Preparation of AGE Proteins-- AGE-BSA was prepared as described previously (18). BSA was incubated under sterile conditions with D-glucose for 8 weeks or with D-glyceraldehyde or glycolaldehyde for 7 days. Unincorporated sugars were then removed by dialysis against phosphate-buffered saline. Control non-glycated BSA was incubated in the same conditions with the exception of the absence of reducing sugars. Preparations were tested for endotoxin using Endospecy ES-20S system (Seikagaku Co., Tokyo, Japan) where no endotoxin was detectable. Carboxylmethyllysine (CML) and Carboxylethyllysine were prepared as described previously (18). The extent of chemical modification was determined as described with 2,4,6-trinitrobenzenesulfonic acid as a difference in lysine residues of modified and unmodified protein preparations (19). The extent of lysine modification (%) of modified BSA preparations was 42% for glu-AGE-BSA, 65% for glycer-AGE-BSA, and 90% for glycol-AGE-BSA.