



## Press Release: embargoed until 12noon on Wednesday 30 January 2008

# New Parliamentary report on the links between diet, mental health and behaviour

The Associate Parliamentary Food and Health Forum today (30 January) issues a report which looks at the scientific evidence on whether mental health and performance can be affected by what we eat, and explores how this may be happening. It concentrates particularly on the role of omega-3 fatty acids (whose benefits are promoted relentlessly and often inaccurately by the food industry) but recognises that other nutrients forming part of a healthy diet also have a significant role.

The report backs the recommendations of the FSA that fish consumption should be increased since it is the prime source of omega-3 long chain polyunsaturated fatty acids, but is concerned that fish stocks may not be sufficient if this advice is followed and considers possible alternative sources of omega-3 fatty acids. The report emphasises the importance of omega-3 in the diet of pregnant and breast feeding mothers and children since brain development mainly occurs at the beginning of life, but also recognises that older people may benefit. There may be a protective effect of omega-3 against Alzheimer's disease but the report concludes that more research, already under way, needs to be evaluated before firm conclusions can be drawn."

Half a dozen Parliamentarians have been conducting an inquiry for a year, in which they have taken scientific and other evidence from experts at a number of open meetings. This evidence has clarified the role of omega-3 and other nutrients in brain development and function, but has also revealed the need for further well conducted research into their effect on different aspects of human behaviour and cognitive development. However they agreed that the evidence for the benefits of naturally occurring omega-3 in fish and fish oils was very powerful and that this should be a vital component of a well balanced healthy diet.

In their report, the Parliamentarians emphasise that we should consider the impact on our mental health, as well as our physical health, of what we eat. In particular the inquiry report looks at the evidence that diet influences the behaviour and performance of school children, the behaviour of offenders and people suffering from depression.

The recommendations range from advice on Government messages about healthy eating, to specific advice in relation to pregnant women and on nutritional standards in prisons.

#### Lord Rea, Chairman of the FHF inquiry team, said:

"The scientific evidence we heard showed very clearly the importance of omega-3 long chain fatty acids in brain composition and function. There is epidemiological evidence that populations with a high fish intake have less depression, a lower rate of Alzheimer's disease and brighter children (as well as healthier hearts and arteries). But there is less hard evidence so far that intervention studies which change people's diets or give them supplements show a beneficial effect. However there are a few well conducted random controlled trials which do appear to show such an effect among juvenile offenders and children with ADHD and other behavioural disorders and we learnt of others in progress,

some which we describe briefly in the report. However it became clear that far too little research of this kind has been done and one of our main recommendations is that more should be commissioned and funded in view of the burden that mental and behavioural disorders place on society."

The report looks at a number of issues which may affect mental health and behaviour, including the controversial issue of artificial food colours. The Parliamentarians recommend that all artificial food colours (which have no nutritional value) and non-essential preservatives, should be banned from food products and soft drinks.

## Dr Ian Gibson, said:

"It was an illuminating experience to hear from a wide range of scientists who have been studying the links between diet, mental health and behaviour. I was pleased that we were also able to hear from teachers at the grassroots level, such as those at Eaton Hall School in Norwich, who are trying to help children with behavioural problems. Mrs Moore and her colleagues do an excellent job and it was very interesting to hear how they are using emerging evidence on diet and behaviour as one strand in their approach to supporting their pupils."

## Earl Baldwin of Bewdley said:

"While we majored on the importance of fish oils, we were also impressed by the emerging evidence of the influence of a range of micronutrients on behaviour, performance and wellbeing, especially in young offenders, and by the importance for some people of avoiding foodstuffs to which they appear to be intolerant.

The report also recommends better diets for offenders held in prisons and young offender institutes, especially pregnant women and breastfeeding mothers. It calls for the introduction of nutrient-based standards for meals, similar to those used in schools, but based on adult dietary needs.

#### **Baroness Miller of Chilthorne Domer said:**

"I am especially pleased that our report highlights how important fish oils are in a mother's diet. We heard how the development of the foetus brain is particularly dependent on the mothers' nutrient intake. Our report highlights how mothers with little or no control of their diet, such as those in prison, must be offered an adequate diet taking their pregnancy into account. Otherwise the unborn child could be having their life chances severely hampered even before they are born."

The Parliamentarians are also critical of medical training, noting that a lack of training in nutrition and diet for GPs and other medical professionals detracts from their ability to support their patients' physical and mental health. The Parliamentarians recommend that this issue should be addressed by the Royal Medical Colleges and the General Medical Council.

The Government may be concerned that the Parliamentarians recommend it includes financial support to School Breakfast Clubs as part of the package set up to improve school meals. They strongly recommend that all children entitled to free school lunches should be entitled also to a free school breakfast the content of which, like school lunches, should be subject to quantified nutritional standards.

#### Baroness Gibson of Market Rasen said:

"A good breakfast is a good start to the day, especially for children. It (free school breakfasts for the children of low income families) could help the least well off in our society and help children to recognise good nutritional food as part of their everyday life."

#### The Countess of Mar said:

"The evidence we received for this report has shown that whilst, in the past, we have recognised the importance of some of the major vitamins and minerals - those we see on cereal packets, for example, we may now be paying the price of ignoring the importance of the role played by lesser known factors, including trace elements in our health and behaviour. I was surprised by the lack of knowledge there is about these essential constituents in the human diet when, in my role as a farmer and stock breeder, I learned very early on to ensure that animals in my care receive a balanced diet, to look out for signs and symptoms of deficiency before they become serious and to provide supplements if necessary. This report is a step along the way towards doing the same, particularly for infants, children and young people."

