

A 3D rendering of a warehouse conveyor belt system. The scene is viewed from a low angle, looking down a long, straight conveyor belt. Several cardboard boxes are positioned on the belt, moving away from the viewer. The boxes are brown with white labels and some have 'FRAGILE' markings. Red laser lines are projected across the floor and the boxes, creating a grid pattern. The lighting is bright and focused on the center of the conveyor belt, with a slight blue tint on the floor. The overall atmosphere is one of a modern, automated industrial environment.

# A Case for Modernization – Human Factors and Organoleptic Tests

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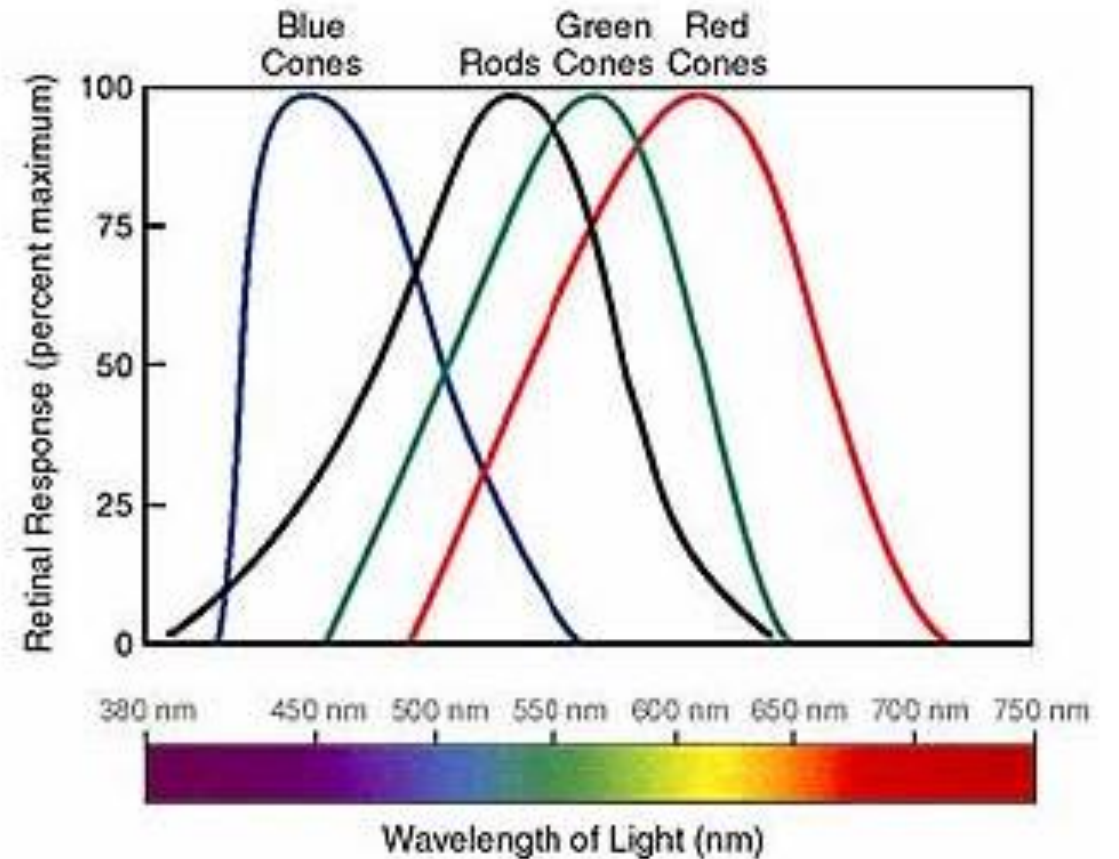


# Human factor – Sensory Perception

- What factors affect sensory perception?  
There are stimulus receptors
  - Vision
  - Smell (olfactory)
- What type of training is required?
  - We train for every analytical test
  - How relevant is a subjective qualitative test?

