

DELTEIL INTERNATIONAL WINE CONSULTING



Berry sensory profiles to assess  
grape ripening and quality

Vineyard and winery routine analysis







# Presentation of the DQSA

- The Descriptive and Quantified Sensory Analysis (D.Q.S.A.) of grape berries, the DIWC methodology, is a tasting method for grape berries, established according to ISO 11035 norm.
- In the vineyard and in the winery, it allows a description and a differentiation of lots of grape berries using a predefined profile composed of descriptors quantified on a fixed scale.





# When the grapes arrive at the winery...

- The D.Q.S.A. of berries allows the chief winemaker
  - to characterize and differentiate the lots,
  - to evaluate the conformity of berries with the wine profile objectives
  - to allow reorientations and adjustments on winemaking processes.





# When the grapes arrive at the winery...

- Paired with the D.Q.S.A. of the Wine (D.I.W.C. methodology), the D.Q.S.A. of Berries allows to correlate the improvement of grapes quality with the improvement of the final product.





# Effect of ripening Red grapes

The D.Q.S.A is a precise tool to monitor  
the ripening of the same vineyard lot at  
2 moments, close to picking





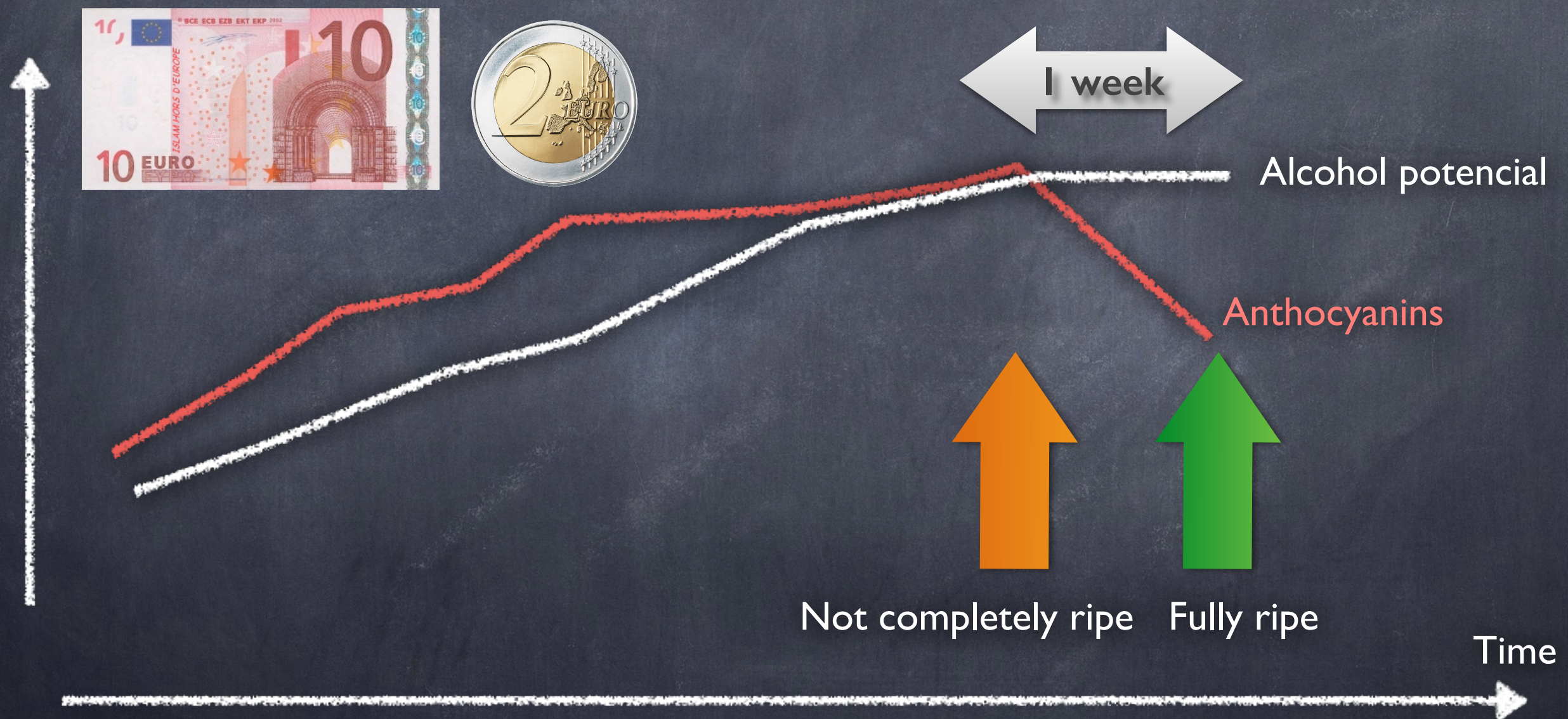
# Main viticulture criteria for a 12 € market goal

- High grape concentration
  - Mid to low yield: < 1.5 kg/plant
  - Preferentially short pruning
- Complete ripening





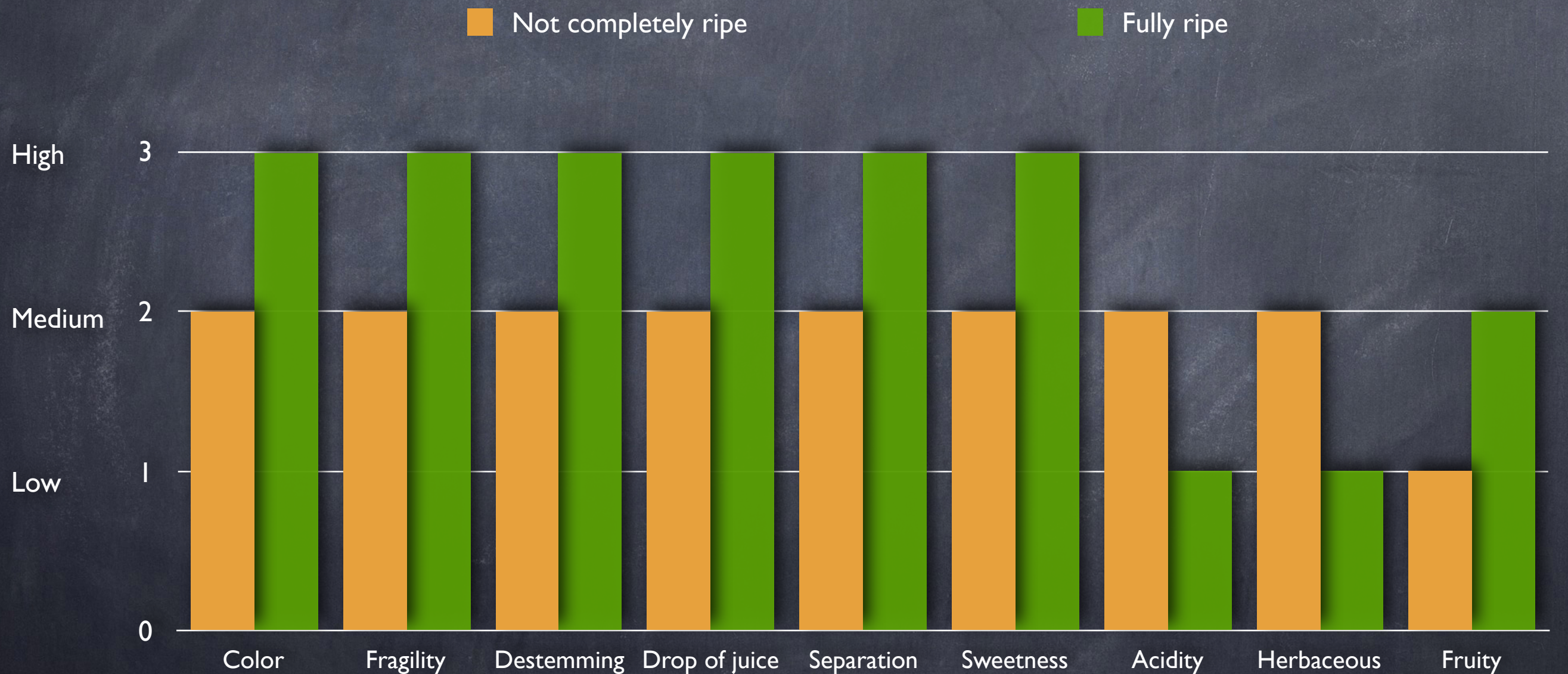
# Sugar and phenolic model curves







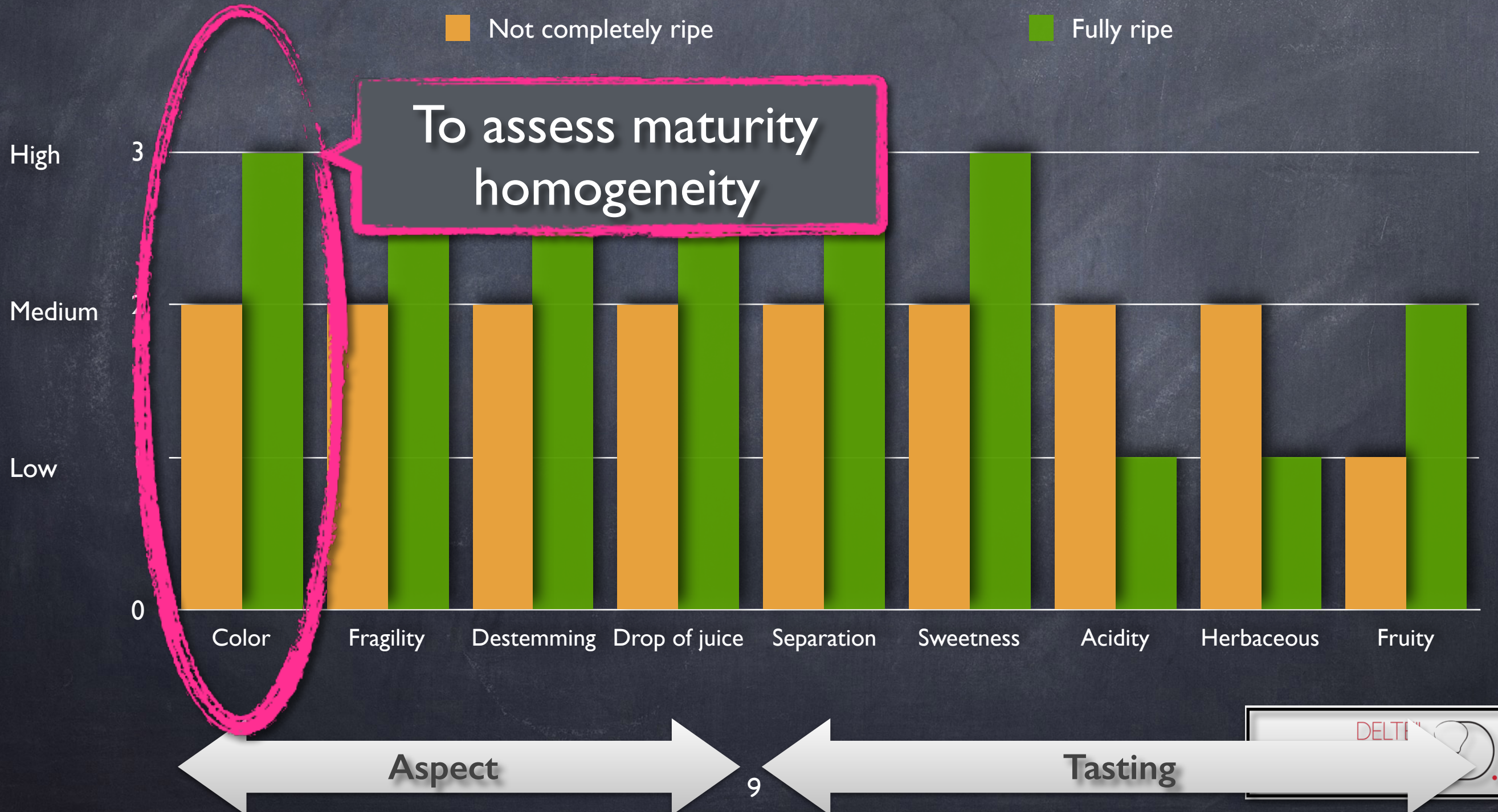
# Aspect of the berry and tasting the pulp







