

Wheat Flour Fortification

Nutrition Research Institute

Iraq

2014

Structure

- NRI was established in 1954, and includes the following sections:
 - Research and Studies Section
 - Nutrition Program Section
 - Nutrition lab Section
 - Nutrition Counseling Section
 - Nutrition Education Section
 - Administrative Section

Strategies and Policies

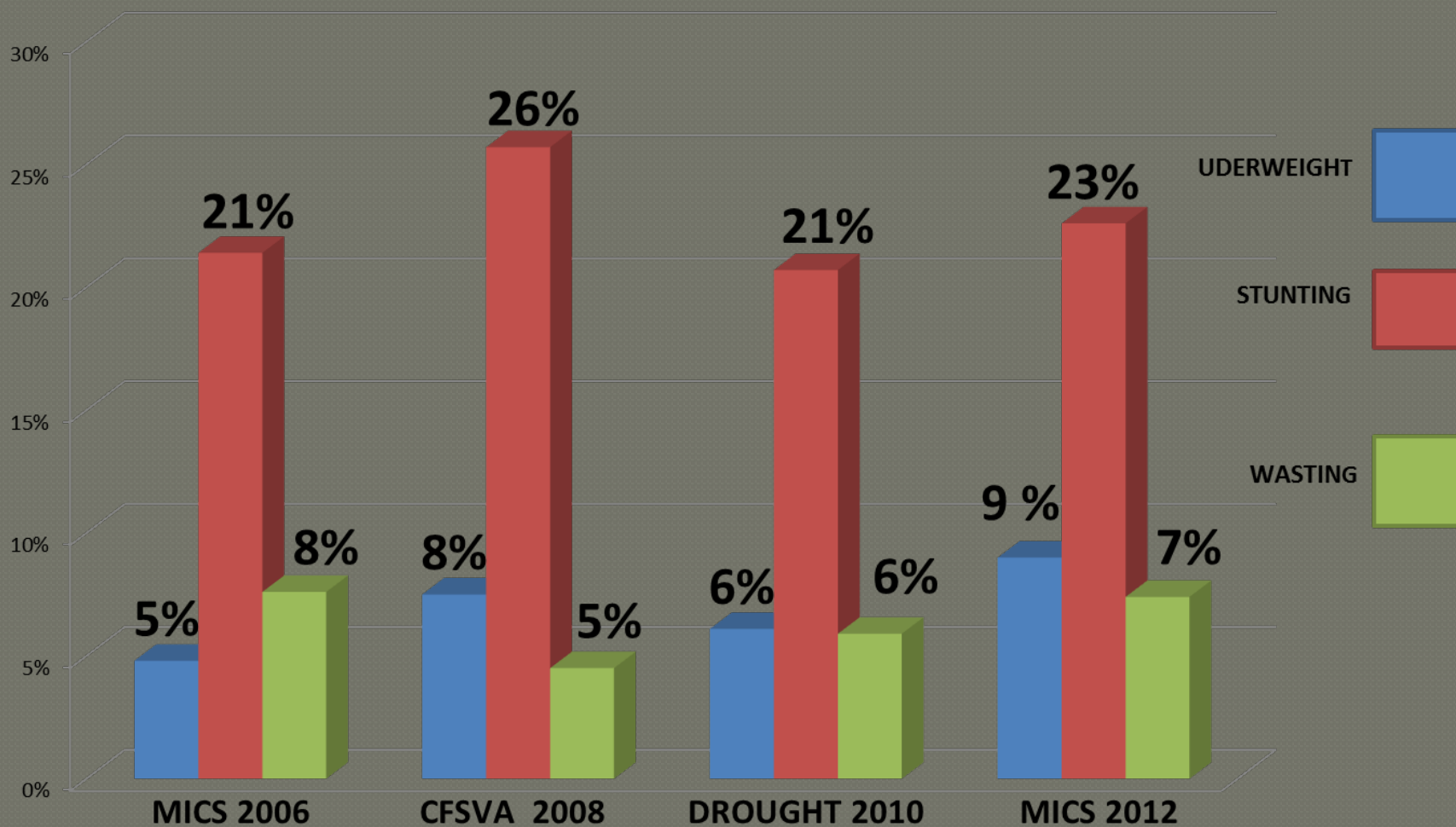
National nutrition strategy 2012-2021

- The National Nutrition Strategy in Iraq 2012-2022 was developed by the Ministry of Health; Nutrition Research Institute with the support of World Health Organization and United Nations Children's Fund and the collaboration of different partners in the line ministries. This strategy document serves as the point of reference in providing a sound foundation for the planning, organization and management of the overall sectors involved in nutrition.
- The overall purpose of this strategy is to define a framework through which available technical, human, and financial resources may be mobilized in order to ensure that the health and nutrition status of all Iraqi population is significantly improved.

