

S2 Appendix. Choice of integration window length for the integrated static mixing model.

Representation of bias estimates ($\beta_{\frac{\omega}{\lambda}}$) as a function of the ω/λ ratio for the instantaneous (SMM_t) and integrated ($\text{SMM}_{\Delta t}$) methods. For $\text{SMM}_{\Delta t}$, four lengths of integration window (Δt) were tested, such as Δt equals to half a time, once, twice, three times the half-life (i.e., $0.5 \times t_{1/2}$, $1 \times t_{1/2}$, $2 \times t_{1/2}$, $3 \times t_{1/2}$). The most appropriated Δt to improve the diet estimates by integration method corresponds to the best compromise to reduce $\beta_{\frac{\omega}{\lambda}}$. The selected Δt for the manuscript is $\Delta t = 2 \times t_{1/2}$.

