Dietary changes and exercise needed to counter chronic diseases worldwide¹

Key words: chronic disease, diet, exercise, guidelines, nutrition policy, World Health Organization.

Instead of a diet high in energy-dense foods with large amounts of saturated fats and sugars, a diet that is abundant in fruits and vegetables, in combination with an active lifestyle, is key to combating chronic disease in both developed and developing countries around the world, according to a major new report issued by the World Health Organization (WHO) and the Food and Agriculture Organization (FAO). Commissioned by the WHO and the FAO, the report is based on an analysis of the best available current evidence and the collective judgment of a team of 30 global experts.

The report aims to identify new recommendations for governments on diet and exercise to deal with the growing number of people who die each year from nutrition-related chronic diseases. The burden from cardiovascular diseases, cancers, diabetes, obesity, and other chronic diseases is rapidly increasing worldwide. In 2001, chronic diseases were responsible for approximately 59% of the 56.5 million total reported deaths in the world and for 46% of the global burden of disease.

The new WHO/FAO report emphasizes that the energy that people consume each day should match their energy expenditures. The document recommends doing moderate-intensity physical activity for at least an hour a day, increasing the consumption of fresh fruits and vegetables, cutting the amount of salt in the diet, and reducing energy-rich foods high in saturated fat and added sugars, such as those found in snacks and other processed foods and beverages. This recommended consumption pattern is both healthier for individuals and more favorable to the environment and sustainable development.

One of the report's most-controversial recommendations is that added (free) sugars should contribute a maximum of 10% of an individual's daily energy intake. That recommendation has drawn fire from some sectors of the processed-food industry, including representatives of soft-drink manufacturers. Some of the strongest criticism has come from a coalition of industry associations and business lobbying groups led by the Sugar Association, an industry group based in Washington, D.C. The coalition has challenged both the technical information in the WHO/FAO report concerning added sugars and the procedures that the two international organizations followed in producing the report (1, 2). The Sugar Association even went so far as to threaten to urge the Congress of the United States to end all United States Government financial support for the WHO (3). The Sugar Associa-

Based on: (1) World Health Organization/Food and Agriculture Organization. WHO/FAO release independent expert report on diet and chronic disease: less saturated fats, sugar and salt, more fruit and vegetables and physical exercise needed to counter cardiovascular diseases, cancer, diabetes and obesity [press release]. Available from: www.who.int [Internet site]. Accessed 17 April 2003. (2) World Health Organization/Food and Agriculture Organization. Executive summary: joint WHO/FAO expert report on diet, nutrition and the prevention of chronic disease [Internet page]. Available from: www.who.int [Internet site]. Accessed 17 April 2003.

Amidst widespread malnutrition, obesity and overweight increase in Guatemala

The prevalence of chronic malnutrition among Guatemalan children is the highest in Latin America and among the highest in the world. Nevertheless, that nation is facing increasing rates of excess weight and obesity, according to a report recently issued by the World Bank.

As in the rest of Latin America, diets and lifestyles in Guatemala have changed noticeably in recent decades, contributing to increases in chronic diseases. Obesity has risen among both children and adults in the country.

Among children in Guatemala the prevalence of obesity grew from 2.7% to 5.4% between 1987 and 2000. Obesity tends to be higher among children living in urban areas and those whose households are not poor and who are not of indigenous heritage. The highest childhood obesity rate is found in the section of the country that includes the capital, Guatemala City. Childhood obesity tends to be higher in households where the mother and the father have more years of formal education.

Overnutrition is particularly serious for adult women in the country. Guatemalan women have the highest prevalence of obesity in Latin America and the second-highest prevalence of overweight, after Peru. Obesity among Guatemalan women has increased rapidly in recent years, with the prevalence climbing from 8.1% in 1995 to 16.2% in 2000.

While less severe than among Guatemalan women, problems of overweight and obesity are still found among Guatemalan men, with rates of 27.6% and 6.3%, respectively. The prevalences of overweight and obesity are higher among men who live in urban areas and who are not of indigenous heritage. Women, on the other hand, have high rates of overnutrition in both urban and rural areas and in both indigenous and non-indigenous households. For both men and women, the levels of overweight and obesity tend to be higher for those with more years of formal education.

The new World Bank report is entitled *Malnutrition* and *Poverty in Guatemala*. The document can be viewed for free on the Web site of the World Bank, at: http://www.worldbank.org.

tion actions drew fierce replies from health and consumer groups. Michael F. Jacobson, the executive director of the Washington, D.C.-based Center for Science in the Public Interest, said: "Naturally, the sugar lobby would reflexively oppose any suggestion that sugar contributes to obesity and dental disease. But we're shocked by the bluntness of the Sugar Association's thuggish threats. There's nothing sweet about Big Sugar's blackmail campaign, and we applaud WHO and FAO for resisting it." (4)

According to the WHO/FAO report, many of the deaths attributed to chronic diseases are due to risk factors that could easily be prevented, including high blood pressure, high cholesterol levels, obesity, and low levels of physical activity. Growing numbers of people in the developing world are suffering from chronic disease, which is a dramatic change from just a few decades ago, when chronic disease was associated with the rich, developed world. Increased urbanization, with rural people leaving the countryside and moving to cities, has played a large part in this change. City residents are more likely to consume energy-dense diets, that is, diets high in saturated fat and refined carbohydrates. This sudden change in diet, combined with a sedentary lifestyle, is having a drastic effect on the urban poor.

