Reply to Letter to the Editor

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Response to Dr. Satish Kalhan:

I appreciate Dr. Kalhan's kind words about my paper [1]. The derivation he provides in his letter is quite correct under the Tracee Steady State assumption, consistent with my equation (7) as he says. However, his formulas here differ slightly from the paper I referred to [2]. In his letter, Dr. Kalhan correctly has (IxEi) in the denominator for fraction of infused tracer oxidized and "I" in the formula for Ra. However, in the 1998 paper [2], both the denominator for tracer fraction oxidized (F) and the formula for Ra have only "I"; the same error is seen in two of the other papers Dr. Kalhan mentions [3,4]. I do see that the formulas are given correctly in one of the references [5]. Apparently, there were typographical errors in the other three articles.

References

1. Ramakrishnan R. Alternative equations for whole-body protein synthesis and for fractional synthetic rates of proteins. Metabolism 2007;56:1550–1560. [PubMed: 17950107]

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3. Assel B, Rossi K, Kalhan S. Glucose metabolism during fasting through human pregnancy: comparison of tracer method with respiratory calorimetry. Am J Physiol 1993;256:E351–E356. [PubMed: 8214042]

4. Kalhan SC, Gruca LL, Parimi P, O'Brien A, Dierker L, Burkett E. Serine metabolism in human pregnancy. Am J Physiol 2003;284:E733–E740.

5. Glamour TS, McCullough AJ, Sauer PJJ, Kalhan SC. Quantification of carbohydrate oxidation by respiratory gas exchange and isotopic tracers. Am J Physiol 1995;268:E789–E796. [PubMed: 7733280]