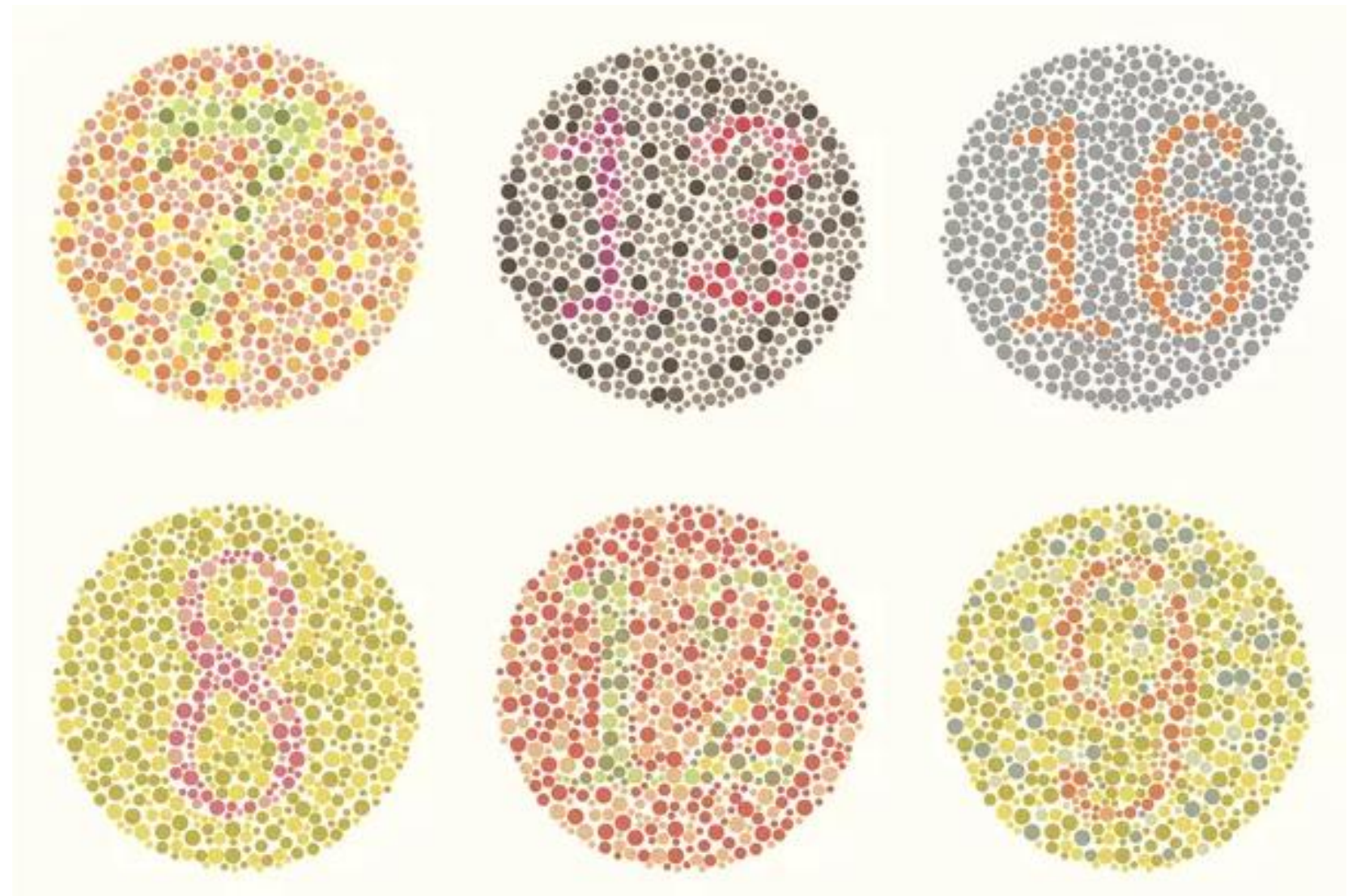
# Visual factors

- Exclusion of personnel due to visual impairment
- Need for required eye exam on a regular basis
- Color blindness





