

Guide to

Design of test rooms for sensory analysis of food

UDC 664.014:543.92:658.562.64:658.2.006.2:721.055

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

BSI
Documents

AVA

Document Sharing Hub

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Food and Agriculture Standards Committee (FAC/-) to Technical Committee FAC/20, upon which the following bodies were represented:

- AFRC Institute of Food Research
- Association for Consumer Research (ACRE)
- British Essence Manufacturers' Association
- British Food Manufacturing Industries Research Association
- British Psychological Society
- Campden Food and Drink Research Association
- Co-operative Union
- Coffee Trade Federation Ltd.
- Department of Trade and Industry (Laboratory of the Government Chemist)
- Flour Milling and Baking Research Association
- Food and Drink Federation
- Institute of Food Science and Technology
- Institute of Masters of Wine
- Joint Committee of the Milk Marketing Board and the Dairy Trade Federation
- Ministry of Agriculture, Fisheries and Food
- Royal Society of Chemistry
- Society of Chemical Industry
- Society of Cosmetic Scientists
- Society of Dairy Technology
- University of Reading
- University of Strathclyde

This British Standard, having been prepared under the direction of the Food and Agriculture Standards Policy Committee, was published under the authority of the Board of BSI and comes into effect on 29 September 1989

© BSI 07-1999

The following BSI references relate to the work on this standard:
Committee reference FAC/20
Draft for comment 87/51232 DC

ISBN 0 580 17494 8

Amendments issued since publication

Amd. No.	Date of issue	Comments

Contents

	Page
Committees responsible	Inside front cover
National foreword	ii
1 Scope	1
2 Principle	1
3 Creation of test rooms	1
4 Testing area	1
5 Preparation area	3
6 Office	3
7 Additional areas	3
Figure 1 — Example of a floor plan for a test room	4
Figure 2 — Example of a floor plan for a test room	5
Figure 3 — Example of a floor plan for a test room	6
Figure 4 — Example of a floor plan for a test room	7
Figure 5 — Table equipped with removable dividers	7
Figure 6 — Example of a floor plan for a testing area for working in testing booths or in groups	8
Figure 7 — Plan for testing booths and serving counter separated by a wall	8
Figure 8 — Herring-bone layout of testing booths	9
Figure 9 — Various types of sliding doors and hatches	10
Figure 10 — Testing area with a facility for supervision by the panel chairman	11
Figure 11 — Dimensional layout of a testing booth	11

National foreword

This British Standard has been prepared under the direction of the Food and Agriculture Standards Policy Committee. It is identical with ISO 8589:1988 “*Sensory analysis — General guidance for the design of test rooms*”, published by the International Organization for Standardization (ISO) and in the preparation of which the United Kingdom played a full part.

The auxiliary “shall” has been used to emphasize those aspects of this standard that are considered essential. Desirable or recommended aspects are either indicated as such or denoted by the use of the auxiliary “should”.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 11 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This International Standard gives general guidance for the design of test rooms intended for the sensory analysis of food products.

It describes the requirements to set up a test room comprising a testing area, a preparation area and an office, specifying those that are essential or those that are merely desirable.

2 Principle

Design of test rooms used to conduct sensory evaluations under constant, controlled conditions with a minimum of distractions, to reduce the effects that psychological factors and physical conditions can have on human judgement.

3 Creation of test rooms

The creation of test rooms intended for sensory analysis differs depending on whether a new building or whether an existing facility is used.

A typical test room comprises

- a testing area in which work may be carried out individually in testing booths and in groups,
- a preparation area,
- an office,
- a cloak-room,
- a rest-room, and
- toilets.

The minimum requirements are

- a testing area in which work may be carried out individually in testing booths and in groups, and
- a preparation area.

The test room shall be easily accessible to the assessors and shall not be located in an area where there is heavy traffic flow, in order to avoid noise and distraction (for example, near a cafeteria).

See the examples given in Figure 1 to Figure 4.

4 Testing area

4.1 General requirements

4.1.1 Location

The testing area shall be located in the immediate vicinity of the preparation area. It is convenient if these two areas are adjacent, but they shall be separated.

The assessors shall not enter or leave the testing area through the preparation area as this could result in bias in the test results.

4.1.2 Temperature and relative humidity

The temperature and relative humidity in the testing area shall be constant, controllable and shall be perceived as comfortable by the assessors.

4.1.3 Noise

The noise level shall be kept to a minimum during the tests. Therefore, it is desirable for the room to be sound-proof.

4.1.4 Odours

The testing area shall be kept free from odours. This can be achieved by installing an air conditioner with activated carbon filters. If necessary, a slight positive pressure may be created in the testing area to reduce the inflow of air from other areas. The testing area shall be constructed from material which is easy to clean and is both odour free and impervious to odours. Furnishings and equipment such as carpets, chairs, etc. shall not emit odours.

It is also necessary to ensure that the cleaning agents used do not leave odours in the testing area.

4.1.5 Decoration

The colour of the walls and furnishings of the testing area shall be neutral so that the colour of samples is not modified. Matt off-white or light neutral grey are recommended colours.

4.1.6 Lighting

Lighting is very important in all sensory testing. It is especially important in the case of colour assessment. The ambient lighting in the testing area shall be uniform, shadow free and controllable. In most cases, lights having a correlated colour temperature of 6 500 K are recommended. In consumer testing, lighting which most closely resembles lighting found in the home should be considered.

4.2 Testing booths

4.2.1 General requirements

In most cases, assessors are required to make independent personal judgements. To limit distractions and to avoid communication between the assessors, they are located in individual testing booths.

4.2.2 Number

The number of booths that can be installed depends on the space available and the tests usually carried out in the testing area. The minimum number of booths is three, but normally there will be between five and ten. This number shall be chosen to allow for sufficient space for movement and for the serving of samples from the serving area.