The new report recommends limiting total fat to between 15% and 30% of total daily energy intake. Saturated fats should compromise less than

10% of the total daily intake. Besides their amount, the quality of fats and oils in a diet can have an influence on cardiovascular diseases such as strokes and heart attacks.

Carbohydrates should provide the bulk of energy requirements, between 55% and 75% of daily intake. Protein should make up 10% to 15% of calorie intake. Salt should be restricted to less than 5 grams a day. Intake of fruits and vegetables should be increased to at least 400 grams a day. Besides their role in combating chronic diseases, fruits and vegetables contain micronutrients that can boost the immune system and protect against infectious diseases.

While many of the report's suggestions are similar to ones made by other nutrition specialists, the WHO/FAO recommendation to limit added sugars to 10% of energy intake differs from a report issued in September 2002 by the Institute of Medicine, which is part of the National Academy of Sciences of the United States of America. That report recommended that no more than 25% of calories come from added sugars, that is, sugars incorporated into foods and beverages during production (in contrast to natural sugars such as lactose found in milk and fructose found in fruits) (5, 6).

Physical activity is a key factor in determining the amount of energy used each day and is therefore fundamental to energy balance and weight control, the WHO/FAO report says. One hour per day of moderate-intensity activity, such as walking, on most days of the week, is needed to maintain a healthy body weight, especially for those people who spend much of their time sitting down. Measures and policies required to promote healthier food consumption patterns and facilitate a physically active life share common grounds and are mutually interactive in determining healthier behaviors.

Policies and programs must address the changes needed at the individual level as well as modifications required in the larger society to make healthier choices accessible and preferable, according to the report.

The WHO is in the process of preparing a global strategy on diet, physical activity, and health that is aimed at reducing the growing burden of cardiovascular diseases, cancer, diabetes, obesity, osteoporosis, and dental disease. The new WHO/FAO report is one part of a process that includes consultations with governments as well as other public and private sector stakeholders in all regions of the world. The proposed strategy is expected to be presented for consideration by the WHO Executive Board in January 2004 and by the World Health Assembly in May 2004.

FAO supports WHO in developing the global strategy. As a follow-up to the report's findings, FAO will work on identifying information needs, monitoring diets, and assessing the implications of the report's recommendations for all aspects of the food production chain as well as for agricultural and trade policies.

WHO and FAO hope the report's findings will provide their Member States with solid evidence to prepare national health strategies. The report urges national governments to aim for dietary guidelines that are simple and realistic. Countries that have actively intervened in the diet and nutritional behavior of their populations, including Finland and Japan, have seen decreases in risk factors and falling rates of chronic disease, the report points out.

The new WHO/FAO report is entitled *Diet*, nutrition and the prevention of chronic diseases. It can

be accessed for free on the WHO Internet site, at: http://www.who.int/hpr/NPH/docs/who_fao_expert_report.pdf

SINOPSIS

El ejercicio y los cambios dietéticos necesarios para contrarrestar las enfermedades crónicas

La sustitución de las dietas basadas en alimentos con alto contenido calórico, muchos ácidos grasos no saturados y azúcares, por otras basadas en abundantes frutas y vegetales combinadas con un estilo de vida activo es crucial para combatir las enfermedades crónicas, tanto en los países en desarrollo como en los desarrollados, según un importante informe recién publicado por la Organización Mundial de la Salud (OMS) y la Organización de Naciones Unidas para la Agricultura y la Alimentación (FAO). El informe contiene nuevas recomendaciones a los gobiernos acerca de la importancia de la dieta y el ejercicio físico para controlar el creciente número de personas que muere cada año a causa de enfermedades crónicas asociadas a malos hábitos alimentarios, tales como las afecciones cardiovasculares, el cáncer, la diabetes y la obesidad. En este informe se recomienda limitar la ingestión de grasa a 15-30% del consumo energético diario total. Los ácidos grasos saturados no deben superar el 10% del consumo diario total. Los carbohidratos deben proporcionar la mayor parte de la demanda energética, entre 55 y 75% del consumo diario, mientras que a las proteínas les corresponde de 10 a 15% de ese total. La sal debe reducirse a menos de 5 g diarios y el consumo de frutas y vegetales debe aumentarse a no menos de 400 g al día. Si bien muchas de las recomendaciones de este informe son similares a las emitidas por otros especialistas en nutrición, la sugerencia de limitar el consumo de azúcar a 10% del consumo energético total ha suscitado controversias y críticas de algunos sectores de la industria alimentaria, incluidos a representantes de los fabricantes de bebidas no alcohólicas. La OMS está elaborando una estrategia global sobre la dieta, actividad física y salud, de la cual forma parte el presente informe. Se espera que esa estrategia sea presentada a la consideración de la 57.ª Asamblea Mundial de la Salud, que se celebrará en 2004.

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