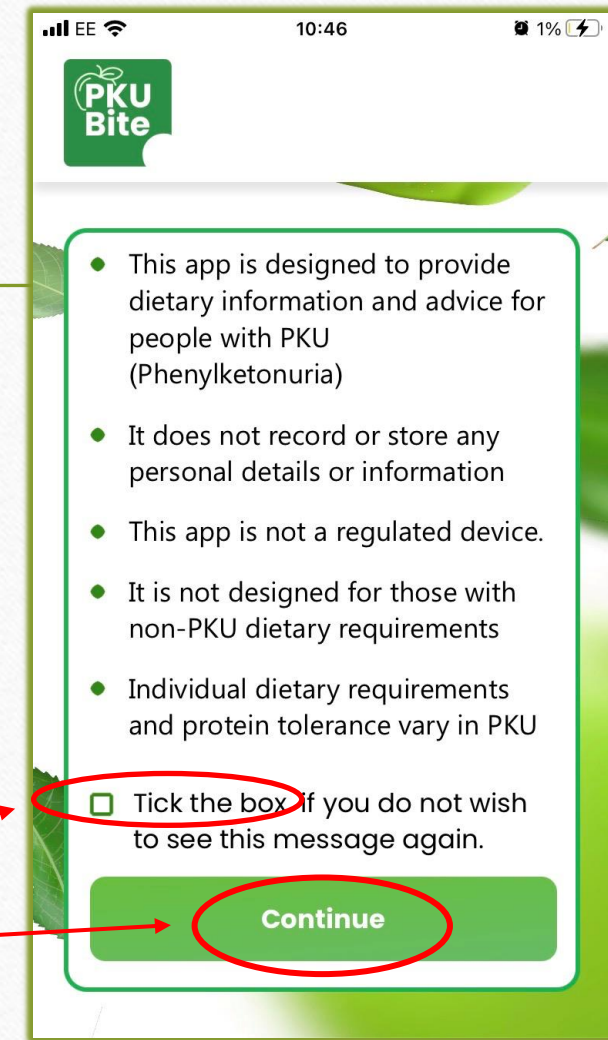# PKU Bite

A new Diet App for PKU

You are now ready to use the App!

- This is the first screen you will see when you open the App.

- It just explains what the App 'is' and 'is not' for safety reasons.

- Once you have read this you can choose not to see this screen again by clicking on the tick box.
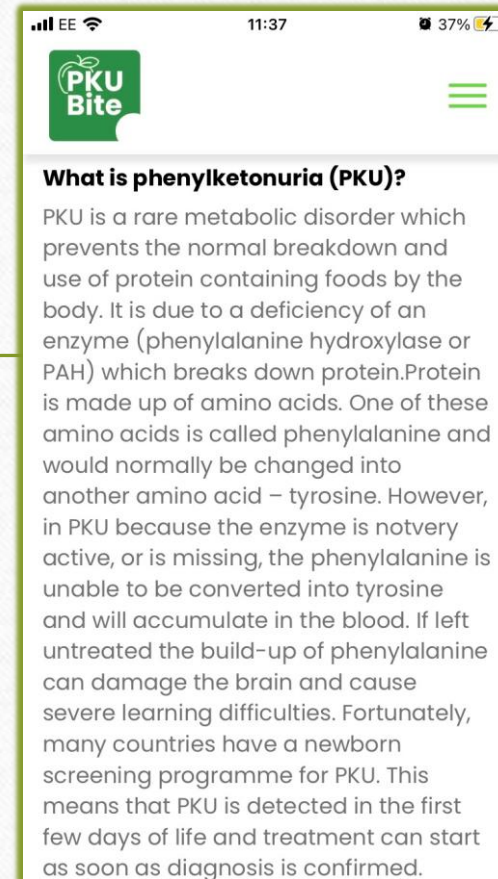
- Then click on '**Continue**'.

Using the App

- This is the **Home screen** 🏠

- You can search by the **name of a food** 🔍 or by looking up a **food category** 🍎

- There is also a **protein exchange calculator** 🖩 for working out the number of exchanges (like the NSPKU Exchange Ready Reckoner).