Test for  
Color  
Blindness  
(example)



# Olfactory factors

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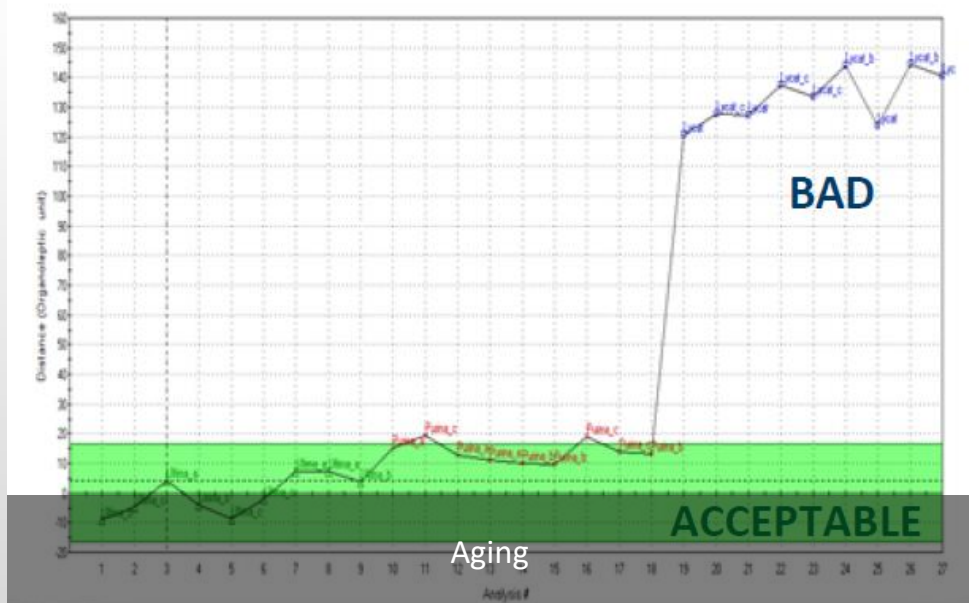
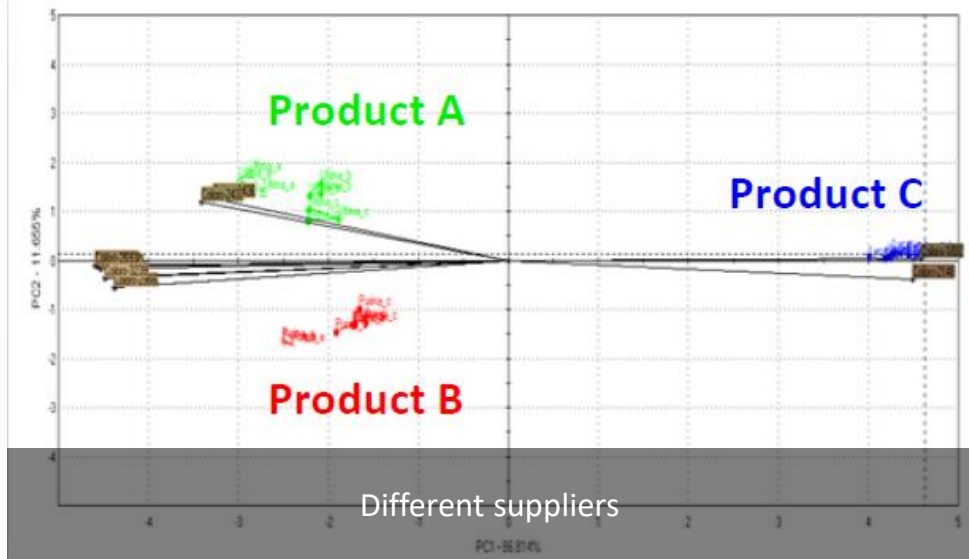
Physical conditions (parosmia or distorted sense of smell, e.g., due to sinus infection)



