

Fruit Quality and Trends in the Cranberry Industry

A wide-angle photograph of a cranberry bog. The foreground and middle ground are filled with a dense carpet of bright red, ripe cranberries. In the distance, three workers wearing hats and work clothes are visible, standing near a narrow water channel that runs through the bog. The background features a line of green trees and rolling hills under a clear, light blue sky.

Rod Serres, Ocean Spray Cranberries

BC Cranberry Congress, Feb. 7th, 2017

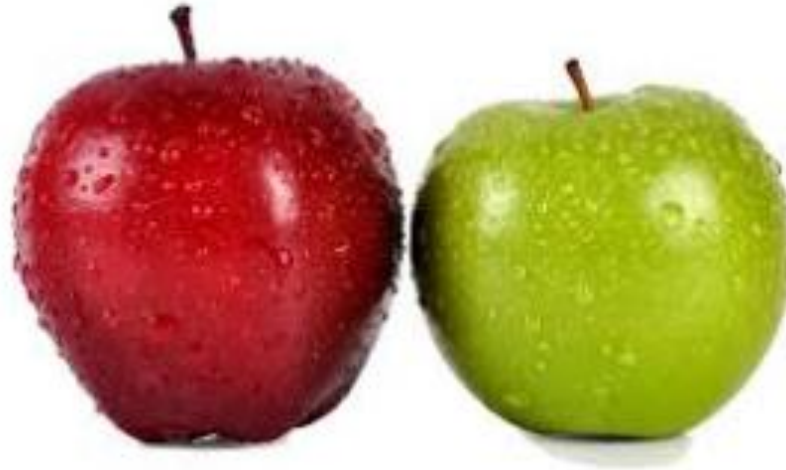
What is Fruit Quality?



The word “quality” comes from the Latin word, *qualitas*, which means attribute, property, or basic nature of an object. In popular language it usually refers to ‘Good’ or ‘Superior’ qualities.



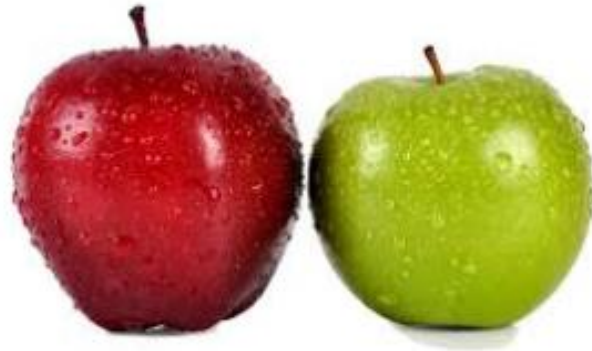
What is Fruit Quality?



BUT – Good quality is often subject to preference!



What is Fruit Quality?



BUT – Good quality is often subject to preference!



Or Intended Use!



What is Fruit Quality?

So, good quality cranberries have specific characteristics that lend themselves to producing consumer-preferred products



