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DOES THE INCREASED CARBON DIOXIDE CONTENT IN THE AIR HAVE AN EFFECT ON HUMAN INTELLECTUAL PERFORMANCE?

Summary

Carbon dioxide is a specific component of atmospheric air, its content steadily increases, and in 2015 it exceeded 400 ppm. According to European and American standards indoor CO<sub>2</sub> content should not exceed 1000 ppm. Measurements taken in school classrooms and university auditoria showed that this value was exceeded multifold, reaching reaching even 7000 ppm. Until recently it was thought that a moderately elevated levels of carbon dioxide (up to approx. 5000 ppm) cause only temporary discomfort (headaches, feeling unwell, anxiety), without significantly affecting the quality of work and mental functions. Increasing number of observations indicate a decreased ability of perception and intellectual performance, when the CO<sub>2</sub> content in the room exceeds 1400 ppm. Very carefully conducted experiments in USA have demonstrated that even moderately elevated levels (2500 ppm CO<sub>2</sub>) can impair decision-making activities, the ability to take initiative and ability to think strategically.