# Aspect of the berry and tasting the pulp







# Aspect of the berry and tasting the pulp

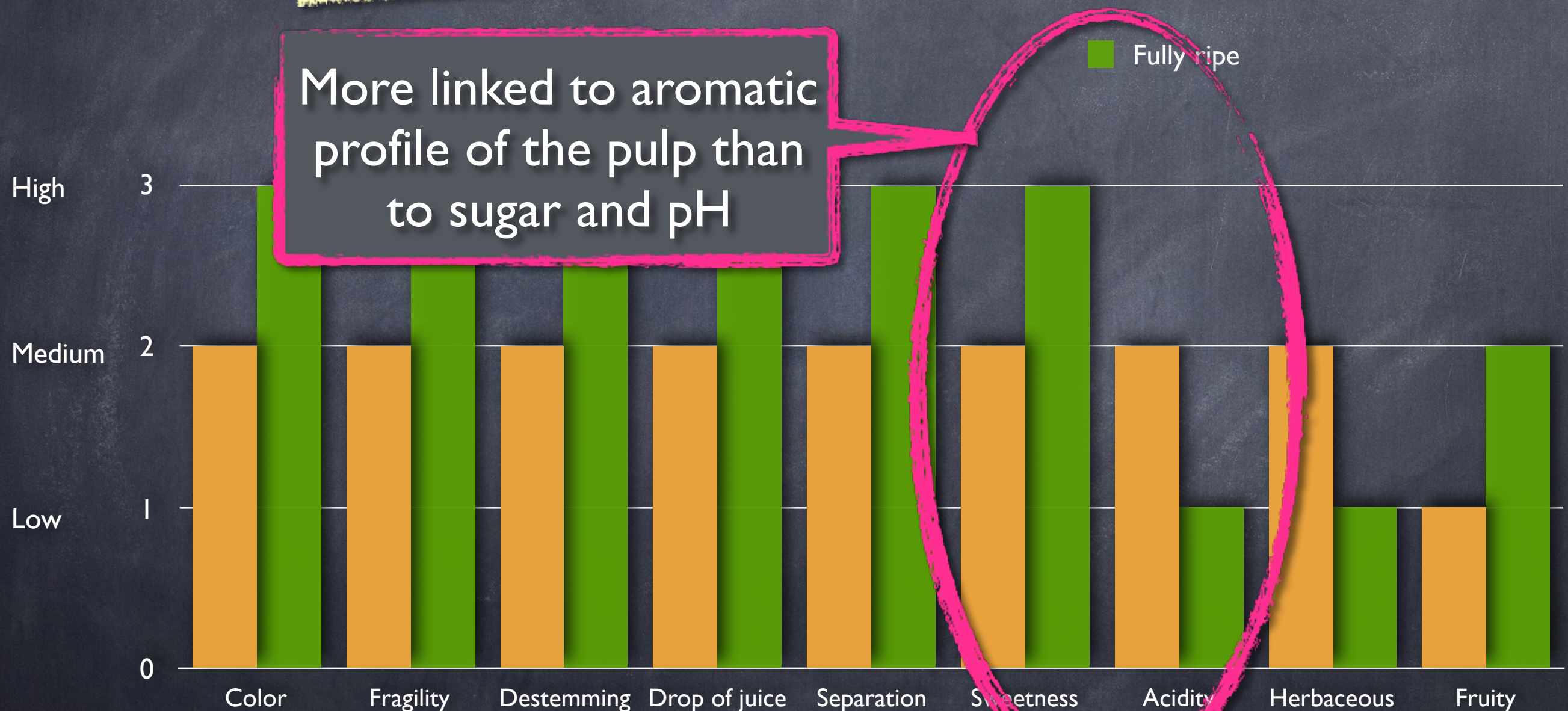






# Aspect of the berry and tasting the pulp

More linked to aromatic  
profile of the pulp than  
to sugar and pH



Aspect

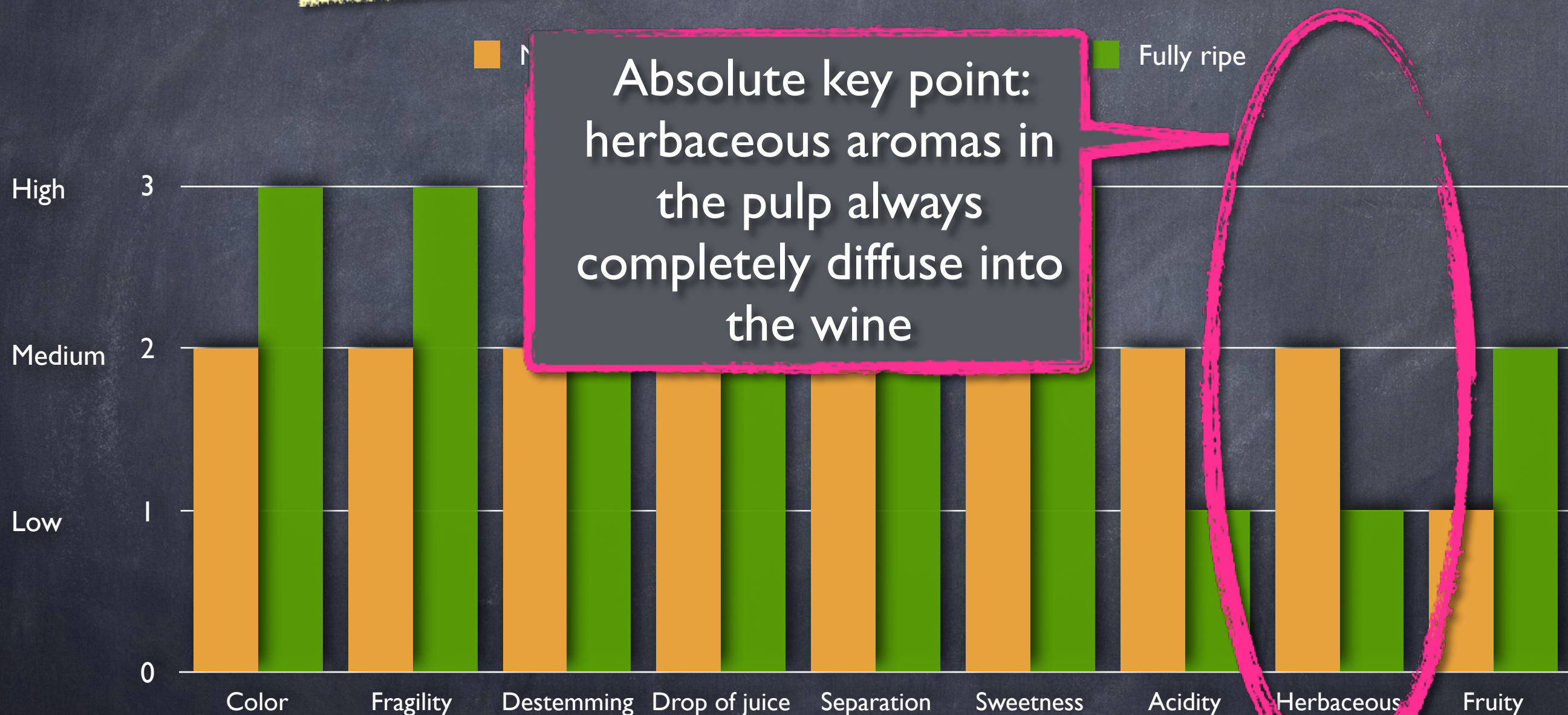
Tasting







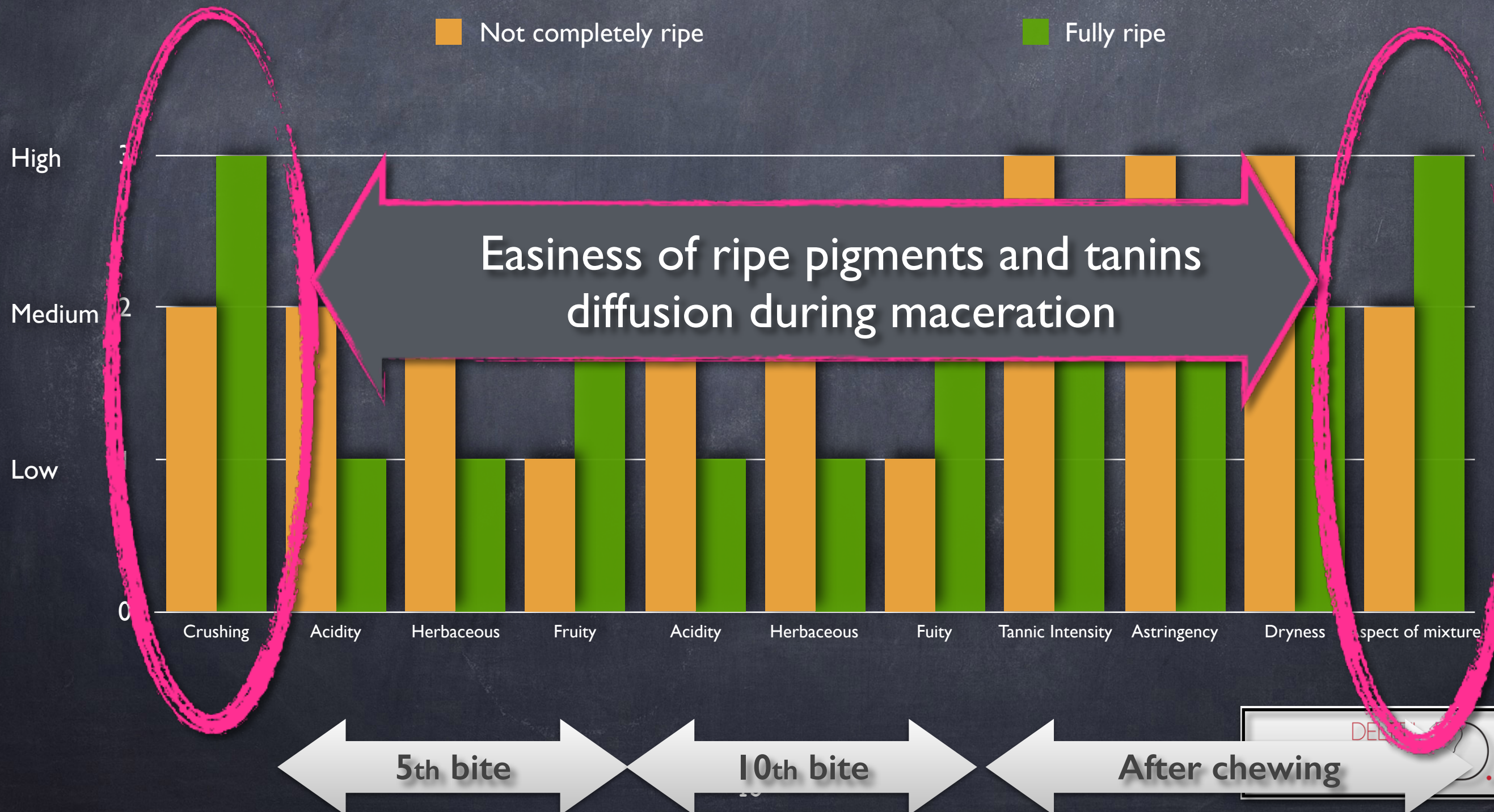
# Aspect of the berry and tasting the pulp







