

# Effect of intermittent hypoxia on the reproduction of rats exposed to high altitude in the Chilean Altiplano

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Cikutovic, Marcos, Nelson Fuentes, and Eduardo Bustos-Obregón. Effect of intermittent hypoxia on the reproduction of rats exposed to high altitude in the Chilean Altiplano. High Alt. Med. Biol. 10:357-363, 2009.- Environmental parameters such as the large day-night temperature differences, high light radiation, and low humidity may have a synergistic effect with low oxygen pressure. To evaluate the effects of the exposure to intermittent chronic hypobaric hypoxia (ICHH) in nature on rat reproduction, a group of rats was alternately moved to a location at 3400 meters over sea level (moml) for 7 days and returned the subsequent week to sea level; this procedure was repeated six times. Hematological and reproductive parameters were measured and analyzed. At the end of the experimental protocol, hematocrit and hemoglobin concentrations were significantly greater in the ICHH group compared to the control group (Nx) ( $p < 0.05$ ). The diameter of the seminiferous tubule and the height of the sp