

PREVENTION OF TYPE 2 DIABETES – THE FINNISH EXPERIENCE

J Tuomilehto

Professor, Department of Public Health, University of Helsinki, Helsinki, Finland

Research into the prevention of type 2 diabetes has been very active in recent years. Unfortunately, it may have happened too late, with type 2 diabetes having reached epidemic proportions in many populations worldwide. It is difficult to reverse this current trend of unhealthy eating, lack of physical activity and resulting obesity that is reaching most countries in the world.

The first question is: why are we so stupid to let it happen? Who wants us to be sedentary and obese? The answer is not clear. We have more information, more possibilities to choose, etc., but it seems not to help. The second question is whether it is possible to change the situation? Results from several major lifestyle intervention trials among high-risk people in all major ethnic groups have consistently shown that the risk of type 2 diabetes in high-risk subjects can be halved, and that the effect of such interventions is rapid. Moreover, as shown in the Finnish Diabetes Prevention Study (DPS), none of the people who had reached all five (modest) lifestyle targets with their diet and exercise developed diabetes. This is the proof that lifestyle changes even in high-risk individuals do not need to be drastic and that relatively modest corrections in lifestyle are helpful. The data from the DPS and other similar studies also showed that the effect of the lifestyle intervention was sustained even up to 20 years after the intervention has been stopped.

Next, the question is, how to translate these important research findings to the population at large. In response to this challenge a nationwide prevention programme for type 2 diabetes has now been set up in Finland. The programme is coordinated by the Finnish Diabetes Association and it is implemented within the existing health care system. We have developed a simple Finnish Diabetes Risk Score (FINDRISC) to identify people who are at high risk of type 2 diabetes (see: www.diabetes.fi). An intensified community-based prevention programme is implemented through primary health care in 5 hospital districts covering approximately 1.4 million inhabitants during 2003 to 2007, and it is the first of its kind in the world.