





# Conference Diet, Physical Activity and Health @ the workplace

Conference Centre ALBERT BORSCHETTE Rue Froissart 36, 1049 Brussels 3<sup>rd</sup> July 2007

**SUMMARY REPORT** 

#### **CONTEXT CONFERENCE**

There is a consensus that the increasing incidence of obesity, and its associated health risks, results from an imbalance between energy intake and energy expenditure, linked to an unbalanced diet and insufficient physical activity. Also at the workplace where a large part of the day is spent, sedentary work has left its negative effects on health. Therefore, workplaces are important settings to promote healthy diets and physical activity.

The Member organizations of the EU Platform on Diet, Physical Activity and Health represent a significant number of companies and organizations that are all employers. In order to make a tangible contribution to combating obesity in their own areas of influence, the Platform has decided to launch the initiative to improve workplace health, in particular regarding the promotion of physical activity at work and the promotion of healthy and balanced food choices. Platform Members will focus on this challenge in their own organizations, but they will also promote action on this by their members, member companies and organizations.

The Conference was meant (1) to provide evidence for workplace interventions to reduce overweight and obesity (for a summary, see pages 3-5 of this report), (2) to indicate what the European Network for Workplace Health Promotion (ENWHP) might mean in disseminating and sharing good practices on such workplace interventions (see page 6), and (3) to present and discuss examples of such interventions as initiated by EU Platform Members (see pages 7-8).

Main conclusions of the Conference are (1) that more research is needed on the effectiveness and cost-effectiveness of nutritional and physical activity interventions at the workplace; (2) that the EU Platform Members and their organizations should continue with their valuable initiatives at the work place; and (3) that much attention should be given to disseminating and sharing good practices (see page 9).

A detailed program of the Conference is given as an annex to this report (pages 12-13).

The Conference received more than 200 registrations, mainly Platform Member representatives and Member States representatives, but also representatives of employer and employee organizations, WHO-EURO, EU Presidency, Member of EU Parliament, and press.

# EVIDENCE FOR WORKPLACE INTERVENTIONS TO REDUCE OVERWEIGHT AND OBESITY

## Obesity as emerging health threat

Obesity is one of the most emerging health threats in Europe. The prevalence of obesity has tripled in many countries across Europe since the 1980s and is expected to increase even more. This trend is not only observed among adults, but also among children.

Obesity is the result of an undesirable weight gain as a consequence of an imbalance between energy intake through foods and energy costs for physical activity. This imbalance between energy intake and expenditure is triggered off by unhealthy lifestyles. The changes of dietary habits towards a high consumption of energy-dense, nutrient-low foods and towards a reduction of physical activity are important factors associated with the development of obesity.

It is widely known that obesity increases the risk on chronic diseases, such as type-2 diabetes, cardiovascular diseases and cancer. Furthermore, persons with overweight and obesity more often develop disabilities and have a lower quality of life, which results in an excess of unhealthy years of life compared to normal weight individuals (Visscher *et al*, 2004).

# Obesity and economic consequences

The negative health effects of obesity have major consequences on health care expenditure, but also on economics. Recently many studies have tried to estimate the economic consequences of obesity. Most studies describe the medical costs associated with obesity (direct costs), while some also describe costs due to lost productivity (indirect costs). Relatively little is known on a third category of costs, namely the individual costs to be made by obese people and their families, such as money spending on domestic care, special clothing or slimming products. Studies in the European region indicate that in general the direct health care costs of obesity account for 2-4% of the national health expenditure (Heijink et al, 2007). The indirect costs of obesity are associated with lost productivity: absence from work due to ill health, early retirement, and premature death. Estimates of such losses in England (Fry and Finley, 2005) and Sweden (Borg et al, 2005) indicate that these costs might amount to respectively two and three times the direct health care costs. The reported differences in Switzerland (Schmid et al, 2005) are not that large. In the Netherlands the largest contributors to health care costs are smoking, high blood pressure and overweight (Baal et al, 2006). The high costs associated with obesity and unhealthy lifestyles demonstrate that savings may result from health promotion and prevention, at least in the short term. The long-term health savings are not known: people may live longer and may suffer from other diseases (such as dementia) later in life, some of which are also associated with costly care. Nevertheless, the prevention of overweight and obesity will lead to short-term health care savings and potentially to larger savings resulting from increased economic productivity.