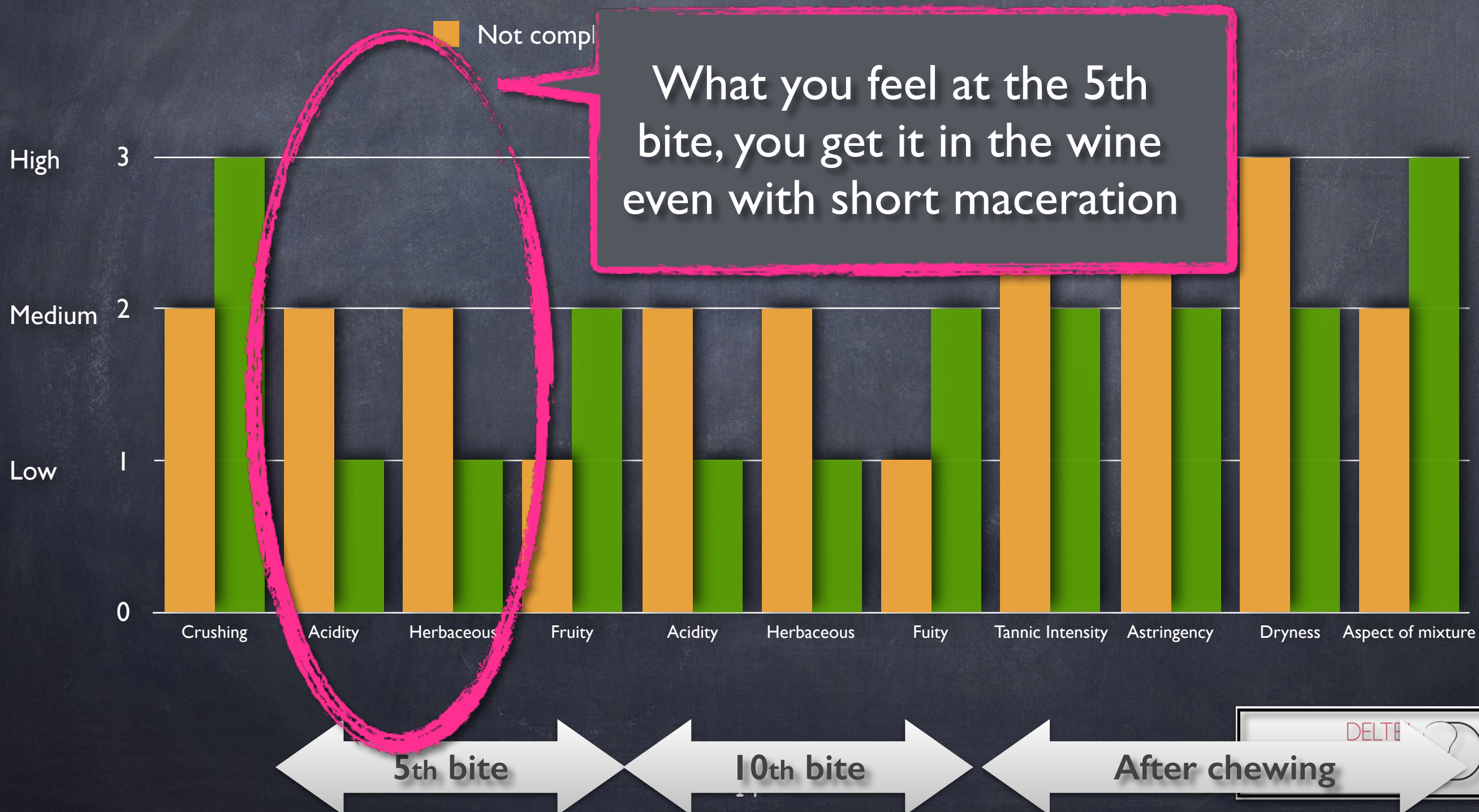
# Tasting the skin







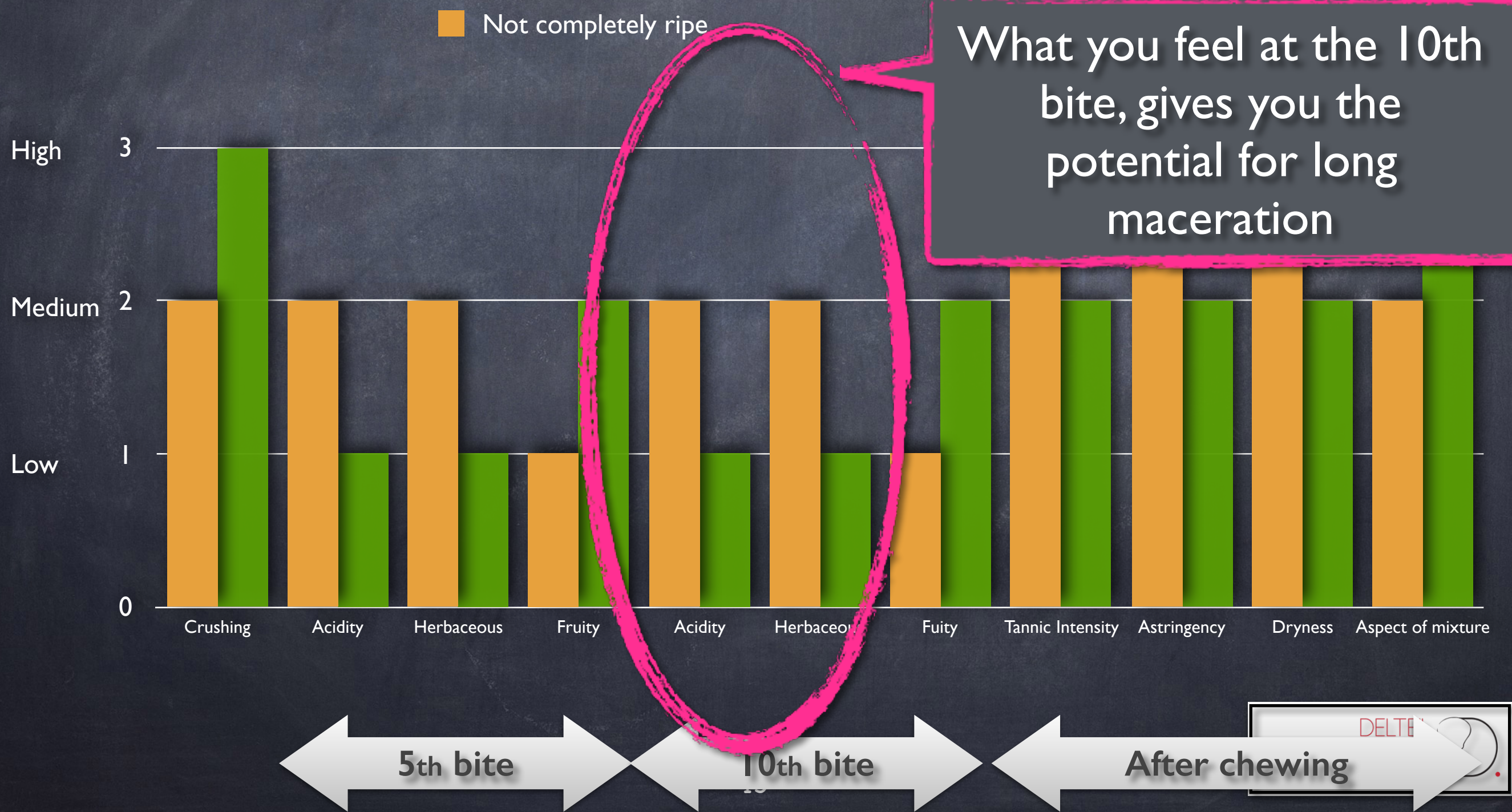
# Tasting the skin







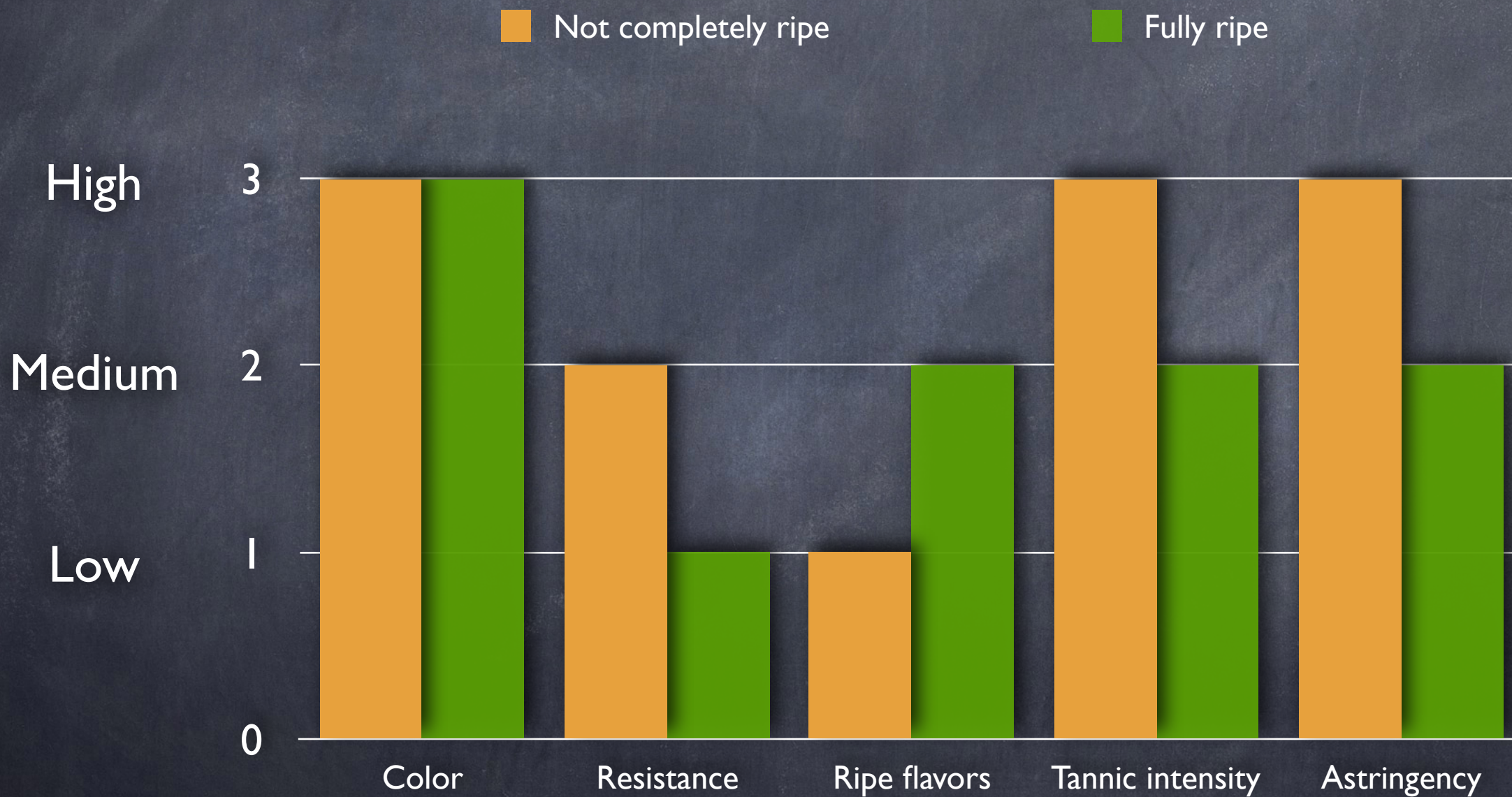
# Tasting the skin







# Tasting the seeds







# Tasting the seeds



The sensory profile of the seeds is only an indicator of maturity dynamics. Seeds do not generally participate to the wine profile. Wine is made with pulp and skins...





