Obese adolescents screened (n = 40)

Baseline assessment
2 days before the onset of the intervention

control group (n = 20)

exercise, eat a balanced diet and sleep in normobaric condition

hypoxia group (n = 20)

exercise, eat a balanced diet and sleep in normobaric hypoxia chambers

Post-intervention assessment
2 days after the 4-week intervention

Follow-up assessment
2 month after the intervention