

Supplementary Table S1. logistic regression analysis for the association between PRAL² and asthma for all sample and according overweight/obese status ^a.

| | | OR | CI (95%) | p |
|---------------|---------|--------------|-------------|-------|
| Normal weight | | | | |
| | PRAL | | | |
| | Model 0 | 0.916 | 0.651,1.288 | 0.613 |
| | Model 1 | 0.912 | 0.628,1.324 | 0.628 |
| | Model 2 | 0.910 | 0.627,1.323 | 0.622 |
| | Model 3 | 0.959 | 0.617,1.491 | 0.853 |
| Overweight | | | | |
| | PRAL | | | |
| | Model 0 | 1.841 | 1.056,3.208 | 0.031 |
| | Model 1 | 2,573 | 1.195,5.541 | 0.016 |
| | Model 2 | 2,536 | 1.184,5.433 | 0.017 |
| | Model 3 | 2.682 | 1.164,6.178 | 0.021 |
| Obese | | | | |
| | PRAL | | | |
| | Model 0 | 1.268 | 0.433,3.718 | 0.665 |
| | Model 1 | 1.061 | 0.304,3.702 | 0.926 |
| | Model 2 | 1.184 | 0.330,4.244 | 0.795 |
| | Model 3 | 1.569 | 0.278,8.841 | 0,610 |

^a OR and 95% CI modeled per interquartile range increase in PRAL (22.04 mEq/d) ²PRAL: Potential renal acid load; OR = Odds ratio. Model 0 – Unadjusted model, Model 1- adjusted for total energetic value, Model 2- adjusted for energetic value, gender and age, Model 3 - adjusted for energy intake, sex, age, parent's education level and physical activity. Significant results in bold.

Supplementary Table S2. logistic regression analysis for the association between NEAP² and asthma for all sample and according overweight/obese status ^a.

| | | OR | CI (95%) | p |
|----------------------|---------|-------|-------------|-------|
| All participants | | | | |
| | NEAP | | | |
| | Model 0 | 1.055 | 0.800,1.391 | 0.706 |
| | Model 1 | 1.000 | 0.710,1.409 | 0.999 |
| | Model 2 | 0.941 | 0.699,1.393 | 0.941 |
| | Model 3 | 1.017 | 0.703,1.470 | 0.930 |
| Non Overweight/obese | | | | |
| | NEAP | | | |
| | Model 0 | 0.906 | 0.617,1.330 | 0.614 |
| | Model 1 | 0.808 | 0.506,1.289 | 0.371 |
| | Model 2 | 0.803 | 0.502,1.283 | 0.359 |
| | Model 3 | 0.793 | 0.456,1.379 | 0.412 |
| Overweight/obese | | | | |
| | NEAP | | | |
| | Model 0 | 1.178 | 0.754,1.842 | 0.472 |
| | Model 1 | 1.545 | 0.854,2.793 | 0.150 |
| | Model 2 | 1.525 | 0.836,2.783 | 0.169 |
| | Model 3 | 1.632 | 0.861,3.093 | 0.133 |

^aOR and 95% CI modeled per interquartile range increase in NEAP (27.41 mEq/d) ²NEAP: Net endogenous acid production ; OR = Odds ratio. Model 0 – Unadjusted model, Model 1- adjusted for total energetic value, Model 2- adjusted for energetic value, gender and age, Model 3 - adjusted for energy intake, sex, age, parent’s education level and physical activity. Significant results in bold.