Ways to Get Your Cranberries



Fresh

1800's



Ways to Get Your Cranberries



Fresh

1800's



Sauce

1930's



Ways to Get Your Cranberries



Fresh

1800's



1930's

Sauce



1960's

Juice



Ways to Get Your Cranberries



Fresh

1800's



Sauce

1930's



Juice

1960's

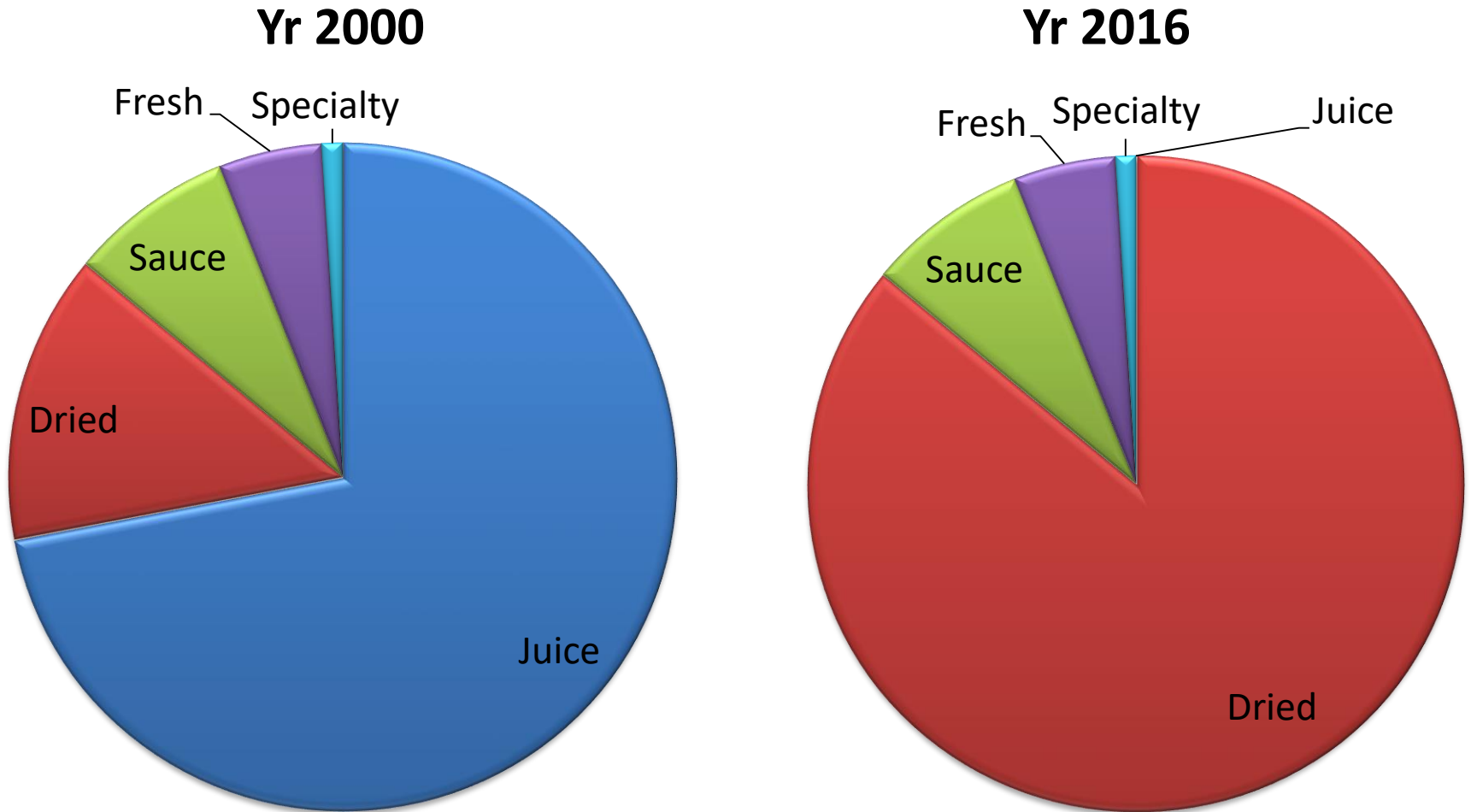


Dried

2000's



Today we need nearly all fruit for Dried



Percentage of fruit needed for various products

Spectrum of Cranberry Fruit Quality*

Low

Medium

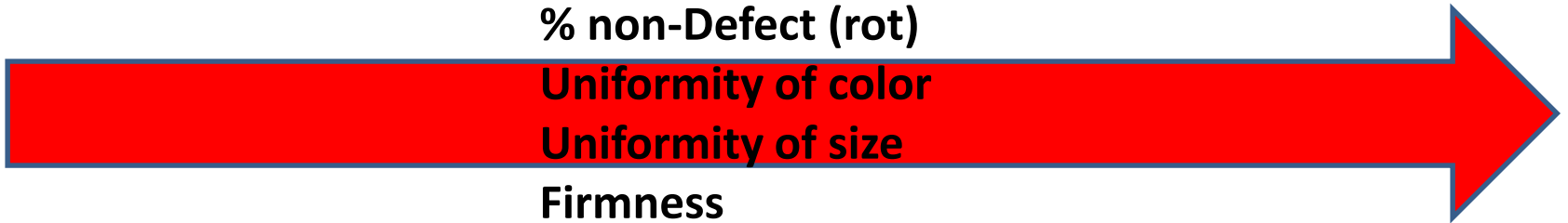
High

% non-Defect (rot)

Uniformity of color

Uniformity of size

Firmness



Spectrum of Cranberry Fruit Quality*

Low

Medium

High

% non-Defect (rot)

