10 KEY FACTS

1. Today’s conference celebrates the 40th Anniversary of the British Nutrition Foundation (BNF) and brings together a number of key experts in the field of nutrition, physical activity and health. The aim of the conference is to highlight the importance of physical activity throughout the life course for the prevention of chronic diseases such as obesity, heart disease and diabetes. The conference will highlight new findings in the area of physical activity and mental health and wellbeing (see point 7, overleaf).

2. As a nation we are living longer but healthy life expectancy isn’t improving. A likely major contributor to this is the fact that we are seeing a major increase in obesity levels. The majority of adults in the UK are already overweight or obese (currently 23% of men and 25% of women are classified as obese) and it has been forecast that if current trends continue, 60% of men, 50% of women and 25% of children could be obese by 2050.

3. One option to tackle obesity is to consume less energy (calories). However, energy intakes have actually been decreasing for several decades. Advising people to consume less energy isn’t necessarily the solution, as when we consume fewer calories, it is more difficult to meet our requirement for essential nutrients. Low vitamin and mineral intakes are still prevalent in the UK (for example 40% of girls and women aged 11-34 in the UK have low iron intakes). Encouraging young people to be more physically active is a safer public health message (for young girls in particular).

4. Physical activity exerts benefits throughout the life course. In childhood, physical activity is important as a means of maintaining energy balance and helping bone strength, and thus it reduces risk of chronic diseases later in life. It is also important for social interaction, wellbeing and the development of good lifestyle habits. It is recommended that children and young people achieve a total of at least 60 minutes of moderate intensity physical activity each day. At least twice a week this should include activities to improve bone health, muscle strength and flexibility (e.g. skipping, running).

5. In adulthood, the benefits of physical activity cannot be overstated. Physical activity increases energy expenditure so, even in the face of an environment in which energy dense foods are plentiful, it is easier to maintain energy balance and a healthy weight. Weight loss programmes that include regular physical activity are more effective at maintaining weight loss in the long term. Therefore physical activity can be a useful tool to challenge yo-yo dieting and repeated problems with weight regain. This is because the total effects of physical activity on energy expenditure go beyond the energy expended during the physical activity session itself. In the long-term, physical activity can increase resting metabolic rate by increasing lean body mass, and there

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is even evidence to suggest that those who are more active adapt to using fat as an energy substrate more effectively.

6. Some of the health benefits of physical activity are less well known. It is clearly established that physical activity reduces the risk of cardiovascular disease, type 2 diabetes and osteoporotic fractures, but now there is increasing evidence that physical activity is an important modifier of cancer risk. According to the recent report from the World Cancer Research Fund, there is now convincing evidence that physical activity reduces the risk of colorectal cancer and ‘probable evidence’ that it reduces the risk of endometrial and (post-menopausal) breast cancers.

7. There is also emerging evidence that physical activity is important for mental health and wellbeing. Mental health problems are prevalent in Britain with at least one in six people suffering at any one time. There is good evidence that physical activity decreases the risk of clinical depression. Overall, physical activity is important for psychological wellbeing and can help improve mood and self-esteem. The conference will highlight new research findings showing that being physically active can reduce the risk of cognitive impairment, dementia or Alzheimer’s disease in older people by 30-40%. Professor Ken Fox and colleagues from Bristol University have reviewed 17 prospective and 3 case control studies carried out in Europe and North America in older people (age 70+). All 17 prospective studies (subjects followed up for 5-21 years) showed a reduced risk of cognitive impairment, dementia or Alzheimer’s or some combination of these with improved fitness.

8. Currently only 35% of men and 24% of women reach the recommended 30 minutes of moderate intensity physical activity at least 5 times a week. Lower income groups have also been shown to have particularly low physical activity levels. As part of the Avon Longitudinal Study of Parents and Children (ALSPAC), children’s physical activity levels have recently been measured using accelerometry (an objective measure that can detect informal play). The results were alarming, indicating that only 2.6% of children meet the current guidelines for physical activity.

9. Getting people to be more active is a major public health challenge. A number of psychological barriers to increasing physical activity have been identified, especially for those who are obese and need to lose weight. These include issues related to body image, poor confidence and lack of immediate rewards from physical activity. It is important to remember that being active is not necessarily about taking part in sports activities, but more about building more activity into our everyday lives.

10. Joining BNF at today’s conference are a number of organisations at the forefront of the sports and physical activity fields, including the British Olympic Association (BOA), the Youth Sports Trust, Sustrans and the London Organising Committee for the Olympic Games and Paralympic Games (LOCOG). The conference aims to highlight the importance of organisations coming together to address the issues of improving nutrition and physical activity levels. As with the challenge of climate change, government, the scientific community, business and civil society all need to engage if change is to be achieved.

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