New reports link mental ill-health to changing diets

As new figures show that mental ill-health is costing the UK almost £100 billion a year¹, evidence released today by the Mental Health Foundation and Sustain reveals that changes to the human diet in the last fifty years or so could be an important factor behind the major rise of mental ill-health in the UK.

A body of evidence linking the impact of diet on mood and behaviour has been growing for many years. Now scientific evidence, published today, reveals that food can have an immediate and lasting effect upon a person's mental health and behaviour because of the way it affects the structure and function of the brain².

Significant changes in the way food is produced and manufactured have not only reduced the amounts of essential fats, vitamins and minerals consumed, but have also disturbed the balance of nutrients in the foods eaten. The proliferation of industrialised farming has introduced pesticides and altered the body fat composition of animals due to the diets they are now fed. As a result, the population's intake of omega-3 fatty acids has decreased whilst the consumption of omega-6 fatty acids has increased. According to the research,

¹ In the UK, the economic and social cost of mental health problems in 2003/2004 was £98 billion (£17billion on health and social care, £28.3 billion in costs to the economy and £53.1 billion in human costs). *Fundamental Facts* (unpublished). London: Mental Health Foundation 2006.

² The Feeding Minds campaign comprises two reports - Feeding Minds: the impact of food on mental health has been written for stakeholders within the mental health sector. Changing Diets, Changing Minds: how food affects mental well-being and behaviour is for stakeholders in the food and farming sectors.

this unequal intake combined with a lack of vitamins and minerals is associated with depression, concentration and memory problems.

At the same time, the UK population is consuming less nutritious, fresh produce and more saturated fats and sugars. According to the Mental Health Foundation and Sustain, new substances, such as pesticides, additives and trans-fats have also been introduced to the diet. These, alone and in combination, can prevent the brain from functioning effectively.

There have also been remarkable changes in the way that the population prepares and cooks food. The research shows that only 29 per cent of 15-24 year olds report eating a meal made from scratch every day, compared to 50 per cent of those aged over 65. It is also reported that a high proportion of younger people are eating insufficient amounts of fresh fruit and vegetables, instead eating unhealthy foods including ready meals and takeaways.

Amino acids are vital to good mental health. Neurotransmitters in the brain are made from amino acids, many of which need to be derived from the diet. A deficiency in certain amino acids can lead to feelings of depression, apathy and leave a person feeling unmotivated and unable to relax.

The two charities assert that many nutrients can improve a person's mental health, and dietary changes may hold the key to combating specific mental health problems including depression, schizophrenia, attention deficit hyperactivity disorder, and Alzheimer's disease.

Dr Andrew McCulloch, Chief Executive of the Mental Health Foundation, says: "We are well aware of the effect of diet upon our physical health, but we are only just beginning to understand how the brain, as an organ, is influenced by the nutrients it derives from the foods we eat, and how our diets have an impact on our mental health. This evidence raises a number of important questions and concerns for us all, but the knowledge gives individuals the power to make decisions that will benefit them and future generations. On a larger scale, our Government cannot ignore the growing burden of mental ill

health in the UK and must look to nutrition as an option in helping people to manage their mental health problems. The potential rewards, in economic terms, and in terms of alleviating human suffering, are enormous."

Courtney Van de Weyer, researcher on the **Feeding Minds** campaign at Sustain, added: "The good news is that the diet for a healthy mind is the same as the diet for a health body. The bad news is that, unless there is a radical overhaul of food and farming policies - particularly on fish - there won't be healthy and nutritious foods available in the future for people to eat."

The two charities have joined forces on the **Feeding Minds** campaign to raise awareness of the links between diet and mental health, and are asking Government to increase financial and political support for measures to ensure that sustainable supplies of a wide variety of nutrient-rich foods are available, affordable and attractive for people to obtain both now and in the future. They are also calling on the Government to incorporate the link between diet and mental health into all food-related policy and practice.

