



FDE443 SENSORY ANALYSIS

Lesson-5



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Controls for Test Room, Product, and Panel-II

Test controls/Sensory laboratory controls

Special booth features

- ✓ A small stainless steel sink and a water faucet
- ✓ Filtered water may be required if odor-free tap water is unavailable.
- ✓ A signal system
- ✓ A direct computer entry system located in each panel booth.

Test controls/Sensory laboratory controls

Descriptive Evaluation and Training Area

- ✓ A table in the panel leader's office for serving standards to train panelists, as a minimum.



Test controls/Sensory laboratory controls

Descriptive Evaluation and Training Area

- ✓ When descriptive analysis is commonly performed, in large training and testing procedures, suggested equipment:
 - A conference-style room several
 - Audiovisual equipment
 - Preparation facilities



Examples for Descriptive Evaluation and Training Area

Test room design- Preparation Area

Preparation Area

- ✓ A laboratory for preparation of test samples.
- ✓ Each booth area and descriptive analysis area should have a separate preparation area



Test room design- Preparation Area

✓ Typical preparation area should have:

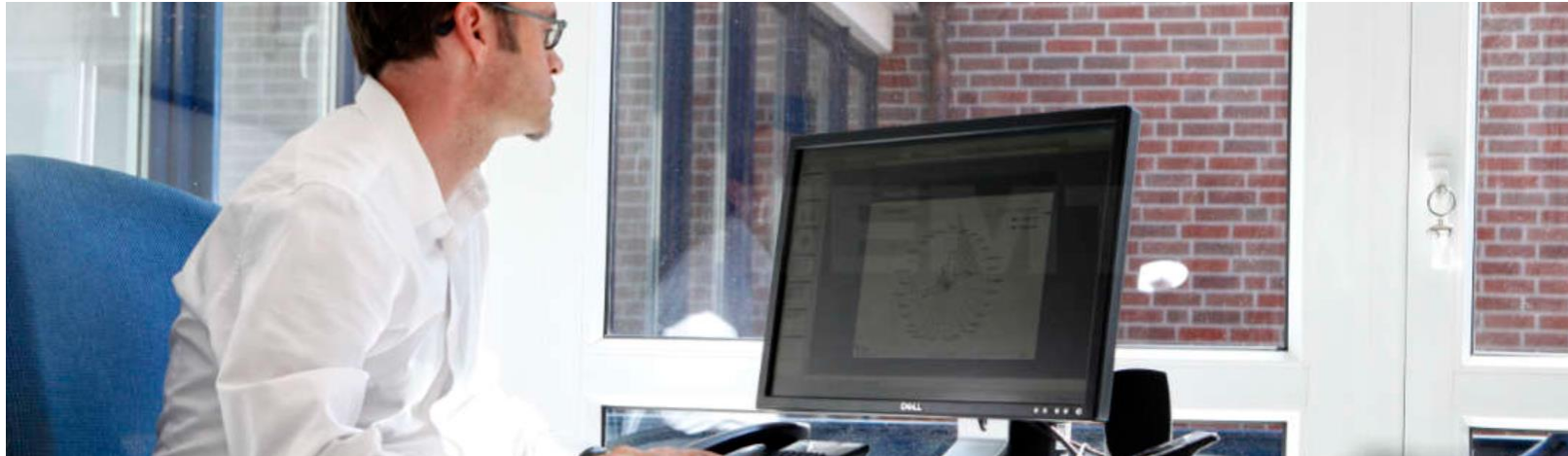
- Benches, kitchen range, ovens, etc. for preparation
- Refrigerator and freezer for storage of samples
- Storage for glassware, dishes, glasses, trays, etc.
- Dishwashers, disposers, trash compactors, wastebaskets, sinks, etc.
- Frozen storage for panel member treats, if used
- Large garbage containers for quick disposal of used product, etc.



Test room design- Office area

Office Facilities

- ✓ An office within view of the panel booths
- ✓ Devices such as fax machines and printers should be at a sufficient distance



Test room design

Entrance and Exit Areas

- ✓ Separate entrance and exit areas in large facilities
- ✓ In the exit area- a desk for panelists to study the samples and to put a “treat” to encourage participation.
- ✓ For nonemployee panelists, the entrance/exit area should have waiting room with comfortable seats, coat closet or coat rack, and separate restrooms.

Test controls/Sensory laboratory controls

Storage for;

- Samples prior to preparation, after preparation, and at the time of serving
- Reference samples and controls or standards
- Large volumes of disposable containers and utensils
- Clean-up materials
- Paper scoresheets before and after use



General Design Factors

Color and Lighting

- ✓ The color and lighting in the booths-adequate viewing of samples while minimizing distractions
- ✓ Walls: off-White
- ✓ Booths: even, shadow-free illumination at 70 to 80 footcandles (fc) (typical of an office area).



General Design Factors

Colored lights:

- ✓ Red, green, and/or blue lighting
- ✓ To mask visual differences between samples in difference tests



General Design Factors

Air Circulation, Temperature, and Humidity

- ✓ Air conditioned at 22-24°C and 45 to 55% relative humidity.
- ✓ Activated carbon cannisters capable of removing all detectable odor.
- ✓ Frequent monitoring to prevent the filters from becoming ineffective and/or becoming an odor source.
- ✓ A slight positive pressure in the booth areas so as to prevent odor contamination from the sample preparation area or from outside.
- ✓ For testing of odorous materials, e.g., sausages or cheese, separate air exhausts from each booth.

General Design Factors

Construction Materials

- ✓ The materials used in the construction and furnishing
- ✓ **Nonodorous**— Avoid paper, fabric, carpeting, porous tile, etc. because they are odorous or may harbor dirt, molds, etc. which will emit odor.
- ✓ Construction materials- smooth, easy to clean, and nonabsorbing
- ✓ Recommended materials: stainless steel, Teflon, and Formica.
- ✓ Nonodorous vinyl laminate: for ceilings, walls, and floors.

General Design Factors

Construction Materials

- ✓ **Color**— A neutral, unobtrusive color scheme using off-white colors and few patterns
- ✓ **Plumbing** — Product trapped in pipes causes distracting and confounding odors in a sensory laboratory.