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15 April 2002

Dr. Derek Yach
Executive Director for Non-Communicable Diseases
and Mental Health
World Health Organization
20 Avenue Appia
Geneva 27
Switzerland

Dear Dr. Yach:

Re: Joint WHO/FAO Expert Consultation on Diet, Nutrition and the
Prevention of Chronic Diseases

We wish to support efforts by the World Health Organization (WHO) to reduce the global burden of chronic disease caused by unhealthy diets and a lack of physical activity. Poor diets coupled with a sedentary lifestyle needlessly increase the rate of heart disease, stroke, cancer, diabetes, osteoporosis, obesity and dental disease. The costs to society, in terms of premature death, disabilities, health care expenses, and lost productivity, are enormous.

I understand that a Joint WHO/FAO Expert Consultation is developing recommendations to civil society, national governments, and the food industry to help promote health through better nutrition and increases in physical activity in both developed and developing countries. I urge that the following policy recommendations be issued:

- Food Labeling and Advertising
 1. Restrict advertising of high-calorie, low-nutrient foods on television programming commonly viewed by significant numbers of children;
 2. Require food labels to provide simple symbols to enable consumers to identify healthy foods and provide more detailed information about calorie, saturated fat, trans fat, and added sugars content;

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3. Require fast food and other chain restaurants to provide nutrition information, including calorie content on menus and menu boards as well as more complete nutrition and ingredient information on food wrappers, containers, and in brochures.

- Fiscal Policies

1. Creatively fund campaigns and other programs to promote good nutrition and physical activity or to subsidize the cost of nutritious foods;
2. Remove taxes on the purchase of exercise equipment, weight management programs and other products and services that have been demonstrated to improve nutritional habits and increase physical activity.

- Schools

1. Set nutrition standards for all foods and meals served in schools;
2. Require schools to provide ample nutrition and physical education;
3. Require that educational materials supplied by industry or that contain advertising, be scrutinized carefully and used only if they present unbiased educational information.

- Educational Programs

1. Provide funding for mass media campaigns that promote good nutrition and physical activity;
2. Require instruction in nutrition and weight management in health professional, medical, and teaching curriculums;
3. Develop culturally appropriate nutrition and physical activity programs for population sub-groups that are at particular risk of chronic disease related to dietary patterns.

- Physical Activity

1. Promote mass transit, bicycling, walking, and other modes of transportation that involve physical activity;
2. Build or strengthen infrastructures for safe, attractive places for people to engage in physical activity (bicycle lanes, recreational facilities, running paths in parks, etc).


- Research

1. Develop and fund a research agenda focusing on behavioral determinants of poor dietary patterns, including the impact of marketing practices;

2. Develop and fund research on cost-effective methods for promoting healthy lifestyles including dietary modifications and increases in physical activity.

I hope that that these recommendations can be taken into account and included in the publication of the final report.

Sincerely,

A handwritten signature in cursive script that reads "Kenneth H. Cooper M.D.".

Kenneth H. Cooper, M.D., M.P.H.
Chairman and Founder

I hereby authorize my name and the name of my organization to be added to the above letter to the World Health Organization.

From: Blair, Steve [sblair@cooperinst.org]
Sent: Wednesday, 12 June 2002 15:22
To: dietandhealth@who.int
Cc: Bruntland@who.int; Yachd@who.int; Puskap@who.int;
Jacques.diouf@fao.org; Hartwig.dehaen@fao.org;
Kraisid.Tontisirin@fao.org; Prakash.Shetty@fao.org
Subject: Comments on the Draft Report

Dear Colleagues,
On behalf of the Cooper Institute, I hereby submit comments on the
Draft
Report of the Joint WHO/FAO Expert Consultation on Diet, Nutrition and
the
Prevention of Chronic Diseases. Our contact information is--
Dr. Steven N. Blair
Director of Research
The Cooper Institute
12330 Preston Road
Dallas, Texas 75230
U.S.A.

Telephone--001 972 341 3240
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Email--sblair@cooperinst.org

The Cooper Institute is a research and education foundation that is
focused
on studying the effects of lifestyle on chronic disease, and to
communicating the results of our research by publication in scientific,
public health, clinical, and lay publications. We have many national
and
international research and education projects and activities. We have
a 32
year history of activities related to the prevention of chronic disease
by
healthful diet and physical activity. Our research is funded primarily
by
competitive research grants and contracts from the U.S. National
Institutes
of Health.

We thank you in advance for considering our attached comments.