# Obvious conclusion:

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If possible, don't pick at the first date  
(orange bars): the grapes have not a  
conforming maturity for the 12 Euro  
segment





# Effect of ripening. Red grapes

The D.Q.S.A is a precise tool to monitor  
the ripening of the same vineyard lot at  
2 moments, close to picking





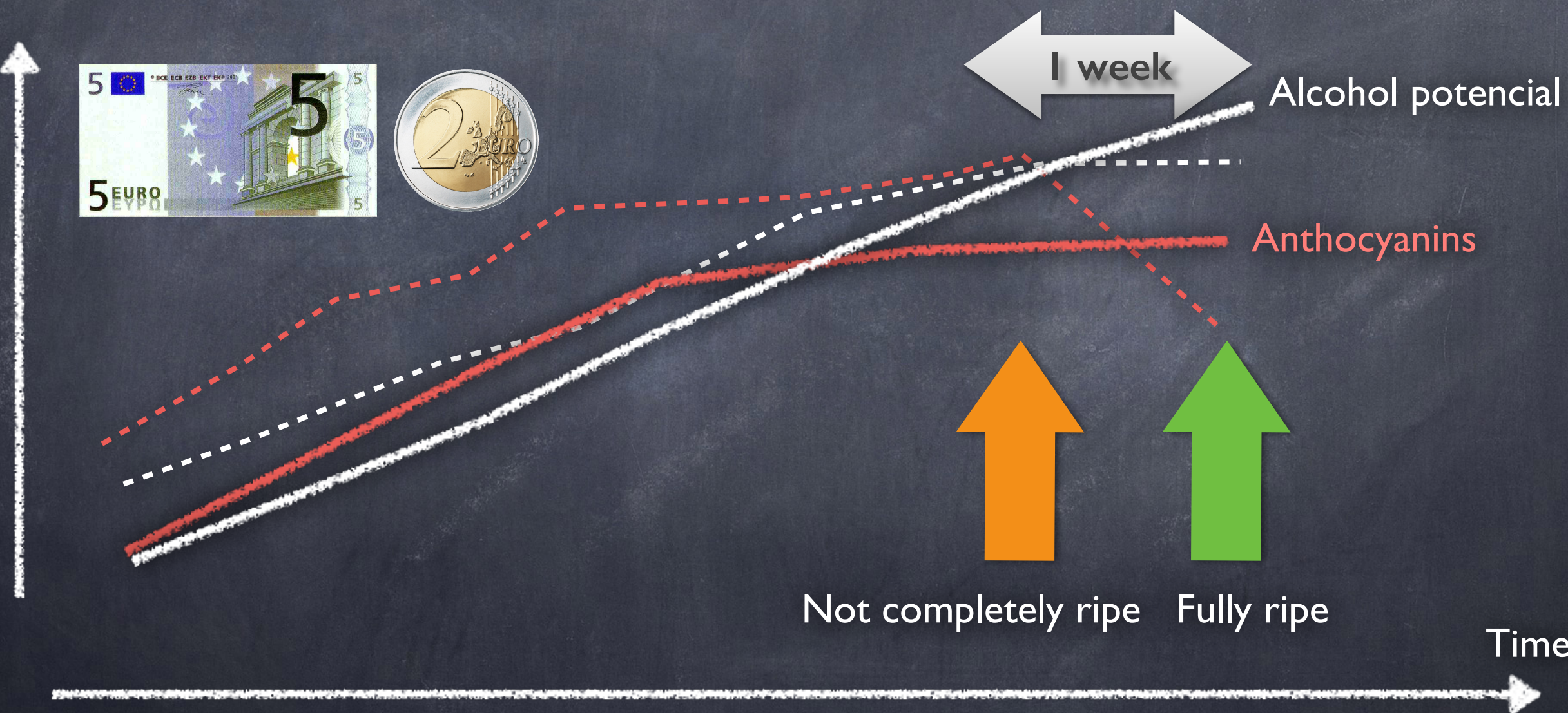
# Main viticulture criteria for a 7 € market goal

- Sound grapes, every year, every lot
- Mid concentration
  - Mid yield: 2-2.5 kg/plant
  - Preferentially short pruning
- Complete pulp ripening





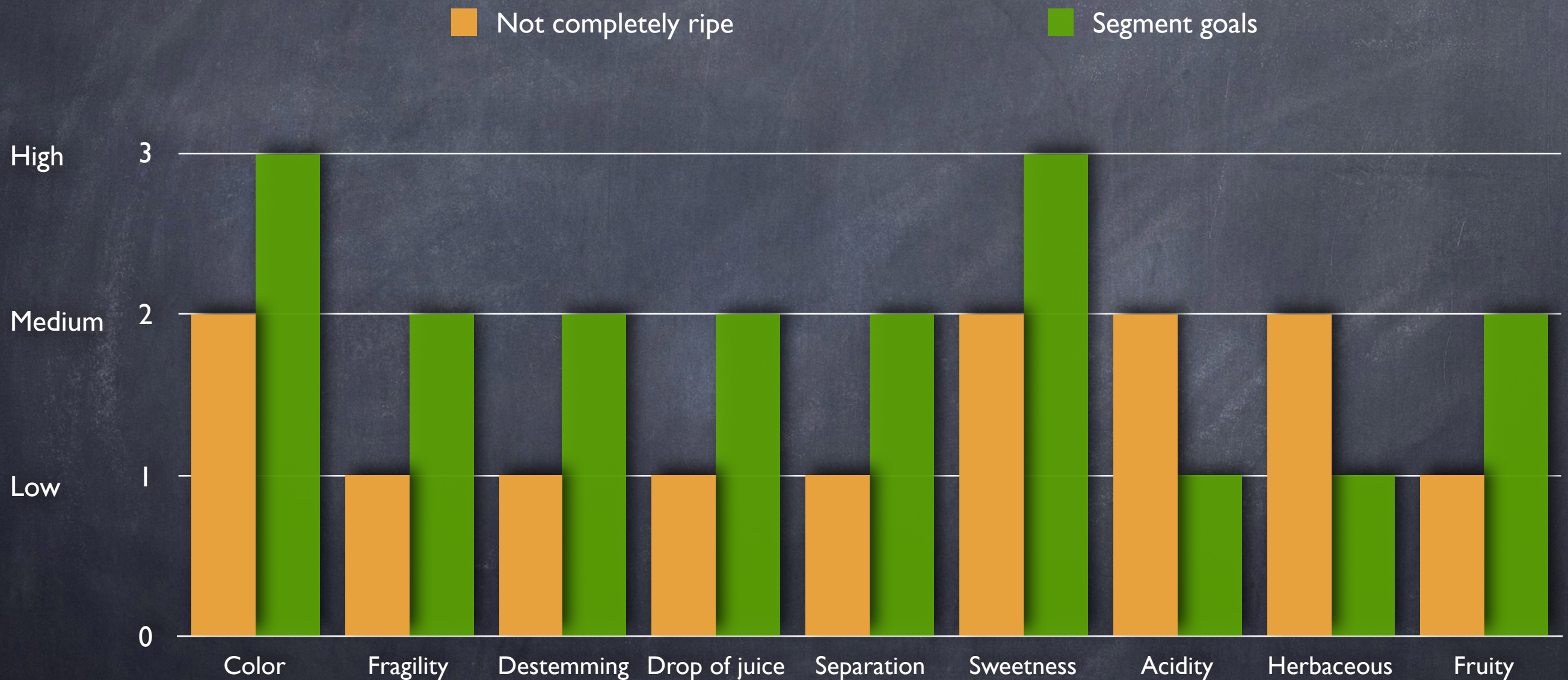
# Sugar and phenolic model curves







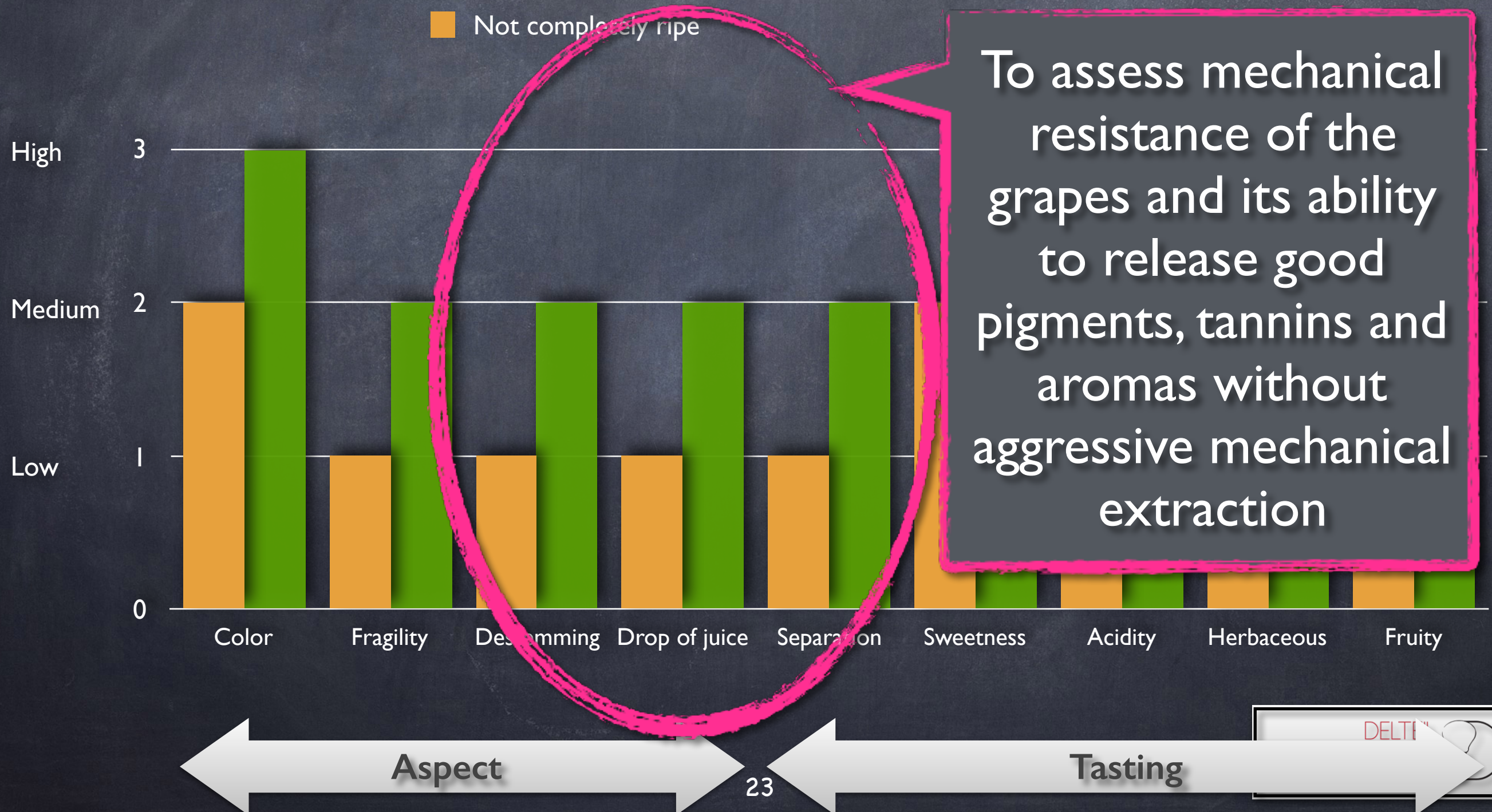
# Aspect of the berry and tasting the pulp







