

ministered daily. Our observation would have been more important if the relationship of Lp(a) was with circulating free insulin levels. Notwithstanding these drawbacks, we believe this observation is important and should be pursued further with prospective studies in both diabetic and nondiabetic subjects. We appreciate the input of Couper et al.

AUDREY AUSTIN, MD
 VIJAY WARTY, PHD
 JANINE JANOSKY, PHD
 SILVA ARSLANIAN, MD

From the Department of Endocrinology, Children's Hospital of Pittsburgh, Pittsburgh, Pennsylvania.

Address correspondence to Silva Arslanian, MD, Department of Endocrinology, Children's Hospital of Pittsburgh, 3705 Fifth Avenue, Pittsburgh, Pennsylvania.

Lp(a), lipoprotein(a); IDDM, insulin-dependent diabetes mellitus, BMI; body mass index.

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Fitness Levels in IDDM Adolescents

Austin et al. (1) speculate that higher physical fitness levels in adolescents with IDDM may decrease

the risk of cardiovascular disease through modulating lipid levels. This hypothesis is supported by recent reports of a greater role for lipids in endurance exercise than was originally thought (2) and by adaptive hyperlipogenesis associated with a certain genetic vigor underlying coronary artery disease and obesity (3).

ERNEST H. FRIEDMAN, MD

From the Departments of Medicine and Psychiatry Care, Case Western Reserve University School of Medicine, Cleveland, Ohio.

Address correspondence to Ernest H. Friedman, MD, 1831 Forest Hills Boulevard, East Cleveland, OH 44112.

IDDM, insulin-dependent diabetes mellitus.

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Assessing Risk Factors When Screening for Diabetes Mellitus

Even though an estimated 6 million cases of diabetes mellitus in the U.S. are undiagnosed, the advantages and disadvantages of screening programs to identify these individuals are controversial (1-5). In its position statement, the American Diabetes Association has proposed that risk factors for diabetes should be assessed and only those indi-

viduals with ≥ 1 risk factors be screened for diabetes (6). These risk factors include 1) a family history of diabetes mellitus; 2) obesity; 3) an at-risk race (American Indian, Hispanic, or black); 4) previously identified impaired glucose tolerance; 5) hypertension or significant hyperlipidemia; and 6) in nonpregnant women, a history of gestational diabetes mellitus or delivery of babies > 9 lbs.

To determine the usefulness of these recommendations, we measured both the risk factors for diabetes by a verbal questionnaire and the blood glucose concentrations by a reflectance meter of 575 self-selected participants in a diabetes screening program. Blood glucose was tested regardless of the answers to the questionnaire.

Of the participants, 34% (193) had no risk factors for diabetes mellitus, and 8.9% (51) had abnormal screening glucose concentrations. Of the participants with abnormal screening glucose concentrations, 31% (16) had no risk factors for diabetes mellitus. Overall, 8.3% of the self-selected participants without risk factors for diabetes mellitus had abnormal screening tests, compared with 9.2% of those with ≥ 1 risk factors (NS). No differences were observed in the abnormal screening glucose concentrations of participants without risk factors for diabetes compared with those with ≥ 1 risk factors. A history of prior, borderline diabetes was the only risk factor predictive of an abnormal screening test (OR 5.6, 95% CI 2.1-14.6) as was the presence of ≥ 3 risk factors for diabetes (OR 4.5, 95% CI 1.7-11.4). A follow-up of all participants with abnormal screening tests an average of 1.8 yr after screening (range: 1.1-2.6 yr) revealed that 41% had diabetes mellitus: 6 from the group with no risk factors and 15 from those with ≥ 1 risk factor (NS).

Assessing diabetes risk factors to identify individuals appropriate for blood glucose screening imposes an administrative burden on those conducting the screening program. This burden is cost-effective only if it aids in selecting