	3 months
Weight gain		2.06 kg	4.8 kg
MUAC gain	-	0.99 cm	2.3 cm
BMI gain	1.01/200 d		1.1
Cost/patient	629 \$	479 \$	115 \$

Increase in haemoglobin in 3 months

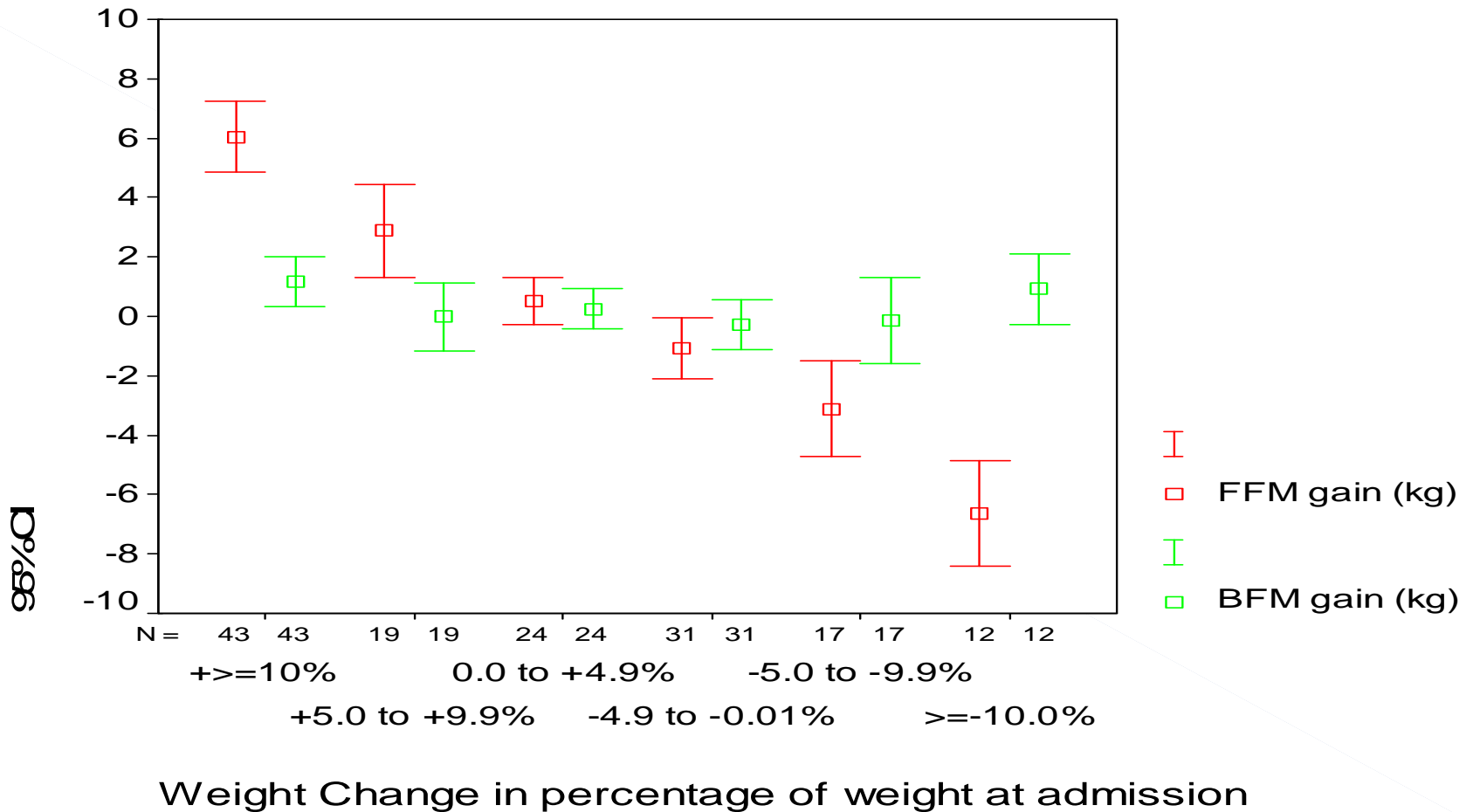
- Overall increase: +0.8 g/dl (p=0.002)
 - baseline Hb <8g/dl : + 2.5g/dl (p<0.001)
 - baseline Hb ≥8g/dl : 0.1g/dl (p=0.559).

Composition of WT gain (1)



Weight gain related to FFM deposition

WT gain composition (2)



**No change in BFM changes across % of weight gain
but change FFM**

Predictors of recovery : reaching MUAC \geq 230mm

Adjusted of OR (95%CI)

- On ART at enrolment: 2.6(1.2-5.5)
- Absence of oral disease: 10.6(1.3-84.7)
- MUAC of admission: 1.05(1.02-1.07)