

# MANGO UNIVERSITY



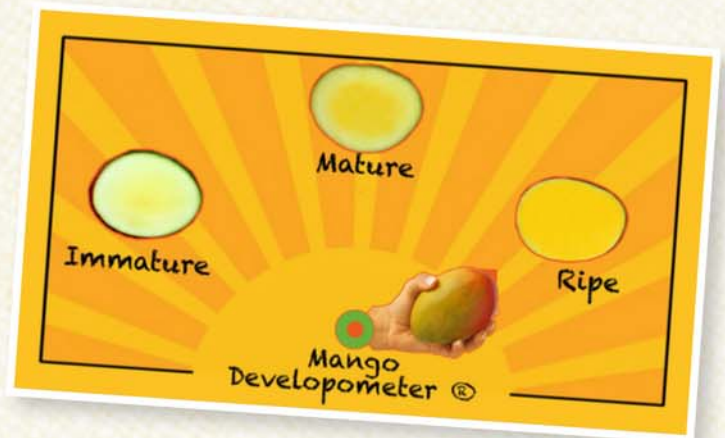
## RECEIVING, QC AND RIPENING

### Class Notes



## NEVER STORE MANGOS BELOW 54°

Mangos are a tropical fruit. They can get chill damaged below 54°.



*Use the Mango Maturity and Ripeness Guide to interpret your results.*

Mangos develop from immature to mature to ripe. A mango that was harvested mature should ripen normally to be soft and sweet. The mangos you receive should be mature, but may not be ripe.

### 3 WAYS TO JUDGE MANGO MATURITY:

1. Internal flesh color – ranges from white or pale yellow to deep golden yellow
2. Firmness – use a penetrometer with an 8 mm tip
3. Brix or Soluble Solids Content – use a refractometer



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## RECEIVING, QC AND RIPENING

### Class Notes



### MANGOS CAN BE RIPENED IN YOUR BANANA ROOMS:

- \* Ripening mangos may increase sales
- \* Mangos can be ripened right along with bananas or with some other items
- \* The National Mango Board has a Mango Ripening and Handling Protocol with detailed instructions for mango ripening
- \* They also have an ripening expert on hand to answer questions

Check out [postharvest.ucdavis.edu](http://postharvest.ucdavis.edu) for more resources.

### WHAT NOT TO LOOK FOR:

- \* Red blush has nothing to do with maturity, ripeness or eating quality
- \* Some varieties will have solid green skin, even when fully ripe
- \* White spots or lenticels on the skin are normal
- \* Sap from the stem end might stain the fruit but usually isn't a problem

Visit [mango.org/university](http://mango.org/university) for more information



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## MANGO MERCHANDISING AND HANDLING

### Class Notes

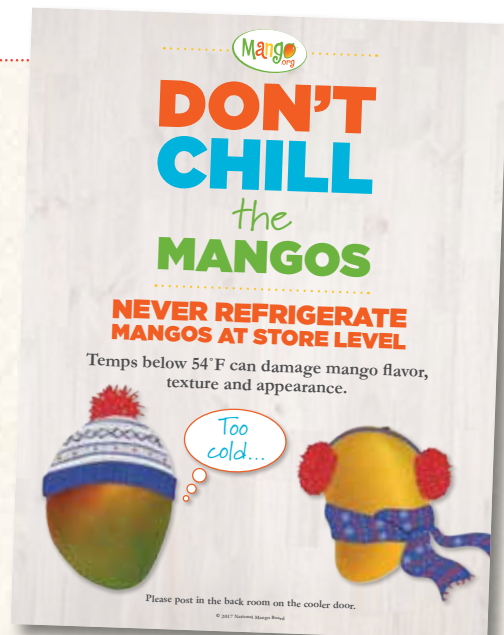


- Mangos are available year round
- Don't think of mangos as exotic
- Consider moving mangos out of tropicals and into your mainstream fruit display
- Stock more than one variety of mango
- Handle mangos gently to avoid bruising or "squish"
- Don't stack heavy fruits like pineapple or coconuts above mangos on an inclined display
- Never stack mangos more than two layers deep
- Don't display mangos in woven or wire baskets, which can leave an imprint on the tender mangos
- Rotate out old, shriveled or damaged fruit every day (lightly wrinkled yellow mangos are delicious and should not be discarded)

\* Don't refrigerate mangos at the store

\* Mangos should stay at room temperature, both in the back room and on display

\* If you put mangos in the cooler, they could get chill damaged



Visit [mango.org/university](http://mango.org/university) for more information



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## MANGO VARIETIES, SOURCES AND SEASONS

### Class Notes

Did you know there are hundreds, maybe even thousands of mango varieties worldwide?  
And mangos are one of the most popular fruits in the world!

