

JUNK FOOD MAKES YOU DIM

If you can read this it is too late for you.

Yes, the boffins have done it again. This time they have confirmed what I had expected all along. Junk food makes you dim.

A very large long-term study in the Bristol area has been in progress since 1991/1992. Some 13,988 children born in those two years were studied for a wide variety of reasons, giving rise to many investigations. Many aspects of the children's life were recorded, among which were their diets at ages 3, 4, 7 and 8.5. Their IQs (intelligence quotients) were recorded at age 8.5. The results were that children who were fed on junk food at 3 years old had a lower IQ at 8.5, and that lower IQ was probably permanent. The average decrease in IQ was 1.67. That may not seem a lot but, in areas where they still have the 11-Plus examination, and for those competing for university places, that 1.67 decrease could make the difference between passing or not passing, so it is serious.

Of the 13,988 children in the total sample, complete data for this particular survey were available for 3,966 children, so the sample size was very large indeed. The authors of the report made allowances for a number of factors which might have distorted the results. Those factors were: gender, age at IQ testing, breastfeeding duration, energy intake, maternal education, maternal social class, maternal age, housing tenure, life events, etc. That was to make sure that like was compared with like. The study was carried out by the Department of Social Medicine of Bristol University, and the results were published by the Journal of Epidemiology and Community Health in an online publication dated 7th February 2011. So it is authentic.

I should add that reference was made in the report to previous studies into the IQ of the Bristol children. Breast feeding improved IQ. Eating oily fish during pregnancy improved IQ.

In the report junk food was described as follows: foods with a high sugar and fat content, and processed and convenience foods. The main comparison was with "traditional" fare such as meat, poultry, potatoes and vegetables. There was a further comparison with "health-conscious" food such as salads, fruit, vegetables, fish, pasta and rice, and..... the latter diet at age 8.5 gave a higher IQ, an average increase of 1.2 over that for the children given the traditional diet.

The reason for the 1.67 decrease in IQ seems to be that the brain grows at its fastest rate during the first 3 years of life and it is possible that eating nutrient-rich foods during this early period may encourage optimal brain growth. That 1.67 fall in IQ was not changed by an improved diet after the age of 3. The authors of the report state that the effects of the poor diet at 3 years old may well persist into later childhood. Since this particular study covers children up to the age of 8.5 only, perhaps later studies will find that the lower IQ persists for ever.

The key aspect is whether the 3-year-old toddlers were receiving adequate vitamins and nutrients. The study does not report on that aspect, merely whether the children ate junk food, traditional food or healthier food. The nutritional content of the various foods does not appear to have been measured. The fruit and vegetables may very well themselves have been deficient in vitamins and nutrients – most supermarket food is. Nutritionists have identified 19 trace elements which are essential for human health and have calculated "Recommended Daily Amounts" (RDAs) for each one. It is likely that most people do not eat the RDA because most food is grown in impoverished soil. What you need is to eat a varied diet of fruit and vegetables which has been grown in rich, healthy soil. I feel that can only be achieved if you grow your own. What you need is, firstly, soil which is rich in the 19 trace elements and, secondly, lots of soil mycorrhizal fungi to bring the trace elements to the roots of the plants. The chances are that the soil in your garden or allotment is not rich in those 19 trace elements but that can be put right by importing lots of farmyard (ie cow) manure and laying it on the surface of the soil for the worms to drag down. For example, by doing so I increased the trace elements in my allotment soil by a factor of 2.57 and the amounts of all 19 trace elements are now

well within the guidelines of the Department for Environment, Food and Rural Affairs. Mycorrhizal fungi play an essential rôle since the roots of plants cannot reach nutrients which are more than an eighth of an inch away – the fungi are long, snakelike creatures which transport trace elements to the plants. Mycorrhizal fungi are killed by digging and by the application of pesticides, etc. Since their rate of growth is only 6 inches per year it is best to really look after them. See the Good Gardeners' Association website www.goodgardeners.org.uk for further information on the no-dig method of growing crops.

And good gardening!

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