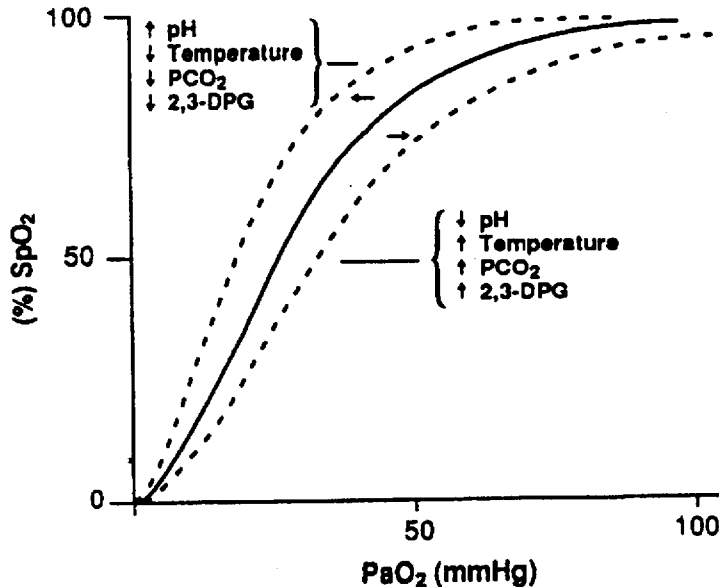


## Measured versus Calculated Saturation

When  $\text{SpO}_2$  is calculated from a blood gas measurement of the partial pressure of arterial oxygen ( $\text{PaO}_2$ ), the calculated value may differ from the monitor's  $\text{SpO}_2$  measurement. This is because the calculated  $\text{SpO}_2$  may not have been corrected for the effects of variables that shift the relationship between  $\text{PaO}_2$  and  $\text{SpO}_2$  (see Figure below): temperature, pH, the partial pressure of carbon dioxide ( $\text{PaCO}_2$ ), and the concentrations of 2,3-DPG and fetal hemoglobin.



Oxyhemoglobin Dissociation Curve