- In the top left corner is the **menu** which also has an '**About PKU**' option 💬
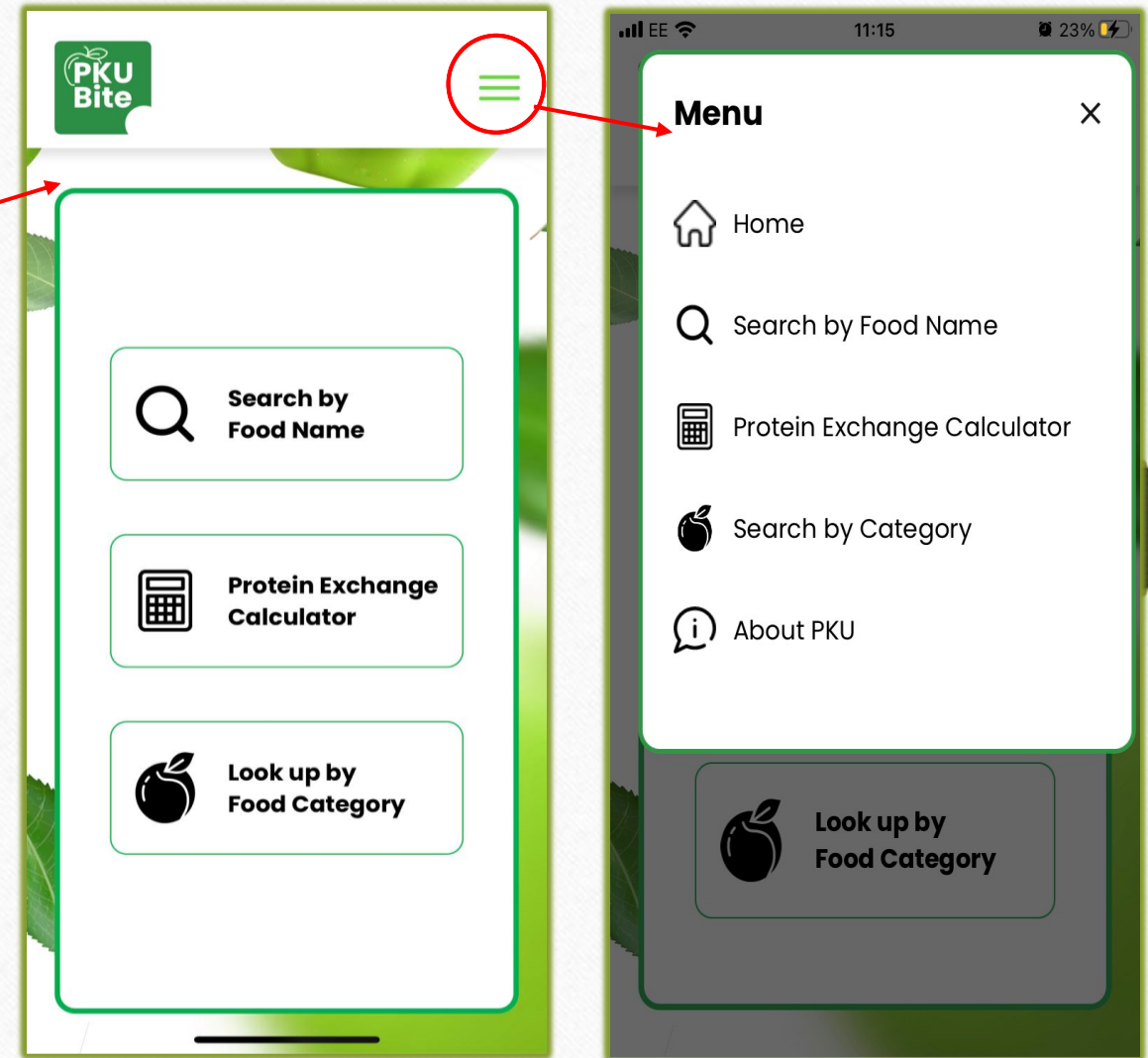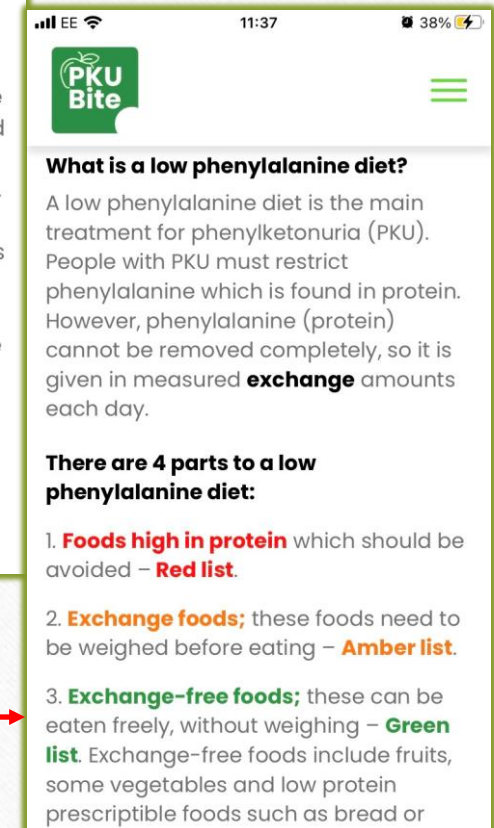
About PKU

- This section is background information about PKU.

- It talks about the traffic light system that is used in the App

What is phenylketonuria (PKU)?

PKU is a rare metabolic disorder which prevents the normal breakdown and use of protein containing foods by the body. It is due to a deficiency of an enzyme (phenylalanine hydroxylase or PAH) which breaks down protein.Protein is made up of amino acids. One of these amino acids is called phenylalanine and would normally be changed into another amino acid – tyrosine. However, in PKU because the enzyme is notvery active, or is missing, the phenylalanine is unable to be converted into tyrosine and will accumulate in the blood. If left untreated the build-up of phenylalanine can damage the brain and cause severe learning difficulties. Fortunately, many countries have a newborn screening programme for PKU. This means that PKU is detected in the first few days of life and treatment can start as soon as diagnosis is confirmed.

What is a low phenylalanine diet?

A low phenylalanine diet is the main treatment for phenylketonuria (PKU). People with PKU must restrict phenylalanine which is found in protein. However, phenylalanine (protein) cannot be removed completely, so it is given in measured **exchange** amounts each day.

There are 4 parts to a low phenylalanine diet:

1. **Foods high in protein** which should be avoided – **Red list**.

2. **Exchange foods;** these foods need to be weighed before eating – **Amber list**.