# Modernization

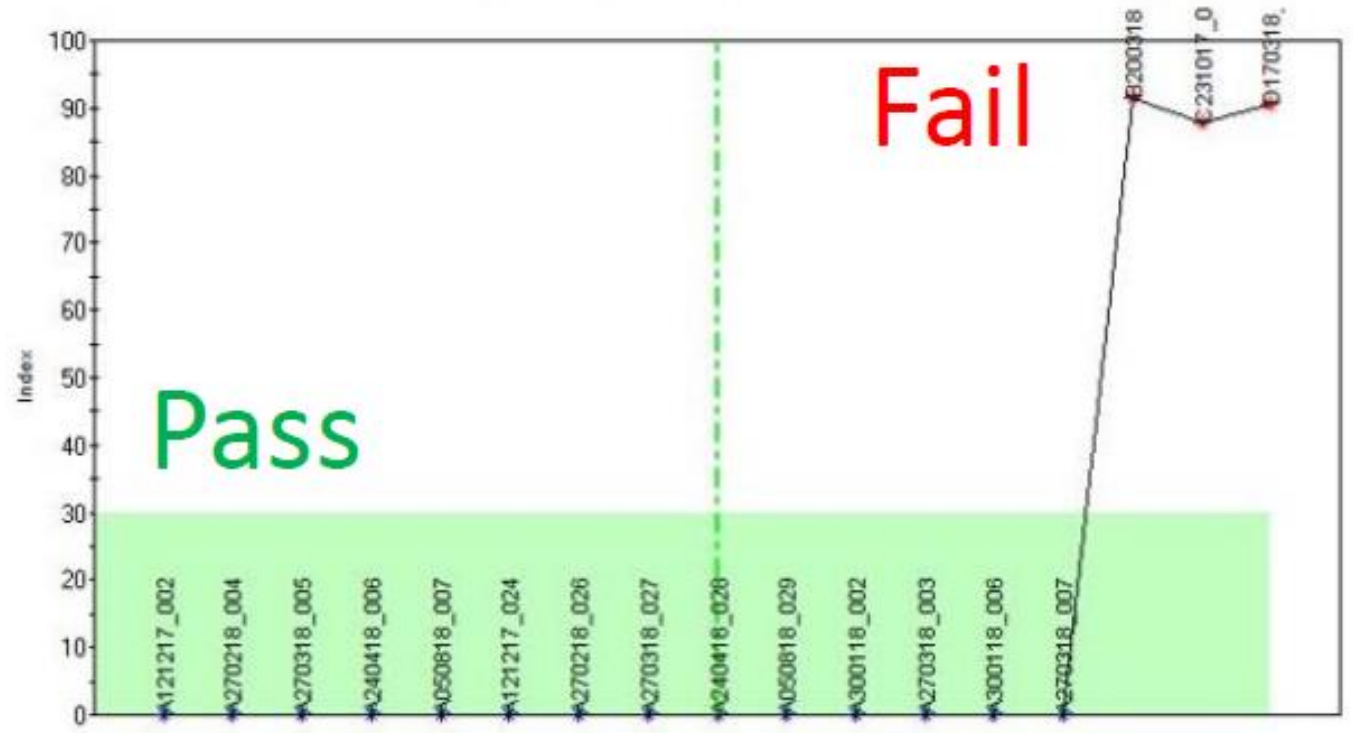
Conversion to instrumental methods – moving from subjective to objective

Applications from Food Industry for visual and smell distinction



# Imaging Material Differentiation

# Objective Criteria for Odor Test



# Objective versus Subjective Testing



How perception affects human decisions as it relates to:

Visual  
Smell



Organoleptic or sensory tests are best left to “consumer” panels or trained experts for Finished Goods



Other materials should be tested by instrumental methods



# Thank You



**The standard of trust**