Here in the United States, six varieties make up most of mango volume sold in grocery stores.  
Each one has a different flavor and texture, so try them all!

#### Ataulfo



**FLAVOR** Sweet and creamy  
**TEXTURE** Smooth, soft flesh with no fibers  
**SKIN COLOR** Vibrant yellow  
**RIPENING CUES** Skin turns a deep golden yellow, fruit gets very soft and small wrinkles appear on the skin  
**PEAK AVAILABILITY AND SOURCES**  
March to June from Mexico

#### Kent



**FLAVOR** Sweet, rich and vibrant  
**TEXTURE** Juicy and tender with minimal fibers  
**SKIN COLOR** Dark to medium green skin with red blush on the shoulders or no blush at all  
**RIPENING CUES** Skin will stay green and yellow undertones may appear, fruit becomes softer  
**PEAK AVAILABILITY AND SOURCES**  
June to August from Mexico, December to January from Ecuador and December to March from Peru

#### Francis



**FLAVOR** Rich, spicy and sweet  
**TEXTURE** Soft, juicy flesh with long fibers  
**SKIN COLOR** Bright yellow with green overtones  
**RIPENING CUES** Green overtones diminish while yellow areas becomes more golden, and fruit gets softer  
**PEAK AVAILABILITY AND SOURCES**  
April to July from Haiti

#### Tommy Atkins



**FLAVOR** Mildly sweet  
**TEXTURE** Firm flesh with lots of fibers  
**SKIN COLOR** Dark red blush may cover most of the mango, with green and orange-yellow accents  
**RIPENING CUES** May not provide any visual cues, fruit becomes softer  
**PEAK AVAILABILITY AND SOURCES**  
March to July from Mexico, March to May from Guatemala, October to November from Brazil, November and December from Ecuador, December and January from Peru

#### Haden



**FLAVOR** Rich, with aromatic overtones  
**TEXTURE** Firm flesh with fine fibers  
**SKIN COLOR** Bright red with green and yellow overtones, and small white dots  
**RIPENING CUES** Green areas turn yellow and fruit becomes softer  
**PEAK AVAILABILITY AND SOURCES**  
March to May from Mexico

#### Keitt



**FLAVOR** Sweet, tangy, slightly citrus  
**TEXTURE** Juicy, firm flesh with minimal fibers  
**SKIN COLOR** Dark to medium green skin with pink blush on the shoulders or no blush at all  
**RIPENING CUES** Skin will stay green and yellow undertones may appear, fruit becomes softer  
**PEAK AVAILABILITY AND SOURCES**  
July to September from Mexico and August to September from the U.S.

*Lots of new varieties and sources are bursting onto the scene as mango demand in the U.S. grows. Check out [mango.org](http://mango.org) for all the latest info about available varieties.*



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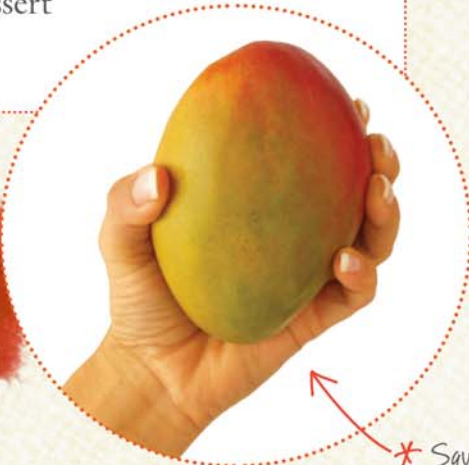


