



## **5b. Carbon Dioxide and the Atmosphere of Modern Air-Conditioned Buildings**

Modern air conditioned buildings are designed to save energy costs. Consequently, most modern buildings minimise the intake of outside air and maximise the amount of recycled air. Oxygen concentrations are decreased and carbon dioxide concentrations are increased. An upper limit of five thousand parts per million has been cited as "safe" for office buildings. This concentration of carbon dioxide actually diminishes the concentration gradient from the lungs to the atmosphere by fifteen times. This increases tissue concentrations of carbon dioxide in the body in a similar manner to that of the aircraft cabin environment.