

## **Determinación del índice de resistencia insulínica mediante HOMA en una población de la Región Metropolitana de Chile**

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### **Abstract**

**Background:** Insulin resistance is defined as an inappropriate high level of plasma insulin required to maintain metabolic homeostasis. It is associated with type 2 diabetes and cardiovascular diseases. The glucose clamp technique is the standard method for the measurement of insulin resistance. However, this method is laborious, expensive and impractical to perform in epidemiological investigations. The homeostasis model assessment (HOMA) has been proposed to assess insulin resistance and secretion, using fasting glucose and insulin concentrations. **Aim:** To measure insulin resistance using HOMA (HOMA<sub>ir</sub>) in a population sample from the Metropolitan Region in Chile. **Material and Methods:** One hundred twenty subjects (59 female) with a normal body mass index and fasting blood glucose were studied. Fasting plasma glucose was measured by a glucose oxidase method and serum insulin was measured by radio immunoassay. **Results:** Fasting blood glucose was  $81.6 \pm 9.4$  mg/dl and serum insulin was  $9.7 \pm 2.4$   $\mu$ U/ml. Mean HOMA insulin resistance was  $1.96 \pm 0.57$  (range 0.5 and 3.0). **Conclusions:** These HOMA values can be used as reference for Chilean non obese individuals