Development of HACCP Procedures for Wheat Flour Milling

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Abstract

Now with the introduction of food quality and safety systems HACCP has become synonymous with food safety. Prior to application of HACCP the production of wheat flour should be according to Codex General Principles of Food Hygiene, the appropriate Codex Codes of practice and appropriate food safety legislation. All hazards, biological, physical, and chemical were identified and developed HACCP manual for wheat flour milling, and establishment of Critical Control Points for identified hazards.

HACCP manual was developed to establish such an effective system through identifying critical control points, deals with the manufacturing process of wheat flour. This approach is enriched by seven principles as analysis of potential hazards, determination of critical control points, establishment of monitoring procedures, verification procedures and establishment of record keeping and documentation.

After identification of all potential hazards from raw material and each and every process step from receiving upto product distribution, the following CCP were identified. They are storage of raw wheat, stones removing step (combi-cleaner), water addition, first break magnet, storage of flour, additives addition, redressing of flour and packaging. Process step were covered under Good Manufacturing Practices (GMPs).

Critical limits storage of raw wheat and flour are the temperature (<20°C) and the relative humidity (<65%). Water should be free from heavy metal and any microorganisms, and chlorine in water should be less than 1200 mg/l. L-ascorbic acid and benzyl peroxide should be less than 300ppm and 60ppm used as flour treatment agent.

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