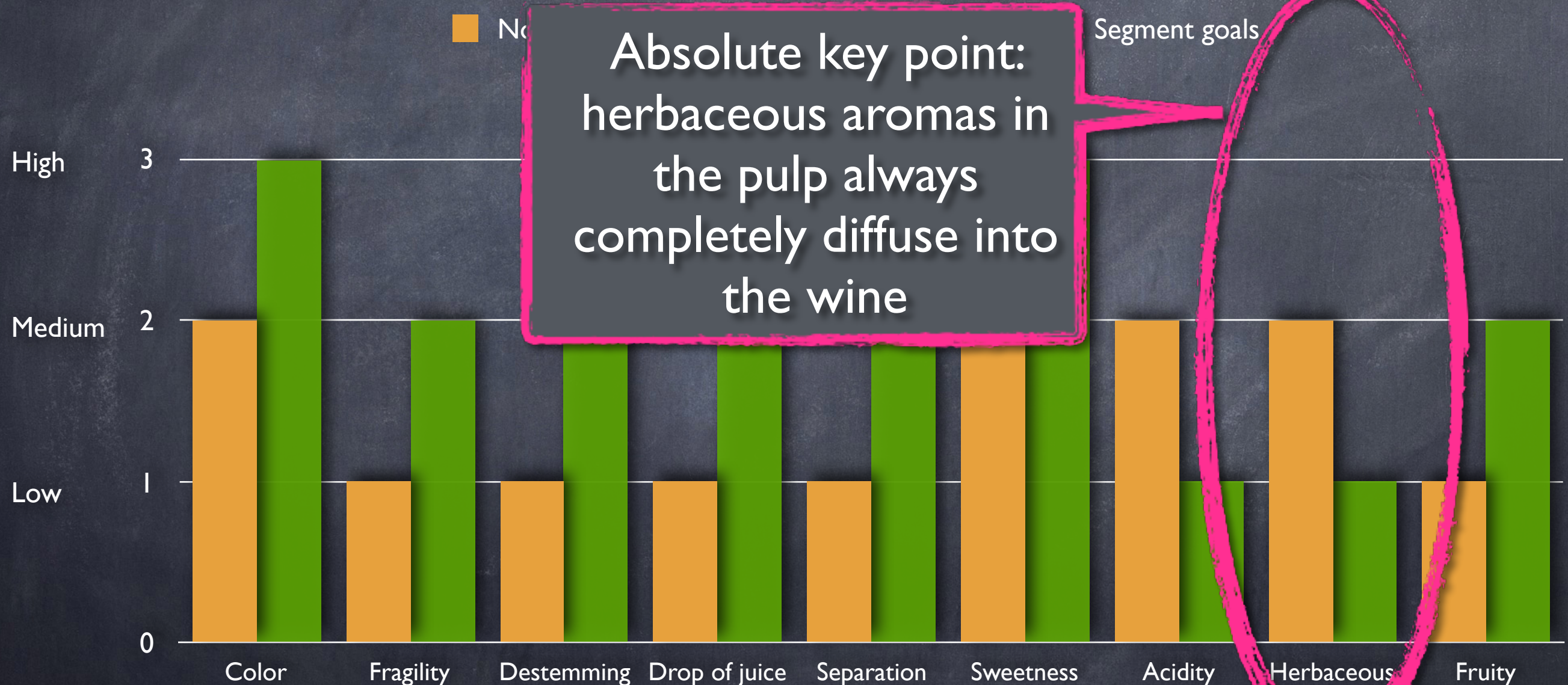
# Aspect of the berry and tasting the pulp







