

## Fasting insulin and HOMA-IR ranges\*

for therapeutic carbohydrate restriction

<b>Fasting insulin*</b>			
<b>µIU/mL or mIU/L</b>	<b>pmol/L</b>	<b>Risk for insulin resistance</b>	<b>Reference</b>
≥ 25	≥ 174	High	Johnson, Duick, Chui & Aldasouqi, 2010
>12	> 83	Moderate	McAuley et al., 2001
≤ 8		Low	Johnson, Duick, Chui & Aldasouqi, 2010

<b>Homeostatic model assessment for insulin resistance (HOMA-IR)**</b>		
HOMA-IR score = fasting insulin (mIU/L) x fasting glucose (mg/dL) / 405 (Matthews et al., 1985)		
<b>Score</b>	<b>Risk for insulin resistance</b>	<b>Reference</b>
< 1.6	Low	Shashaj & Luciano, 2015

\* These definitions have not been standardized. These are “working” ranges until more studies are done to standardize values for predicting insulin resistance. Following the trend in an individual patient over time is likely more helpful than an absolute value when monitoring patients on therapeutic carbohydrate restriction.

\*\* A calculator for HOMA-IR can be found at:  
[mdcalc.com/homa-ir-homeostatic-model-assessment-insulin-resistance](http://mdcalc.com/homa-ir-homeostatic-model-assessment-insulin-resistance)