3. **Exchange-free foods;** these can be eaten freely, without weighing – **Green list**. Exchange-free foods include fruits, some vegetables and low protein prescriptible foods such as bread or
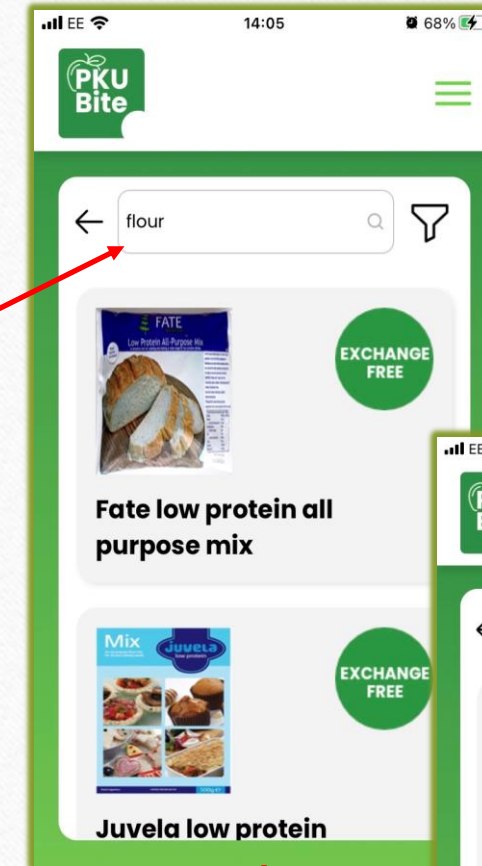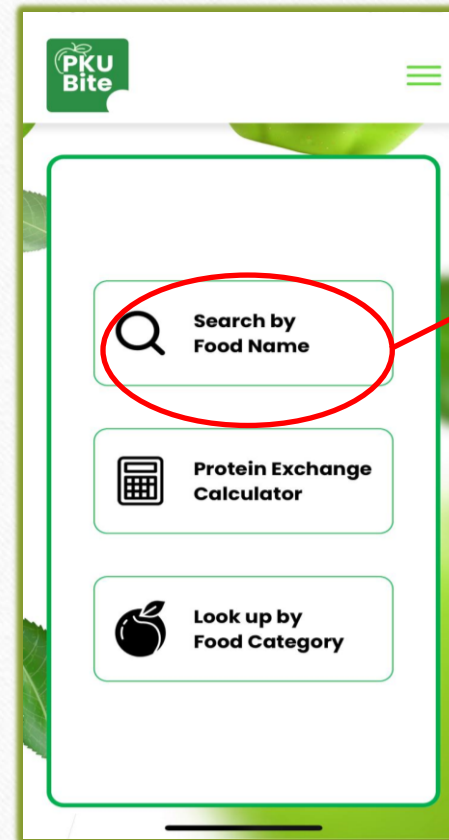
Scroll down

The PKU diet traffic light system

- All foods in the App have one of 6 coloured circles.

- **Green exchange-free foods**

- **Amber/orange exchange foods**

- **Red high protein avoid foods**

- **Green/Amber** **'protein check'** foods may be **exchange-free** but may also require weighing as an **exchange** based on their protein content and the list of ingredients on the food label.

- **Amber/Red** **'caution'** foods may be **exchange** foods that require weighing or may be foods to **avoid** based on their protein content on the food label.

- **Info only** foods are food ingredients or food additives that you might see on a food label list of ingredients.

Searching for a food

- If you click on **'Search by Food Name'**, when you start typing foods will start to appear – you may not need to type the whole word for the food to come up.

- Type in flour.

- Any foods with that name in their title, or foods related to that name, will appear.

- Any foods that are exchange-free (**green**) will always appear first (in alphabetical order), as you scroll down the list, **green/amber** foods will appear next, then **amber**, **amber/red**, **red**, then **info only**.

Scroll down
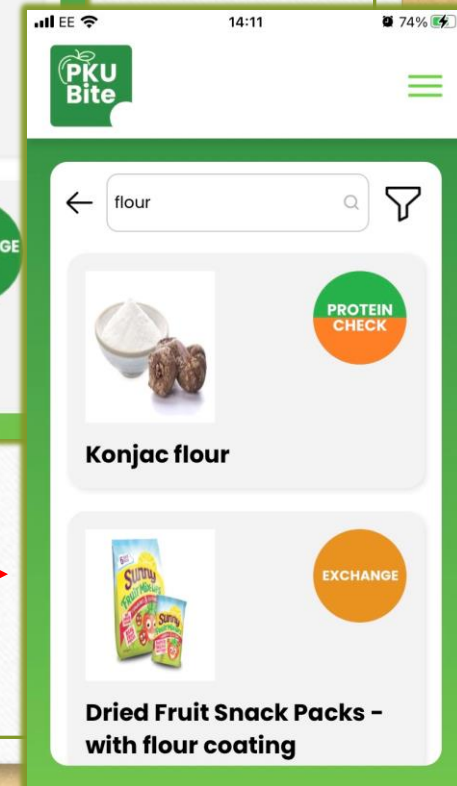
Food information

- Click on Fate low protein all purpose mix

- If you click on a food there are several icons at the bottom of the screen with additional information.

