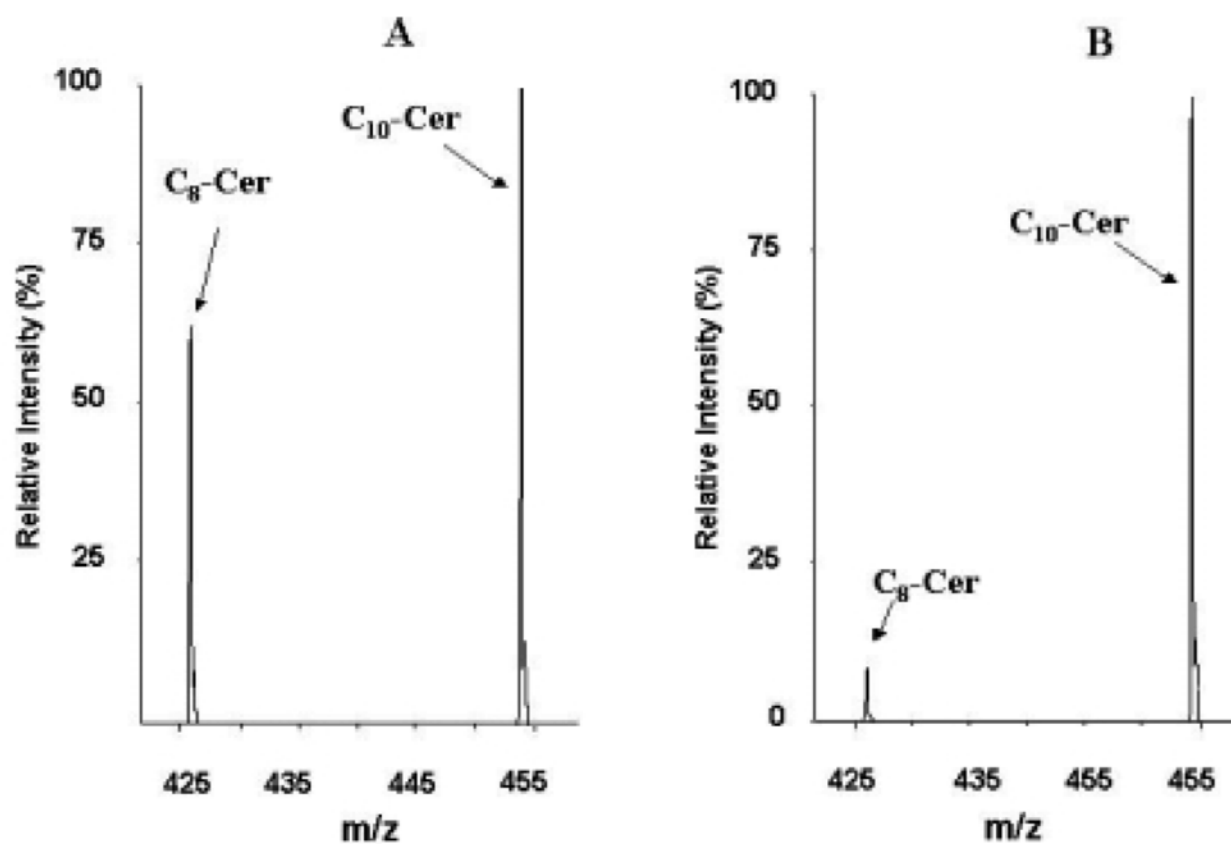
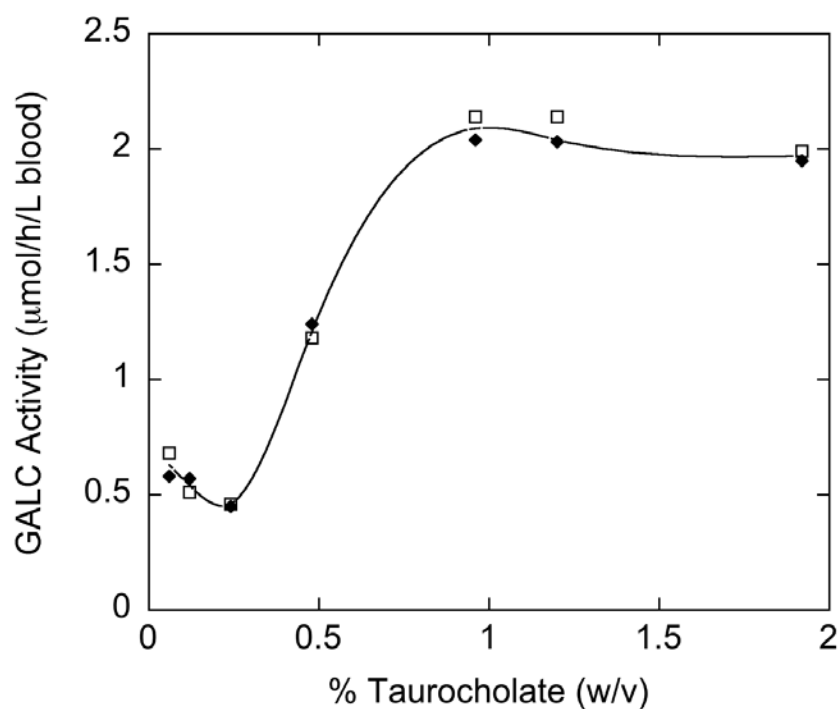
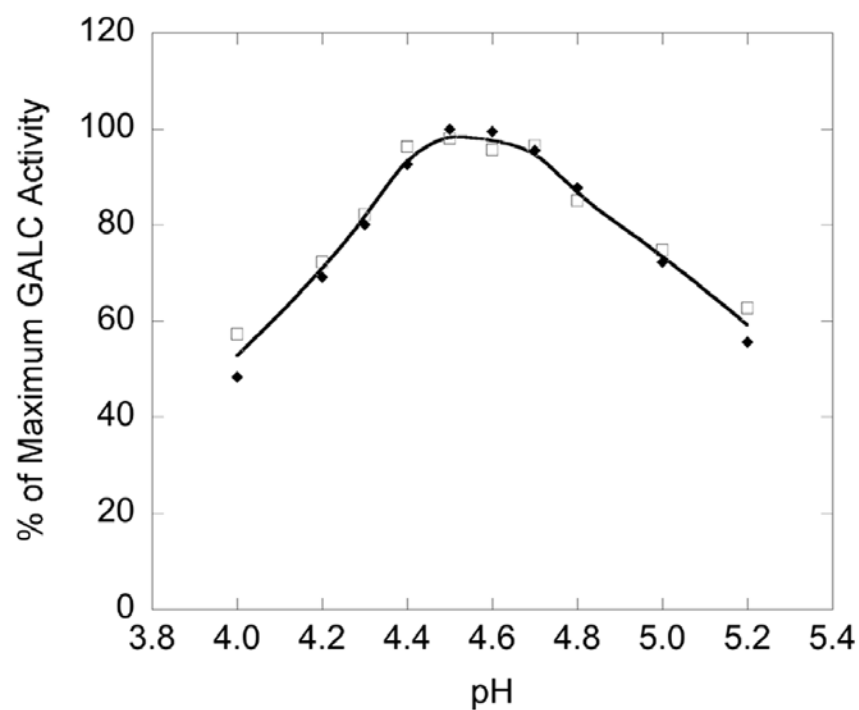


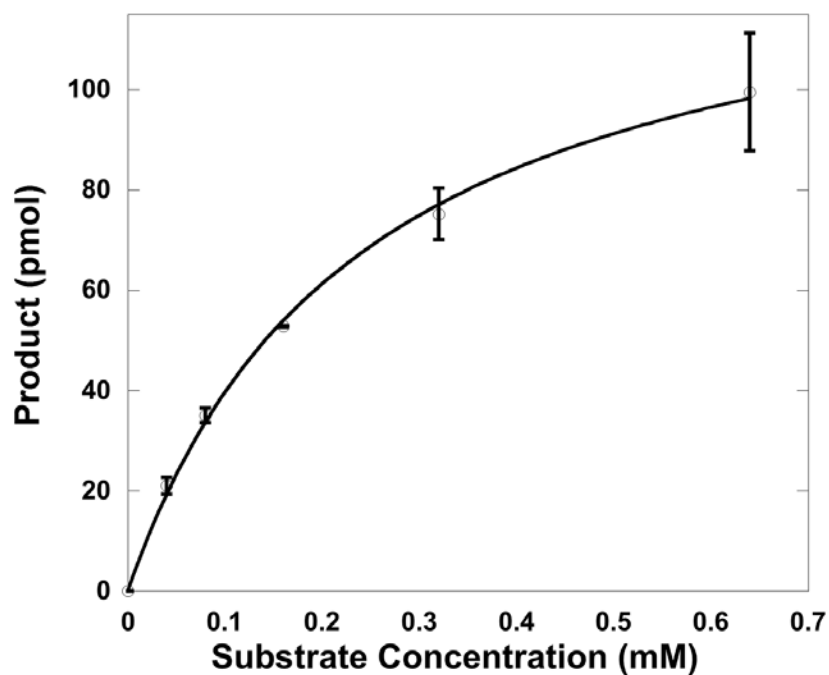
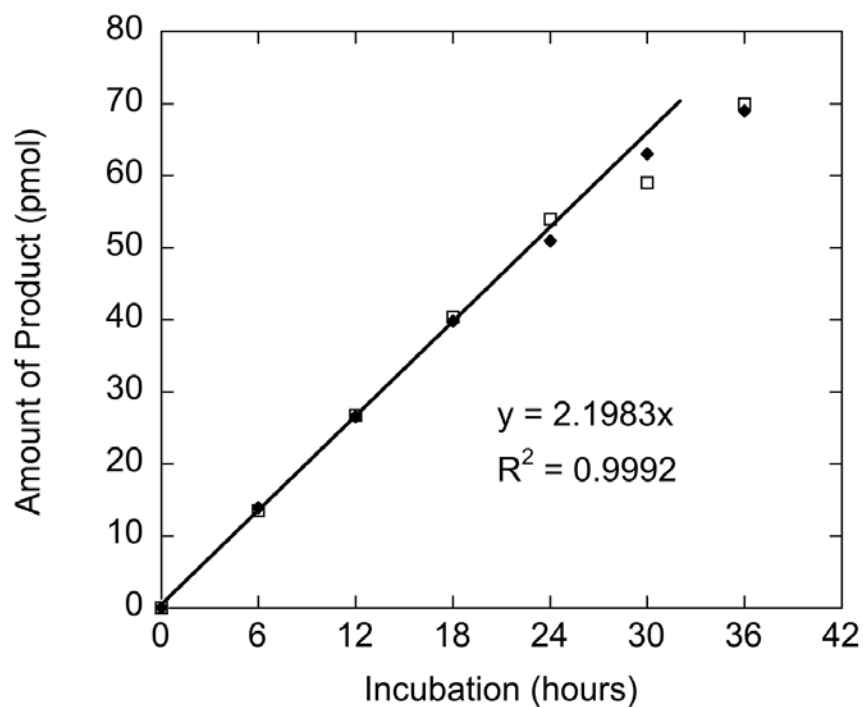
Supplemental Data Figure 1. C8-Cer/C10-Cer ion ratio observed by parent ion scanning ESI-MSMS versus the relative amount of C8-Cer and C10-Cer added to the GALC assay. Samples contained all assay components except substrate, a fixed amount of C10-Cer (0.1 nmol) and various amounts of C8-Cer. The line shows the linear regression fit to the data. Error bars are the standard deviations from triplicate analyses.



Supplemental Data Figure 2. ESI-MSMS parent ion scan of a GALC assay mixture from (A) a 2 mm diameter dried blood spot from a healthy person and (B) a 2 mm diameter, blood-free paper disk.



Supplemental Data Figure 3. Top panel is GALC activity versus pH. Bottom panel is GALC activity versus the amount of taurocholate at a fixed taurocholate/oleate ratio of 10. The different symbols are for independent GALC assays.



Supplemental Data Figure 4. Top panel is the GALC activity versus the incubation time. The solid line is the linear regression fit for the 0 - 24 hr data. Bottom panel is the GALC activity versus the substrate concentration. The solid line is the regression fit of the data to the Michaelis-Menten equation. Error bars are the standard deviations for triplicate analyses.