Uniformity of color

Uniformity of size

Firmness



“shrink”



juice

sauce



dried

fresh



The Craisin™ Berry



No rot spots, cracks, or bruises

Uniformly colored and TAcy range of 35-50

Size of $> \frac{1}{2}$ " diameter

Generally round

Firm >450 on Firmtek

The Craisin™ Berry



As a Delivery Load

Less trash the better

Less rot the better

Fewer non-colored the better

No allergens

No foreign material

Uniform size

Why Individual Berries Matter



=

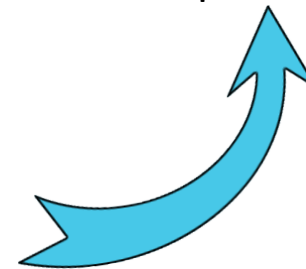


When

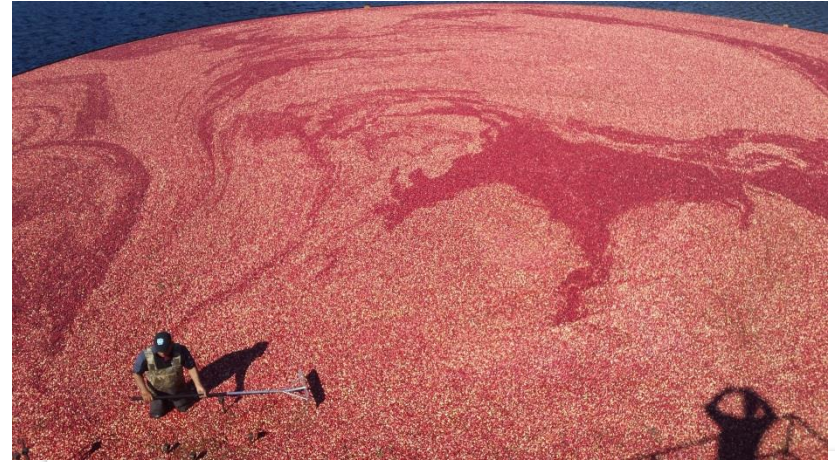
- OSC can sell all parts of the berry.
- Increased receiving Efficiency.
- Increased Manufacturing Efficiency.
- Finished product quality is uniform, to spec, and competitive.

Individual Berry Quality

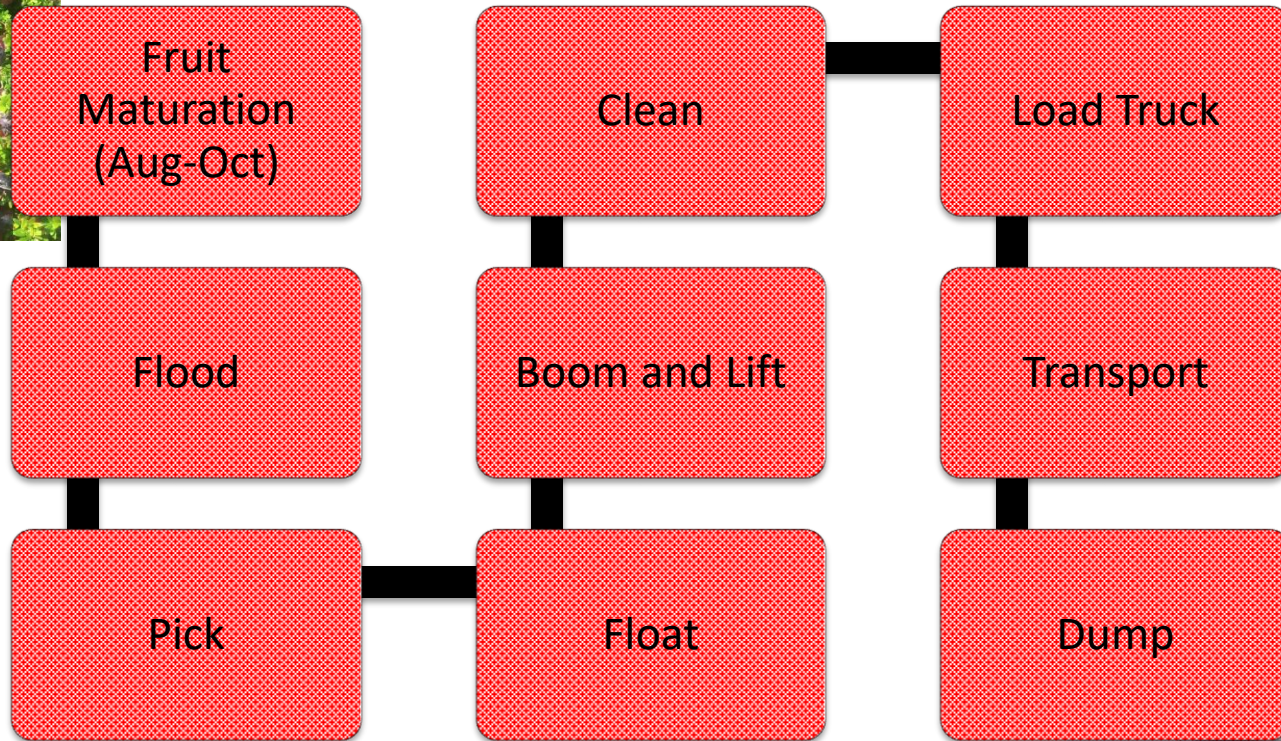
- Low in defects
- Uniform in color and within our optimal color range
- Uniform in size and within our optimal size range
- Firm and have good flesh integrity



