This study supports the idea that young people need to be educated in nutrition and healthy eating so they will be able to choose, produce and consume a healthy diet to help slow down the levels of obesity.

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The nutritional knowledge and attitudes in a group of 11 – 12 year olds in Merseyside

Nutrition needs to have a secure place in the national curriculum to help males to adopt more positive attitudes to healthy eating and provide more support for the weight concerns of females.

The aim of this study was to assess the attitudes and the levels of nutritional knowledge in a mixed comprehensive school where 61% of the pupils were entitled to free school meals.

Obesity is a growing problem in the UK, especially in children. Recently the first cases have been found of adult type-2 diabetes in children, which is associated more with overweight older adults.

In a cross-sectional study comparing the trends in overweight children from 1984 to 1994, it was found that the percentage of male subjects aged 9 - 11 years who were overweight increased from 5.8% in 1984 to 12.7% in 1994, and for females of the same age the percentage of overweight subjects was 9.9% in 1984 compared to 16.7% in 1994.[1] Linked to these increases in obesity, are the increases in adult death and disease, especially with reference to cardiovascular diseases (CVD).

Hence action against unhealthy weight gains is required, and since prevention of obesity is considered to be easier than treatment, this action should begin as soon as possible in childhood.

Providing individuals with the correct nutritional knowledge and skills to enable them to choose and consume a healthy balanced diet is one of the key components in the prevention of obesity. The nutritional knowledge and skills need to be taught during childhood when firm eating practices are being established and the main arena for providing these young individuals with this nutritional knowledge and skills is at school.

However many believe that nutrition education in schools is inadequate and that insufficient attention is paid to the basic cookery skills.[2] Many feel that, with the removal of basic nutrition and cookery lessons, adolescents are less able to make choices about a healthy balanced diet.[3]

The study

The aim of this study was to assess the attitudes and the levels of nutritional knowledge in a group of 11 - 12 year olds in Merseyside.

A mixed comprehensive school in a deprived area of Merseyside, which had a high level of unemployment, was used. In 1996, 61% of the pupils were entitled to free school meals.

A questionnaire was specifically designed for this study to be used with year 7 pupils. The subjects were asked to complete the questionnaire on their own.

Part 1 of the questionnaire examined the attitudes to various aspects of nutrition and healthy eating. A list of statements were

constructed to assess:

- ⇨ the children's attitudes and views on healthy eating
- ⇨ their own belief in being able to choose and consume a healthy diet
- ⇨ any weight concerns

The subjects were asked whether they strongly agreed, agreed, were uncertain, disagreed or strongly disagreed with the statements.

Part 2 of the questionnaire tested the pupils' knowledge on nutrition and healthy eating. Statements were generated using National Curriculum documents for Key Stage 3, using work from previous studies on nutritional knowledge and also current healthy eating guidelines.

The statements either tested the subjects' 'know how' (practical nutritional knowledge on foods) or 'know that' (theory nutritional knowledge referring to nutrients) knowledge. The subjects responded to the statements by selecting the true, false or don't know response. Points were awarded for the responses in part two. One point was awarded for a correct answer, a wrong answer resulted in minus one point and a 'don't know' response equated to no points.

Only 41% of the males and 50% of the females agreed with the statement 'I believe I eat a balanced healthy diet'.

Results

Eighty-five pupils out of 177 in year 7 completed the questionnaire (48%), 37 were male and 48 female.

Part 1: Nutritional attitudes and beliefs.

From the responses to the statement 'I enjoy cooking', the females were found to enjoy this activity more than the males, since 31% of the females strongly agreed and 65% agreed with this statement compared with the males (16% and 49%, respectively).

Other gender differences with the pupils' views on healthy eating and their own health were seen in the sample. A greater number of males than females in this study thought that they were too young to be worried about eating a healthy diet. Of the males sampled 39% agreed to some extent, 22% were uncertain and 39% disagreed with the statement 'I am too young to be worried about eating a healthy diet', compared to 23% of the females who agreed with this statement, 19% were uncertain and 58% who disagreed with it. Also more males than females did not believe that their health in the future might be affected by what they eat today and thought healthy eating was a waste of time.

Since fewer males (68%) compared to females (77%) agreed with the statement 'My health in the future may be affected by what I eat today'. 89% of the females disagreed to some extent with the statement 'Healthy eating is a waste of time' compared to only 65% of the males. It would appear from these results, that females are more health conscious and are more aware of the consequences of what they eat today on their health in the future, than the males.

