

HANDLING PRECONDITIONED TREE FRUIT AT RETAIL STORES

Carlos H. Crisosto
Department of Pomology
University of California, Davis
at the Kearney Agricultural Center
Carlos@uckac.edu

What is Preconditioned Fruit?

When you sell preconditioned tree fruit in your store, you are offering consumers peaches, nectarines, and plums that have been preconditioned/ preripened to delay mealiness and assure the consumer the peach, nectarine or plum is juicy and tasty. This product will be at a higher stage of ripeness than conventionally packed product and needs to be handled carefully at the retail store level. The preconditioning process does not prevent mealiness, it only delays its development, and, therefore, this product needs to be moved quickly from the distribution center to retail stores in order to assure a satisfactory eating experience for your customers.

Temperature Management

Ideally, preconditioned tree fruit should be transported at 32-35°F from the distribution center and kept at 32-35°F prior to transfer to dry/warm table for display. We refer to the temperature range of 36-50°F as the “killing temperature zone” which increases fruit flesh browning, mealiness, and “off flavors”. To the extent the fruit temperature cannot be maintained below this “killing zone”, it would be preferable to move fruit fast. Firmness measurements need to be considered in the decision-making process.

Fruit Firmness

Preconditioned peaches and nectarines should ideally be arriving from the distribution center to the retail stores with firmness in the 4-6 pound range (weakest position) or 6-8 pound range (cheeks). Preconditioned plum firmness should be in the 3-5 pound range (at any position on the fruit). This fruit is at the “Ready to Buy” or “transfer point” stage of ripening and within ~48-72 hours at 68°F should be “ready to eat” in the 2-4 pound firmness range. This is the firmness range at which most consumers claim the highest satisfaction when eating tree fruit.

Display Suggestions

- Produce managers need to be educated about this new “Ready to Buy” type of fruit (preconditioned).
- Minimize mechanical damage and expedite an effective rotation (first in, first out).

- The dry tables should be labeled as preconditioned or “Ready to Buy/Eat” and consumers should understand that this fruit is riper than conventionally packed tree fruit.
- In order to protect preconditioned fruit, the display should be no more than two layers deep. In box display should be attempted.
- As tree fruit will continue to ripen on the display warm/dry table, they should be checked often and the softest fruit be placed at the front of the display.
- Fruit that reaches the “Ready to Eat” ripeness of 2 to 3 pounds cheek firmness need to be sold quickly or placed in refrigeration to extend their shelf life.
- Consumers should be instructed that this type of fruit should be refrigerated if fruit are not going to be consumed within 3 days of purchase.

More information on this subject can be found on the following web sites:

<http://www.uckac.edu/postharv/>; <http://postharvest.ucdavis.edu/>;
<http://fruitsandnuts.ucdavis.edu/>; <http://pom.ucdavis.edu/>; and <http://caltreefruit.com/>