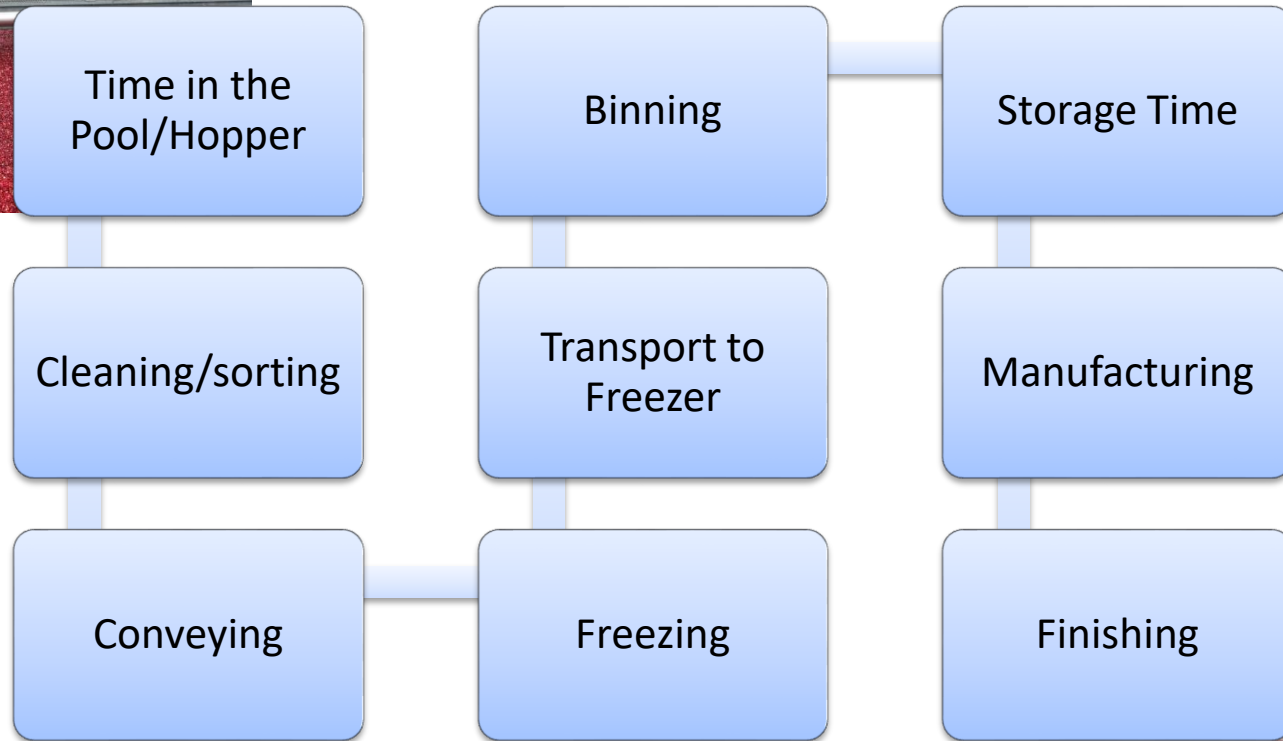
How to Optimize and Maintain Berry Quality



