

# The Production and Safety of Aomori Apples

## How are Aomori Apples Made?

Most of the process is done by hand. It is a year-long operation that requires a significant commitment of time and work.

### Monthly Operations



### The Purpose of Each Operation

#### Pruning

Careful pruning allows sunlight to reach all parts of the tree. This allows the tree to successfully bear fruit.

#### Mowing

Grass is cut 4 to 6 times a year because if it is allowed to grow too long, it begins to compete with the apple trees for water and fosters insects.

#### Application of Agricultural Chemicals

This is done to protect the apples from disease carrying insects. The chemicals used are completely safe, and application is stopped 1 to 3 months before the harvest.

#### Thinning Out Superfluous Fruit

In order to grow the largest most delicious apples, our process focuses on nutrition by removing useless fruit from the tree.

#### Leaf Removal and Apple Turning

The leaves on our apple trees are carefully removed 2 or 3 times a year so that the sun may reach all areas of the tree. Since apples only turn red on the face of the fruit that receives sunlight, we are meticulous about turning our apples to achieve equal coloring on all sides.

#### Bag Covering and Bag Removal

Bag coverings are used to protect the apples from damage via insects. They are also used to ensure our apples receive sufficient sunlight and coloring.

## Aomori Apple Products Safety Policies

### 1 Soil and Water Quality Testing

Places like the Prefecture's Agricultural Experiment Station conduct periodic analysis of the metallic contents of the soil, the quality of the water used, as well as tests of the water source. Furthermore, orchards' individual records are also sometimes monitored and serviced. Orchards often conduct their own inspections and analysis of their soil and water.

### 2 The Application of Agricultural Chemicals

The use of agricultural chemicals is regulated by law. The degree of dilution, and the times which they can be used are determined by the Agricultural Chemicals Law. In the case that the law is violated, there are established penal regulations.

In addition, national and prefectural sources provide information which forecasts pest behavior. There is even a structure in place designed to quickly respond to plague situations.

### 3 Regulations Related to Food Hygiene "The Positive List"

The Food Hygiene Law has been enforced starting in 2006. It introduced a system which prohibits the sale or dissemination of food products which contain chemicals that do not have set standard limits. For those chemicals that do not have clear domestic standards, the accepted international codes are used as a temporary reference. For those domestic and international chemicals which have no standard, the EU equivalent (no more than 0.01ppm) is applied.

### 4 Fruit Sorting by Photo-detector

Our photo-detector system can check the size of the apples, their sugar content, as well as detect internal browning. Beyond simply determining which products are suitable for sale and consumption, the system can monitor decayed samples and reject them. With such an advanced system, we are able to guarantee the quality of the apples grown in Aomori prefecture for sale abroad.

### 5 Traceability

Manufacturers are responsible for keeping records of their use of agricultural chemicals and fertilizers. The agricultural cooperative actually retains a log of all the actions of manufacturers. The number of sorting facilities who keep a record of their correspondence with sellers related to manufacturing, sorting, storage, distribution and marketing is also rising. Inspections related to residual agricultural chemicals are regularly being carried out.

## FAQ

### Q1 Are Aomori Apples EUREPGAP Certified?

**A1:** In 2004 the Aomori Prefecture's Katayama Apple Company achieved the EUREPGAP certification, thus you could say that the apples produced in the prefecture are generally equal to EUREPGAP quality. Currently, there is a movement to unify the Japanese JGAP (Good Agricultural Practice) Association's standards with large-scale Japanese companies and wholesalers' GAP criteria. Also as JGAP moves towards EUREPGAP standards for certification, it appears that the EUREPGAP certification will be obtainable at a low cost in the near future..

### Q2 What Kind of Agricultural Chemicals Are Used?

**A2:** In Japan, because we follow the international standards and use agricultural chemicals properly, we can guarantee the safety of our products. The approved use of agricultural chemicals varies according to country. However we keep a production log chronicling the use of agricultural chemicals and pesticides and it is possible to confirm when a nation that we export to has a special rule we need to recognize.

### Q3 Are Aomori Apples Genetically Engineered?

**A3:** Aomori Apples can grow as large as 500grams, and make excellent gifts. Such high quality fruit is the result of meticulous fruit thinning, not genetic engineering. Our processes yield fruit with a very high nutrition concentration and can be consumed without concern for problems related to genetic engineering.

