Cholesterol

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

All cholesterol esters present in serum or plasma are hydrolyzed quantitatively into free cholesterol and fatty acids by microbial cholesterol esterase. In the presence of oxygen, free cholesterol is oxidized by cholesterol oxidase to cholest-4-en-3-one. The H_2O_2 reacts in the presence of peroxidase (POD) with phenol and 4-aminophenazone to form an oquinone imine dye. The intensity of the color is proportional to the cholesterol concentration and is measured photometrically.

> -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