10. REFERENCES


INSTITUTE OF FOOD TECHNOLOGISTS, 1981. Sensory evaluation guide for testing food and beverage products. *Food Technology* 37 (11), 50-59.


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Earning easy money is your aim?

"The coffee project" is the name of the game!

You are good with words,
Love drinking coffee and
Have a few hours free in the afternoons...

Call us NOW!

Find out more

012 420 3238

If you snooze you loose!
Coffee Questionnaire:

Good Morning/Afternoon
I am __________________________ FROM DEPT OF FOOD SCIENCE, UNIVERSITY OF PRETORIA.

You’re phoning in connection with the coffee project [YES][NO]?

We are recruiting participants for a coffee tasting project at the University of Pretoria.

Payment is at R21.19/h thus giving you a minimum of R630 for 2 hours work per day for 20 days.

Do you drink coffee? [YES][NO]

Are you willing to drink black coffee? [YES][NO]

What type of coffee do you drink? [INSTANT]

How often do you drink coffee? [AT LEAST ONCE A DAY]

Are you available from 14:00 to 16:00 every weekday from 23 August to 30 September (exception public holiday 25 Sept)? [YES][NO]

Invite him/her to an information session the 18th Aug 2000 from 14:00 - 15:00 at the Department of Food Science room 2-35 (Old agriculture building – Main Campus – cnr of Roper and Prospect Road, Brooklyn)
APPENDIX 3: Basic taste recognition test for the identification of potential panellists for descriptive analysis
(ASTM Committee E-18 (1968) sensitivity for basic taste sensations)

PANEL SCREENING TEST 1

Panellist number: ______________________

Name: ____________________________ Contact number: ______________________________

Date: _______________ Age: (15-19/25-29/30+) Sex: (M/F)

On your tray you have 5 samples. Indicate after each sample the taste you are recognizing. You may NOT go back and forth among samples

TEST TRAY NUMBER: _______________

Test 1

<table>
<thead>
<tr>
<th>Sample</th>
<th>Sweet</th>
<th>Sour</th>
<th>Salty</th>
<th>Bitter</th>
<th>Nothing detected</th>
</tr>
</thead>
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Test 2

<table>
<thead>
<tr>
<th>Sample</th>
<th>Sweet</th>
<th>Sour</th>
<th>Salty</th>
<th>Bitter</th>
<th>Nothing detected</th>
</tr>
</thead>
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APPENDIX 4: Forced choice threshold test for the identification of potential panellists for descriptive analysis
(ASTM Committee. E 679 (1991) sensitivity for specifically bitter and sour)

PANEL SCREENING TEST 2
Panellist number: ____________________

You are receiving 7 sets tasting solution of 3 samples each. Taste the samples. In each set, indicate which sample is different from the other two

TEST TRAY NUMBER: ________________

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
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<tbody>
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<td>4</td>
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<td>7</td>
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</tbody>
</table>
APPENDIX 5: Duo-trio test for the identification and training of potential panelists for descriptive analysis
(1) Coffee vs. chicory blend, (2) coffee caffeinated vs. decaffeinated, (3) pure coffee vs. coffee blend

PANEL SCREENING TEST 3

Panellist number: ______________________

On your tray you have a marked control sample (R) and two coded samples. One sample is identical to R and the other different. Which of the coded samples is DIFFERENT from R?

TEST TRAY NUMBER: _________________

Test 1

Sample number different from R: 347 982

*************************************************************************

Test 2

Sample number different from R: 687 417

*************************************************************************

Test 3

Sample number different from R: 329 541

*************************************************************************
APPENDIX 6: Odour identification and description test identification and training of potential panellists for descriptive analysis

PANEL SCREENING TEST 4

Panellist number: ________

You are receiving smelling strips, each with a specific odour. Wave the strip a few centimetres away from your nose and write down short words (less than 10) or descriptives to indicate what you smell. After three minutes, we will indicate that you must move on to the next sample.

e.g. Sample A: sweet, fruity, berry-like, strawberry

Sample 578: _Apple__________________________________________________________

Sample 276: _Black Pepper____________________________________________________

Sample 903: Vanilla___________________________________________________________

Sample 154: Lemon____________________________________________________________

Sample 427: Cinnamon________________________________________________________

Sample 289: Caramel__________________________________________________________

Sample 175: Mushroom_______________________________________________________
Sample 371: Orange

Sample 648: Hazelnut

Sample 025: Grassy Green

Sample 473: Chocolate

Sample 728: Woody

Sample 213: Mint

Sample 558: Herbal

Sample 306: Buttery

Sample 470: Melon

Sample 596: Coffee
Sample 432: Lime

Sample 729: Smoky

Sample 658: Cherry
APPENDIX 7: Descriptive analysis scoring of coffee by the trained sensory panel

**DESCRIPTIVE ANALYSIS SCORING OF COFFEE**

Date: ____________________  Panellist number: ________________

Please evaluate the following attributes of these samples of coffees.

Make vertical lines on the horizontal line to indicate your rating of the attribute of each sample. Label each vertical line with the code number of the sample it represents. You may have water and biscuits in between samples.