Sincerely,

Steven N. Blair

Comments on the Draft Report of the Joint WHO/FAO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases

**Cooper Institute
Steven N. Blair
Director of Research**

The purpose of this report is to provide suggestions for the revision of the Draft Report of the Joint WHO/FAO Expert Consultation on Diet, Nutrition and the Prevention of Chronic Diseases (Draft Report). The primary reasons for our suggestions are that the Draft Report focuses almost exclusively on dietary factors and inadequately reviews the crucial role of physical inactivity in the etiology of chronic diseases, does not appropriately consider the interaction or effect modification of physical activity on the diet or obesity association with chronic diseases, and fails to provide detailed physical activity recommendations for the prevention of chronic disease. For example, the Introduction for Annex 2 includes the statement “Physical activity is at least as important as energy intake in the genesis of weight gain and obesity and there are likely to be many interactions between the two sides of the equation in terms of etiology and prevention.”, but provides little further discussion of physical activity. In the following material we provide additional information on the importance of physical inactivity and low levels of cardiorespiratory fitness as effect modifiers of the obesity—chronic disease association. The nearly exclusive focus of the Draft Report on dietary factors in relation to obesity and chronic disease provides an unbalanced review of the importance of inactivity, and we encourage WHO/FAO to consider expanding the report to include this information.

A fit and active way of life reduces mortality risk in all BMI groups

This is a fundamental component that is largely ignored in the Draft Report. Much of the available research on obesity and health outcomes did not include physical activity or fitness in the analyses or activity was measured so crudely and imprecisely that the data were not adequate for consideration of this exposure. We think that we were the first research group to address specifically the issue of physical inactivity in the amelioration of mortality risk in overweight and obese individuals.¹ We have since published additional reports on this issue.²⁻⁴ We also published a thorough review of the available literature on related issues, and found a high degree of consistency with our reports and other data.⁵ Our studies include an objective measure of cardiorespiratory fitness determined by maximal exercise testing as a marker of a habitual physical activity.⁶ We have shown that the consensus public health recommendation for physical activity⁷⁻¹⁰ is sufficient to produce the moderate to high levels of cardiorespiratory fitness that we find to reduce mortality risk.^{1-4, 11}

Some of the specific findings of our research on fitness and mortality in normal weight, overweight, and obese individuals are:

1. Obese men who are at least moderately fit have substantially lower risk of dying when compared with those who are unfit. In fact, obese men who are fit actually have lower death rates than normal weight men who are unfit.^{2,3}

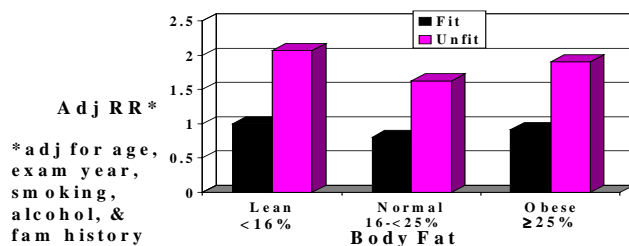
These findings are summarized in Figure 1 for all-cause mortality, and similar results were found for cardiovascular disease mortality. We also find comparable results for the protective effect of fitness in obese women (Farrell S et al. *Obes Res.* In press).

2. Low cardiorespiratory fitness is an important co-morbidity of obesity, and is similar to other co-morbidities such as diabetes, elevated cholesterol or blood pressure, and smoking (see Figure 2).⁴
3. Men with type 2 diabetes who are high fit have an 80% lower all-cause mortality rate than men with diabetes who are unfit,¹² and these results hold after adjustment for BMI. More recently we have found that fitness protects against mortality at all BMI levels in men with diabetes (Figures 3 & 4).¹³

Summary. Cardiorespiratory fitness is an important determinant of health, and moderate to high levels of fitness provide substantially reduced risk of cardiovascular disease and all-cause mortality. These benefits of fitness apply to all BMI levels. A sizeable proportion of deaths in overweight and obese populations are probably due to low levels of activity and fitness rather than obesity *per se*. We encourage the authors of the WHO/FAO expert consultation report to give more emphasis to the importance of low fitness as a cause of chronic disease in obese individuals.

