

### **Bicarbonate ( $\text{HCO}_3$ )**

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

Bicarbonate reacts with phosphoenolpyruvate (PEP) in the presence of PEPC to produce oxaloacetate and phosphate. This reaction occurs in conjunction with the transfer of a hydrogen ion from NADH to oxaloacetate using MDH. The resultant formation of NAD causes a decrease in absorbance in the UV range (320-400 nm). The change in absorbance is directly proportional to the concentration of bicarbonate in the sample being assayed.

-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