Figure S1. Boxplot demonstrating the median and range of total calcium (tCa) at timepoints 1 (T1) and 2 (T2), n = 13. The bold horizontal lines represent the upper and lower reference intervals for tCa, 2.3 and 2.6 mmol/l respectively. The circle represents an outlier.

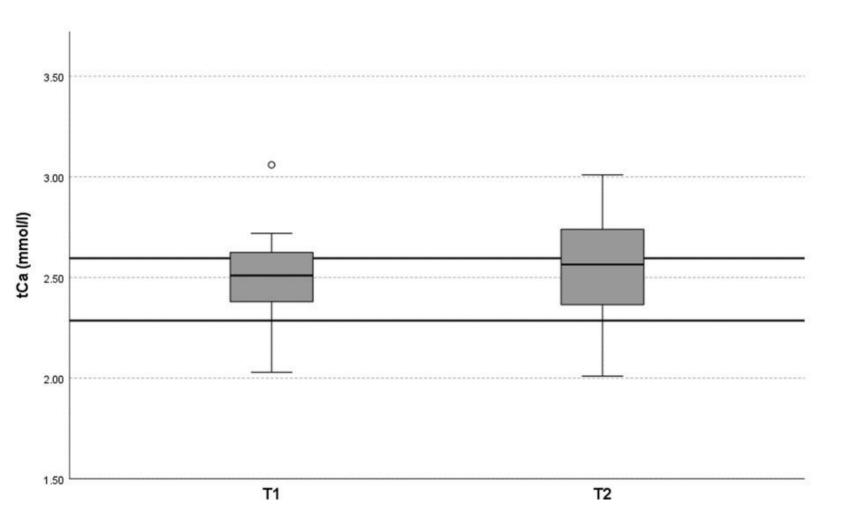
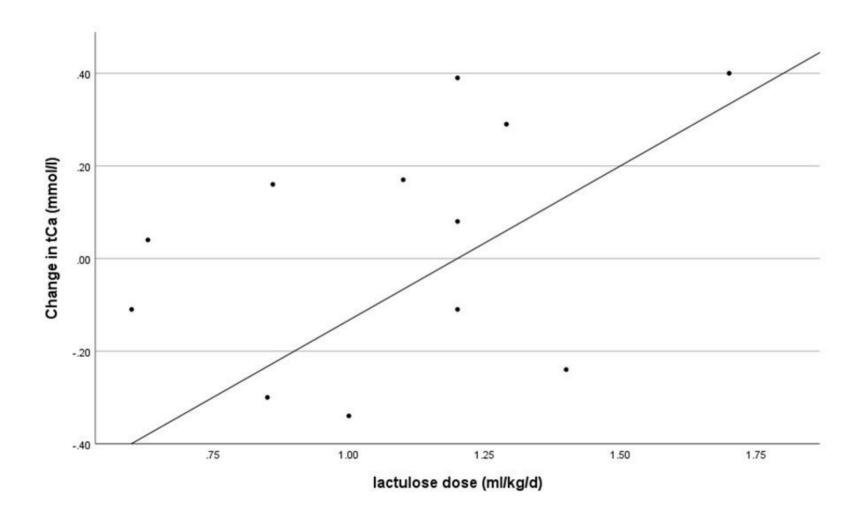
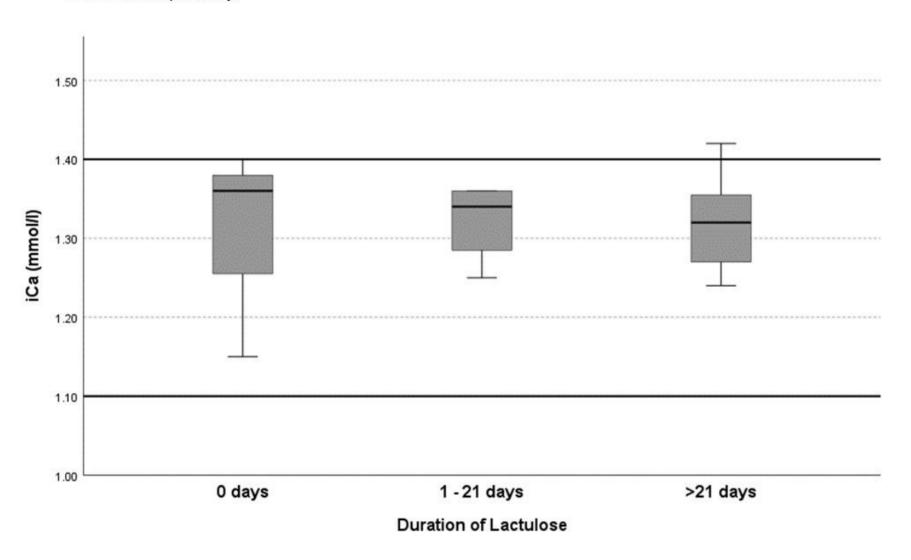


Figure S2. Scatterplot with a line of best fit demonstrating the relationship between lactulose dose and change in total calcium (tCa) between T1 and T2, n = 12.



**Figure S3.** Boxplot demonstrating ionised calcium (iCa) at 3 different time points: 0 days (n = 10), 1-21 days (n = 5) and >21 days (n = 16). The bold horizontal lines represent the upper and lower reference intervals for iCa, 1.1 and 1.4 mmol/l respectively.



**Figure S4.** Boxplot demonstrating total calcium (tCa) at 3 different time points: 0 days (n = 10), 1-21 days (n = 5) and >21 days (n = 16). The bold horizontal lines represent the upper and lower reference intervals for tCa, 2.3 and 2.6 mmol/l respectively.

