

Commonly Used Indices for Insulin Sensitivity (Resistance)

Quantity	Measurements Used	Reference
Glucose AUC (mmol-min/L)	Fasting insulin	
Fasting Glucose (mmol/L)	Fasting glucose and insulin (c-peptide)	Wallander, et al. (2005)
HOMA-S (%)	Fasting glucose and insulin	Katz, et al. (2000)
OGIS ($\text{ml min}^{-1} \text{m}^{-2}$)	Glucose and insulin from OGTT (MMTT)	Mari, et al. (2001)
log(PREDIM)	Glucose and insulin from OGTT (MMTT)	Tura et al. (2018)
QUICKI	Glucose and insulin from OGTT (MMTT)	Bergman et al. (1979)
SI ($\text{min}^{-1} (\mu\text{U}/\text{ml})^{-1}$)	Glucose and insulin from OGTT (MMTT)	
Insulin AUC (ulU-min/ml)	Glucose and insulin from OGTT (MMTT)	Matsuda and DeFronzo (1999)
Fasting Insulin (ulU/ml)	Euglycemic clamp test	DeFronzo, et al. (1979)

This is not an inclusive list. OGTT, oral glucose tolerance test; MMTT, mixed meal tolerance test

- ▶ M-value is generally considered the gold standard
- ▶ HOMA-S is a widely used index based fasting glucose and insulin
- ▶ Matsuda index is a widely used index based on OGTT or MMTT