## Importance of interventions at the workplace

A main argument to intervene at the workplace is that work sites offer an access to a large proportion of the adult population. Therefore, the workplace can be considered as one of the key channels for intervention designed to prevent overweight and obesity. In addition, interventions at the workplace offer employers important opportunities to improve the health of their employees and thereby increasing their productivity and reducing their absenteeism.

Several interventions have been conducted to assess workplace health promotion. Most interventions aim to promote healthy eating behaviours and to increase the physical activity level of the employees. These changes can be achieved by changing individual and environmental factors. At individual level, interventions aim to change conscious habits by modifying the awareness, attitudes, knowledge and skills to take action. Environmental strategies aim to reduce barriers or increase opportunities for healthy behaviours.

# Scientific evidence for nutritional interventions at the workplace still scarce

Several studies have been published on worksite health promotion programmes related to nutrition, but unfortunately most studies are of poor methodological quality and only a few met standard quality criterions. The 'Working Well Trial' in the USA aimed to increase awareness on healthy nutrition. Individuals were offered behavioural skills training and to maintain behavioural changes, supportive implementations were made at the organisation level. The program resulted in small increases in fruit and vegetable consumption and in a small decrease in fat consumption (Sorensen et al, 1996). The 'Treatwell 5-a-day' study was also performed in the USA and aimed at increasing fruit and vegetable consumption. A supportive home environment was created in addition to environmental changes at work, such as worksite coordinators, point of purchase education and increasing healthy offerings from vending machines. An increase of 19% in total fruit and vegetable intake was reported in the group where a supportive home environment was created. One may conclude that a worksite intervention involving family members appears to be a promising strategy for influencing worker's dietary habits (Sorensen et al, 1999). Product information at the workplace to facilitate healthier food choices can be used as a strategy to increase the consumption of healthy foods. A Dutch study showed that product information changed psychosocial determinants positively (e.g. more social support came from colleagues at attempting to eat less fat) and negatively (e.g. the attitude in eating less fat decreased during the intervention period). However, in that study, no changes in fruit, vegetable and fat consumption could be observed (Engbers et al, 2006). In Finland the meals served in the staff canteen are usually based on the national nutrition recommendations. In addition, the meal in many companies is offered at a reduced price. Roos et al (2004) observed higher consumptions of vegetables and fish, and employees adopted more recommended food habits, when eating lunch at a staff canteen.

# Scientific evidence for physical activity interventions at the workplace also scarce

Although the trend in overweight and obesity is increasing, total energy intake in many European countries does not seem to increase, suggesting a crucial role of reduced physical activity in the aetiology of overweight and obesity.

A critical review was published on the effectiveness of worksite physical activity programs on physical activity, physical fitness and health. Only 6 out of the 26 trials could be considered of sufficient quality. Those studies showed strong evidence for effects on physical activity and on musculoskeletal disorders, limited evidence for effects on fatigue, and no evidence for effects on physical fitness (Proper et al, 2003). Another review on effectiveness of physical activity programs at worksites with respect to work-related outcomes revealed limited evidence for effects on absenteeism, inconclusive evidence for effects on job satisfaction, job stress, and employee turnover, and no evidence for effects on productivity. Unfortunately all 8 trials in the review were of poor quality (Proper et al, 2002). More recently, a review on worksite health promotion programs based on environmental changes was published. Only 4 out of the 13 trials were considered of high quality and suggest strong evidence for effects on dietary intakes and reveal inconclusive effects on physical activity (Engbers et al, 2005).

### Need for more scientific studies across Europe

There is clearly a lack of good quality studies in Europe in the field of promotion of healthy nutrition and physical activity at the workplace. The limited number of good quality studies reveals inconclusive results with respect to the effectiveness of workplace health promotion. Therefore, more studies are needed to confirm that healthy nutrition promotion programs that are effective in USA are effective in Europe as well. More good quality interventions are needed to examine the effectiveness of these programs in terms of productivity and absenteeism. Little is known about the cost-effectiveness of the intervention studies. This lack of evidence makes it very difficult at this stage to come up with best practices in workplace health promotion.

#### PROMOTING GOOD PRACTICE IN WORKPLACE HEALTH

The European Network for Workplace Health Promotion (ENWHP) is a network that aims to improve workplace health and well-being and to reduce the impact of work related ill health on the European workforce. The Network is committed to develop and promote good practices in workplace health. ENWHP – Members (31) are among others from national institutions in occupational safety and health, national institutions in public health, and national institutions in health promotion.

