## **Hypoglycemia and Employment/Licensure**

American Diabetes Association

n 1984, in recognition of the tremendous progress made in the treatment and daily management of diabetes, the American Diabetes Association adopted the following policy on employment.

Any person with diabetes, whether insulin dependent or non-insulin dependent, should be eligible for any employment for which he/she is otherwise qualified.

Despite the significant medical and technological advances made in managing diabetes, discrimination in employment and licensure against people with diabetes still occurs. This discrimination is often based on apprehension that the person with diabetes may present a safety risk to the employer or the public—a fear sometimes based on misinformation or lack of up-to-date knowledge about diabetes. Perhaps the greatest concern is that hypoglycemia will cause sudden unexpected incapacitation.

Hypoglycemia occurs from a relative excess of insulin in the blood and results in excessively low blood glucose levels. The level of glucose that produces symptoms of hypoglycemia varies from person

to person and for the same person under different circumstances. Hypoglycemia usually occurs gradually and is generally associated with typical warning signs, which may include rapid heartbeat, perspiration, shakiness, anxiety, and hunger. When symptoms occur, preventive action can be taken by eating carbohydrates. A hypoglycemic reaction is not ordinarily associated with a loss of consciousness or a seizure. However, if warning signs are absent or ignored and the blood glucose level continues to fall, more severe hypoglycemia may lead to an alteration of mental function that proceeds to confusion, stupor, and finally to unconsciousness. Most individuals with diabetes never suffer such severe hypoglycemia. Those who experience recurrent episodes should be individually evaluated and, when appropriate, the employment position should be modified.

Hypoglycemia does not occur in people with diabetes who are treated with only medical nutrition therapy (MNT) and exercise and is rare in people treated with  $\alpha$ -glucosidase inhibitors, biguanides, or thiazolidinediones. Except in el-

derly or chronically ill individuals or in association with prolonged fasting, severe hypoglycemia is unlikely to occur when appropriate doses of any oral glucoselowering agents are used to manage blood glucose. Most people recognize the early warning signs of hypoglycemia and can quickly counteract them by eating. Furthermore, the proper use of systems that allow rapid and accurate self-monitoring of blood glucose levels can assist people in avoiding significant hypoglycemia. Thus, most people with diabetes can manage their condition in such a manner that there is a minimal risk of incapacitation from hypoglycemia.

In summary, because the effects of diabetes are unique to each individual, it is inappropriate to consider all people with diabetes the same. People with diabetes should be individually considered for employment based on the requirements of the specific job. Factors to be weighed in this decision include the individuals medical condition, treatment regimen (MNT, oral glucose-lowering agent, and/or insulin), and medical history, particularly in regard to the occurrence of incapacitating hypoglycemic episodes.

## Bibliography

Approved 1990. Most recent review/revision, 2007. Abbreviations: MNT, medical nutrition therapy.

The recommendations in this paper are based on the evidence reviewed in the following publication:

Hypoglycemia in diabetes (Technical Review). Diabetes Care 26:1902-1912, 2003.

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Cryer PE, Davis SN, Shamoon H: Hypoglycemia in diabetes. *Diabetes Care* 26:1902– 1912, 2003

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