- You can click on the icon or swipe the screen from right to left to go to the next screen.
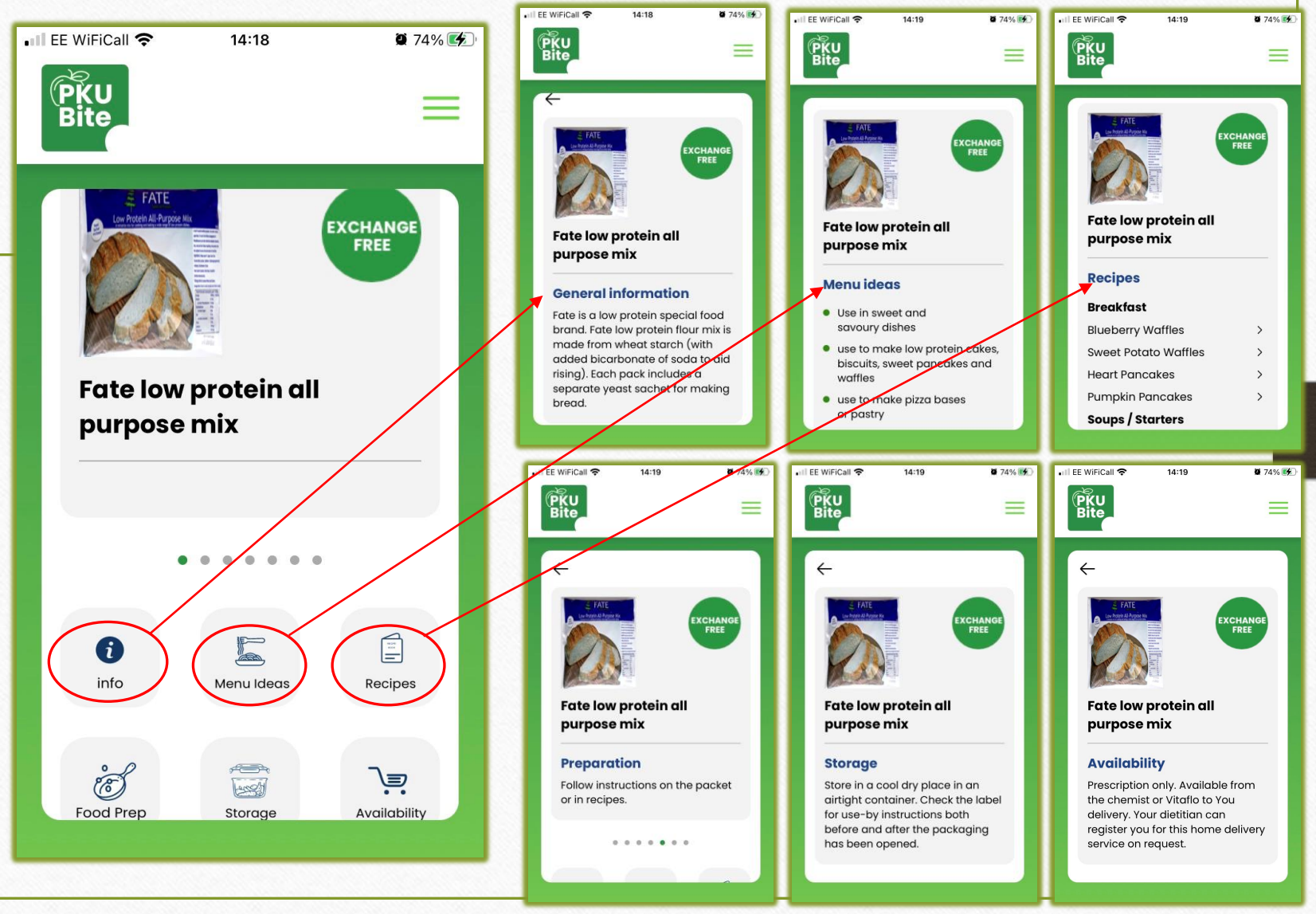
Recipes

- The Recipes page lists recipes in groups e.g. starters, main meals, desserts.

- Click on a recipe name and it will take you to the recipe.
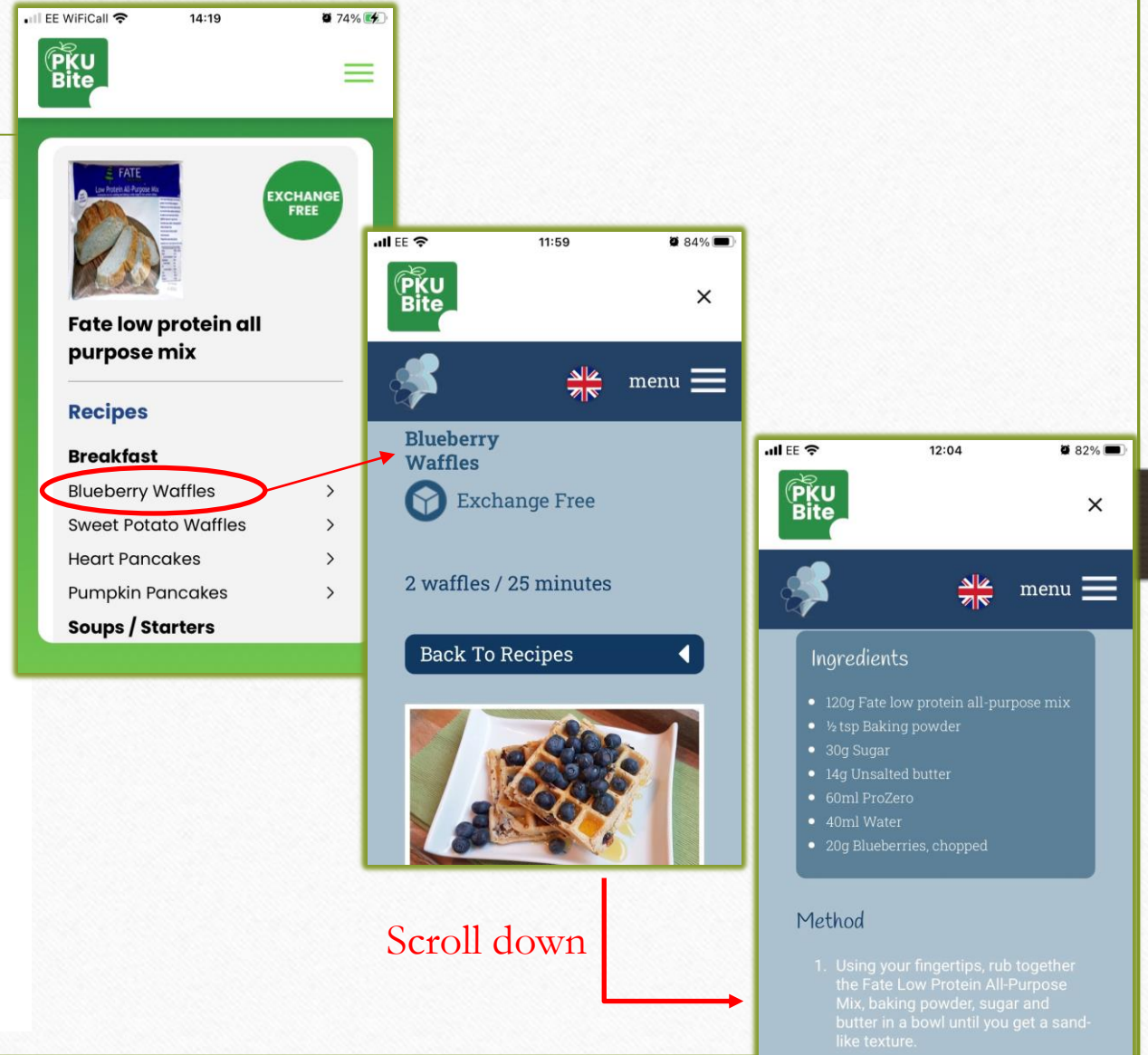
Scroll down

General functions

- The PKU Bite icon will take you back to the home screen.