Farm to Receiving Station



Receiving Station to Finished Product



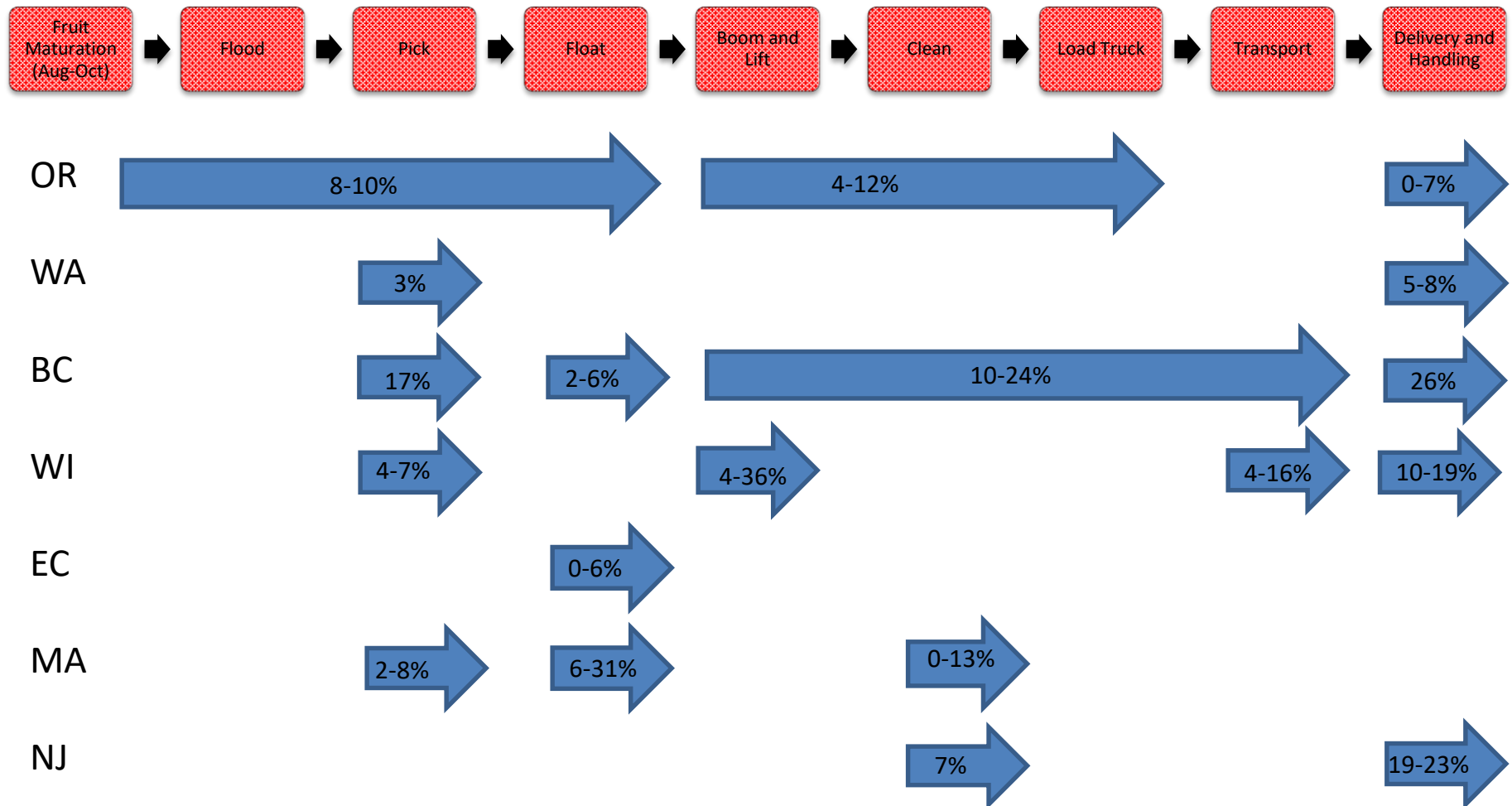
On The Farm



- Defect/Rot – Canopy, water, fungicides, inoculum, traffic
- Color – Maturity, cultivar, light exposure, canopy, crop load
- Size – Maturity, cultivar, nutrition, water
- Firmness – Maturity, handling, water, nutrition, cultivar
- Trash – Weeds, harvest, cleaning, foreign material
- Allergens – Manage peanuts, tree nuts, fish, shellfish

Farm to Receiving Station

% Firmness Reductions Found Experimentally



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To be successful, we strive to
maximize the use of what we receive
and
What we receive needs to be useful.



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