

APPLES – THE LOW DOWN ON CRUNCHY AND SWEET

Apples grow as a starchy fruit, and the starch converts to sugar as they mature. Growers use two tools to measure when an apple is ready for harvest. The first is a brix meter – a sensor probing the apple measures the amount of sugar in the juice. The second is a penetration sensor that measures the firmness of the fruit.

Sweetness of apples can range from 11 to 16% sucrose to water, and pressure can range from 8 to 20 lbs.

If you try to push your thumb into an apple and you are successful, that means it's lost its pressure and will have little juice and a mealy texture – the kind you either spit out, or eat politely (depending on where you are or who you are with.)

There are about 20 varieties of apples that are sold commercially in Western Canada, ranging from the earliest and tartest Sumac harvested in July, to the firmest varieties – the Braeburn and Fuji, which aren't harvested until October - and usually after several nights of frost. Here's some common ways that apples are described, and what that means:

DESSERT APPLES: These are the earliest harvested varieties (Sumac, William's, Tydemann, Transparent and Discovery.) All of these are tart and crisp, with less sugar and lower pressure. Within a couple of weeks at room temperature they are sour and mealy – simply because they mature with far less sugar, and with lower pressure. They are called Dessert Apples because the high starch levels make great pies that don't turn to juicy sludge while they're baking. These apples have virtually no storage life but sell very well because they are the first local apples of the season – and some people like tangy fruit!

EARLY SEASON: There include Sunrise, Macintosh, Earligold, Ginger Gold and Gala. These are the first snappiest, juicy and sweet apples of the season – good eatin' ones. Gala is the only one of these varieties that can be stored for a few months, and for winter storage only in special (CA) storage. Because these varieties are harvested in the heat, and mature during our warmest weeks in August, the trees often have to be picked a few times because each apple matures differently and rapidly. Honeycrisp is the last of the "early" apples to be harvested and although they can be stored for a month or more, there isn't enough production for them to be available for very long. These early season apples are harvested with 20% less pressure when sweet compared to the later ones, and only have 2-3 months of potential storage, except Gala, which are stored in large quantities in controlled atmosphere rooms where they go dormant for up to 6 months without losing brix or pressure.





MID-SEASON: Most commercial apples fall into this variety – the venerable Spartan, Gold Delicious, Empire and Ambrosia are good examples – they have lots of snap, are sweet and have a long storage life.

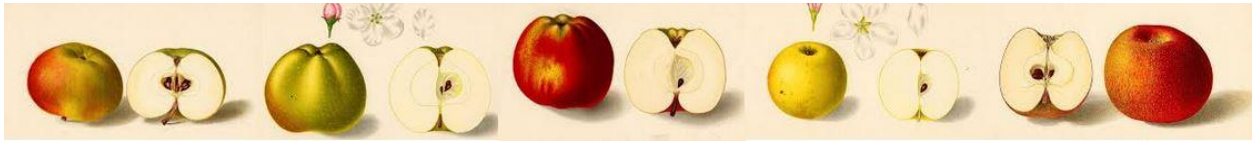
LATE APPLES: Some varieties are very late to mature, and in the cooler fall months there is less heat and sun to help them along, so they are generally harvested between late September and early November – these include the Granny Smith, Fuji, Braeburn, Pacific Rose, Cripps (Pink Lady), Mutsu and Orin – although there are more on that list. These late varieties have 50% more sugar and twice the pressure of the earliest apples. Most of these varieties have such high pressure and sugar levels that they can be stored for 6 months without being in controlled atmosphere rooms, although most are – so the season can be stretched well into the spring. Some apples hold just fine in “CA” for a very long time – Red Delicious for 12 months and Cameo for 14 months. Growers in the Southern Hemisphere, whose apples we are eating in May, June and July primarily grow these high pressure later varieties because they store and ship better than others.

THESE ARE VERY SPECIAL APPLES

They have that "just-picked" October taste. This orchard-freshness was made possible by an amazing discovery called **CONTROLLED ATMOSPHERE (C.A.)** storage. A select few apples were literally "put to sleep" within hours after harvest. Their breathing, or ripening, was brought almost to a halt ... merely by controlling the volume of oxygen in the air around them. These "Sleeping Beauties" were awakened just a few days ago, and rushed here from Washington State.

ENJOY THE CRISP TASTE OF OCTOBER - NOW!





HEIRLOOM or HERITAGE: These are generally European varieties – like the Cox’s Orange and Elstar Pippin’s from England that can easily be traced back 100’s of years. Unfortunately a lot of the older apples are small and only produce a good crop every two years. Because they don’t grow uniformly like the ‘modern’ varieties, most commercial growers have cut them down a long time ago. Most of these heritage varieties are also late apples.



CHANCE APPLES: You may run across the term “chance” apples. Many modern varieties have been carefully hybridized – a process that can take 10 years before the breeder finds out if their hopeful cross between two varieties will produce good fruit. You can go to the website: <http://www.heirloomorchardist.com> and find out how many apples are heritage, which ones are hybrids and which are “chance” apples. A hybrid description will tell you that, for example, *“Honeycrisp was produced from a 1960 cross of Macoun and Honeygold, as part of the University of Minnesota apple breeding program.”* The most famous chance apple is the Granny Smith – because Granny (Marie) Smith threw a handful of French crabapples out into the garden, and a few years later, thanks to Mother Nature and the bees, a Granny Smith tree grew out of her garden. Locally, the Ambrosia was a ‘chance’ apple that was out of the reach of the lawn mower in an orchard in Cawston, and years later, it produced its first apple which the orchardist named the Ambrosia. Despite breeding programs to produce better tasting, better looking and longer lasting fruit, you will be surprised how many of our common apples are actually chance varieties created by Mother Nature and the bees!

