# Producing Quality Food On-Farm



## On-Farm Quality Assurance Programs

#### Frequently Asked Questions

Canadian farmers produce raw food products (animal and plant origin) that are fresh, wholesome, high quality products, and are subject to rigorous Canadian inspection and/or residue analysis programs. Canadian producers are becoming increasingly aware of the need to give their customers more formal assurances of their commitment to meeting the highest production standards. For that reason, over 14 Canadian producer associations, in close collaboration with the Canadian Food Inspection Agency and provincial governments, have been dedicated to the development of quality assurance programs. On-farm food safety is one part of a "gate-to-plate" effort that links quality assurance across all levels of food production and processing, and across all Canadian producers and processors.

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Is This New?

No. The development of Quality Assurance programs began in 1959 when the Pillsbury Company cooperated with the National Aeronautics and Space Administration (NASA) to ensure the safety of food to be used for the space program. They used a system of analysis that has evolved into the concept we now know as HACCP (pronounced has-sip). Since that time HACCP has evolved into an internationally recognized food safety program. Today this is being expanded to the farm, transport industry, processor and retail level. Truly a "gate to plate" system.

### On-Farm Quality Assurance Programs

#### Quality Assurance & HACCP – What is HACCP?

HACCP is an acronym - standing for Hazard Analysis Critical Control Point. HACCP is an objective and systematic approach that identifies and assesses any potential hazard associated with all inputs and process steps involved in the production and processing of food. Each HACCP plan is unique to the operation allowing the operator to develop records and best management practices that fit their operation, employees and products. On-Farm Food Quality and Safety Programs are <u>HACCP-based</u> programs and are developed from the following seven principles:

- 1. Identify actual and potential hazards (chemical, biological and physical) by reviewing farm inputs and best management practices used on the farm.
- 2. Identify critical control points (CCPs). CCPs are any points or procedures in a specific food system or process where loss of control (of the hazards) may result in an unacceptable food quality or safety risk. It is at this point where things can be done (e.g. recording storage temperatures) to prevent, eliminate or reduce a food safety or quality hazard.
- 3. Establish critical limits. The level set for a farm may be unique to the farm, an industry standard or be the level set by government regulations. Whatever level is chosen for that particular farm and related hazard it is used as a preventative measure or "flag" to alert operators that something is wrong and to set in motion a corrective action.
- 4. Establish a CCP monitoring procedure. By standardizing operating procedures it assures that tasks will be done the same way, by preferably the same person(s) every day. Standard Operating Procedures (SOPs) are developed by the producer, and are written directions to employees as to how a specific job is to be done. A SOP may contain a requirement for recording information into a daily log. Equipment operations will occur many times throughout the HACCP Plan making SOPs an efficient method of handling these activities. The time invested in preparing SOPs saves training time, product loss and dollars, and gives some guarantee of consistency from employee to employee. In addition, some potential hazards can be averted through adherence to SOPs.
- 5. Establish corrective actions. Having corrective steps ready ahead of time insures that staff and family members know what to do when things do go wrong.
- **6. Establish record-keeping procedures for each CCP.** By having records, problems can be noted when they happen and allow for adjustments to be made to daily tasks in order to maintain control. Keeping records also has the added benefit of giving information on treatment efficacy, equipment function and maintenance requirements as well as monitor employee performance.
- 7. Establish procedures to verify that the on-farm quality assurance program is working correctly.

#### What Types of Hazards Could Exist on my Farm?

Each operation is unique and so may be the hazards. Basically, a hazard is any input on the farm that could effect the quality or safety of the intended product. Hazards can be chemical, physical or biological in origin. A chemical hazard can come from drug treatments, cleaners and sanitizers, feed additives, pesticides, fertilizers, etc. Biological hazards can be bacteria, virus, moulds, yeasts or parasitic in origin. Physical hazards can be organic debris, flies, glass, metal, plastic.

#### How Much Time will this Take?

At the outset, farm managers or their owners can expect to invest at least a day – basically to review the requirements, evaluate their on-farm hazards and develop their own records and standard operating procedures. However, many of the activities associated with the development of a QA plan are those that make a good business better and many may already have some or all of these steps in place. Once a basic plan is in place, daily time investment related to the program is typically 5-10 minutes depending upon the existing level of management.

#### How Do You Insure Program Needs are Met?

To ensure that producers are indeed following the program and meeting the standards, a program validator will visit the farm, ensure the documentation is in order and verify that protocols are being followed in practice. Validators will be trained and certified and will be audited to ensure accuracy and consistency.

#### Who Oversees the Programs?

Each national or provincial producer organization will be responsible for their own program's mandate and to ensure consistency and accuracy of validation methods across their region(s). Regardless if the commodity is part of a national or provincial program it is likely that they will or already have a provincial contact for their commodity. It will be the provincial group that will be expected to coordinate validators, provide final approvals for farm applications, and monitor the effectiveness of the program. Third party groups will be used to audit the commodity's program and their validation process or in the case of some provincially based programs actually do the on-farm validation. Who audits will vary from commodity to region and will be on request of either the raw product buyer or the program leaders.

#### What are the Benefits?

By following the plan, producers, processors, retailers and consumers all benefit by assuring that the food produced is done by the highest standards for production. More specifically, producer's benefit by preventing losses due to quality defects from accidental contamination or equipment failures. Producers also achieve better control over management decisions, daily routines and staff turn-overs through the improvement of staff communication. For many producers, being part of these programs also insures better market access, both in the domestic and export markets.

This program fits in with Canadian processors HACCP programs and is an excellent method for improving end product quality by providing a better raw product that is more consistent, better flavour and longer shelf-life. On-Farm Food Safety programs also help provide post-farm gate groups with a program that will aide in developing consumer confidence in their food system.

#### Need More Information about these Programs?

#### Contact your:

- Canadian Producer Association,
- Canadian Food Inspection Agency,
- Provincial Producer Organization,
- Provincial Commodity Specialist, and/or
- Provincial On-Farm Food Quality and Safety Specialist

Food Safety & Quality Unit

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