

## **Aspartate Aminotransferase (AST)**

Aspartate aminotransferase was performed on a Hitachi Model 737 multichannel analyzer (Roche Diagnostics, Indianapolis, IN).

$\alpha$ -Ketoglutarate reacts with L-aspartate in the presence of AST to form L-glutamate plus oxaloacetate. The indicator reaction uses the oxaloacetate for a kinetic determination of NADH consumption. The International Federation of Clinical Chemistry (IFCC) has now recommended standardized procedures for ALT determination, including 1) optimization of substrate concentrations, 2) the use of Tris buffers, 3) preincubation of a combined buffer and serum solution to allow side reactions with NADH to occur, 4) substrate start ( $\alpha$ -ketoglutarate), and 5) optimal pyridoxal phosphate activation.

-from *Laboratory Procedures Used for the Third National Health and Nutrition Examination Survey (NHANES III) 1988-1994*  
Elaine W. Gunter, Brenda G. Lewis, and Sharon M. Koncikowski, 1996