Fortification at the Mill
- Basic & Best/Enhanced Practices

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Rationale

• To ensure the consistent application of the fortification practice at the flour mill.
• To ensure that the commercial practices will result in the correct addition of micronutrients to the national diet of the country
• To assure that the fortification will result in the anticipated impact on public health
Basic practices and Best/Enhanced Practices

• Basic practices are those that meet the minimum requirements for consistent fortification at the mill

• Best/enhanced practices are those that meet more rigorous quality systems – will require additional investment by industry to comply

• CAVEAT – Countries need to strike a balance between making best/enhanced practices and the ability of industry to pay for them
Components of the system

• Quality systems – GMPs, SOPs, ISO, HACCP
• Premix procurement and handling
• Feeders
• Fortification Process & Quality Control
• Quality Assurance and Audits
Example – Quality Systems

- GMPs – Good Manufacturing Practices with manuals
- ISO Series – 9001, 9002
- HACCP – ISO22000, SQF

The minimum requirement for a flour mill is a set of documented GMPs.
## Basic – Best/enhanced Practices Comparison – Quality Systems

<table>
<thead>
<tr>
<th>Fortification Component</th>
<th>Basic Practice</th>
<th>Indicator</th>
<th>Best/Enhanced Practices</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality system</td>
<td>GMPs</td>
<td>GMP Manual &amp; Records</td>
<td>ISO 9001, 9002 HACCP SQS ISO 22000</td>
<td>Manuals, Records, Documents, Third Party Audits</td>
</tr>
<tr>
<td>Fortification Component</td>
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<tr>
<td>Specifications, Ordering, Packaging, Storage &amp; Handling, Preblends</td>
<td>On file GMPs</td>
<td>GMP Manual, Documents, Inspections, &amp; Inspection Records</td>
<td>Quality Systems and Manuals, SOPs</td>
<td>Manuals Records Documents Inspection documents</td>
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## Basic – Best/enhanced Practices Comparison – Feeders

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<tr>
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<th>Best/Enhanced Practices</th>
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</thead>
<tbody>
<tr>
<td>Specifications, Types of Feeder Calibrations, Maintenance</td>
<td>On file GMPs SOPs</td>
<td>GMP Manual, Documents, Inspections, &amp; Maintenance Records</td>
<td>Quality Systems and Manuals, SOPs</td>
<td>Manuals Records Documents Inspection documents</td>
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Basic – Best/enhanced Practices Comparison – Fortification Process

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<td>Feeder Location, Addition point, Feeder Control, Continuous monitoring, Production monitoring Feed rates, Check weighing</td>
<td>On file GMPs SOPs, Calculations</td>
<td>GMP Manual, Documents, Inspections, &amp; Maintenance Records</td>
<td>Quality Systems and Manuals, SOPs</td>
<td>Manuals Records Documents Inspection documents &amp; records</td>
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### Basic – Best/enhanced Practices Comparison – Mill QC

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</thead>
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<td>Sampling Schedule, Qualitative testing, Quantitative testing, Usage &amp; Inventory control</td>
<td>On file GMPs SOPs, Calculations</td>
<td>GMP Manual, Documents, Inspections, &amp; Maintenance Records</td>
<td>Quality Systems and Manuals, SOPs</td>
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For More Information

For best practices on:

- Procuring premix
- Setting up the mill
- Operating fortification systems
- Assuring quality control

Download the desired section of the Flour Millers Toolkit:

http://www.ffinetwork.org/implement/toolkit.html

For more on premix best practices, see:

http://www.ffinetwork.org/implement/documents/Premix_Best_Practice270408.pdf in English and
http://www.ffinetwork.org/implement/documents/Premix_Best_Practices_French.pdf in French