Since the start of the Network in 1996, several initiatives have been launched to get workplace health on the European agenda and the national agenda's. The Network has developed a toolbox and 160 models of Good Practice for work place health promotion. The toolbox can be easily assessed by the website (<a href="www.enwhp.org">www.enwhp.org</a>). From this toolbox, employers can identify good practices that can be used as an example for work place health promotion at the workplace. The Network also provides arguments to justify investments in workplace health promotion. These arguments are related to organizational and individual level.

The ENWHP is currently carrying out the project 'Move Europe' in which good practices of work place health promotion are collected. The aim of the project is to generate and increase public interest in good workplace health promotion practice and to win over a large number of enterprises to support the program. In this project, companies are asked to submit their health promotion initiatives on a website and thereby assessing the quality of their lifestyle related health promotion programs. Models which are considered to be suitable for transfer in other countries will be invited to present their activities in health promotion on a European Conference to be held in Rome in 2009.

# EXAMPLES OF HEALTH PROMOTION BY EU PLATFORM MEMBERS

The EU Platform for Action "Diet, Physical Activity and Health" includes actors willing to give a lead in taking actions that can help to contain or reverse current obesity trends. The Member organisations of the EU Platform represent a significant number of companies and organisations that are all employers. In order to contribute to combating obesity in their own areas of influence, these companies and organisations take initiatives to promote physical activity and healthy and balanced food choices at work.

Many companies provide employees with information on healthy lifestyles. This information is given by means of booklets or leaflets on healthy living. Companies also integrate healthy messages into the existing communication strategies such as employee magazines or intranet. Some companies also organize seminars where information on healthy nutrition and physical activity is provided by dieticians and nutritionists.

Other companies offer healthy dietary options at the canteen. These options are often promoted with additional information on healthy nutrition. Some companies use symbols in order to help the employee to make the healthy choice. Distribution of free fruits and vegetables among employees is also used to increment the consumption of fruits and vegetables.

Companies may encourage employees to be more active. This is realized in several ways. Some companies offer subsidized gym memberships for their employees, or create fitness facilities within the company. Other facilities that are created are on-site showers and bike sheds. Another way to improve physical activity is to organize activities in which employees may participate. Lunchtime walking or running groups are good examples. One small size company offered Thai Chi Chuan classes to their employees. Other companies organize whole day or evening sport activities for employees to participate.

Companies may also offer employees services on early detection. Many companies offer the employee regular health checks at which, among others, the blood cholesterol level or blood pressure is measured. Of course, the results of such measurements should be used confidentially. Other services provided by companies are tailored information to specific functions or individuals and ensuring an appropriate work environment.

Mental health is included in many of the projects as well. It mainly deals with stress management and how to achieve personal health goals.

Fun is an important aspect of all interventions. The employees need to enjoy the organized activities. People are encouraged to participate, but it is fully voluntarily. Most activities are set up around a theme. These themes fit into the health program and are meant to increase the participation rate of the program.

Some organizations offer work place health promotion programs. The key learning from these projects is that the project should be simple. The message that the program sends should not be too complicated, otherwise people may miss the message. The costs are often a major barrier to get a program into action at the work floor, especially for small companies. Human resource managers have to invest a lot of their time and input to get a program working. Many small companies drop out when financial resources become an issue. Therefore it remains important for small companies to have for example free distribution of folders. In larger companies there are probably more possibilities to implement activities.

In general, the participation rate of the programs is satisfactory. Most employees enjoy participation in the activities. Many employees have participated in health checks. However, little information is available on the effectiveness of such activities. It is unclear what the effect of these projects is in terms of reduced absenteeism or productivity. Furthermore, companies are often unaware of the costs involved in the projects, which implicates that the cost-effectiveness of the programs is unknown.

## DISCUSSION AND RECOMMENDATIONS

There is a clear need for interventions at the workplace. Apart from the health aspects, overweight is also an economic issue with financial consequences for employers. Obviously, more research is needed on the cost-effectiveness of programs, which will definitely improve both the quality of the programs and the willingness to participate in workplace health promotion.

There is also a strong need to continue on working on good practices. Today's conference showed some good examples of such practices, but certainly more examples should be presented and discussed with each other. More should also be done on creating awareness on the importance of good practices. Projects offered by companies should be monitored consistently in order to identify the effectiveness of the program.

