

COMMENTS AND
RESPONSES

Glycemic Control and Hypoglycemia: Is the Loser the Winner?

Response to Musen et al.

The study by Musen et al. (1) evaluated the effect of severe hypoglycemia in intensive diabetes treatment with respect to cognitive performance in type 1 diabetic patients aged 13–19 years at entry into the Diabetes Control and Complications Trial (DCCT). The investigators concluded that long-term cognitive function was not adversely affected over an extended period despite a relatively high rate of hypoglycemia in this subset of the DCCT cohort. Their study adds valuable information to the field. In an editorial (2) in the October 2008 issue of *Diabetes Care*, we suggested that their conclusions be tempered for a number of reasons, in response to which Musen et al. (3) have provided helpful information.

We thank them for addressing each of our comments. The provision of additional data and explanation of study design and statistics adds depth to their original publication (1).

Notwithstanding these observations, it needs to be recognized that cognitive dysfunctions and their progression can encompass multiple-path genetic mechanisms. Further studies will help elucidate the relationship between glucose dysregulation and cognitive dysfunctions in diabetes.

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References

1. Musen G, Jacobson AM, Ryan CM, Cleary PA, Waberski BH, Weinger K, Dahms W, Bayless M, Silvers N, Harth J, White N, the Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications (DCCT/EDIC) Research Group: Impact of diabetes and its treatment on cognitive function among adolescents who participated in the Diabetes Control and Complications Trial. *Diabetes Care* 31:1933–1938, 2008
2. Perlmutter LC, Flanagan BP, Shah PH, Singh SP: Glycemic control and hypoglycemia: is the loser the winner? *Diabetes Care* 31:2072–2076, 2008
3. Musen G, Jacobson AM, Ryan CM, Cleary PA, Waberski BH, Weinger K, Dahms W, Bayless M, Silvers N, Harth J, White N, the Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications (DCCT/EDIC) Research Group: Glycemic control and hypoglycemia: is the loser the winner? (Letter). *Diabetes Care* 32:e46, 2009. DOI: 10.2337/dc08-2264