Your sample numbers: _______ _______ _______ _______ _______

1. Colour:

   [Light brown] [Black brown]

2. Coarseness:

   [Very fine (powdery)] [Very coarse]

3. Symmetry:

   [Asymmetric] [Symmetric]

4. Density:

   [Perforated] [Compact/Dense]

5. Fishy smell:

   [No fishiness] [Strong fishy aroma]
6. Solubility:

| Insoluble | Rapidly soluble |

7. Roasted smell:

| Lightly roasted | Burnt |

8. Sweet smell:

| Very bland | Intensely sweet |

9. Sour /acidic smell:

| Bland | Strongly acidic |

10. Malty smell:

| No maltiness | Intensely malty |

11. "Meaty" (Fenugreek) smell:

| No Fenugreek | High Fenugreek |

12. Spicy smell:

| No spiciness | Intensely spicy |
13. **Earthy smell:**

| No earthy aroma | Strong earthy aroma |

14. **Mushroom smell:**

| No mushroom aroma | Strong Mushroom aroma |

15. **“Cacao” (dark chocolate smell):**

| Light/toffee/caramel notes | Dark chocolate |

16. **Toasted cereal smell:**

| No toasted cereal | Intense toasted cereal |

17. **Nutty smell:**

| No nuttiness | Intense nuttiness |

18. **Leather/animal smell:**

| No animal/leather smell | Intense animal/leather smell |

19. **“Root” (cooked sweet potato smell):**

| No root smell | Intense root smell |

20. **Cloudiness:**

| Clear | Cloudy (opaque) |
21. Bitter taste:

| Not bitter                  | Intense bitter |

22. Roasted taste:

| Lightly roasted             | Burnt          |

23. Acidic taste:

| No acidic taste             | Intensely acidic |

24. Sweetness:

| No sweet taste              | Molasses sweet |

25. Malty taste:

| No maltiness                | Intense malty  |

26. Nutty taste:

| No nuttiness                | Intense nuttiness |

27. Earthy taste:

| Least earthy                | Most earthy     |

28. Astringency:

| Not astringent              | Strong astringency |

29. Body:

| Watery                      | Full bodied     |

PLEASE MAKE SURE ALL THE SAMPLES ARE EVALUATED FOR ALL THE ATTRIBUTES!!!!
APPENDIX 8: Consumer coffee survey and scoring sheet

COFFEE SURVEY

Dear Sir/Madam

We appreciate you volunteering to participate in this survey. As your field worker should have explained to you, you received 11 samples of coffee to test and evaluate over the next 14 days (at least one coffee a day, but feel free to evaluate more samples).

You may evaluate the coffee samples in any order, but please make sure you evaluate on the form supplied with the samples.

Make your coffee as you would normally in a mug/coffee cup, add milk and/or sugar if desired (sugar sachets and milk measurement cup are supplied). PLEASE KEEP THE AMOUNT OF MILK AND SUGAR CONSTANT OVER THIS TRIAL PERIOD (thus if you drink 2 sachets of sugar and no milk today, please continue to drink it that way for all the samples). Evaluate the coffee sample immediately after consuming it to ensure freshness of evaluation.

Name: __________________________________________ Contact number: __________________________

Date: ______________ Age: (15-19/20-24/25-29/30-39/ 40+) Sex: (M / F)

Income: (optional)

Occupation/Job description: ________________________________________________________________

Nationality: (optional)

[Black] [White] [Coloured] [Asian]

City: __________________________ Suburb: __________________________

How do you drink you coffee?
[black] [black with sugar] [milk/cream] [milk & sugar] [artificial sweetener]

How many cups of coffee do you drink per day? [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5+
When do you drink coffee?

<table>
<thead>
<tr>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
</tr>
</tbody>
</table>

What other drinks do you drink more or just as much as coffee (may mark more than one)?

<table>
<thead>
<tr>
<th>MILO</th>
<th>HOT CHOCOLATE</th>
<th>HORLICKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEA</td>
<td>BEER</td>
<td>WINE</td>
</tr>
<tr>
<td>DISTILLED SPIRITS</td>
<td>BAR MIXES</td>
<td>LIQUORS</td>
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<tr>
<td>(e.g. gin &amp; tonic)</td>
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<tr>
<td>ENERGY DRINKS</td>
<td>ISOTONIC SPORT DRINKS</td>
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<tr>
<td>COKE COLA</td>
<td>OTHER CARBONATED SOFT DRINKS</td>
<td>OTHER (specify)</td>
</tr>
</tbody>
</table>

Where do you drink coffee most often?

- Home
- Work
- Friends
- Shopping
- Coffee shop/Restaurant

How often do you drink any of the following coffee types?

<table>
<thead>
<tr>
<th>Coffee Type</th>
<th>Regularly</th>
<th>Sometimes</th>
<th>Never</th>
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</thead>
<tbody>
<tr>
<td>Instant coffee</td>
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<tr>
<td>Filter coffee</td>
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<td>Flavoured coffee</td>
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<tr>
<td>Iced coffee</td>
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<tr>
<td>Instant coffee blends</td>
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</table>

What coffee brand are you currently purchasing for your home?

Why?

- Taste
- Price
- Image
- Tradition
- Other reason: __________________________

Which of the following descriptions do you think suit you the best?

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
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<tbody>
<tr>
<td>Group A</td>
<td>Competitive individualist, desire to stand out and excel, seek power and admiration from others, stubborn, venturesome, driven</td>
</tr>
<tr>
<td>Group C</td>
<td>Wants to be loved and appreciated by others, seek friendship and accepted place within a group, warm-hearted, affected by feeling, easily led, sensitive,</td>
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<tr>
<td>Group D</td>
<td>Desire freedom from obligation, independent and little interest in either influencing others or being influenced, critical, calm, realistic, down to earth, resourceful</td>
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</tbody>
</table>
Taste each of the samples of coffee and indicate [X] how much you like or dislike each one:

<table>
<thead>
<tr>
<th>Sample number</th>
<th>Like extremely</th>
<th>Like very much</th>
<th>Like moderately</th>
<th>Like slightly</th>
<th>Neither like nor dislike</th>
<th>Dislike slightly</th>
<th>Dislike moderately</th>
<th>Dislike very much</th>
<th>Dislike extremely</th>
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