A large proportion (86%) of the pupils studied agreed that they understand and know what to eat to have a healthy diet, with no differences between the males and females.

However, only 41% of the males and 50% of the females agreed with the statement 'I believe I eat a balanced healthy diet'. This could suggest that just knowing which foods that should and should not be eaten, does not necessarily imply that an individual will follow their knowledge through into their eating behaviours.

However, the belief that the pupils know what they should be consuming in order to have a healthy diet may be unfounded. This was shown in the knowledge part of the questionnaire where the pupils were found to have poor levels of nutritional knowledge in certain areas e.g. dietary fibre and fat.

Besides the fact that the pupils may not be using their nutritional 'knowledge' to choose and consume a healthy diet, another potential barrier for these young people to eat healthily is that no healthy foods may be available at home

One area where the nutritional knowledge was good related to the specific food items of breakfast cereals and milk: 80% of the pupils knew that breakfast cereals provide vitamins and iron; 79% knew that the statement 'Semi-skimmed milk is good for my bones' was true.

or at school. However, in this survey nearly all the subjects agreed (96%) that there were healthy food choices at home, but slightly less agreed (73%) that there were any at school.

It would seem that the availability of healthy food choices is not such a problem for these young people, but as noted before their interpretation of a healthy food choice may not be that accurate.

There seemed to be more concerns with body weight for the females than the males. For the statement 'My friends worry about being too fat', more females strongly agreed (31%) and agreed (31%) with the statement compared to the males (19% and 22%, respectively). However, approximately similar proportions of males (46%) and females (40%) agreed with the statement 'I have never tried to lose weight'.

There were some misconceptions concerning dieting and healthy eating, more so in the males than in the females. This was shown by 56% of the males, compared to only 25% of the females, who agreed with the statement 'Healthy eating involves dieting'. Dieting can be used to treat obesity, but often the types of diets these young people undertake can lead to unfavourable health consequences, and are all not conducive for a healthy lifestyle.

Part 2: Nutritional Knowledge.

The pupils' nutritional knowledge on fat was tested, and the level of knowledge varied considerably with the questions used. 71% of the young people knew that 'jam doughnuts are not low in fat'. However, only 46% knew that 'sausage rolls are not low in fat' and 24% knew that the nutrient fat contains a high amount of calories/joules of energy.

The pupils in this study also had problems with the different types of fats in the diet since only 13% of them knew that 'polyunsaturated fat (PUFA) is the sort of fat which is bad for your heart' was false. It would seem that young people know they should be cutting down on the amount of fat in their diet, but they are unsure of the fat content and the different types of fat in various foods.

Other areas, where the pupils had difficulties, were questions on carbohydrate and dietary fibre. For instances, only 35% knew that they 'should not be cutting down on the amount of carbohydrate eaten', and only 22% of the pupils knew that the statement 'for a healthy diet you should eat a small amount of dietary fibre' was false.

One area where the nutritional knowledge was good related to the specific food items of breakfast cereals, milk and coca-cola. 80% of the pupils knew that breakfast cereals provide vitamins and iron, 79% knew that the statement 'Semi-skimmed milk is good for my bones' was true, and 91% knew 'a can of coca-cola contains a high amount of sugar' was also correct.

The young people in this study on the whole seemed to have better knowledge related to foods ('know how' knowledge) rather than to nutrients ('know that' knowledge). It was found that the females studied had better nutritional knowledge than the males, in that generally the females had higher average scores compared to the males in all aspects of their nutritional knowledge.

These findings could reflect the possibility that females are more interested in cooking and health than males as noted in the attitude part of the questionnaire in this study.

Conclusion

Good eating practices, healthy attitudes and a good knowledge basis to nutrition and health needs to be established in childhood and adolescence. Data from this study would seem to suggest that favourable attitudes on healthy eating need to be established more in males than in females. The weight concerns of the young females in this sample need more attention. Nutritional knowledge especially with reference to carbohydrate, dietary fibre and fat needs to be extended.

This study supports the idea that nutrition needs to have a secure place in the national curriculum at school. Young people need to be educated in nutrition and healthy eating so they will be able to choose, produce and consume a healthy diet now and in the future to help to slow down the ever increasing levels of obesity and CVD in the UK.

References

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