

Online Supporting Material

Supplemental Table 1. The fractional synthesis rate of albumin in males and females and younger and older adults in the postabsorptive and postprandial states with 125, 94, and 63 % of the RDA for dietary protein.¹

Group	State ⁴	FSR of Albumin by Protein Trial ^{2,3}		
		P125	P94	P63
		<i>%/d</i>		
Males ⁵ (n=19)	PA	12.3 ± 3.5	13.0 ± 4.0	13.5 ± 3.7
	PP	17.6 ± 6.2	16.0 ± 4.7	16.4 ± 5.2
Females (n=17)	PA	11.0 ± 6.2	9.8 ± 2.4	10.7 ± 4.0
	PP	13.6 ± 5.8	12.1 ± 3.6	12.0 ± 5.7
Younger (n=18)	PA	12.3 ± 6.3	11.3 ± 3.4	12.1 ± 4.4
	PP	16.5 ± 7.6	14.3 ± 4.8	14.9 ± 6.5
Older (n=18)	PA	11.1 ± 3.1	11.7 ± 4.0	12.3 ± 3.8
	PP	16.5 ± 7.6	14.0 ± 4.5	13.7 ± 5.1

¹Values are mean ± SD. .

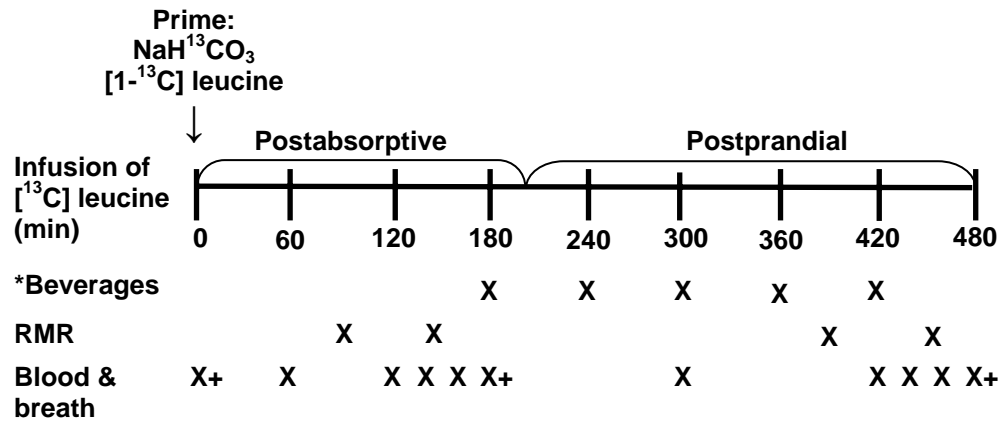
²FSR is the fractional synthesis rate in %/day

³Protein trial: P125 = 125%; P94 = 94%; and P63 = 63% of the RDA for dietary protein.

