

begun to melt, press it with the tongue to the roof of the mouth to judge the smoothness and detect the presence of any discernible particles. The flavour and oral sensations of the chocolate should now be assessed, while masticating and working the chocolate around the mouth dissolving it in the saliva and clearing it from the palate. Finally, using the other half of the sample, bite through with the incisors to gauge the hardness of the chocolate.”

In some cases, these instructions would be considered unnatural. For example, in situations where the goal is to assess the consumer experience with a product it may be unnecessary and unnatural to provide tasting instructions. However in other instances, tasting instructions may be necessary in order to replicate testing and obtain comparable results across either different groups of evaluators or different products. Carvalho da Silva and colleagues (2011) demonstrated that, within a typical sample of the population in the UK, there are three distinct groups of eating behaviours that exist naturally when consumers evaluate chocolate. It is possible that these differences in eating styles could influence the consumer experience with and therefore their perception of chocolate products. With this in mind, when carrying out descriptive analysis, it may be important for participants to evaluate in the exact same manner to get consistent, comparable impressions of the products; whereas in consumer testing it may be important to avoid these types of instructions to accurately capture these different product experiences.

21.4 General considerations/good sensory testing practices

21.4.1 Blinding codes

Similarly to the use of coloured lights and presentation order, the purpose of using blinding codes on samples is to avoid systematic bias as well as personal biases that evaluators may unintentionally impose upon the samples being tested. For example, an individual participating in a sensory test may for some reason think that certain samples are the same and try to make their evaluations accordingly (to get the “correct” answer). To encourage the individual to consider the samples separately, they should be labelled with different blinding codes. Blinding codes generally consist of randomly assigned three digit numbers. As much as possible, it is best to ensure that these numbers do not have potential connections that the participants could be familiar with, such as local area codes, or other prior connotations (e.g. 666, 911, 888 etc.).

21.4.2 Sensory testing environment

There are many thorough resources available for the design of sensory testing facilities (i.e. Eggert and Zook, 2008). However, when the design of a brand new facility is not possible, it is important to follow principles of good sensory

practice to ensure that the data collected is valid and consistent. The sensory testing environment must be kept clean and organised so as to avoid any potential biasing of participants. For example, if sample wrappers are left in the waste basket where participants can see, this may bias their responses. Best practice requires the sensory testing environment to be free of distractions. These may present themselves in the form of noises, odours, high foot traffic, bright colours, poor lighting, poor air flow or climate control and so on. Therefore, interruptions should be minimised when possible, all areas should be decorated with neutral colours and climate controls should be set so that the participants are comfortable, while odours are minimised. Additionally, evaluation areas should have sufficient space and light to accommodate evaluations.

21.4.3 Sample serving containers

Similarly to the design of the sensory testing environment, ideal sample serving containers should be plain, so as to not distract the participant. This is one way in which sensory testing differs from market research, where the package design would be included as part of the overall experience. If using containers with lids, the lids should be easy to remove so as not to be a source of frustration or distraction for the panelist. Serving containers or plates should be plain and of neutral colour or clear and should be consistent across all samples. Additionally, samples should be clearly labelled with their corresponding blinding codes so there is no confusion as to which sample is which, and which sample is to be evaluated when. Additionally, if more than one sample is being presented at the same time to the panelist, it can be useful to include a visual aid to reiterate the order in which the samples will be evaluated. For example, when presenting numerous samples on a serving tray it may be useful to include a template on the tray that shows which sample is which, and when it is tasted, in addition to the instructions that are given to the participant.

21.4.4 Recruitment

It is not usually difficult to get individuals to volunteer to taste chocolate! However, the appropriateness of the incentive should always be considered, if one is provided. Additionally, it can potentially be beneficial if panelists are pre-screened for known defects of taste or smell, temporary or permanent upper respiratory conditions that could negatively affect their ability to taste and/or smell (i.e. a head cold), a history of choking or difficulty in swallowing or allergies to any of the ingredients in the samples being evaluated. The specific research goals of a given test will determine if there are other screening factors, such as familiarity with the product or liking of the category. Additionally, as mentioned previously, panelists can be screened beforehand for sensory function.