

Nutrition education: the way to reduce childhood obesity?

How can countries stop the tide of childhood obesity from becoming a tsunami of complications of lifelong obesity? Susan Mayor investigates.



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With about a third of young people in the USA overweight or obese, delegates at an Institute of Medicine (IOM) workshop recommended a set of nutritional curriculum standards for US elementary and secondary schools. The aim of these standards—ie, expectations for student learning—would be to improve the consistency and effectiveness of nutrition education in schools.

The US Department of Agriculture commissioned the workshop after a previous IOM report recommended that schools should be a focal point for obesity prevention. Nutrition education can change behaviours. A Cochrane Review suggested that a school curriculum incorporating lessons about healthy eating, physical activity, and positive body image was one of the most promising strategies, although the effect was modest.

The IOM workshop agreed that nutrition should be taught every year so that knowledge builds sequentially and cumulatively. Lessons should focus on simple and consistent messages, such as encouraging people to eat foods of different colours. “Scientific information focused on nutrients can be too far removed from the choices that students and parents make every day”, delegates said.

Although no standard national nutrition curricula exist in the USA, workshop delegates reviewed federal and state projects. 75 min of health education (including nutrition) every week for children in elementary and middle schools was mandated in Washington, DC, as part of the 2010 Healthy Schools Act. In the workshop, Stacey Snelling (American University, Washington DC, USA) described the effect of a training programme for teachers and innovations such as school gardens. A survey of teachers

showed their feelings of responsibility to address health issues in the classroom had increased and their confidence about integration of health education into curricula had improved.

The Shaping Health as Partners in Education (SHAPE) programme in Sacramento County (CA, USA) began 18 years ago and now includes 14% of individuals teaching children aged 11 years or younger in the county. It includes trips to food processing centres, farmers’ markets, local grocery stores, and student gardens. In kindergarten (children aged 5–6 years), nutrition lessons about colourful fruit and vegetables are delivered by clowns, and parent communications are circulated. A nutrition unit in ninth grade (age 14–15 years) is mandatory for graduation.

Summing up the main conclusions of the IOM workshop, Katie Wilson (University of Mississippi, MS, USA) suggested the time is right to introduce national nutrition education standards. “Everybody is talking about childhood wellness”, she said.

The USA is lagging behind other countries, in which national standards or statements about nutrition education have been in place for some time. A survey by the UK Children’s Food Trust showed that cooking and food skills (a range of practical skills and nutritional knowledge) are an important part of the curriculum in most of the 19 countries that replied. All countries emphasised the practical aspects of cooking and food skills, recognising that children develop knowledge and skills for their adult lives through practical, real-life activities.

Several countries participating in the survey made explicit links between nutritional education in schools and a nation’s health. Germany’s National Action Plan IN

FORM guides nutritional education in schools, and food preparation is a compulsory unit for schoolchildren in the Czech Republic as part of a life-skills programme. A 2006 curriculum review in New Zealand showed a global resurgence in home economics “as society grapples with a number of health related issues directly attributable to food choices affecting personal and family well-being”.

In the UK, national standards for nutrition education have been applied for many years, and for provision of food in schools since 2006. “Ultimately knowledge and skills are one thing, but there are enormous pressures to eat fast and pre-prepared foods. We need to change the behaviours of what is a lost generation”, said James Bunn (Alder Hey Children’s NHS Foundation Trust, Liverpool, UK; trustee of the Children’s Food Trust). “It isn’t just knowledge and skills—we need to get children to choose different dietary behaviours by experiencing healthy foods in the school environment.” The School Food Plan—a major review of school food in England, published in July, 2013—recommends a whole-school food culture. It suggests that cooking should be part of the curriculum for all children up to the age of 14 years.

“With appropriate education and the implementation of food standards within a school environment, we may get children to adulthood with the knowledge and skills, and ideally the behaviours that are going to provide healthy lives for them into the future”, Bunn concluded. But he cautioned that such an achievement will be challenging in view of the advertising for and availability and price of obesogenic foods.

Susan Mayor

For more on the **standards** see <http://www.iom.edu/Reports/2013/Nutrition-Education-in-the-K-12-Curriculum.aspx>

For the **IOM report** see <http://www.iom.edu/Reports/2012/Accelerating-Progress-in-Obesity-Prevention.aspx>

For the **Cochrane Review** see *Cochrane Database Syst Rev* 2011; **12**: CD001871.

For more on the **Children’s Food Trust** see <http://www.childrensfoodtrust.org.uk>

For more on **IN FORM** see <http://www.bmelv.de/SharedDocs/Standardartikel/EN/Food/IN%20FORM.html>

For more on the **curriculum review** see <http://nzcurriculum.tki.org.nz/content/download/456/3630/file/hee-position-statement.doc>

For more on the **School Food Plan** see www.schoolfoodplan.com