

# NAMIBIA

## STAPLE FOODS FORTIFICATION



# **PRODUCTS FORTIFIED**

**Maize meal – since 2001**

**Bread Flour – since 2009**

**Fortification on Maize meal and Bread Flour is carried out as per SA fortification regulations.**

# FORTIFICATION NUTRIENTS

- **Vitamin A**
- **Vitamin B1 (Thiamin)**
- **Vitamin B2 (Riboflavin)**
- **Vitamin B3 (Niacin)**
- **Vitamin B6 (Pyridoxine)**
- **Minerals: Folic Acid, Iron, Zinc**

# **FORTIFICATION NUTRITIONAL DAILY BENEFIT**

**Maize meal (per 100g Dry Meal)**

- **Maize Meal – 25% NRV**
- **This intake equals 500-700g of porridge**

**Bread Flour (per 100g Dry Flour)**

- **Bread Flour (White, Brown) – 20% NRV**
- **This intake equals 4 slices of bread (20% of an 800g bread loaf)**

**(Please note that 1 serving portion of a grain meal/flour is actually 30/35g dry product, but in Namibia a person consumes more per day, hence indicating 100g dry meal/flour)**

# CONCLUSION

- Any person (4 years and older) who consumes either 500-700g maize porridge (100g meal was used to prepare)
- Or 4 slices (20% of bread loaf) of bread flour (= 100g)
- Or 250-350g of porridge + 2 slices of bread

**Will have an approximate intake of 20-25% of NRV (per day) of the vitamins and minerals being fortified.**

# COMMENTS

In order to maintain a healthy functioning body, a human being cannot live entirely on starch products, even if it is the staple food.

Therefore it would not be wise to fortify any staple food 100% with vital nutrients in order to have 100% daily NRV per meal serving.

There are lots of other micronutrients needed in order to have normal body functioning, and these are being obtained from e.g. vegetables and fruit, meat, fish, and other foods.

# COSTING

- **Fortification of Maize meal – 1.8c/kg**
- **Fortification of Bread flour – 1.6c/kg**
- **Fortification as per SA regulation (= 20% NRV per daily 'namibian' portion of 5 essential vitamins and 3 essential minerals)**

**Micro feeder: ND 50 000 – 140 000 (U\$ 6000)**  
**(depending on size and supplier/brand)**

# NAMIBIA

- **% Wheat Flour produced by Industrial Mills** • **98 %**
- **% Wheat Flour fortified** • **85 %**
- **% Maize Flour produced by Industrial Mills** • **99 %**
- **% Maize Flour fortified** • **90 %**
- **% Rice processed by Industrial Mills** • **40-45 %**
- **% Rice fortified** • **0 %**



# Namibia at a Glance

	<b>Before 2011</b>	<b>2013</b>	<b>2016</b>
• % Stunting (< 5 years)	• <b>29 %</b>	<b>21 %</b>	
• % Wasting (< 5 years)	• <b>8 %</b>	<b>8 %</b>	
• % Underweight (< 5 years)	• <b>17 %</b>	<b>13 %</b>	
• % Short Maternal Stature (<145 cm)	• <b>1 %</b>		
• % Maternal Underweight (<18.5 kg/m <sup>2</sup> )	• <b>9 %</b>		
• % Low Birth Weight (< 2500 g)	• <b>14 %</b>		
• Total Population	• <b>2,140,000</b>		<b>2,526,531</b>
• Total population < 5 years old	• <b>291,000 (13.6 %)</b>		<b>(13.6 % ?)</b>
• % Population living in Poverty	• <b>28 %</b>		

**PROUDLY NAMIBIAN**

**THANK YOU**