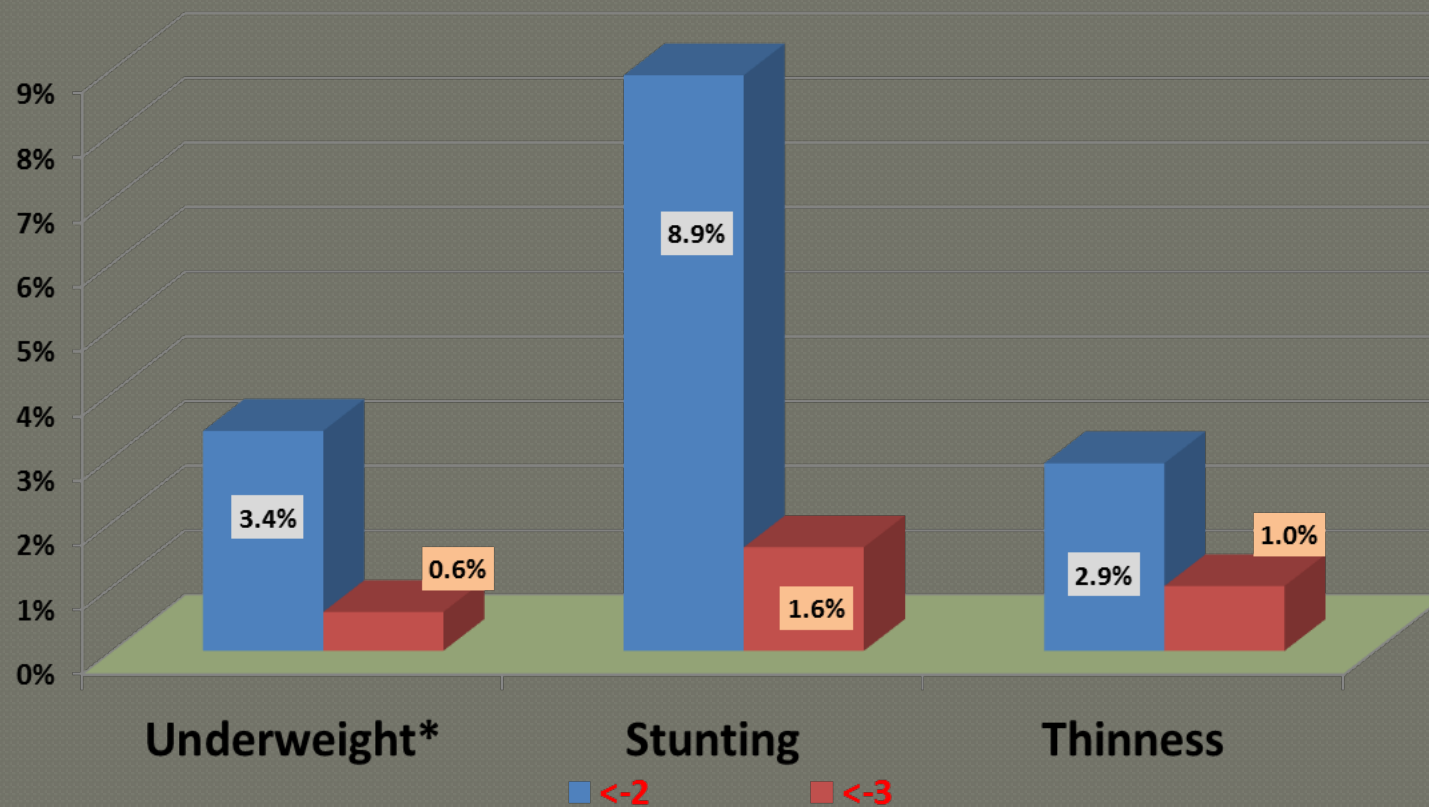
Studies and surveys

- Baseline food security 2003
- Food security and vulnerability survey 2005
- Comprehensive food security and vulnerability analysis survey 2008
- Rapid nutritional assessment survey 2010
- Multiple indicators cluster survey 2011
- Micronutrient survey 2011-2012
- Rapid nutritional assessment of Syrian refugee 2012
- Studies on knowledge , attitude and practice on breast feeding and iodized salt 2013

