

## CASE STUDY: NUTRITION ONLINE LEARNING MODULE

This case study details a Nutrition Online Learning module for Medical Students at Barts and The London Medical School.

The nutrition online learning pilot was designed by a dietician (who had previously delivered Foundation Doctor training in nutrition) and a GP academic at the medical school. The medical school curriculum nutrition learning outcomes were used to form the basis of the content.

A PowerPoint presentation was initially made of the content and then this was developed into an interactive e-learning package and launched on the virtual learning environment (VLE) with support from the e-learning technician based at the medical school.

The content of the learning was a mix of didactic information and spot diagnoses via vignette or photographs, multiple choice questions, free text responses to questions and matching activities.

A three-hour slot was allocated for students to complete the online learning, although each term the online learning was available for a four week period and could be accessed as many times as the student wished to during that time.

A total of 240 third year students completed the online learning over the academic year. There was a significant increase in confidence in all ten measured confidence parameters when tested with a Wilcoxon two-way t-test (see Fig 1).

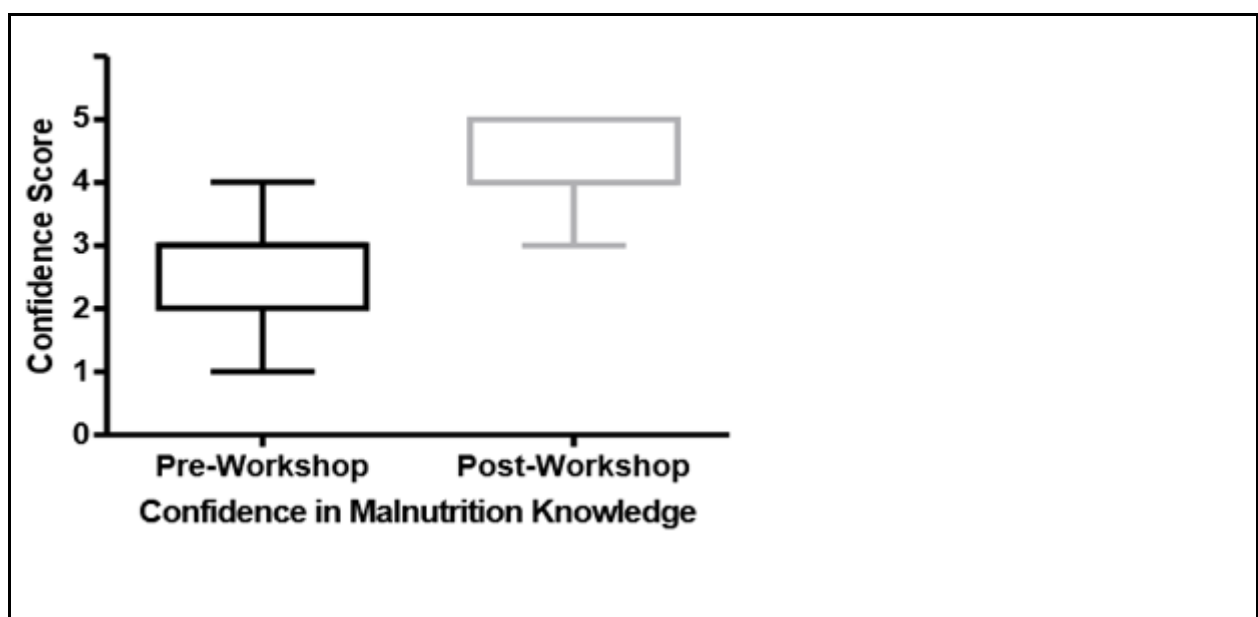


Figure 1: Self-reported Pre and post confidence levels.

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On a Likert scale, the majority of students either agreed or strongly agreed that the online content was appropriate, particularly highlighting the interactivity as a useful tool in the free text. Free text allowed students to suggest improvements which included increased use of using video and audio formats, reducing overall volume and creating the ability to stop the package and rejoin at a later time.

E-learning has gained popularity due to the potential benefits of allowing learners to tailor the pace and content of courses to their individual needs, increasing the accessibility of information to remote learners, decreasing costs and facilitating frequent content updates (Vaona et al, 2018). The technology required to develop this package was minimal as an annotated PowerPoint presentation was quickly adapted to an interactive e-learning package on a VLE. A variety of formats to the learning was mindful of individual learning styles (Honey P, Mumford A 1986) and data on immediate impact on knowledge as well as content feedback could be collected which may have been more challenging if content had been delivered in a lecture format.

Going forward, the plan is to modify the technology to allow breaking up the learning, introduce either short videos and/or audio files within the package, and alter the balance between text and activities. External national accreditation of the module is also being explored.

### References

- Vaona A, Banzi R, Kwag KH, Rigon G, Cereda D, Pecoraro V, Tramacere I, Moja L. E-learning for health professionals. Cochrane Database of Systematic Reviews 2018, Issue 1. Art. No.: CD011736. DOI: 10.1002/14651858.CD011736.pub2.
- Honey, P. and Mumford, A. (1986) The Manual of Learning Styles, Peter Honey Associates