- You can swipe right to left to go to the next screen.

- Swipe from left to right to go back to the previous screen or click on the arrow on the top left

- You can also scroll down the page to see more information on that page.
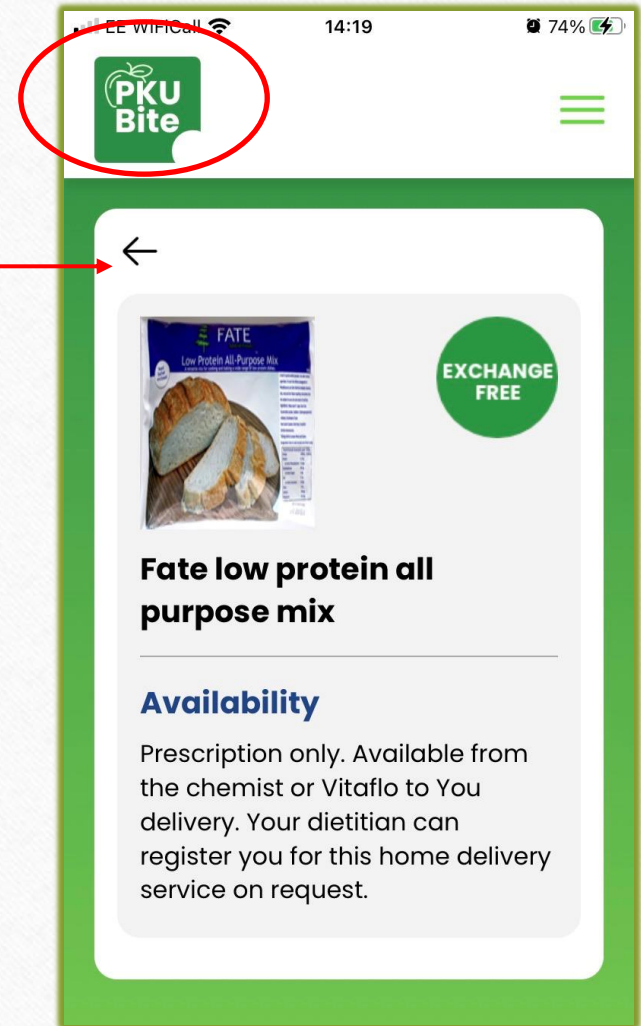
Food information

- The colour coded foods differ in the information on the first screen.

- Here is an example of a **green**, **green/amber**, **2 ambers**, **amber/red**, **red** and **info only** food.

- On all screens you can scroll down for the 6 icons seen in the first picture.

- Exception: **red** and **info only** foods only have **info** but no other icons/screens.
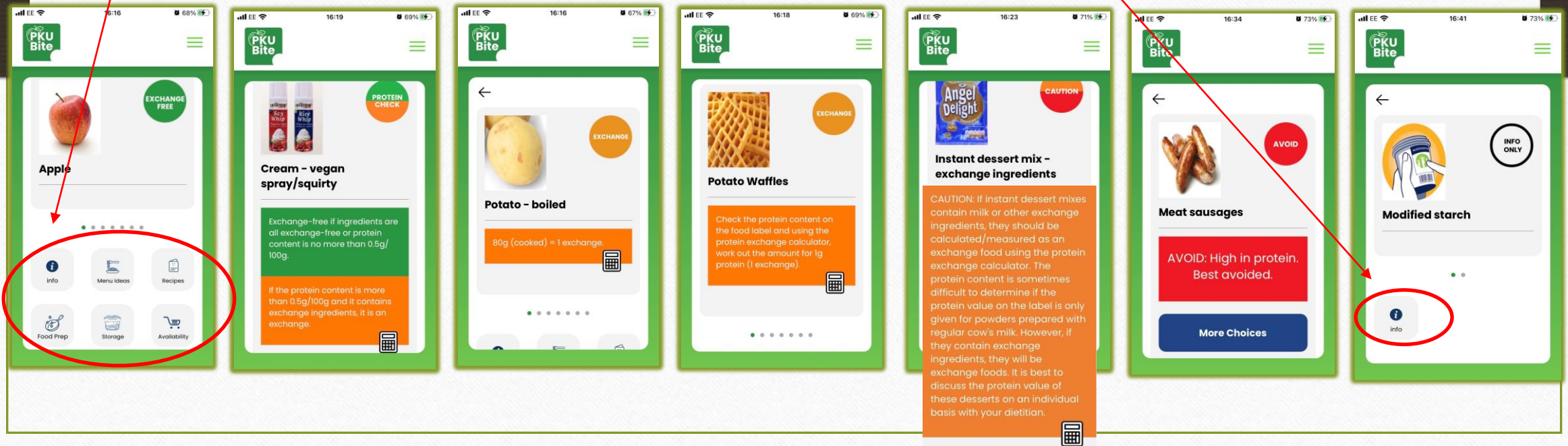
More Choices

