

UGANDA INTEGRATED NUTRITION INFORMATION SYSTEM - FLOUR FORTIFICATION MONITORING AND SURVEILLANCE

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Uganda Integrated Nutrition Information System (UINIS)

- System developed to strengthen the existing HMIS
 - ▣ Data on some of the nutrition indicators was being left out
 - ▣ Multiple players implementing/supporting various programs
- Coordinate all the nutrition information data collection and dissemination
- Minimum uniform indicators have been suggested to be included in surveys to be carried out by different partners
- Multiple vehicle fortification program
- Flour fortification to fit into the UINIS

Flour fortification stakeholders in Uganda

Organisation		Key Roles
Consumer association	<ul style="list-style-type: none"> • CONSENT , UCPA 	
Flour millers	<ul style="list-style-type: none"> • Uganda Wheat Flour Millers' Network 	<ul style="list-style-type: none"> • Qty. Fortified flour produced • Qty. fortified flour marketed in different regions/districts • Sales of fortified flour in local markets
Ministries	<ul style="list-style-type: none"> • Ministry of Health-Environment health 	
	<ul style="list-style-type: none"> • Ministry of Health-Nutrition 	<ul style="list-style-type: none"> • Prevalence of micronutrient deficiencies, NTDs in different parts of the country • Identify sentinel sites for data collection • Issue guidelines and forms for collecting data on NTD births, VAD,IDA
	<ul style="list-style-type: none"> • Ministry of Trade, Tourism and Industry 	
	<ul style="list-style-type: none"> • Ministry of Agriculture, Animal industry and Fisheries 	
	<ul style="list-style-type: none"> • Local authorities (Ministry of Local Government) 	No. Of H/holds in different areas Formalize surveys indifferent areas of the country

Stakeholders Cont'd

Other government agencies	Uganda Bureau of Statistics	Population data
Food control	Uganda National Bureau Standards	Proportion of products meeting standards
	National Drug Authority	
	Uganda Revenue Authority	Quantity of imported and exported fortified flour
Donor Agencies	WFP,WHO, A2Z, UNICEF, USAID, GAIN, IBFAN	Funding and technical assistance
Academia and research institutions	Makerere, Kyambogo, Gulu,Mbarara, Busitema Universities UIRI, FBRC,UVRI,	Surveillance teams, Quality of fortified flour/flour products
Civil Society Organisations	UGAN,	Advocacy

Fortified flour scenario and accessibility

- ▣ Fortification – voluntary program
- ▣ Fortified wheat flour is produced from 4 wheat millers out 8 producers
- ▣ From factory, the flour is taken to distributors in the different regions of the country.
- ▣ From the distributors the flour goes to the wholesalers then retailers and bakeries (small and large scale)
- ▣ The population buys the flour products from the retail or they purchase flour and make own products.

Flour Fortification Program objectives



- ▣ Reduce the prevalence of iron deficiency anemia by 10% in 3 years
- ▣ Reduce the prevalence of vitamin A deficiency by 10% in 3 years
- ▣ Reduce the prevalence of neural tube defects

Key monitoring and impact indicators



- ▣ Prevalence of iron deficiency
- ▣ Prevalence of iron deficiency anaemia
- ▣ Prevalence of vitamin A deficiency
- ▣ Prevalence of folate deficiency
- ▣ Incidence of NTDs
- ▣ Total quantity of fortified flour
(domestic production + imports less exports)

Indicators cont'd

- Quality of fortified flour produced /Proportion of fortified flour meeting standards
- Amount of fortified vehicle distributed (absolute amount and % market share of the available fortified food; domestic production, imports and exports) within different regions/districts
- Geographical area coverage of the fortified food
- Prevalence of awareness on fortification/recognition of the fortification logo



Potential options to collect program coverage and impact data

Indicator	Approach
Prevalence of awareness about fortification/recognition of the fortification logo	Collect data from health facilities (Health centre III as sentinel sites)
Prevalence of population reporting purchase of fortified flour	<ul style="list-style-type: none">• Collect data from health facilities (Health centre III as sentinel sites)• HIES
Per capita consumption of fortified flour	<ul style="list-style-type: none">• Collect data from health facilities (Health centre III as sentinel sites)• HIES
Prevalence of households which use fortified flour	<ul style="list-style-type: none">• Collect data from sentinel primary schools in the area• Analyse the flour samples from households in the area

Cont'd

Indicator	Approach
Prevalence of iron deficiency	<ul style="list-style-type: none">• Collect serum samples from health facilities in the area/region (Health centre III as sentinel sites) – HMIS/UDHS• Biochemistry labs performs tests
Prevalence of iron deficiency anaemia	Collect data from health facilities in the area/region (Health centre III as sentinel sites) –HMIS/UDHS
Prevalence of folate deficiency	<ul style="list-style-type: none">• Collect serum samples from health facilities in the area/region (Health centre III as sentinel sites) -HMIS• Biochemistry labs performs tests
Incidence of NTDs	Collect data from health facilities in the regions - HMIS

Thank you