Malnutrition rate under five years children

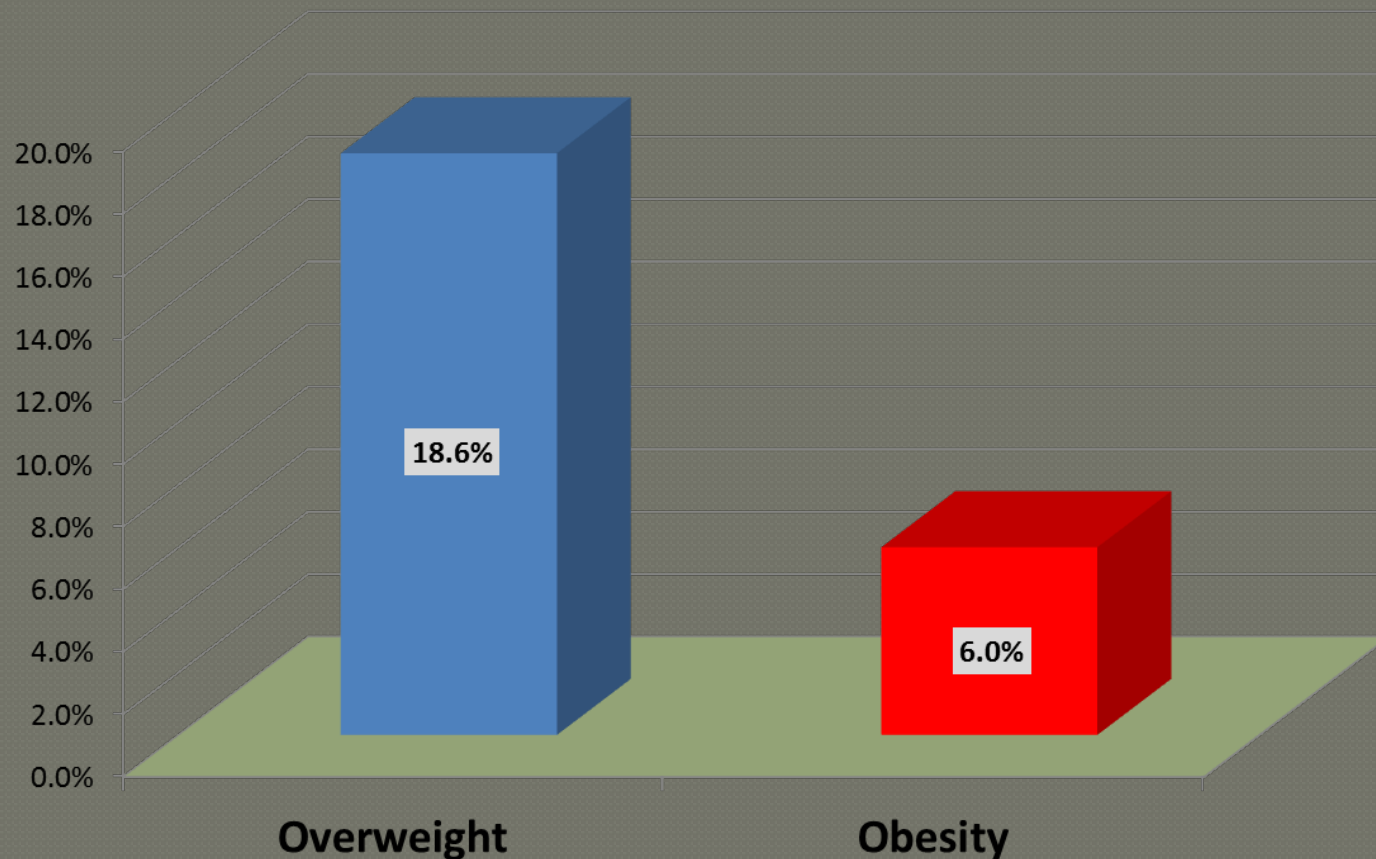


Malnutrition rate school aged children (6-12 years)