## Editors' Note:

The members of the FHF inquiry team were: Lord Rea (Chairman), Baroness Gibson of Market Rasen, Baroness Miller of Chilthorne Domer, Dr Ian Gibson and Earl Baldwin of Bewdley.

Copies of the report *The links between diet and behaviour: the influence of nutrition on mental health* are available from the FHF secretariat. Please contact Patricia Constant at: <u>patricia.constant@centrallobby.com</u> (020 7222 1265)

More detailed information about the inquiry, including minutes of meetings and presentations given by witnesses, is available at: <u>www.fhf.org.uk/inquiry</u>

#### The Parliamentarians' recommendations are set out below:

- 1. We recommend that the Government principally the Department of Health, the Department for Children, Schools and Families and the Ministry of Justice, working with the FSA and the Medical Research Council commission and support further research in the areas highlighted in this report.
- 2. We recommend that the Scientific Advisory Committee on Nutrition (SACN) should be asked to define further the optimum intake of omega-3 polyunsaturated fatty acids (PUFAs) in different stages of life, especially for pregnant women and children.
- 3. We also recommend that in the meantime, on a precautionary basis, the FSA should reconsider its advice to pregnant women about fish consumption, with a view to encouraging them to eat two portions of oily fish, or the equivalent in omega-3 PUFAs, a week (rather than that people should eat two portions of fish a week, of which one should be oily).<sup>1</sup>
- 4. We also recommend that the FSA continues to monitor closely levels of mercury, dioxin and dioxinlike polychlorinated biphenyl (PCB) in the different species of oily fish available in the UK.

The lack of nutritional training for GPs and other medical professionals detracts from their ability to support their patients' physical and mental health; this issue should be addressed by the Royal Medical Colleges and the General Medical Council if we are to tackle the problems and costs associated with mental as well as physical ill health.

- 5. We recommend that the Royal Medical Colleges and the GMC consider upgrading the role of nutrition in the medical curriculum.
- 6. We recommend that Primary Care Trusts (PCTs) should increase the number of posts for dietitians working in the community and that GP practices should be fully reimbursed if they employ a dietitian to whom patients can be referred for nutritional advice.

<sup>&</sup>lt;sup>1</sup> Scientific Advisory Committee on Nutrition(SACN)/Committee on Toxicity (COT). Advice on fish consumption; benefits and risks. 2004; The Stationary Office, London

The campaigns by the Department of Health and FSA to increase the consumption of fruit and vegetables and reduce consumption of sugar and salt are welcome, but they do not make explicit the emerging link between diet and mental well-being and they neglect the vital role of essential fatty acids, which appear to be crucial to children's life chances particularly *in utero* and in early childhood.

7. We believe the Government should take further action to raise public awareness of the significance of good nutrition in pregnancy and to tackle the incidence of low birth-weight in the UK.

The evidence which has emerged to date of the links between nutritional status and childhood disorders, depression, aggressive and anti-social behaviour merits further publicly funded research.

- 8. We recommend that more research to test the effect of selected essential fatty acids on the cognitive skills, mood and behaviour of both "healthy" children (that is, children suffering from no known disorders), as well as children suffering from a range of behavioural disorders should be undertaken.
- 9. We recommend that regulations should be introduced to prohibit all artificial colours and nonessential preservatives in food products and soft drinks.
- 10. We recommend that the Government includes financial support to School Breakfast Clubs as part of the package set up to improve school meals. We strongly recommend that all children entitled to free school lunches should be entitled also to a free school breakfast whose content, like school lunches, should be subject to quantified nutritional standards.
- 11. We recommend that the Department of Health encourages other NHS Trusts to adopt an approach similar to that pursued by the Doncaster and South Humber Healthcare NHS Trust which undertakes a nutritional assessment of patients suffering from depression and patients with early symptoms of psychosis and provides dietary advice to them.
- 12. We recommend that consideration of the outcome of the next trial of nutritional supplements in Young Offender Institutes should be a priority for the National Offender Management Service (NOMS) given that our prisons are overcrowded and there is continuing concern about the mental health of prisoners, particularly young offenders at risk of self-harm and suicide.
- 13. We recommend that any dietary intervention that can be used to improve the behaviour and mental well-being of offenders held in custody should be given serious consideration by the NOMS.
- 14. We recommend that the NOMS looks positively at the case for introducing nutrient-based standards for meals in prisons, similar to those introduced for schools, but based on recommended daily intakes for adults.
- 15. We also recommend that effective measures should be taken in all prisons to inform prisoners about the benefits of a good diet and to persuade and encourage them to make healthy choices both while they are in custody and after their release.
- 16. We recommend that in all women's prisons national nutritional standards should be introduced to ensure that the basic dietary needs of pregnant women prisoners are achieved.
- 17. Because of the major potential benefit for the fields of education, crime, health and the well-being of vulnerable sections of society, we believe that more research is urgently needed in the area of nutrition and behaviour and we recommend that the Government devotes more resources to this, especially in corrective institutions and care homes.
- 18. We recommend that the Department of Health messages on a healthy diet should emphasise the importance of a balanced diet for optimum <u>mental</u> as well as physical health.
- 19. While research continues to identify and produce alternative sources of omega-3 PUFAs, we recommend that all people in the UK should be encouraged to eat more fish, some of which should be oily fish, or its equivalent in omega-3 PUFAs.