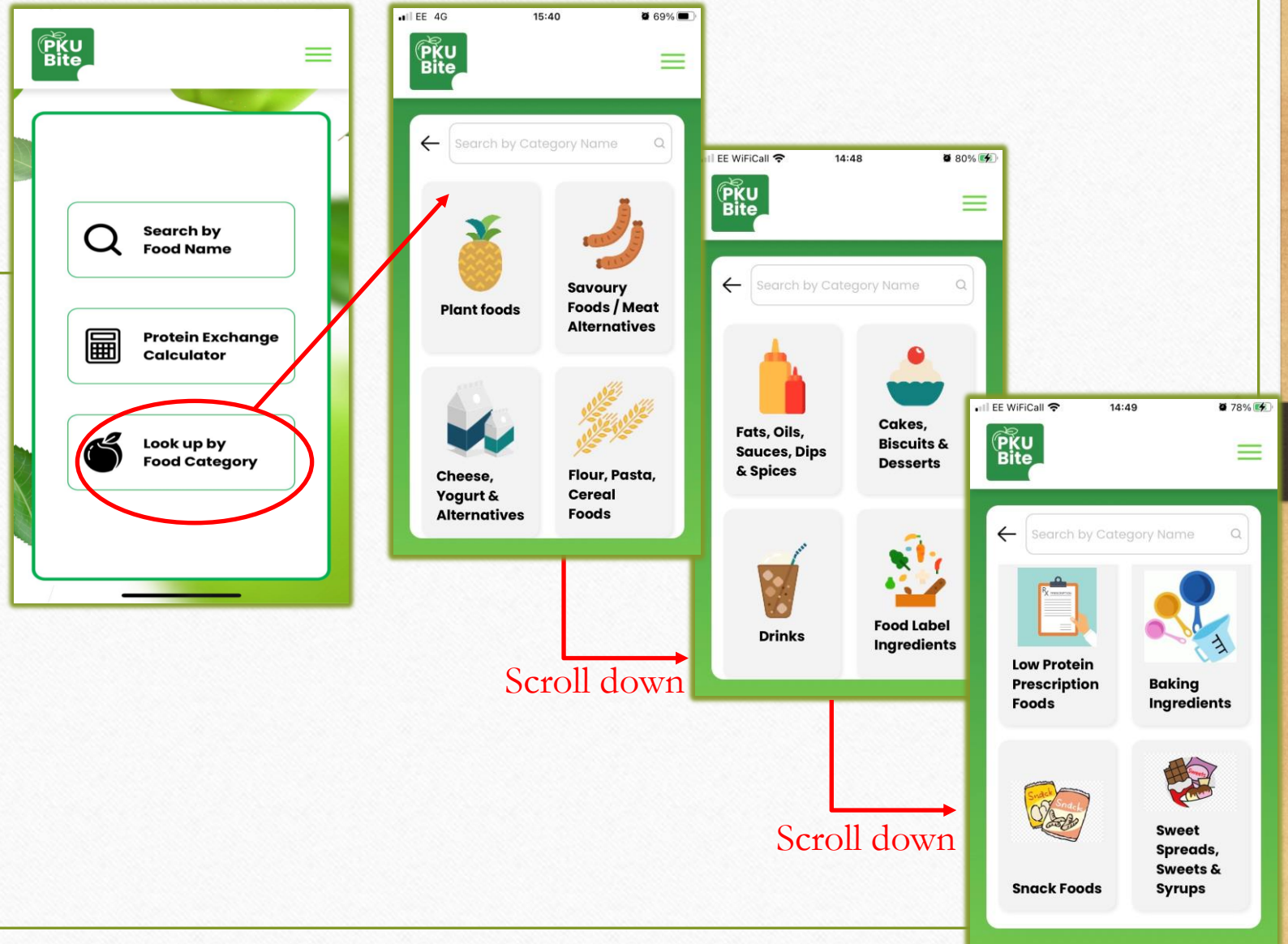- The 'More Choices' box gives you a link to exchange-free food choices that may be more suitable.
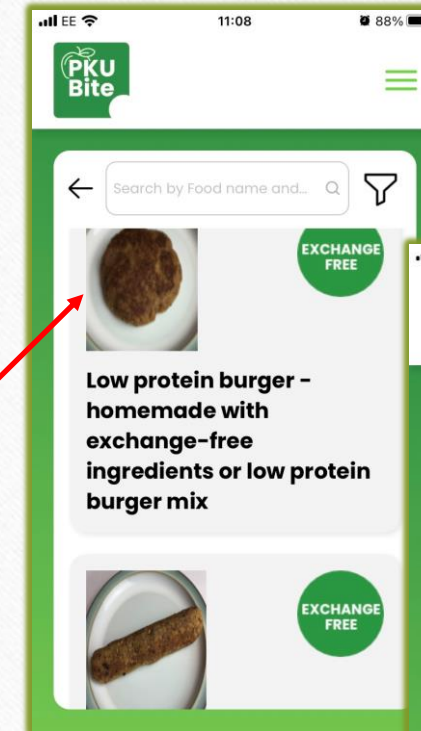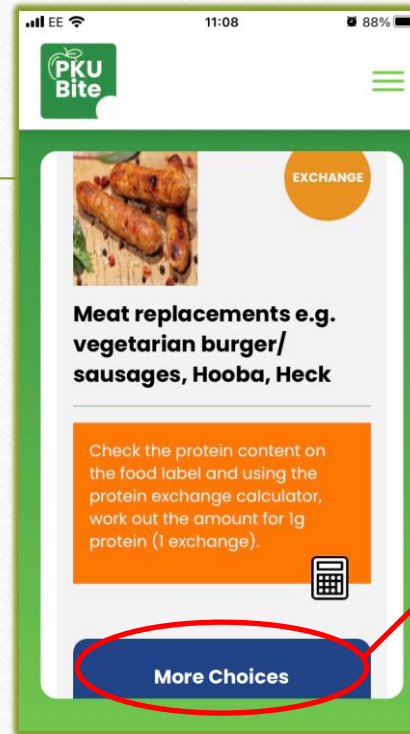
Scroll down
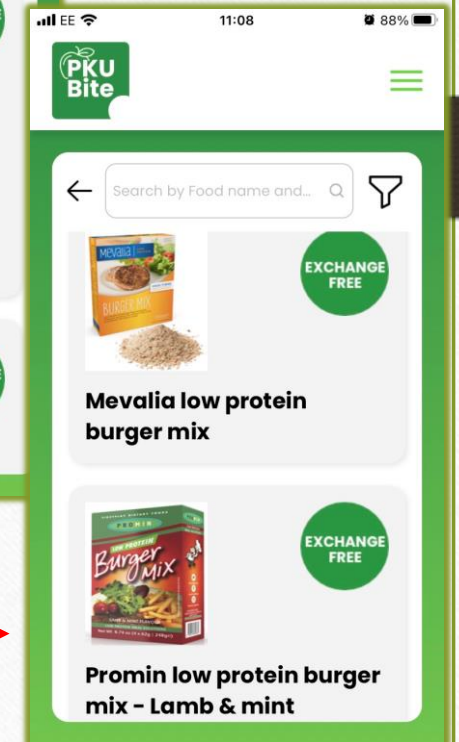
Searching by food category

- You can also search by food category.

