

Biometric aspects of the hand in Chilean individuals [Aspectos biométricos de la mano de individuos chilenos]

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The hand is essential to perform various actions both in the workplace and in entertainment and sports, may perform other functions from very basic to highly specialized. The hand function can be analyzed best when it is divided into parts, although it is somewhat artificial and merely didactic, allowing a better understanding of the labor activity as a unit. Because of the importance of this part of the body and biometric parameters limited information that exists in our population, it has become necessary to a thorough study on the dimensions of the hand as a whole, as well as its components, the fingers. Accordingly, we analyzed 1,196 hands belonging to people of both sexes (267 men and 331 women) aged between 18 and 65, born and living in VII Maule Region of Chile. Each patient underwent an anthropometric examination of general and specific one hand. The variables considered were: hand length, hand width, finger length, length of the phalanges sector. The variables were studied according to sex, age and sides. Part of the results were as follows: in males, the average length of the right hand was 184.9 mm and the left of 185.6; in females was 167.6 mm on the right side and of 168.9 on the left. With respect to the length of the fingers in males, whereas the sum of the averages for each sector of the corresponding phalanges, the averages were: thumb, 72.5 mm in the right hand and 72.4 mm in the left; index finger, 104.2 and 104.5 mm; middle finger, 115 and 114.6 mm; ring finger, 109.1 and 108.9 mm; little finger, 88.5 and 88.4 mm respectively. Among females, the average lengths were: right thumb, 63.5 mm and 62.6 mm in the left; index, 91 and 90.7 mm; middle finger, 100.4 and 99.2 mm; ring finger, 94.4 and 94.2 mm and the little finger, 75.8 and 75.9 mm, respectively. Data reported in this study are important because they allow a real knowledge of biometric variables in Chilean hands.

Biometry

Fingers

Hand

Phalanges