

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard
for
SENSORY ANALYSIS OF FOODS

PART 2. SPECIFIC METHODS

AS 2542.2.1 PAIRED COMPARISON TEST

1 SCOPE. This standard sets out a method for comparing the sensory properties of two food samples (paired comparison test).

2 FIELD OF APPLICATION. The paired comparison test may be used for the following purposes:

- (a) *Directional difference:* to determine in what way a particular sensory property differs between two samples (e.g. more sweet or less sweet).
- (b) *Preference:* to establish whether there is a preference between two samples (e.g. in consumer tests).

NOTES:

1. The paired comparison test may be conducted as either a unilateral or a bilateral test (see Clause 9.2).
2. The paired comparison test is not valid for simple difference testing.

3 REFERENCED STANDARDS. The following standards are referred to in this standard:

AS 2542 Sensory Analysis of Foods
Part 1—General Guide to Methodology*
Part 3—Glossary of Terms*

4 DEFINITIONS. For definitions of terms relating to sensory analysis, see AS 2542.3.*

5 PRINCIPLE. A pair of samples, one of which may be a control, is presented to each assessor.

The assessors provide responses to questions which are determined by the purpose of the test. The responses are recorded and interpreted.

The paired comparison test is a *forced choice* test in which the assessors must discriminate between the pair of samples. Responses indicating no difference or no preference are not permitted.

6 APPARATUS. The apparatus shall be selected by the test supervisor in accordance with the principles laid down in AS 2542.1.

7 GENERAL TEST REQUIREMENTS.

7.1 Testing Area. The conditions in the testing area shall be in accordance with principles laid down in AS 2542.1 such that conditions do not influence or impair the judgement of assessors.

7.2 Assessors.

7.2.1 Qualifications, selection, aptitude. The qualifications, aptitude and selection of assessors shall be in accordance with the principles laid down in AS 2542.1.

7.2.2 Number of assessors. The number of assessors shall be chosen by the test supervisor according to the type of test. The minimum number of assessors required for statistical purposes is shown in Tables 1 and 2.

To obtain valid results in consumer preference tests, at least 100 assessors shall be used.

* In course of preparation.