

Supplementary table 1: Tasks completed by users in stage-I (group-1)

Task 1

Please click on the web link in the computer screen and then enter your details into the profile section

Username: participant02

Password: XXXXXX

Task 2

Have a read through the '**Getting started**' instructions on the 'My Profile' page and when you are ready enter the 'Food diary'

Task 3 (Breakfast)

You decide to use the 'Make a list' function on the website to enter this meal.

You had:

- 2 slices of brown bread (Hovis)
- ½ a tin of baked beans in tomato sauce (Tesco)
- 1 banana
- a glass of 100% orange juice

Task 4 (lunch)

Please add these foods using the search bar

You had:

- Hamburger, takeaway
- a side salad of lettuce and cucumber
- French Fries (second portion)
- a pint of coke

Task 5 (Snack)

In the afternoon you have another banana

(Try entering the banana using your 'Recently used items')

1 cup of tea with semi-skimmed milk, and 1 teaspoon of sugar

Task 6 (Evening meal)

Your mum cooked a lasagne for 4 people. As your mum made this you decided to enter your mum's recipe into the recipe builder on the website.

'My lasagne'

- 450g of Minced beef
- 1 onion fried in corn oil
- 1 tin of chopped tomatoes
- 100g mushrooms
- 1 jar of Tesco White Lasagne Pasta sauce
- ½ a packet of lasagne sheets

Supplementary table 2: Task analysis criteria for each user (Note taker's guide)

Task/ myfood24 functions	Criteria to be investigated	Participant Behaviour and notes/ Task completion rate	Time completion
1. My profile	Are they able to load the webpage and enter their details successfully?		
2. Getting started	Have they read the instructions? Is the language appropriate and easy to understand?		
3. Breakfast (Make a list function)	Can participants find quick entry option; understand how to use it, and what it was for? Could participants find the generic items? Did they know what it was for (generic)? Could they find branded products? Could they select the right food portion size?		
4. Lunch (search food menu & food portion size)	Could they easily use search function and find the items? Did they use food picture in selecting food portion size and entering the right portion size?		
5. Snack (Recently used items)	Could they find and use "recently used items" easily? Did participants respond to prompt?		
6. Evening meal (Recipe builder)	Could they easily create the recipe, could they find the ingredients? Could they add cooked food in their food diary and select their portion size? Could they use the converter? Find out participants' learnability in entering food items and food portion sizes. Could they use the converter? Find out participants learnability in entering food items and food portion sizes.		
7. Submit food diary	Could participant go back and add forgotten food items easily? Could they submit their food diary? What do they think regarding the feedback?		

Supplementary table 3: System Usability Scale (SUS)*

Statement	Strongly Disagree	Somewhat Disagree	Neither agree or disagree	Somewhat Agree	Strongly Agree
1. I think that I would like to use myfood24 frequently	①	②	③	④	⑤
2. I found myfood24 unnecessarily complex	①	②	③	④	⑤
3. I thought myfood24 was easy to use	①	②	③	④	⑤
4. I think that I would need the support of a technical person to use myfood24	①	②	③	④	⑤
5. I found the various functions in myfood24 were well integrated	①	②	③	④	⑤
6. I thought there was too much inconsistency in myfood24	①	②	③	④	⑤
7. I would imagine that most people would learn to use myfood24 very quickly	①	②	③	④	⑤
8. I found myfood24 very cumbersome (inconvenient) to use	①	②	③	④	⑤
9. I felt very confident using myfood24	①	②	③	④	⑤
10. I needed to learn a lot of things before I could get going with myfood24	①	②	③	④	⑤

*Adjusted from (Bangor A, Kortum P, Miller J. Determining what individual SUS scores mean: Adding an adjective rating scale. Journal of usability studies. 2009;4(3):114-23).