Ends

REPORT KEY FINDINGS

Food consumption

- Over the last 60 years there has been a 34 per cent decline in UK vegetable consumption with currently only 13 per cent of men and 15 per cent of women now eating at least five portions of fruit and vegetables per day.
- People in the UK eat 59 per cent less fish the main source of omega 3 fatty acids than they did 60 years ago.

Mental health

- Some foods damage the brain by releasing toxins or oxidants that harm healthy brain cells. There are many more nutrients that serve the brain without deception or damage, which can improve mood and mental well-being.
- A balanced mood and feelings of well being can be protected by ensuring that a diet provides adequate amounts of complex carbohydrates, essential fats, amino acids, vitamins and minerals and water.

- Research indicates that good nutritional intake may be linked to academic success. A number of studies report that providing children with breakfast improves their daily and long-term academic performance.
- Among some young offenders, diets supplemented with vitamins, minerals and essential fatty acids have resulted in significant and remarkable reductions in anti-social behaviour.

Mental health problems

- There is growing evidence that diet plays an important contributory role in specific mental health problems including Attention Deficit Hyperactivity Disorder (ADHD), depression, schizophrenia and Alzheimer's disease.
- The presentation of depression in the UK population has increased dramatically over recent decades and this has been accompanied by a decrease in the age of onset, with more cases being reported in children, adolescents and young adults.
- The incidence of schizophrenia is similar across the globe, although there are differences in outcomes between countries. This implies that environmental factors have some role in determining the duration and severity of symptoms, and the role that diet has to play is attracting increasing scientific interest.
- Alzheimer's disease has become more common in the past fifty years and is believed to be the result of a combination of factors, including the aging population, genetics and environmental factors. Growing epidemiological evidence suggests that diet may be one of those environmental factors with associations being reported between the occurrence of Alzheimer's and high saturated fat, consumption, and low vitamin and mineral consumption.
- Complementary mental health care services that focus on diet and nutrition report promising results, particularly among those who experience ADHD and depression. On the whole however, they are poorly funded and have received insufficient research attention to draw firm conclusions.

National opinion poll findings

- Women report eating healthy foods, including fresh vegetables, fruit or fruit juice and meals made from scratch, more often than men, who tend to eat more takeaways and ready meals.
- Younger people are more likely than older people to report daily mental health problems, as are those in social class DE, those on a lower income, those who are not in paid employment and those who are not married.
- Nearly two thirds of those who do not report daily mental health problems eat fresh fruit or fruit juice every day, compared with less than half of those who do report daily mental health problems. This pattern is similar for fresh vegetables and salad.
- Those who report some level of mental health problem also eat fewer healthy foods (fresh fruit and vegetables, organic foods and meals

made from scratch) and more unhealthy foods (chips and crisps, chocolate, ready meals and takeaways).

Notes to Editors:

- The Feeding Minds campaign comprises two reports Feeding Minds: the impact of food on mental health has been written for stakeholders within the mental health sector. Changing Diets, Changing Minds: how food affects mental well-being and behaviour has been written for stakeholders in the food and farming sectors. Both reports are free and available to download from www.mentalhealth.org.uk/feedingminds and www.sustainweb.org
- A Web Guide providing recipes and nutritional advice to help people manage their mental well-being can be found at www.mentalhealth.org.uk/feedingminds
- To sign a petition to campaign for the Government to incorporate the link between diet and mental health into all food-related policy and practice, visit www.mentalhealth.org.uk/feedingminds
- For media interviews, advance copies of the full reports, recipes and illustrations of the brain, contact Fran Gorman or Laura Gibson on 020 7803 1128 / 1130 or email fgorman@mhf.org.uk / lgibson@mhf.org.uk
- For out of hours media enquiries, please contact Fran Gorman on 07967 586489

The Mental Health Foundation is the leading UK charity working to improve services for both people with mental health problems and people with learning disabilities. It is the only charity to fund and work with both service users and providers and plays an important role in funding research and new approaches to promotion, treatment and care.

Sustain: The alliance for better food and farming advocates food and agriculture policies and practices that enhance the health and welfare of people and animals, improve the working and living environment, enrich society and culture and promote equity. We represent around 100 national public interest organisations working at international, national, regional and local level.