

Case Study

Sustainable Food Issues 2018-19

Key Points

- This real world project allowed students to investigate behaviours which impact both the health of the individual and the wellbeing of the environment thereby addressing the wellbeing goals for sustainable development as outlined in the Future Generations (Wales) Act 2015.
- Issues of nutritional and environmental choice are positioned within the constraints of economic and cultural availability, illustrating the context within which the Nutritional professional has to practice.
- The need for nutritional scrutiny, in addition to economic and environmental considerations, when providing generalised dietary advice within the context of sustainability is explored.

Who?

The Real World project is a Level 6 BSc (Hons) Nutrition project designed to provide students with the opportunity to conduct research, analyse the issues identified and provide realistic solutions which have the potential to directly affect their own and their fellow student's wellbeing.

Why?

The plastics audit coursework was developed in 2018 in response to the growing media attention on the effect of plastics and micro plastics in the environment, a significant proportion of which emanates from food packaging. Additionally the level of micro plastic contamination of food is beginning to cause concerns for public health.

Environmentally, food is a highly emotive topic and as final year Nutrition students, the group were able to fully appreciate and debate fundamental concepts such as a realistic, varied diet and individual requirements and needs. It is important that consumers and those (such as nutritionists) who will inform these consumers are aware of the nuances of the debate and can speak authoritatively around the area.

How?

Students undertook a 3 day audit of any food or drink products (including nutritional supplements) they consumed that used plastic in some form as its primary packaging including food packaged, wrapped, displayed or served in plastic. Primary packaging is defined as the material that touches the food, for instance a bottle of water or a plastic wrapping inside a breakfast cereal box or a plastic layer in a tetra pack. In other words, the audit did not consider any secondary or tertiary wrapping encountered due to the manufacture or retail of the product, such as outer containers or pallets, neither did it consider the appreciable amounts of plastic used in agriculture to produce and deliver the individual food ingredients to the manufacturer.

The results of the audit were entered into a spreadsheet. Each student then picked the 5 most prevalent plastic packed foods that they consumed in their 3 day audit and for these reviewed the possible options available that would decrease the impact of their plastic use. Then a second group of students analysed the plastic audit using both qualitative and quantitative methodologies to determine if plastic use amongst university students varied with sociodemographic variables and evaluated the suggested methods to reduce plastic food packaging use.

Outcomes

The factors affecting student choice were identified as cost, convenience and accessibility to shopping outlets whereas gender, subject discipline, size of household and age made little appreciable difference. This indicates that all students had difficulty in accessing a plastic free diet.

Alternatives such as paper, board or waxed board were suggested, although students were generally appreciative that this would cause changes in production, processing and pricing of products. The emphasis was on the retailers (and by default manufacturers) to change packaging materials and to commence with the most highly consumed foods (Milk, Bread, Bottled Water, Fruit and vegetables) to have the biggest environmental impact. It was felt that the University should investigate these areas first in trying to improve the ecological impact of the foods supplied on campus.