⁴State: PA = postabsorptive and PP = postprandial

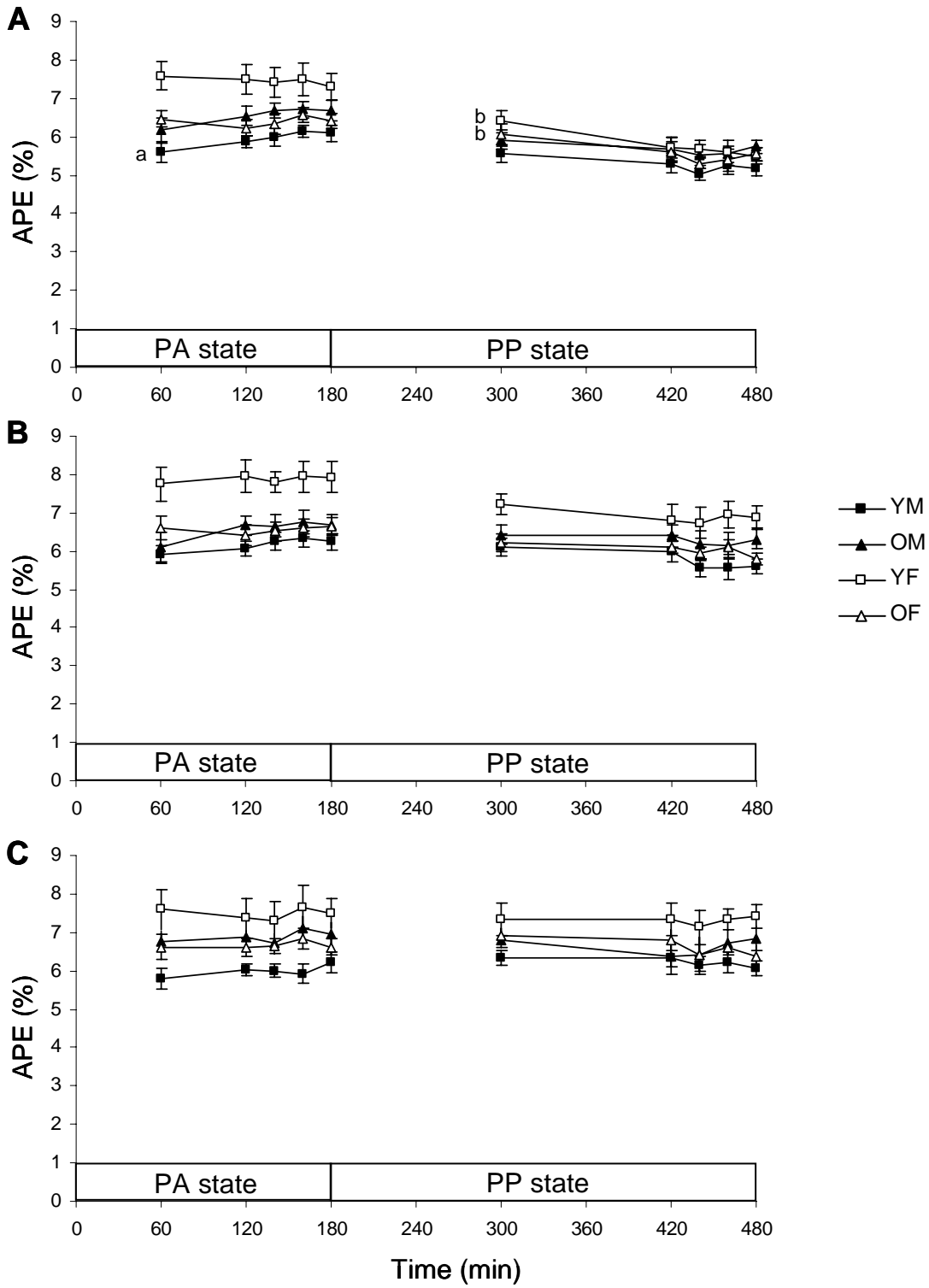
⁵Different from females, P<0.05

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Supplemental Figure 1. Protocol for $[1-^{13}\text{C}]$ leucine infusion used to measure albumin FSR. **X**, indicates the time that a beverage was provided, a resting metabolic rate (RMR) measurement completed, or blood draw and breath samples were collected. **+**, Time point used to measure ^{13}C -leucine in albumin. **↓**, indicates the administration of the priming doses of $\text{NaH}^{13}\text{CO}_3$ and $[^{13}\text{C}]$ leucine. *Beverages contain one-twelfth of each subject's estimated daily energy and dietary protein needs.

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Supplemental Figure 2. Plasma ^{13}C -KIC enrichment in atom percent excess (APE, %) during the postabsorptive (PA) and postprandial (PP) states for all groups (YM, younger males; OM, older males; YF, younger females; and OF, older females) during trials (A) P125 = 125% of the RDA for dietary protein (B) P94 = 94% of the RDA for dietary protein and (C) P63 = 63% of the RDA for dietary protein. Steady-state plasma ^{13}C -KIC enrichment was assessed as the period during the PA and PP states when the slope was not different from zero ($P < 0.05$). The only slopes that were significantly different from zero were for ^ayounger men during PA at P125, and ^byounger and older females during PP at P125. Values are means \pm SEM.