Chapter 13
Promoting Physical Activity and a Healthy Diet among Working Women

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Introduction

This chapter will focus on worksite interventions that aim to promote moderate physical activity and a healthy diet. Whenever data exist on working women, emphasis is put on the description of worksite health promotion interventions specifically for working women. This chapter is focused on the description of evidence from intervention trials on working women and men, in relation to physical activity and diet, and does not make an evaluation of other types of studies that do not include an intervention. Physical inactivity, inadequate diet, and their combination have long been recognized as risk factors for several chronic diseases, including cardiovascular diseases and cancer. These risk factors have been, together with tobacco, the most common targets of both community and worksite health promotion programs.

Nutrition, Physical Activity and Women’s Health

Physical inactivity and its consequences are of major concern in Western society. Physical inactivity is associated with an increased risk of many chronic diseases, such as cardiovascular disease and some types of cancer, including female cancers such as breast cancer. Another consequence of physical inactivity is obesity. During the last few decades, the percentage of overweight and obese people has increased dramatically, and the consequences for public health, as well as the economic impact, are enormous. In Europe, obesity-related costs have been estimated at 1 to 5 percent of the total health care expenditure (Proper et al., 2004).

There is abundant evidence of the important role of nutrition on health status, and this evidence is continuously growing. Indeed, five of the leading causes of death in developed countries—heart disease, some types of cancer, stroke, diabetes, and atherosclerosis—are associated with poor dietary practices (Glanz et al., 1996). For instance, excessive consumption of dietary fat and low consumption of fiber-rich foods, fruit, and vegetables contribute to increased risk for chronic diseases—particularly cardiovascular disease and cancer. The association of nutrition and cardiovascular disease occurs principally through the role of diet in several primary...
and secondary risk factors, including high blood cholesterol levels, high blood pressure, obesity, and diabetes mellitus. Healthful eating patterns can reduce the risk of premature morbidity and mortality from these diseases, help many people avoid suffering and disability, and reduce the need for medical treatment. There is also increasing evidence on the importance of nutrition of pregnant mothers on the health of their offspring.

**Current Situation**

Despite the well-documented benefits of moderate physical activity, 40 percent of Europeans older than 15 years of age declared that they did not exercise or practice sports (Ministerio de Sanidad y Consumo 2005). A certain pattern between North and South can be observed in Fig. 13.1. Finland, Sweden, and Denmark are the countries with less inactive populations (4 to 17%), whereas Portugal, Hungary, Italy, and Greece (57 to 66%) showed the highest percentage of inactive population (Ministerio de Sanidad y Consumo 2005).

The geographic distribution of the caloric ingestion per person and day is shown in Fig. 13.1b. Apart from the total energy ingestion, the composition of this is also an indicator related to health. Figs. 13.1c and 13.1d show the distribution of the percentage of ingested calories that comes from fat and the consumption of fruits and vegetables. Differences between countries are important, and a clear North-South and East-West pattern exists. There exists little direct information on the effects of work on obesity—for example, obesogenic factors in the workplace—and even less data on this effect among working women.

Both physical inactivity and excess of energy intake are associated with the onset of obesity (WHO 2006). Obesity prevalence (body mass index (BMI) above 30 kg/m²) presents an extraordinary geographic variability (see Table 13.1). The percentage of adult population with a BMI above 30 kg/m² ranges from 9.7 to 27.5 percent in men and from 9.9 to 38.1 percent in women in the 25 EU member states. Among women, the prevalence of obesity is highest in Greece (38%), Malta (35%), Portugal (26%), and the Czech Republic (26%). There exist no comparable population data across countries on obesity in working women.

**Obesity in the Workplace**

Physical activity might as well have direct consequences on work ability, especially in the older workforce. An adequate level of physical activity may be needed to maintain or promote work ability—in particular, among aging workers. The aging of the workforce will affect many industrialized European countries in forthcoming years. In order to prevent early retirement, for example, preventive promotion of health and work ability is needed.