# Aspect of the berry and tasting the pulp





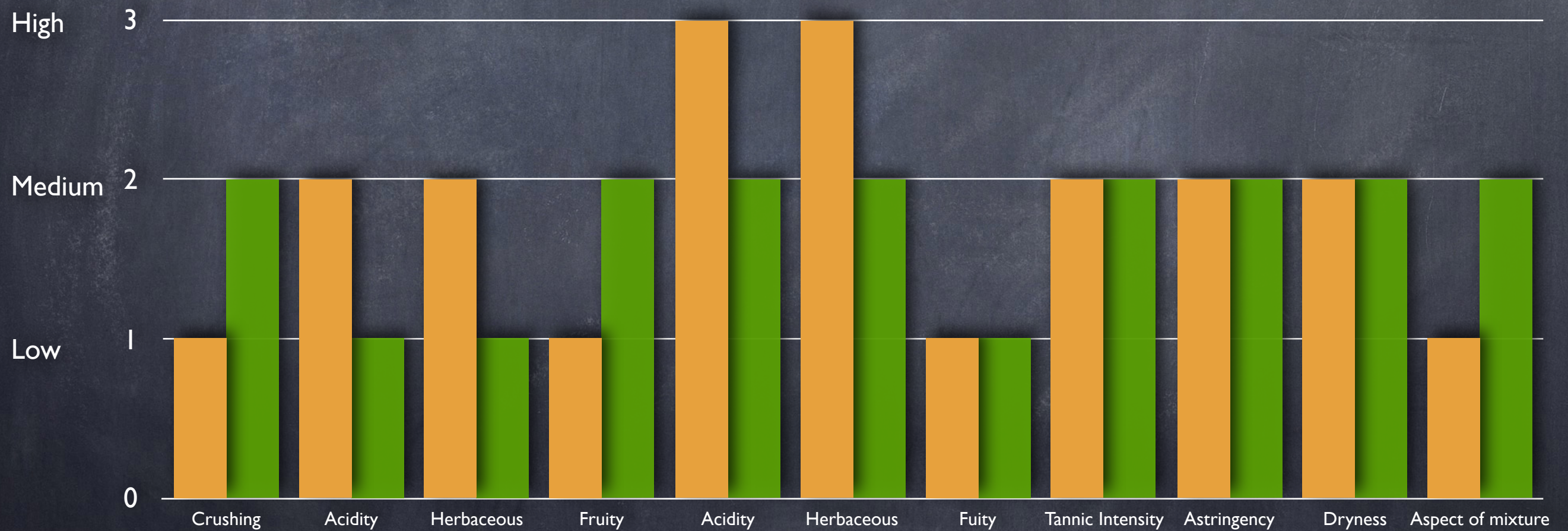


# Tasting the skin



Not completely ripe

Segment goals







# Tasting the skin



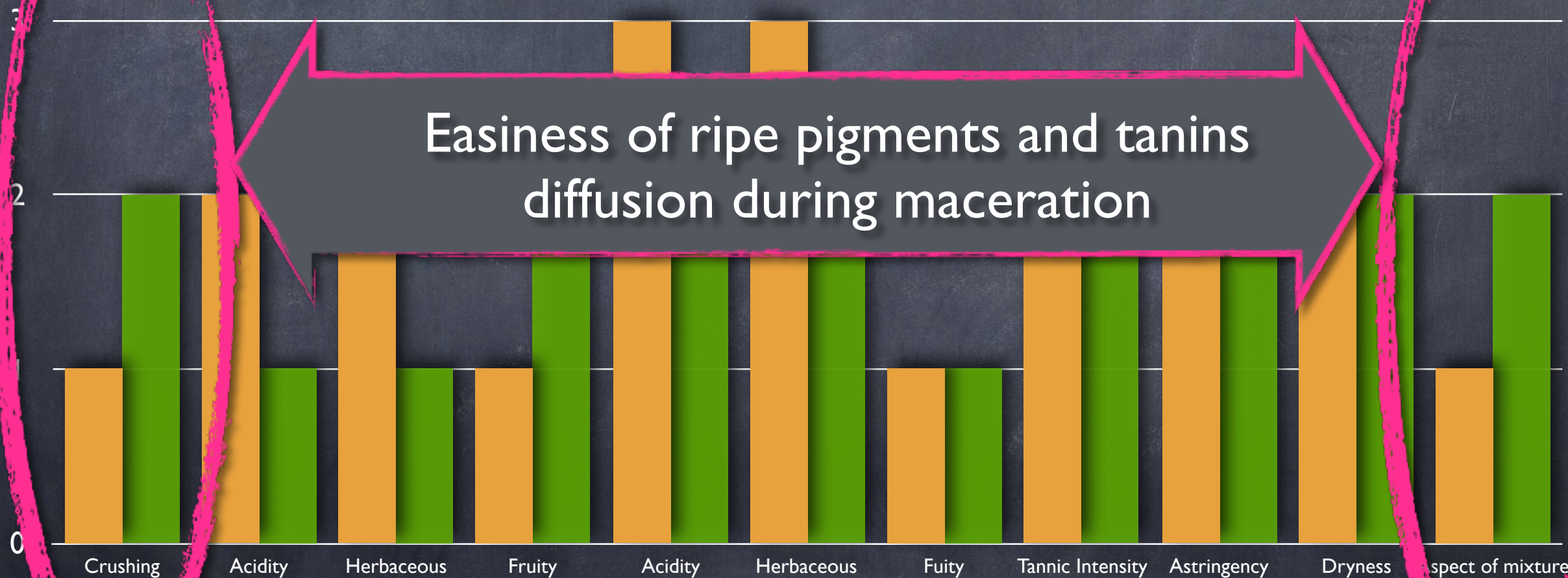
Not completely ripe

Segment goals

High

Medium

Low

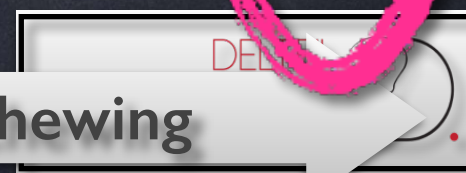


Easiness of ripe pigments and tanins diffusion during maceration

5th bite

10th bite

After chewing







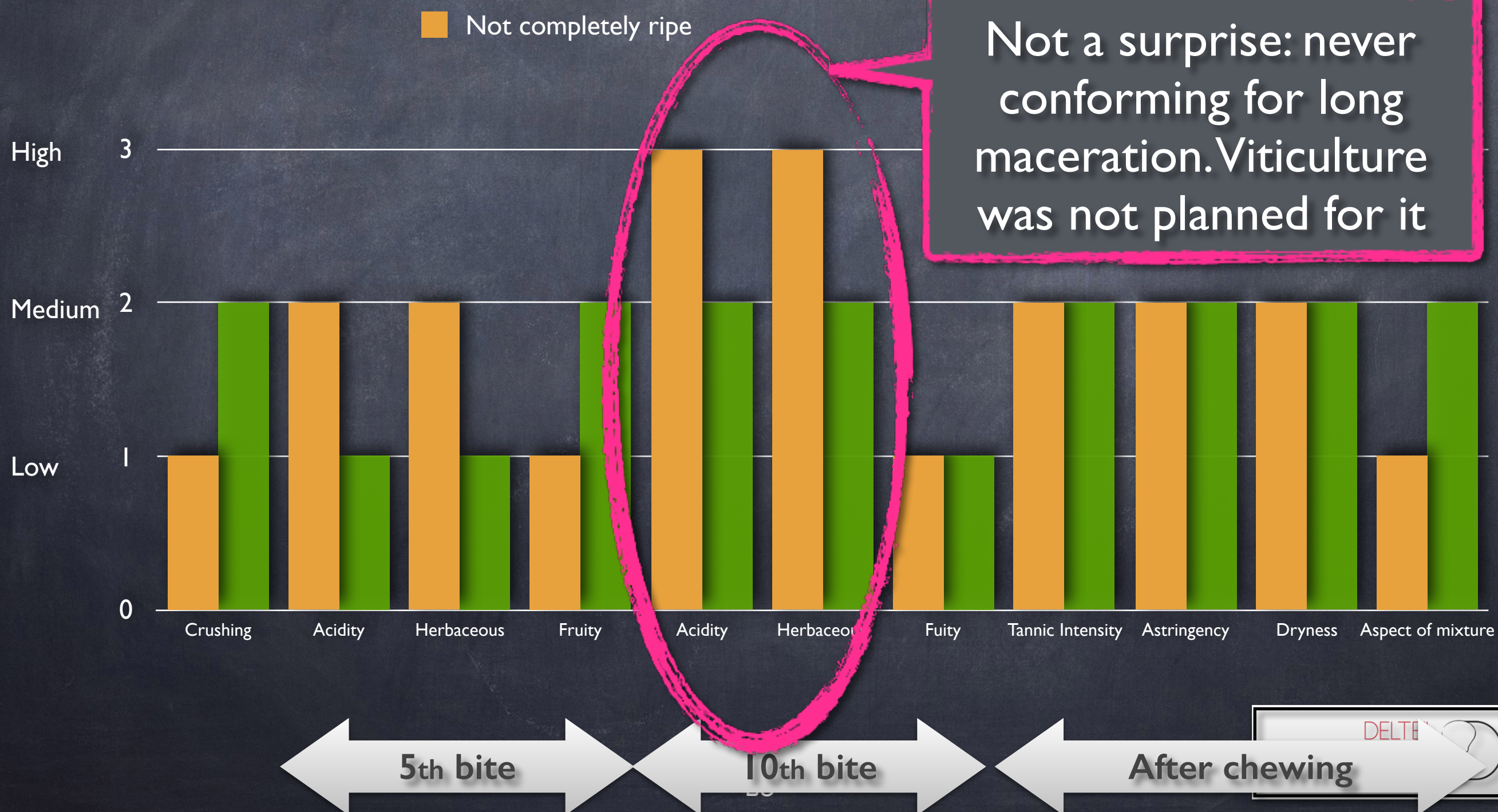
# Tasting the skin







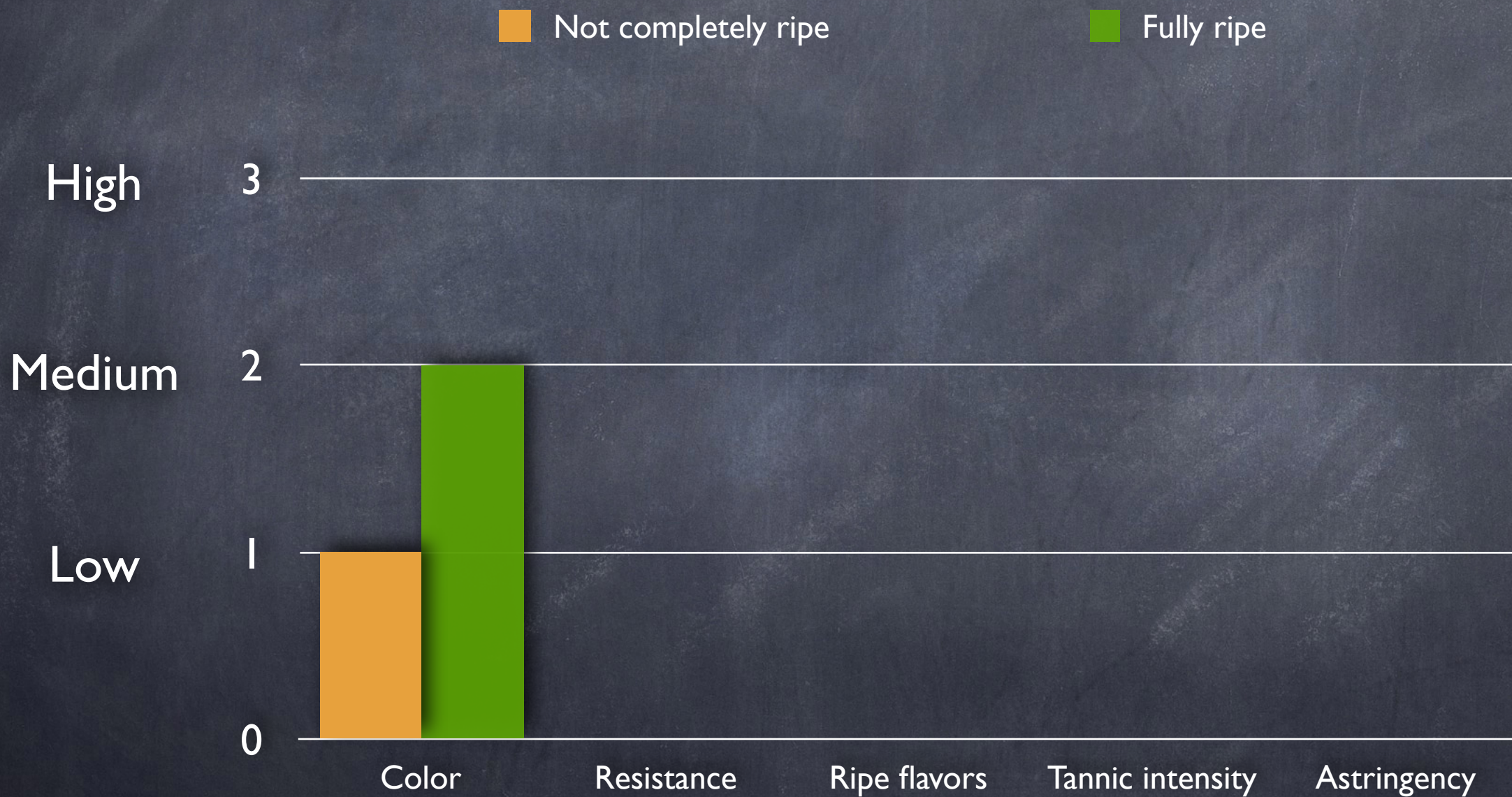
# Tasting the skin







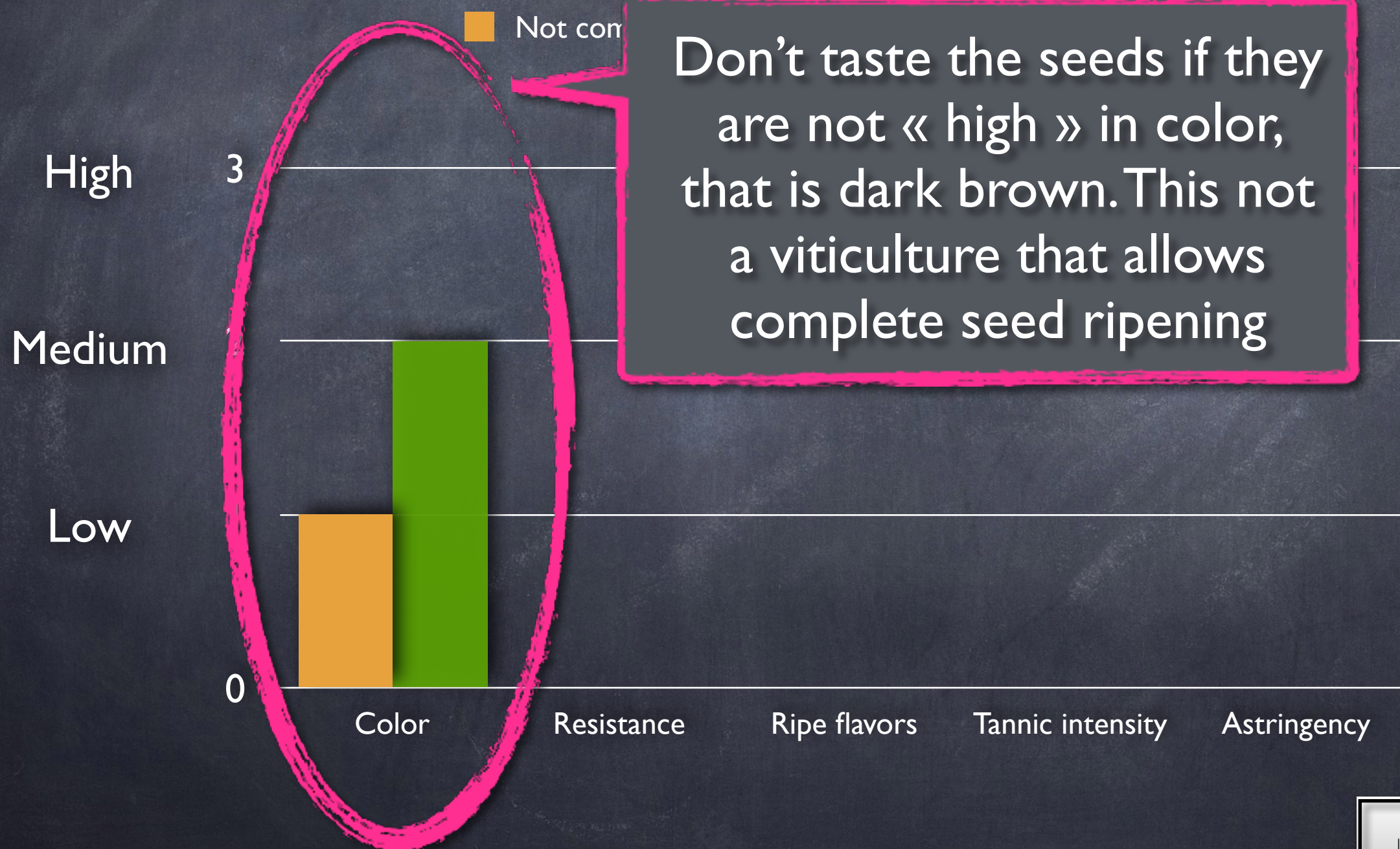
# Tasting the seeds







# Tasting the seeds







# Obvious conclusion:

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If possible, don't pick at the first date: the grapes are not conforming for the 7 Euro segment





# Difference in skin ripening

## Red grapes arriving at the winery

The D.Q.S.A is a precise tool to differentiate different lots arriving at the winery at the same moment with roughly the same sugar and phenolic analytical maturity