- There are 12 categories.

- Foods within each category are listed alphabetically with all **green** foods first, then **green**/**amber**, **amber**, **amber**/**red**, **red**, **info only**.


Scroll down

Scroll down

Aspartame

- The filter icon ⛢ appears when you search by food name.

- Click on it, and a pop up '**Aspartame warning**' box appears, click '**Yes**' to open a list of all foods in the App that may contain aspartame.

- A green dot appears to show that the filter is being used ⛢

- The aspartame warning ⚠️ **Aspartame Warning** warns you that the food may contain aspartame so you should check the food label and avoid if it does have aspartame.
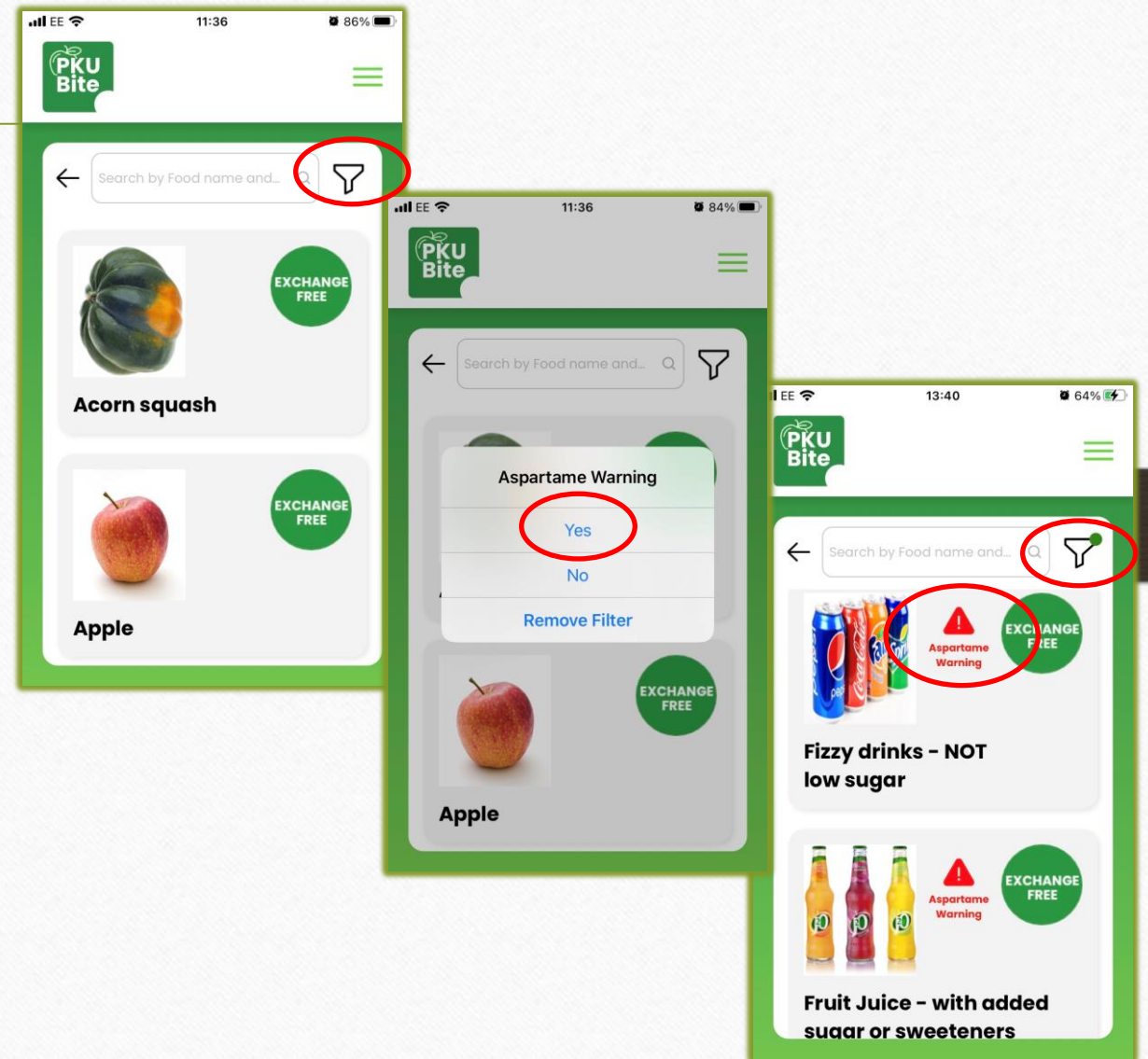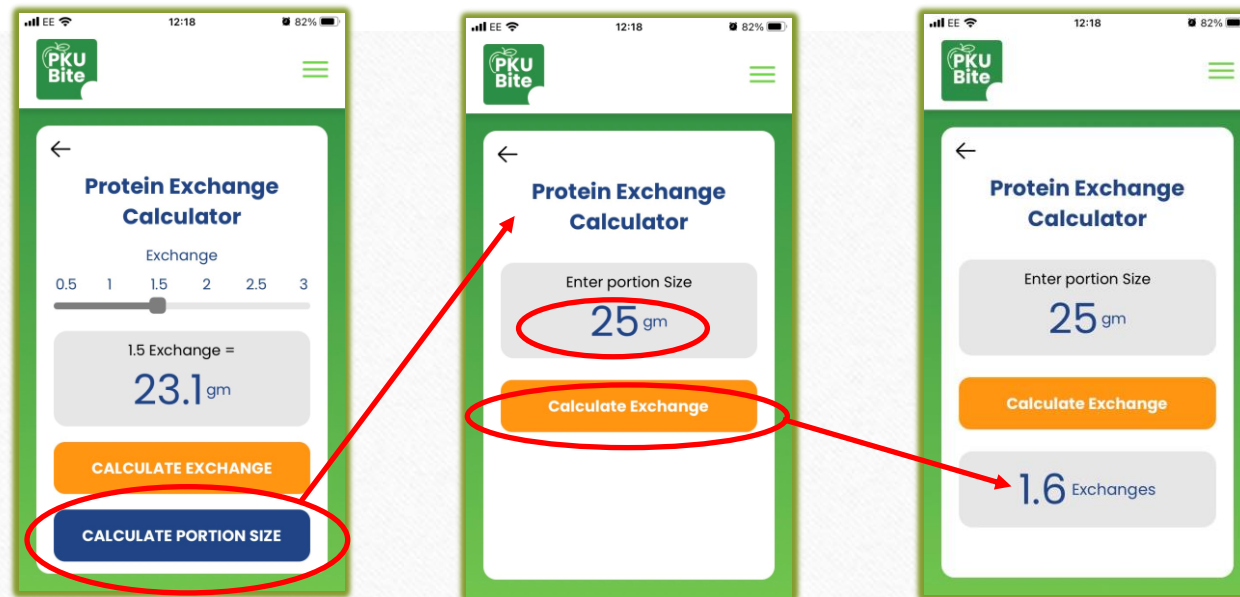
Using the protein exchange calculator

