Somatotype, body composition, nutritional state and physical condition in people with visual impairment who practice goalball [Somatotipo, composición corporal, estado nutricional y condición física en personas con discapacidad visual que practican goalball]

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Few publications refer to people with a visual impairment who practice Goalball, given that other groups of the population were studied or for unknown reasons. The aim was to measure the somatotype, the body composition, the nutritional state, and the physical condition (more specifically structural and functional features) of people with visual impairment in the Araucanía Region in Chile. The type of investigation considers a cuantitative, non-experimental, descriptive and transversal design. The sample consists of 14 Goalball athletes of the Araucanía Region. The sample was selected randomly and included 11 male subjects (age 42.36±14.46), with respect to weight and height the average was 74.76±10.36 and 1.695±0.07 respectively. To measure the somatotype and the body composition, the protocol described by the International Society for the Advancement of Kinanthropometry (ISAK) was used, whereas to evaluate the nutritional state and physical condition, the tests employed in the SIMCE (System of Measuring the Quality of Education) for the subsector of Physical Education in Chile (MINEDUC - Ministry of Education) were administered. The results indicate that the evaluated athletes classify as meso-endomorph. They reached 28.78% of fat mass and 42.71% of muscle mass, whereas their BMI is 26.05kg/m2. Regarding their physical condition the findings show a satisfactory level for the tests of abdominals, flexibility, and cardiorespiratory resistence. The tests of long jump with joined feet and elbow-flexo-extention were not as good. however. These outcomes can possibly be explained by the age, visual impairment, and by characteristics of the sport discipline practiced.

Anthropometry

Goalball
Nutritional state and physical condition
Somatotype
Visual impairment

Body composition