Using of sustainability label with mobile application for a more sustainable environment through diet change

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INTRODUCTION

Two challenges for public health and nutrition are climate change and obesity, based on the current consumption patterns of the UK population that did not meet dietary recommendations[1]. Despite agriculture causing environmental problems such as pollution and the loss of topsoil, environmental sustainability in the agricultural sector is linked to diet because half of the global grain production is consumed by livestock, limiting food supplies. One method to improve diet and carbon footprint is to consume lower down the food chain.

The livestock sector contributes to 80% of total anthropogenic land use and 18% of the greenhouse gas emissions (GHGE). The consumption of less meat could reduce up to 2,700Mha of pasture and 100Mha of cropland, resulting in huge reduction of nitrous oxide and methane gas. In the UK, food consumption accounted for about 20–30% of total annual GHGE, mostly due to high consumption of meat and dairy products. Moreover, research has shown that barriers, such as the lack of understanding of sustainable diet and misinterpretation, could affect the alteration of dietary intakes.

IDEATION

The ideation of the sustainability label with 'GOOD&FIT' mobile application might be able to motivate consumers to select healthier and more environmental-friendly food products as well as to understand the environmental quality of the sustainability label. The sustainability label will consist of various criteria such as; amount of calories, dietary contents, carbon footprint, Fairtrade, organic and eco-friendly. With increasing trend in mobile application usage, the label would be presented in the form of a Quick Response (QR) code that could be captured by the camera function of any smartphone. Further information regarding the sustainability label would be presented in the application; such as reminding the user about the expiry date, which will reduce food wastage. Points system in relation to consuming healthier food products might be introduced to allow the users to compete amongst each other, leading towards a healthier and sustainable lifestyle through changes in behaviour.

INTERFACE OF THE GOOD&FIT MOBILE APPLICATION
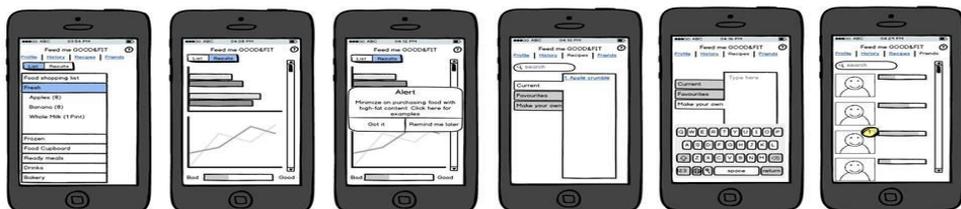
REFERENCE

[1] Macdiarmid, J. I., Kyle, J., Horgan, G. W., Loe, J., Fyfe, C., Johnstone, A. & Mcneill, G. (2012). Sustainable diets for the future: Can we contribute to reducing greenhouse gas emissions by eating a healthy diet? *Am J Clin Nutr*, **96**, 632-639.