## SHARE THE MANGO MANIA

### Class Notes

- Mangos are one of the most popular fruits in the world
- Your customers may be confused about how to select, ripen and cut mangos
- Share a few tips with them and watch those mangos fly out the door
- Don't judge a mango by its color
- Cutting a mango is easy once you learn a few tricks
- Mangos are delicious as a snack or in recipes for breakfast, lunch, dinner or dessert

#### Cutting



#### Selecting

- \* Squeeze gently to judge ripeness
- \* Slightly soft = ready to eat
- \* Firmer = ripen for a few days at room temperature

#### Recipes



Send your customers to [mango.org](http://mango.org) for the how-to-cut video and tons of recipes

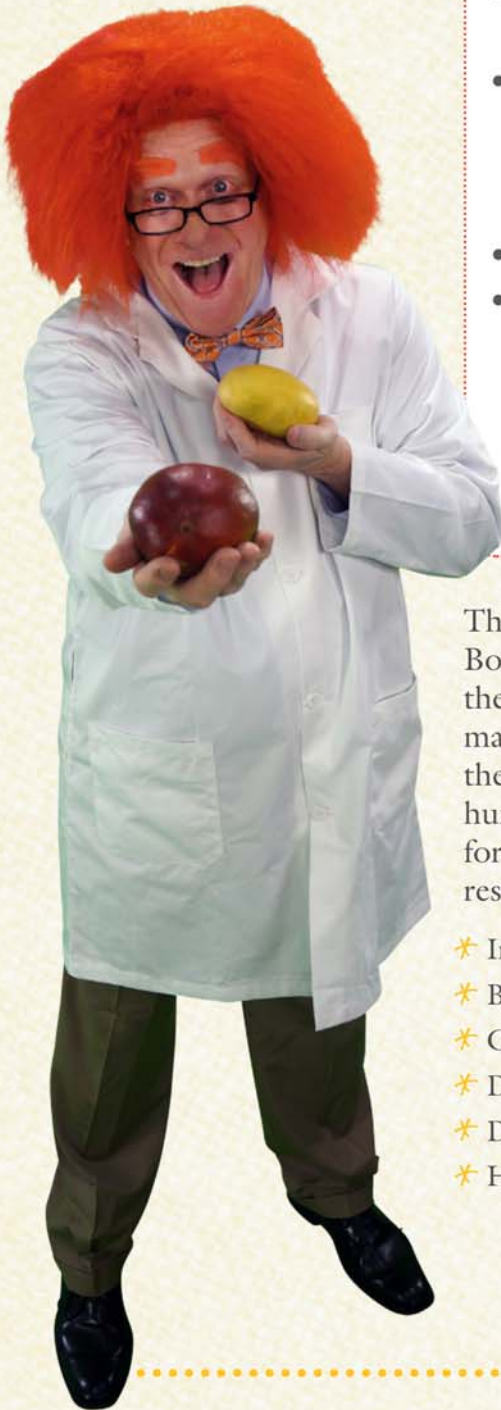
[MANGO.ORG/UNIVERSITY](http://MANGO.ORG/UNIVERSITY)

# MANGO UNIVERSITY



## MANGO NUTRITION

### Class Notes



- Mangos are a SUPER FRUIT with more than 20 different vitamins and minerals
- One cup of mango provides:
  - ✦ 100% of your daily Vitamin C
  - ✦ 35% of your daily Vitamin A
  - ✦ 12% of your daily Fiber
- All for just 100 calories!
- This one-cup serving also provides:
  - ✦ 20% of your Folate, which is good for your cardiovascular system
  - ✦ 10% of your Vitamin B6, which helps bolster immunity
  - ✦ 10% of your Copper, which helps keep your bones healthy



The National Mango Board is researching the health benefits of mangos, and many of these have progressed to human studies. Stay tuned for more news about our research into:

- ✦ Inflammation
- ✦ Breast Cancer
- ✦ Colon Cancer
- ✦ Digestion
- ✦ Diabetes and Glucose Response
- ✦ Heart Disease



Please help us spread the word about mangos!

Use your social media, blog, ads videos and newsletters to share the mango love.

**GET ALL THE TOOLS YOU NEED HERE.**

