



Pre Harvest/ Post Harvest APPLE MANAGEMENT

PRE-HARVEST WHEN SHOULD I PICK MY FRUIT?

- Begin tasting the apple 2-3 weeks prior to when you think they are ready.... sometimes this is the best test.
- Color of the skin.... the green color will begin to turn to yellow
- Color of seed coat should be dark
- Soluble Solids ... measuring the sugar content in the apple, for example Sweetango should be around 16 Brix prior to picking.
- Hardness is measured with a Penetrometer..... this is another test used by many commercial growers.
- **TO ENSURE MAXIMUM STORAGE LIFE**, apples should be harvested when mature but not fully ripe or overripe. Ripe fruit should be avoided because it will continue to ripen in storage, rapidly becoming too soft and mealy.

YOUR GOAL: The apple continues to live and respire even after it is picked..... your goal is to slow respiration in post-harvest to increase storage life.

Air Circulation • Temperature • Humidity 3 FACTORS TO CONTROL

TEMPERATURE

- Optimum 32F to 40F depending on variety
- Freezing Temperature 29F
- The higher the holding temperature, the greater the softening and respiration rate and the sooner the quality become unacceptable. Apples respire and degrade twice as fast at 40F as at 32F. At 60F they will respire and degrade more than 6 times faster. At 70F they will respire and degrade more than 10 times faster. (See Chart)

HUMIDITY

- Did you realize this? An Apple is 84% water
- Optimum Humidity 90-95%
- Humidity should be at 90-95% Maintaining the humidity within this range will reduce weight loss, but humidity near the saturation point 100% will encourage the growth of bacteria and fungi. Keeping the apples in plastic liners will keep the humidity at higher levels.

CIRCULATION

- As the apple respire it is giving off an ethylene gas, it is very important that your apple storage bag has holes to release this ethylene gas.

