



COMMENT ON PILZ ET AL.

## Insulin Sensitivity and Albuminuria: The RISC Study. Diabetes Care 2014;37:1597–1603

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In their recent study, Pilz et al. (1) showed in middle-aged adults from the RISC (Relationship between Insulin Sensitivity and Cardiovascular Disease) study that insulin resistance measured by the gold-standard hyperinsulinemic-euglycemic clamp was continuously related to a higher risk of increasing urine albumin. Although this finding is of great interest, the authors did not find this association with surrogate indices to assess insulin sensitivity and resistance, such as oral glucose tolerance test–based insulin sensitivity and homeostasis model assessment of insulin resistance. These results question the use of the gold-standard hyperinsulinemic-euglycemic clamp to detect insulin-resistant subjects who are at risk to develop renal alteration. As the use of a surrogate index instead of the clamp would be easier to implement in the assessment of insulin sensitivity and resistance in a large population, it would

have been of great interest to find the most relevant surrogate as a tool. In this context, it is possible that the authors did not totally explore all the possibilities to find a simple surrogate that could give relevant information similar to the clamp. As elevated urine albumin is linked to cardiovascular risk, the indices that include lipids in their formulas, such as the triglycerides and glucose index and McAuley index, could have been tested as they have previously been found relevant to detect individuals with insulin resistance at risk to develop cardiovascular complications (2). Moreover, another simple surrogate, the revised quantitative insulin sensitivity check index, recently highlighted in a meta-analysis published by Otten et al. (3) on surrogate measures of insulin sensitivity versus the hyperinsulinemic-euglycemic clamp, could have been tested. Finally, perhaps other indices derived from the oral glucose tolerance test, listed elsewhere (3,4), could have been

tested before the authors reached their conclusions.

**Duality of Interest.** No potential conflicts of interest relevant to this article were reported.

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