- On the home page click on the **Protein Exchange Calculator**.

- Type in the protein per 100g from the food label (e.g. 6.5g) and click on **Calculate Exchange**.

- It will then tell you how many grams you can have for 1 exchange (e.g. 15.4g).

- If you wanted 1.5 exchanges instead you use the exchange slide (e.g. 1.5 exchanges = 23.1g)
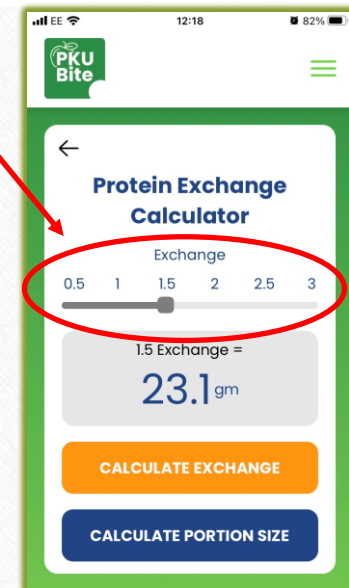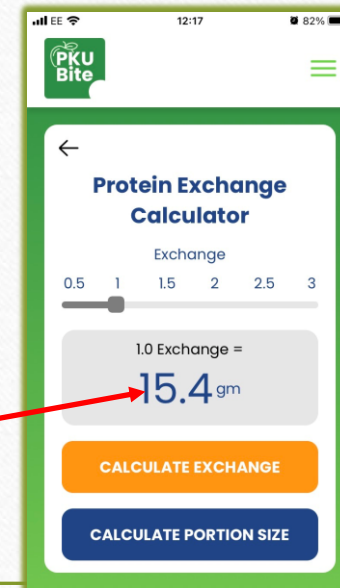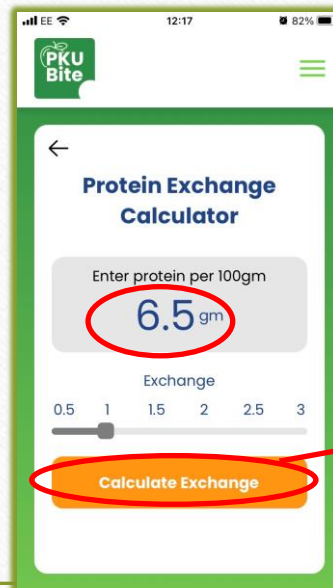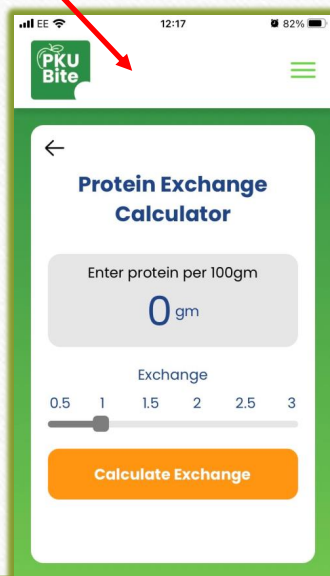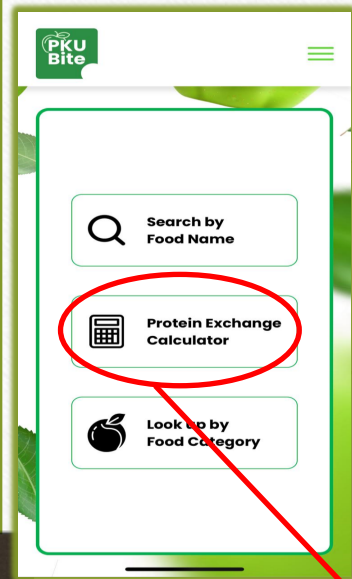
Using the protein exchange calculator for a portion size

- If you want to know how many exchanges one individual portion/packet of a food is, click on the **Calculate Portion Size** button.

- Enter the portion size in grams from the packaging (e.g. 25g) and click on **Calculate Exchange**.

- It will then tell you how many exchange one portion is (e.g. 1.6 exchanges).

Using the protein exchange calculator

- You can also use the calculator when you are on a food by clicking on the calculator icon