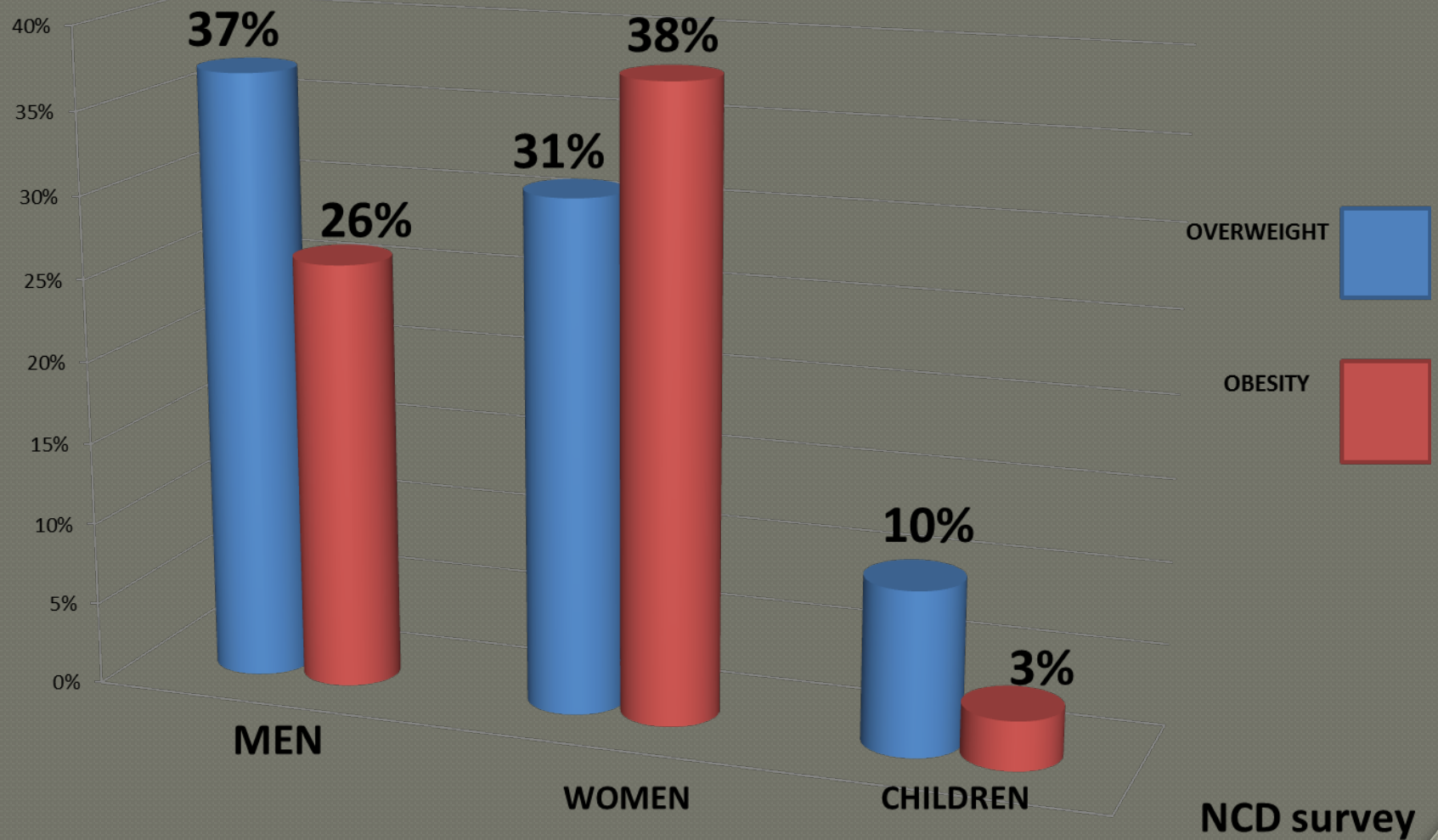
MNAR survey

Over nutrition rate (6-12 years) school aged children



MNAR survey

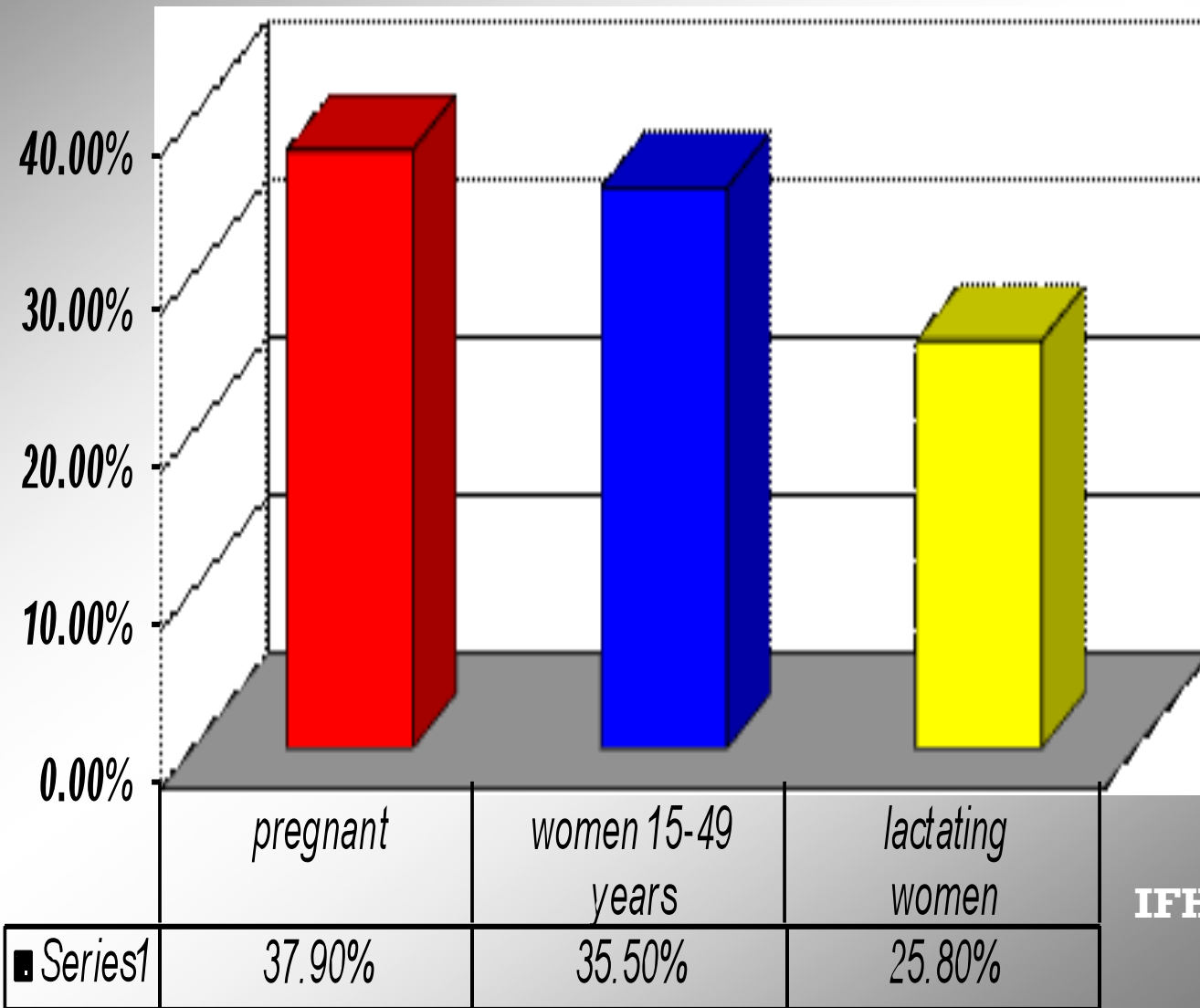
Over nutrition



Micronutrient deficiencies in non-pregnant women (15-49 years)

| | |
|-------------------------------|------------------------|
| Anemia | 19.9% |
| Iron deficiency | 24.5% |
| Iron deficiency anemia | 4.9% |
| Vitamin A deficiency | 4.2% |
| Vitamin D deficiency | 74.5% |
| Vitamin B12 deficiency | 29.3% |
| Folate deficiency | 19% |
| Median urinary iodine | 92.1Ug/L (mild) |

anemia in women



IFHS survey

Micronutrient deficiencies in under five children

| | |
|-------------------------------|--------------|
| Anemia | %21.6 |
| Iron deficiency | %14.4 |
| Iron deficiency anemia | %6.8 |
| Vitamin A deficiency | %15.0 |

School aged children (6-12 years)

| | | |
|------------------------------|------------------|-------------------------------|
| Anemia | 20.1% | |
| Median urinary iodine | 83.6 ug/L | Mild iodine deficiency |

Why WFF in Iraq?

- Due to the prevalence of iron deficiency anemia WFF was introduced in Iraq.
