

**Additional file 4. Comparison of morphometric studies of EE and / or HIV enteropathy in
Zambian adults. (PDF file)**

Patient group	Parameter	Kelly[6]	Kelly[6]	Current study
		CD4 >200	CD4 <200	CD4 159-656
EE+HIV	VH	255 (47)	247 (39)	269 (40)
	CD	173 (26)*	174 (33)*	157 (15)
	MT	[428]	[421]	425 (45)
	VW	209 (56)	217 (47)	163 (152-192)
	VP	425 (101)	415 (74)	391 (353-414)*
	VA	16733 (4074)	18195 (7055)	31246 (5734)*
EE	VH	265 (49)	265 (49)	237 (40)
	CD	149 (29)*	149 (29)*	152 (22)
	MT	[414]	[414]	388 (48)
	VW	193 (39)	193 (39)	130 (118-171)
	VP	458 (112)	458 (112)	274 (244-320)*
	VA	16659 (4082)	16659 (4082)	21651 (5722)*

* Significant difference ($P < 0.05$) between patient groups. Mucosal thickness in the Kelly study was not stated and has been calculated by adding mean VH and CD. VH, CD, VW and MT expressed in μm (SD; IQR for VW in current study); VA and VP expressed in $\mu\text{m}/100\mu\text{m}$ mucosal length (SD; IQR for VA in current study). CD, crypt depth; EE, environmental enteropathy; IQR, interquartile range; MM, multiple micronutrient supplementation; MT, mucosal thickness; VA, villous area; VH, villous height; VP, villous perimeter; VW, villous width.