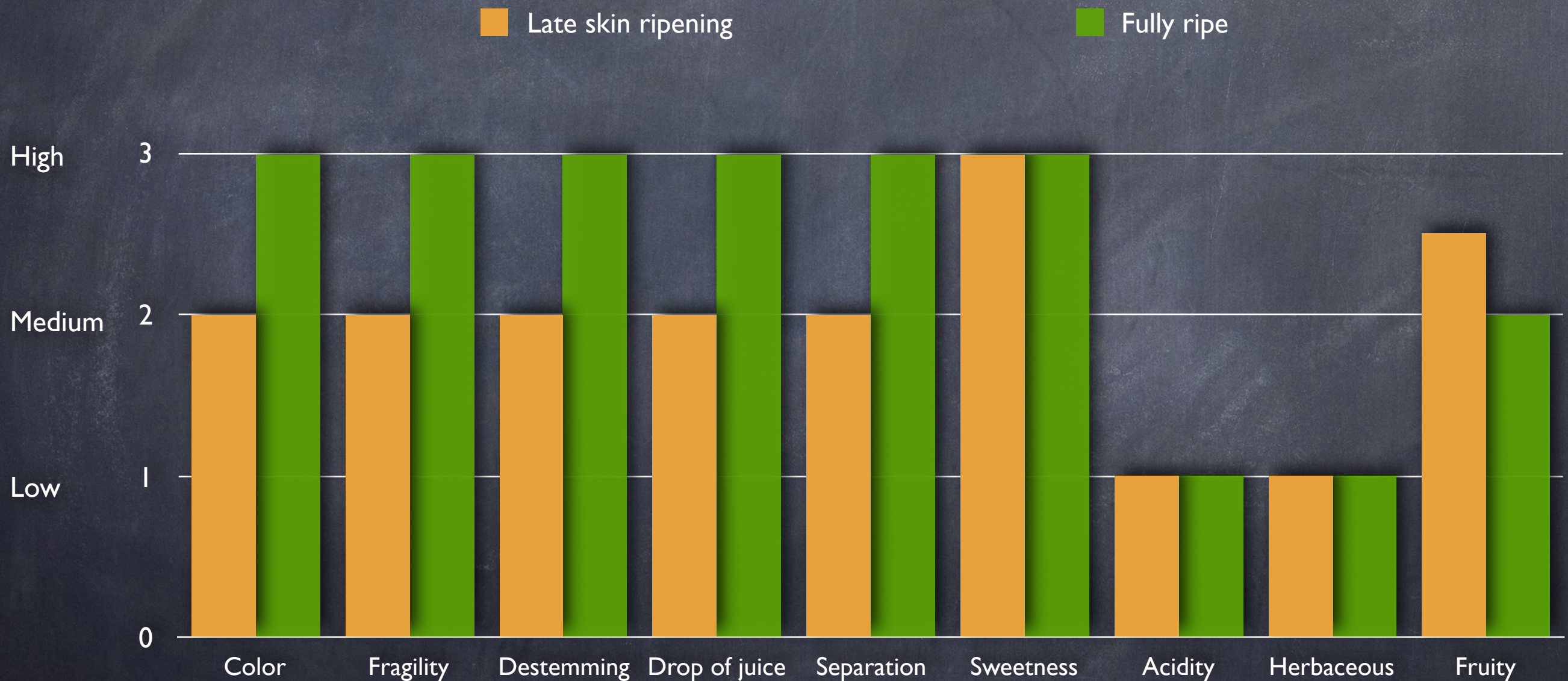
# Sugar curves







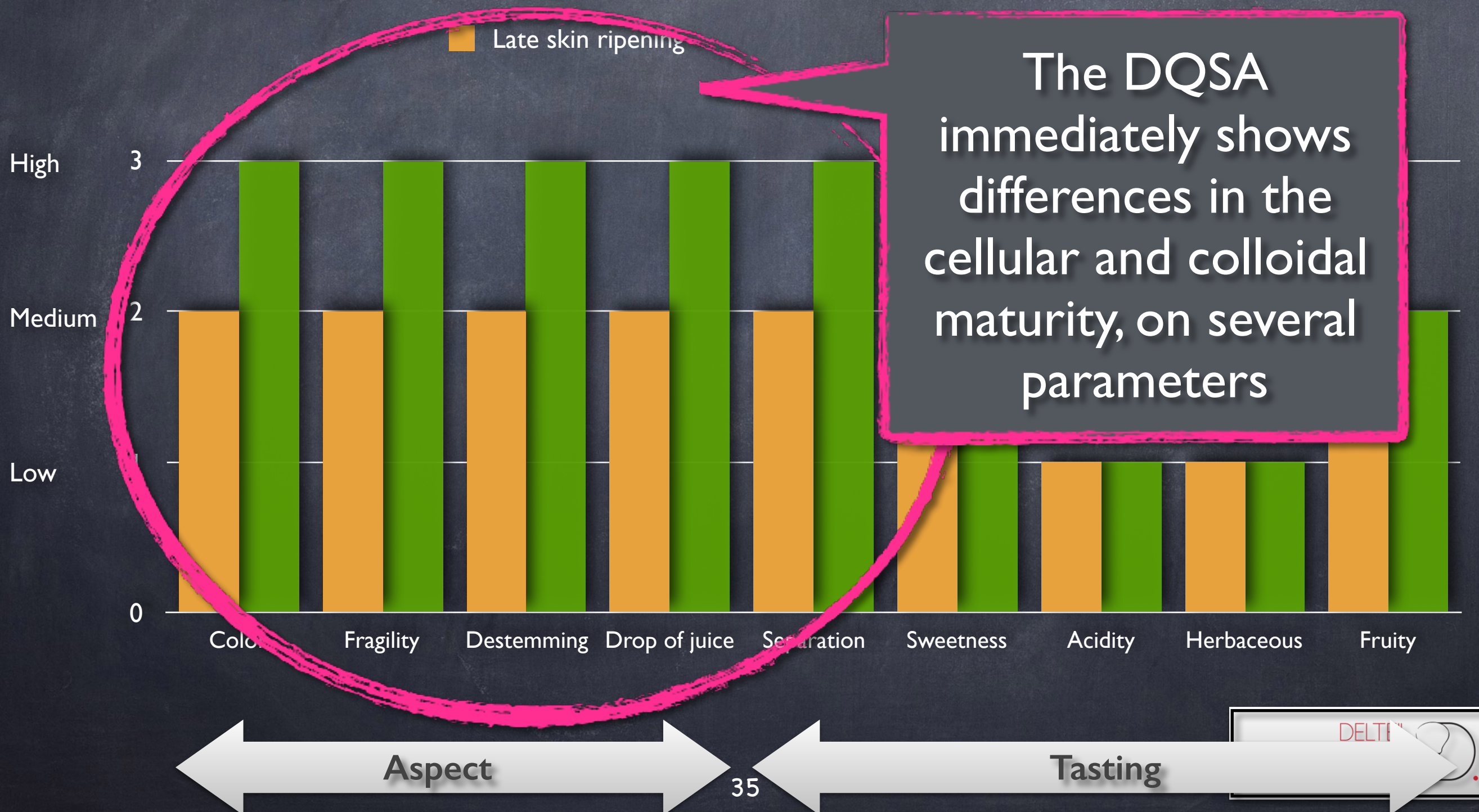
# Aspect of the berry and tasting the pulp







# Aspect of the berry and tasting the pulp

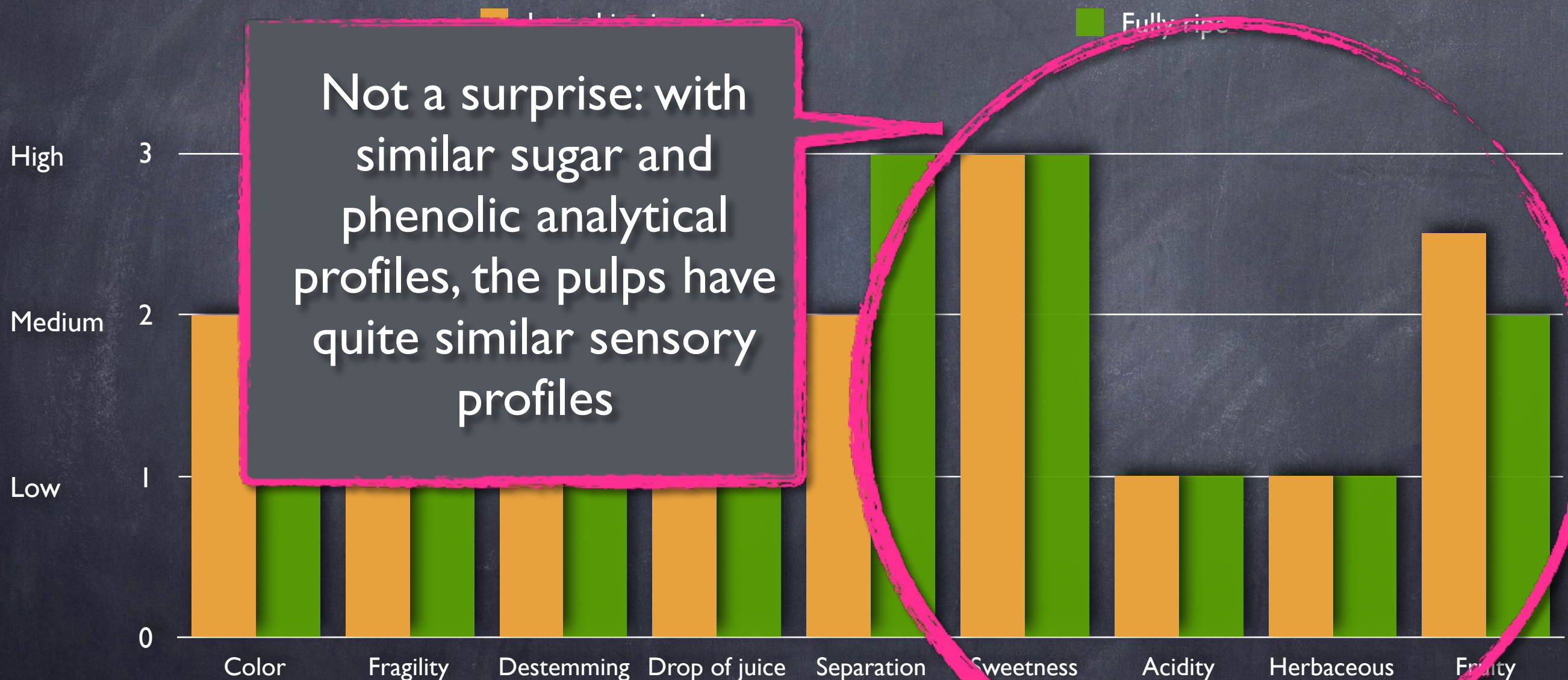






# Aspect of the berry and tasting the pulp

Not a surprise: with similar sugar and phenolic analytical profiles, the pulps have quite similar sensory profiles





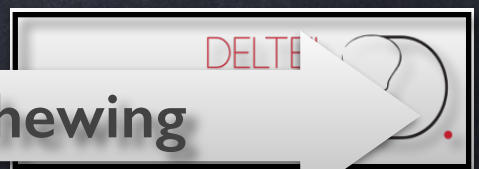
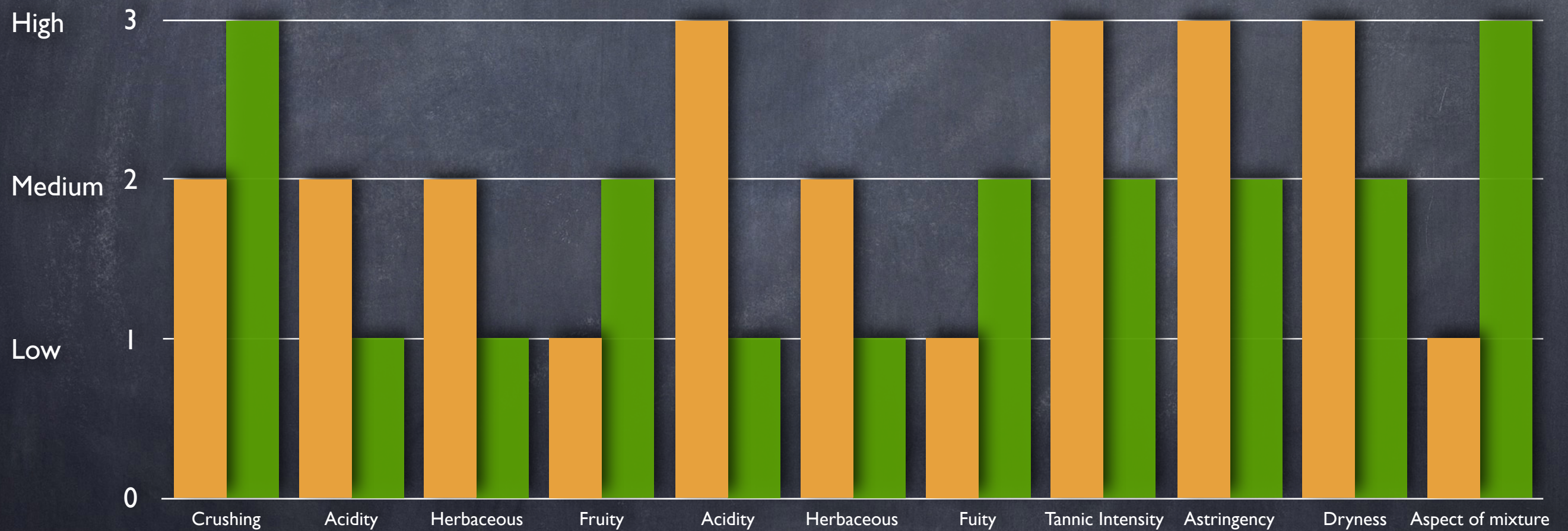


