# **Consumption Study**



# Consumption Study Methodology

In partnership with the MOH and sanctioned by the Ministry of Statistics, PHC conducted a nationwide consumption study of six staple food products.

- From April to June 2008, data was collected for 6 staple foods: cassava flour, maize flour, rice, salt, sugar and oil\*
- Target audience included women of reproductive age (16-45 years) and children less than 59 months of age
- Interviews were conducted in all 5 provinces of Rwanda
- 30 sectors selected using a cluster sampling methodology
- •7 interviews were conducted per district using a random walk methodology
- A single woman/child pair was the focus of each survey
- Data was collected using handheld computers and aggregated into a single database

\*Data on oil includes: sunflower, vegetable, palm and cow's milk.



# Consumption Study: Revised Analysis

Initial analysis included numerous records in four sectors within Kigali province. In this revised analysis, records have been randomly removed from those four sectors to achieve equal representation, removing potential bias towards urban consumption patterns.





Daily Consumption: Women



Percent of Women Who Consume Each Staple Daily n = 1001



PROJECT HEALTHY CHILDREN

Rwanda Consumption Study

# Daily Consumption: Women



# Percent Who Consumed Each Combination In Past Day: Women n = 1001

# Weekly Consumption: Women



#### Percent Who Consumed Each Combination In Past Week: Women n = 977

Daily Consumption by Region: Children



Percent of Children Who Consume Each Staple Daily n = 981



PROJECT HEALTHY CHILDREN

Rwanda Consumption Study

# Daily Consumption: Children



### Percent Who Consumed Each Combination In Past Day: Children n = 981



# Weekly Consumption: Children



# Percent Who Consumed Each Combination In Past Week: Children n = 954



# Cassava: Daily and Weekly Consumption



Consumption: Women



**Consumption: Children** 



PROJECT HEALTHY CHILDREN

Rwanda Consumption Study

# Cassava: Frequency of Consumption



# Weekly Consumption Frequency: Women $n = 590, \sigma = 1.43$





# Cassava: Average Amount Consumed



Average Amount Consumed: Children

n = 299



National Distribution by Serving Size: Children n = 299, 1 serving = 0.05kg,  $\sigma$  = 0.62





0.06

0.05

0.04

0.02

0.01

0.00

**9** 0.03

Eastern

Northern

Southern

Western

TOTAL

Kigali

# Cassava: When Consumed



### Cassava: Purchase Rate and Location





### Cassava: Purchase Amount and Frequency

# Cassava: Storage



**National Distribution: Amount In Home** 

# Maize: Daily and Weekly Consumption



**Consumption: Women** 



**Consumption: Children** 

|4+1@

PROJECT HEALTHY CHILDREN

Rwanda Consumption Study

# Maize: Frequency of Consumption



Weekly Consumption Frequency: Women  $n = 638, \sigma = 2.16$ 





# Maize: Average Amount Consumed



**National Distribution by Serving Size: Women** n = 445, 1 serving = 0.09kg,  $\sigma = 0.52$ 



Average Amount Consumed: Children n = 436









# Maize: When Consumed



# Maize: Purchase Rate and Location





### Maize: Purchase Amount and Frequency

22

# Maize: Storage



# Rice: Daily and Weekly Consumption



Consumption: Women



**Consumption: Children** 



PROJECT HEALTHY CHILDREN

Rwanda Consumption Study

# **Rice: Frequency of Consumption**



# Weekly Consumption Frequency: Women $n = 349, \sigma = 1.65$





# Rice: Average Amount Consumed





Average Amount Consumed: Children n = 185









# Rice: When Consumed



# **Rice: Purchase Rate and Location**





### **Rice:** Purchase Amount and Frequency

# Rice: Storage



**National Distribution: Amount In Home** 

# Salt: Daily and Weekly Consumption



Consumption: Women



**Consumption: Children** 



PROJECT HEALTHY CHILDREN

Rwanda Consumption Study

# Salt: Frequency of Consumption



# Weekly Consumption Frequency: Women $n = 970, \sigma = 0.67$







PROJECT HEALTHY CHILDREN

**Rwanda Consumption Study** 

# Salt: When Consumed



# Salt: Purchase Rate and Location





#### **Average Amount per Purchase** n = 1022 $n = 1022, \sigma = 0.3 kg$ 0.80 700 Number of Respondents 0.70 average = 0.6kg 600 Eastern 0.60 500 0.50 Kigali 400 Кg 0.40 Northern 300 0.30 Southern 200 0.20 Western 100 0.10 TOTAL 0.00 0 0.25 0.5 1 1.5 2 3 5 kg less **Purchase Frequency** n = 1024 than **National Distribution: Purchase Frequency** n = 1024, average = 54, $\sigma$ = 54 weekly, 800 more Number of Respondents 700 le**g**an than 600 500 400 daily, weekly; 91% 300 200 more 100 than 0 24 52 12 36 104 156 208 365 4 **Purchases per Year**

# Salt: Purchase Amount and Frequency

**National Distribution: Amount per Purchase** 

35

# Salt: Storage



**National Distribution: Amount In Home**
#### Sugar: Daily and Weekly Consumption



**Consumption: Women** 



**Consumption: Children** 



PROJECT HEALTHY CHILDREN

Rwanda Consumption Study

## Sugar: Frequency of Consumption



Weekly Consumption Frequency: Women  $n = 559, \sigma = 1.93$ 







# Sugar: When Consumed



# Sugar: Purchase Rate and Location





#### Sugar: Purchase Amount and Frequency

# Sugar: Storage



**National Distribution: Amount In Home** 

# Oil: Daily and Weekly Consumption



Consumption: Women





PROJECT HEALTHY CHILDREN

Rwanda Consumption Study

# **Oil: Frequency of Consumption**



# Weekly Consumption Frequency: Women $n = 892, \sigma = 1.92$





# Oil: When Consumed



45

## Oil: Purchase Rate and Location





# Oil: Purchase Amount and Frequency

**PROJECT HEALTHY CHILDREN** 



**Rwanda Consumption Study** 

47

# Oil: Storage