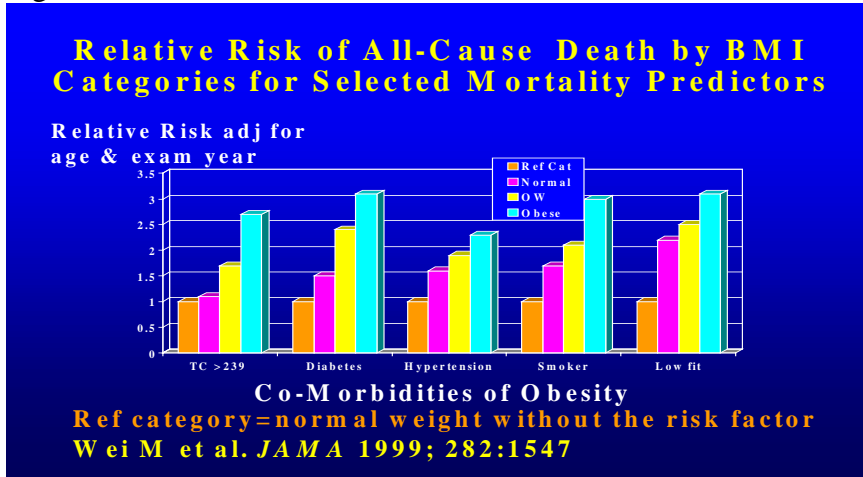
Figures

Figure 1. Adjusted RR for All-Cause Mortality by Fitness and % Body Fat



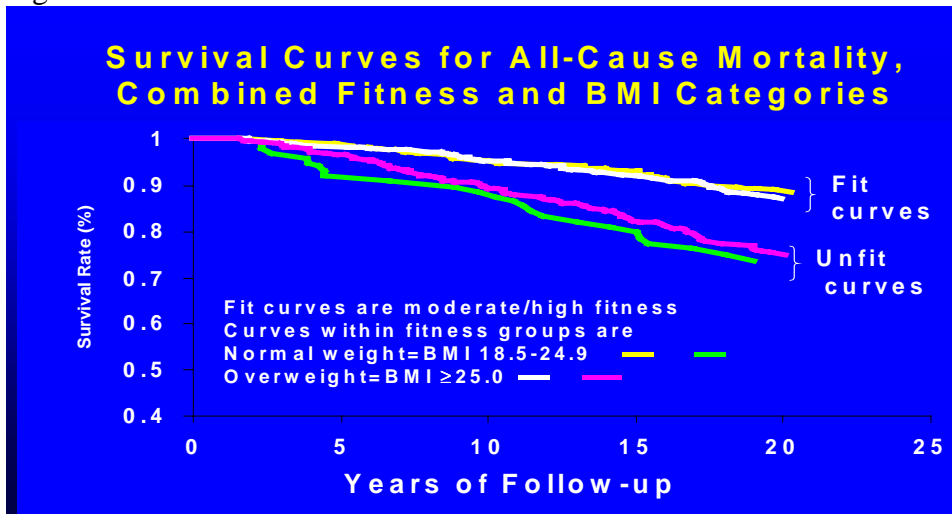
Legend—Adjusted relative risks for all-cause mortality by body fatness (assessed by hydrostatic weighing or sum of 7 skinfolds) and fitness (assessed by a maximal exercise test on a treadmill) groups. Prospective study of 21,925 men followed for an average of 8 years (176,742 man-years of observation), during which time there were 428 deaths. The reference category is the lean—fit men. The lower boundary of the 95% confidence intervals was above 1.0 in all three fatness groups.³

Figure 2



Legend-- Adjusted relative risks for all-cause mortality by BMI categories (normal weight 18.5-24.9, overweight 25.0-29.9, obese ≥ 30.0) for 5 co-morbidities of obesity. Prospective study of 25,714 men followed for an average of 10 years (258,781 man-years of observation), during which time there were 1,025 deaths. The reference category for the analysis for each co-morbidity is normal weight men without the specific co-morbidity.⁴

Figure 3



Legend—Survival curves for fitness and BMI groups. Prospective study of 2,196 men with confirmed type 2 diabetes. Mortality follow-up for up to 26 years (32,162 man-years of observation, with 275 deaths). Fitness was determined by a maximal exercise test on a treadmill.¹³

Figure 4

Adjusted RR for All-Cause Mortality, 2196 Men with Type 2 Diabetes, ACLS			
<i>Fitness</i>	<i>Normal</i>	<i>Overweight</i>	<i>Obese</i>
<i>Groups</i>	<i>weight</i>		
<i>Low</i>	1.0 (referent) (95% CI)	0.91 (0.57-1.47)	1.05 (0.65-1.71)
<i>Mod</i>	0.56 (0.34-0.94)	0.46 (0.26-0.69)	0.43 (0.22-0.89)
<i>High</i>	0.27 (0.15-0.49)	0.28 (0.14-0.56)	
Adj for age, exam year, smoking, family history of CVD, and chronic illness			

Legend-- Prospective study of 2,196 men with confirmed type 2 diabetes. Mortality follow-up for up to 26 years (32,162 man-years of observation, with 275 deaths). Fitness was determined by a maximal exercise test on a treadmill.¹³

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