# Tasting the skin



■ Late skin ripening

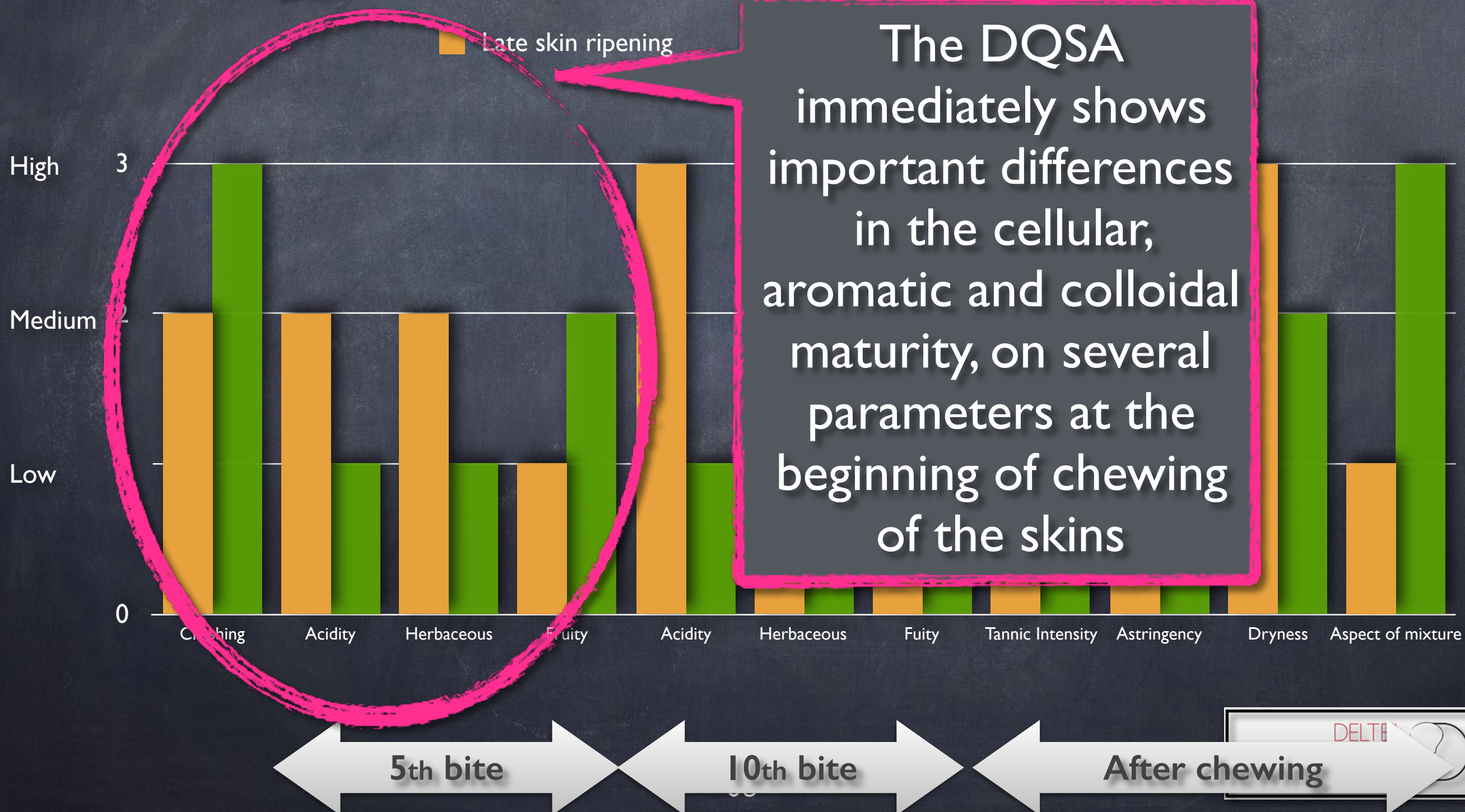
■ Fully ripe







# Tasting the skin

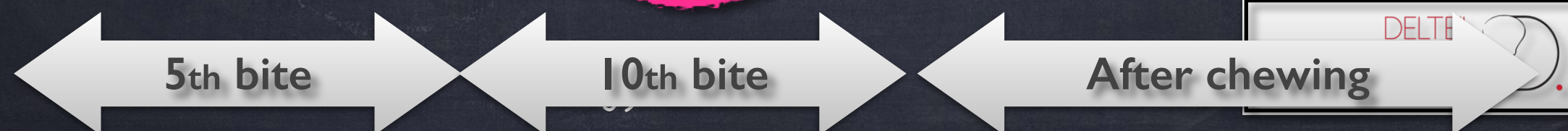
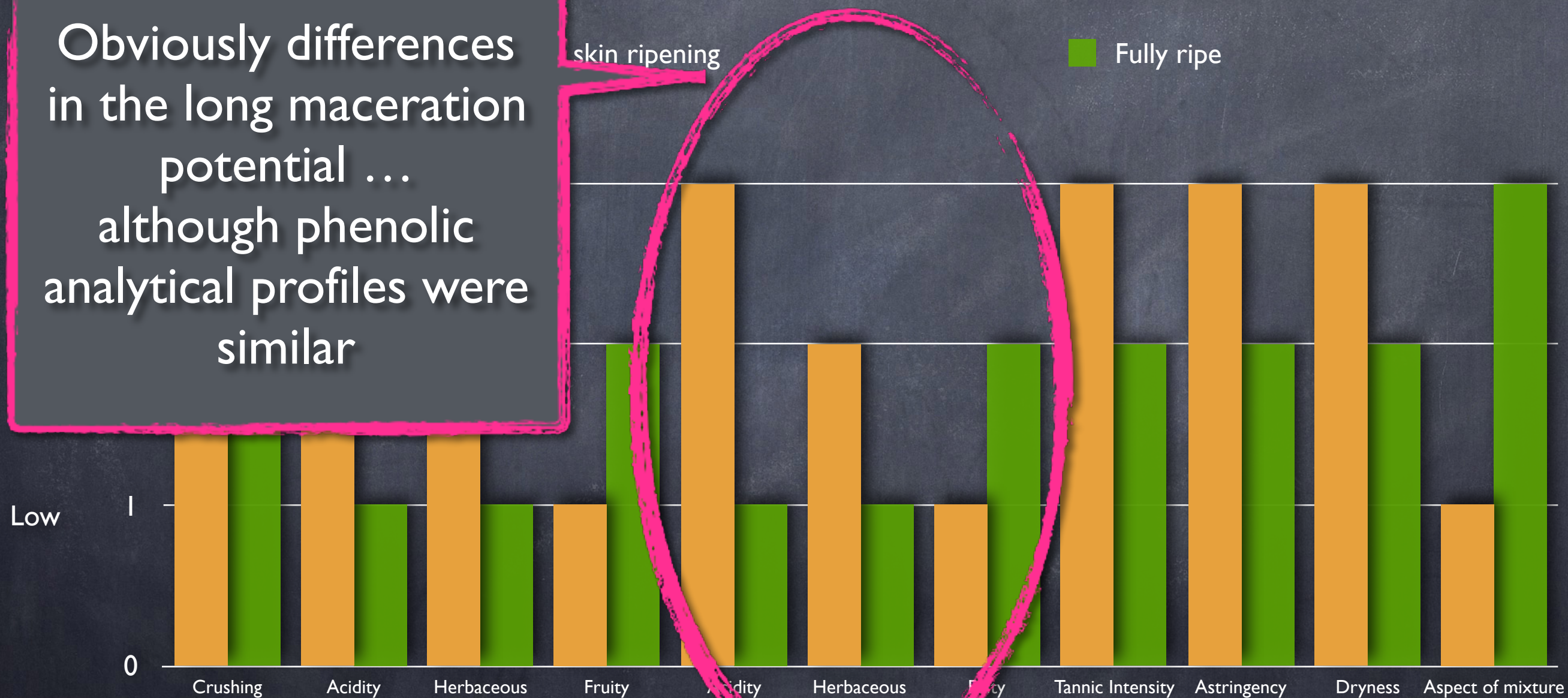






# Tasting the skin

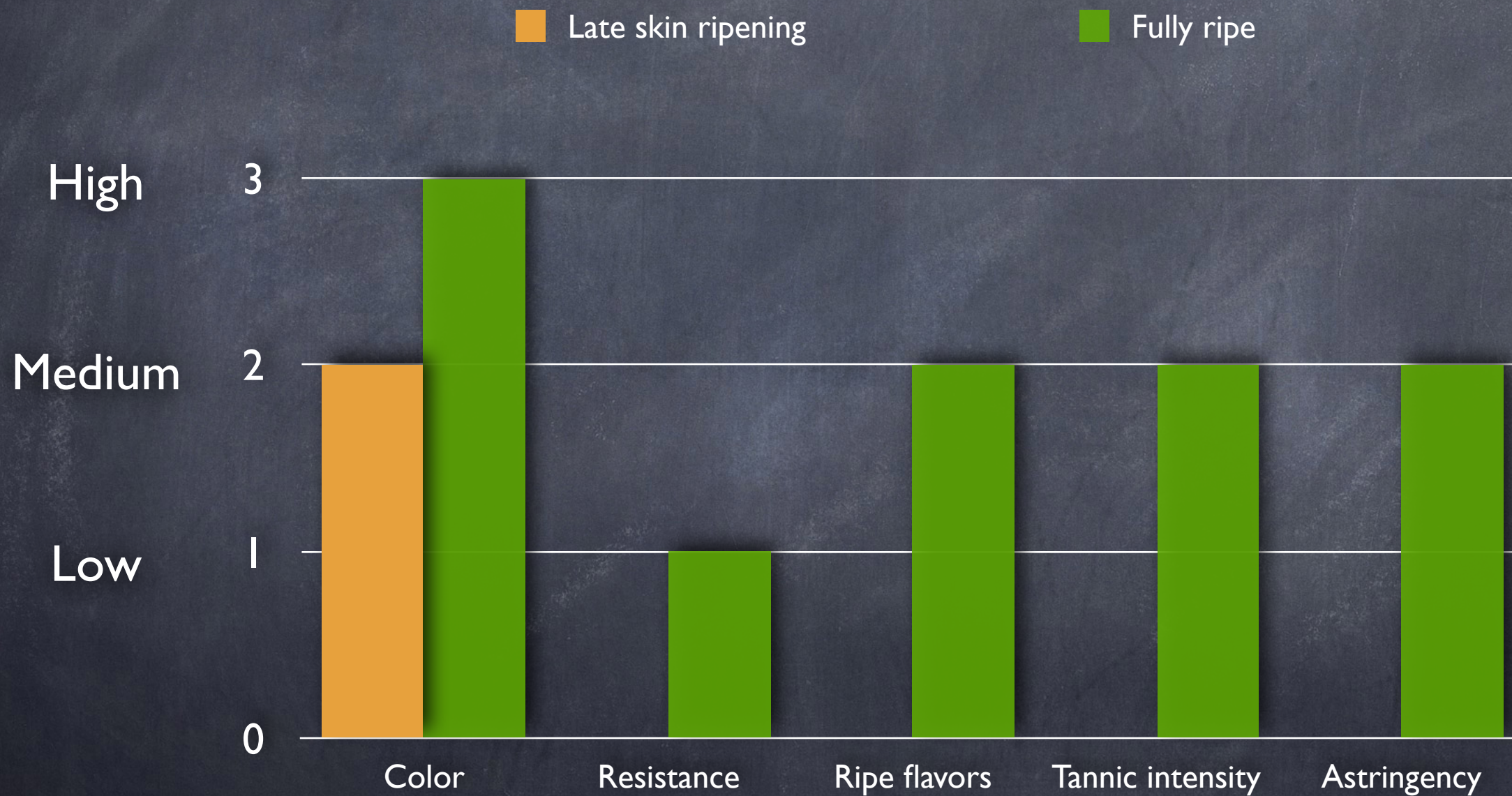
Obviously differences  
in the long maceration  
potential ...  
although phenolic  
analytical profiles were  
similar







# Tasting the seeds







# Obvious conclusion:

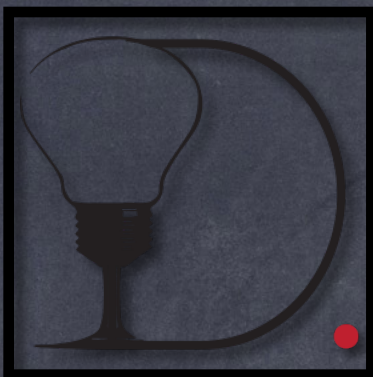
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Vinify the 2 lots in 2 separate tanks with 2  
different procedures

...

as Dominique Delteil will present you soon !





Thank you  
for your  
attention

