**Nutrition Toolkit – Answers and Guidance**

# **Birmingham Public Health Measurement Toolbox**

**Measuring BMI**

Body Mass Index (BMI) is a measure which uses your weight and height to work out if your weight is healthy. The calculation divides an adult’s weight in kilograms by their height in metres squared. It is slightly different for children and young people as it also takes into account their age.

Follow this link to the NHS BMI calculator: [Calculate your body mass index (BMI) - NHS - NHS (www.nhs.uk)](https://www.nhs.uk/health-assessment-tools/calculate-your-body-mass-index/)

For more information on BMI ranges and the accuracy of BMI follow this link: [What is the body mass index (BMI)? - NHS (www.nhs.uk)](https://www.nhs.uk/common-health-questions/lifestyle/what-is-the-body-mass-index-bmi/)

**Measuring Fruit and Vegetable Intake**

Dietary screeners are used to obtain basic information about a limited number of food or drinks over a period of time.

The [Five-a-day Community Evaluation Tool (FACET)](https://www.nutritools.org/tools/132) is a self-completion questionnaire that focuses on intake of fruit and vegetables.

The screener you can use to measure fruit and vegetable intake is below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Food type** | **0 portions** | **1 portion** | **2 portions** | **3 portions** | **4+ portions** |
| Breakfast cereal |  |  |  |  |  |
| Fruit for breakfast, e.g. on cereal |  |  |  |  |  |
| Crisps |  |  |  |  |  |
| Fruit as a between meal snack |  |  |  |  |  |
| A glass of pure, unsweetened fruit juice (not squashes or fruit drink) |  |  |  |  |  |
| Fruit as a starter to a meal |  |  |  |  |  |
| A baked potato |  |  |  |  |  |
| A bowlful of home-made style soup |  |  |  |  |  |
| Portions of vegetables with main meal (include baked beans and pulses as vegetables but not potatoes |  |  |  |  |  |
| Any type of meat |  |  |  |  |  |
| A vegetable based meal |  |  |  |  |  |
| Any type of fish |  |  |  |  |  |
| A bowlful of salad |  |  |  |  |  |
| Fruit as dessert |  |  |  |  |  |

*Guidance: If you are delivering an intervention with aim of assessing the impact on dietary intake, ask participants to complete the screener both pre and post intervention. You can then compare the data collected*.

**Measuring Food Literacy**

Food literacy is the ability to understand and make informed decisions about food, including knowledge of nutrition, cooking skills and the social and environmental impact of food choices.

The [OzHarvest’s six-week NEST (Nutrition Education and Skills Training)](https://www.mdpi.com/2072-6643/12/8/2197) program produced a pre and post survey which included questions to measure food literacy, confidence and self-efficacy, and food behaviours.

Please see example questions below, adapted and directly from the NEST pre and post survey, which can be used in a survey to evaluate health literacy:

**Food Literacy:**

1) How many portions of fruit and vegetables should you eat every day for good health? *Mark one*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 |

*Guidance – 5 portions is recommended for good health, every day.*

2) What is the recommended daily intake of fibre for adults? *Mark one*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 15g | 20g | 25g | 30g | 35g | 40g |

*Answer – 30g of fibre is recommended each day in adults for good health.*

**Nutrition Label**

Please use the nutrition information table to answer the following questions:

|  |  |  |
| --- | --- | --- |
| **Typical Values** | **Per 100g** | **Per average slice (40g)** |
| Energy (kJ) | 1050 kJ | 420 kJ |
| Energy (kcal) | 248 kcal | 99 kcal |
| Fat | 2.9g | 1.2g |
| of which saturates | 0.6g | 0.2g |
| Carbohydrate | 44.3g | 17.7g |
| of which sugars | 2.6g | 1.0g |
| Fibre | 2.1g | 0.8g |
| Protein | 9.8g | 3.9g |
| Salt | 0.98g | 0.39g |

3) In 100g of this product, how many grams of sugar are there?

…*A = 2.6g*……………………………

4) How much energy is there per average slice of this product? In both kJ and kcal.

……*A = 420 kJ and 99 kcal*………………………...

**Confidence and self-efficacy:**

*On the scale of 1-5, 1 is not at all confident and 5 is extremely confident.*

5) On a scale of 1-5, how confident are you that you can eat the recommended number of servings of fruit and vegetables each day? *Mark only 1 number*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 |

6) On a scale of 1-5, how confident are you that you can buy healthy foods on a budget? *Mark only 1 number*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 |

7) On a scale of 1-5, how confident do you feel to follow a simple recipe? *Mark only 1 number*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 |

8) On a scale of 1-5, how confident do you feel about tasting foods that you have not eaten before? *Mark only 1 number*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 |

9) On a scale of 1-5, how confident do you feel about preparing and cooking new foods and recipes? *Mark only 1 number*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 |

*Guidance: Advice and assurance should be given to individual to increase their confidence, depending on the organisation or intervention*

**Food Behaviours:**

10) How often do you read the Nutrition Information Label on food items when you go shopping? *Mark one only*

|  |  |  |  |
| --- | --- | --- | --- |
| Always | Often | Sometimes | Never |

11) How often do you read the ingredients list on food items when you go shopping? *Mark one only*

|  |  |  |  |
| --- | --- | --- | --- |
| Always | Often | Sometimes | Never |

12) How often do you look at the price per kilo when shopping? *Mark one only*

|  |  |  |  |
| --- | --- | --- | --- |
| Always | Often | Sometimes | Never |

13) How often do you change recipes to make them healthier? *Mark one only*

|  |  |  |  |
| --- | --- | --- | --- |
| Always | Often | Sometimes | Never |

14) How often do you add salt to food during cooking? *Mark one only*

|  |  |  |  |
| --- | --- | --- | --- |
| Always | Often | Sometimes | Never |

15) How often do you choose wholemeal/wholegrain varieties of carbohydrates? *Mark one only*

|  |  |  |  |
| --- | --- | --- | --- |
| Always | Often | Sometimes | Never |

*Guidance: Advice should be given to individuals depending on their results and organisational/intervention capacity. Results will change depending on the individual.*

**Measuring Food Insecurity**

The **Food Insecurity Experience Scale (FIES)** consists of 8 questions about people’s access to food.

The questions are as follows:

1. You were worried you would not have enough food to eat?

2. You were unable to eat healthy and nutritious food?

3. You ate only a few kinds of foods?

4. You had to skip a meal?

5. You ate less than you thought you should?

6. Your household ran out of food?

7. You were hungry but did not eat?

8. You went without eating for a whole day?

More information about the tool can be found by following this link: [Food Insecurity Experience Scale](https://www.fao.org/in-action/voices-of-the-hungry/fies/en/).