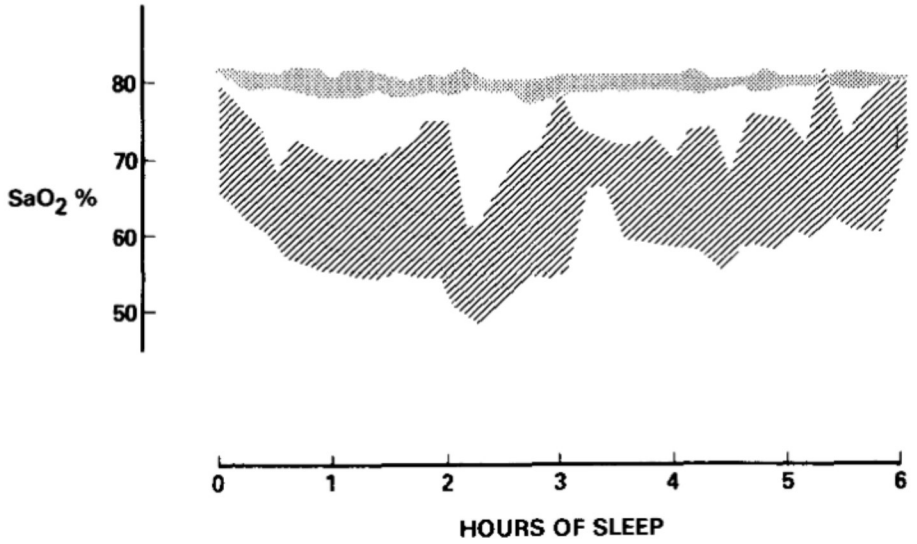

FIG. 4. The ranges of arterial oxygenation obtained during sleep at 5,360 m in one subject, with (upper, stippled area) and without (lower, crosshatched area) acetazolamide. (Reproduced with permission, from Sutton, 1979.)

occurring through the night demonstrated higher average levels of saturation, much less oscillation in saturation, and an absence of profound hypoxemia. The findings in 1 subject are seen in Fig. 4, and similar changes were evident in the group as a whole and were not related to time spent at altitude. Acetazolamide increased the average sleep Sao_2 from 72.0 ± 2.1 to 78.7 ± 1.2% (means ± SEM; $p < 0.005$), the mean low saturation from 67.6 ± 2.6 to 75.8 ± 1.3% ($p < 0.005$), and the mean high saturation from 78.5 ± 2.1 to 81.8 ± 1.4% ($p < 0.05$). The lowest Sao_2 increased from 60.8 ± 3.8 to 71.9 ± 1.6% ($p < 0.01$), and abolished profound

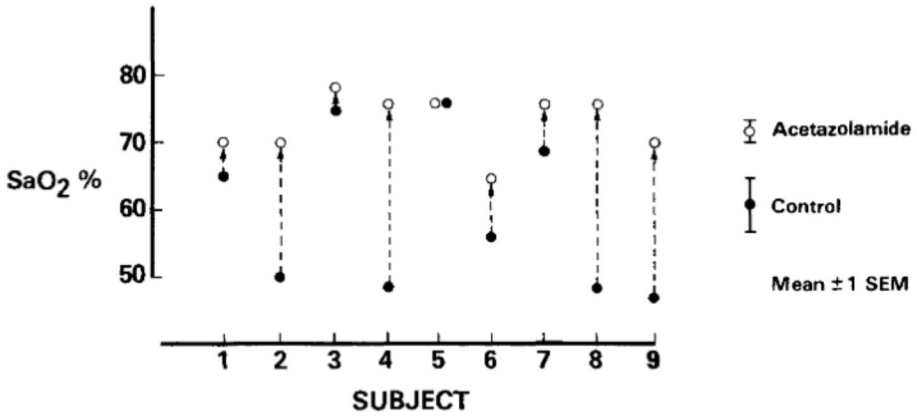

FIG. 5. Effect of acetazolamide on the lowest SaO_2 during sleep at 5,360 m. (Subjects 8 and 9 were those at altitude for 30 days; subjects 2, 6, 7, and 9 were female.)