The public health risks are becoming more and more a risk for the economy. It is important for stakeholders to share their examples of good practices with others. In particular, good practices for small companies should be shared, in order to allow small companies to work on health promotion at the workplace as well.

The main conclusions of today's Conference are that (1) more research is needed with respect to the effectiveness and cost-effectiveness of nutritional and physical activity interventions at the workplace; that (2) at the same time the Platform should continue to work on health promotion at the workplace in their fight against overweight and obesity; and that (3) sharing the good practices can be considered as a tangible step in the elimination of overweight and obesity, and that in that process the ENWHP may play an essential intermediary role.

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#### **ANNEX**

# Programme Conference

10.00-10.30 Registration

#### **MORNING SESSION**

Chair Mr. Andrzej Ryś, Director Public Health DG SANCO

10.30-10.40 <b>WELCOME</b> A	AND OPENING

By Mr. Robert Madelin, Director-General DG SANCO

#### 10.40-11.15 **IMPROVING HEALTH AT THE WORKPLACE:**

NUTRITIONAL AND DIETARY OPTIONS

By **Dr. Eva Roos**, Department of Public Health, University of Helsinki and Folkhälsan Research Center, Finland

#### 11.15-11.25 *MOVE AND STRETCH*

By EHFA, European Health and Fitness Association

#### 11.25-12.00 IMPROVING HEALTH AT THE WORKPLACE: PHYSICAL

**ACTIVITY OPTIONS** 

By **Prof. Dr. Willem van Mechelen**, Department of Public and Occupational Health at the Free University Medical Center, Amsterdam, The Netherlands

#### 12.00-12.35 THE IMPACT OF OBESITY ON ECONOMY

By **Prof. Dr. Johan Polder**, Department Public Health and Health Care Forecasts at the RIVM, Bilthoven, The Netherlands

#### **LUNCH BREAK SESSION**

#### 12.35-12.40 Welcome to "How to balance your diet?"

By **Mr. Antonio Llorens**, president of FERCO, European Federation of Contract Catering Organizations

12.40-14.00 **A healthy lunch** will be offered by **FERCO**. Nutritionists will be present for advice on how to balance your diet and video presentations

will demonstrate new cooking methods and technologies and will show how catering business can supply healthy alternatives for work

places

**EHFA**, European Health and Fitness Association, will demonstrate physical fitness equipment

#### AFTERNOON SESSION

#### Chair Mr Michael Hübel, Head of Unit Health Determinants, DG SANCO

14.00-14.30 HEALTHY EMPLOYEES IN HEALTHY ENTERPRISES TOWARDS A HEALTHIER WORKING LIFE By Dr. Eva Stergar, ENWHP (the European Network for Workplace Health Promotion) and WHP counselor University Medical Centre, Slovenia

HEALHTY EMPLOYEES IN HEALTHY ENTERPRISES 14.30-14.40 LEARNING FROM PRACTICE

> By Prof. Marc de Greef, ENWHP and Managing director Prevent, Belgium

14.40-14.50 **MOVE AND STRETCH** 

By **EHFA**, European Health and Fitness Association

14.50-15.30 ACTION AT THE **WORKPLACE: EXAMPLES** ON **NUTRITION FROM** EU **PLATFORM MEMBER ORGANISATIONS** 

Nutrition and Health Foundation Ireland, Ms Louise Sullivan

Kraft Food, Ms Lyn Trytsman-Grey

Delhaize. Dr Tim Lammens

15.30-16.10 ACTION AT THE WORKPLACE: EXAMPLES ON PHYSICAL **ACTIVITY** FROM EU **PLATFORM MEMBER** 

**ORGANISATIONS** 

European Health and Fitness Association, Ms Andrée Deane

Cadburys Schweppes, Ms Kate van der Plank

European Vending Association, Ms Catherine Piana

16.10-16.15 **BREAK** 

#### **PLENARY DISCUSSION SESSION**

16.15-17.00 PANEL DISCUSSION chaired by Mr Michael Hübel

> Speakers of the morning (Prof. Willem van Mechelen, Prof. Johan Polder) and afternoon session (Ms Louise Sullivan, Ms Andrée Deane) participate in the Panel and answer questions from the

audience

**CLOSING** (by Mr Michael Hübel)

17.00-17.30 Drink and social gathering