- In 2004 a meeting was held in Amman attended by members of MOH, MOT, MOHE with full support of UNICEF and WHO. During that meeting a plan of action was developed regarding WFF in Iraq.
- ❖ UNICEF took the role of Procurement and distribution of 256 feeders. Installation was done in 80% of 148 mills across the country.
- ❖ Procurement and distribution of premix:
 - first shipment: 160 MT
 - second shipment: 150 MT
- ❖ fit requirement for 6 months

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- ❖ Training of 10 engineers / in Amman on installation and maintenance of feeders.
 - ❖ Training of 10 laboratory technicians on QC/QA testing.
 - ❖ WHO provided reagents for QC/QA.
 - ❖ WFF project was successfully launched in AUGUST 2006

Monitoring

- The Monitoring and Evaluation plan was implemented on central and peripheral levels with coordination of MOH and MOT lab technicians.
- This monitoring included both spot tests and quantitative tests (supported by UNICEF).
- Training of lab. staff in governorates was done regarding quantitative and spot tests.

Awareness Campaign

- National seminars on WFF at central and regional levels (supported by Unicef)
- IEC Materials were developed (supported by Unicef)

The expected outcome

Within the next 5 years, the prevalence of IDA reduced from 50% to less than 10%



Legislations

- Public Health Law No.89 issued in 1981.
- Chapter Five / Nutrition /
- 5. Ministry of Health is responsible for the supervision on the process of fortification with micronutrients.

Add Premix to Flour

- **FeSO₄ 42% and Folic Acid 0.75%**
- **Concentration 200 gm/T**
- **30 PPM**



مطاحن الطحين ال (183)
 موزعة على خارطة العراق
 السنوي لعام 2013

Obstacles

- Security situation
- Premix provision
- Shortage of equipments and training
- Most mills are private
- Feeders' maintenance

Summary report of WFF / 2013

- No. of mills = 183 mills of which 95% are private.
- Coverage rate for monthly visits averaged to 95%.
- WFF in mills fell from 95% coverage early 2013 to 65% coverage at the end of 2013 due to lack of provision of Premix.
- Another, but milder obstacle is electricity, and here the mills only face problems when their generators are out of order.
- 96% of the laboratories in the mills function properly.

Future Plans

- Including premix provision in the national budget
- Training of technicians on maintenance of feeders
- Provision of extra feeders and spare parts
- Introducing other micronutrients (MNAR results)

Thank you for your kind attention