Free Amino Acids dynamics over time in Human Milk

March 20, 2019

Abstract

1 Free amino acid Composition of HM over time

Change of concentration over time is studied for each of the AA recorded. They are divided into two categories:

Essential: HIS, ILE, LEU, LYS, MET, PHE, THR, TRP, VAL.

Non Essential: ALA, ARG, ASN, ASP, CYS, GLN, GLU, GLY, PRO, SER, TYR.

1.1 Distribution over time

Figures ?? and ?? show the concentration of each AA over time. In most cases concentration increases over time.

Trends in time are not clear by looking at the tables and density plots. The following regression model is fitted to study this relationship:

$$AA = \alpha_0 + \alpha_1 \ week + \alpha_{id} \tag{1}$$

where the effect α_{id} is different for each participant.

2

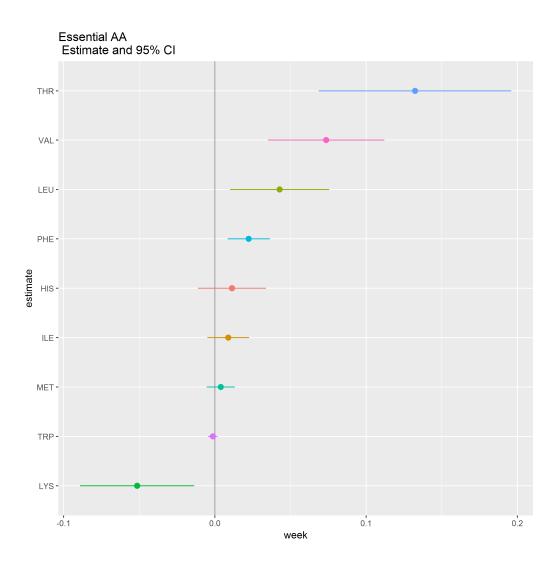


Figure 1:

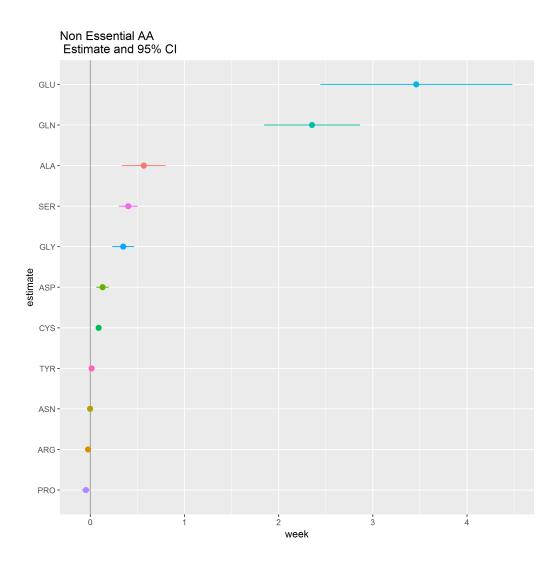


Figure 2: