**Maternal trimester fluoride data from urine samples**

Contains urinary fluoride measures obtained from maternal urine samples during pregnancy. The samples were assayed in two labs (source=M for Michigan Lab, and I for Indiana lab). Samples were (for the majority of cases) measured in duplicate, thus an RSD value could be obtained. Only samples with RSD<10 “should” be used. There are a few exceptions where RSD is missing and we can still use the value (these are samples measured in Indiana where we know the RSDs are very low).

**PROYECTO + FOLIO**: unique subject identifier

**F\_qualitycheck\_T1**: quality controlled urinary fluoride samples measured on at trimester 1

**RSD\_T1**: Samples were (for the majority of cases) measured in duplicate, thus an RSD value could be obtained.

**source\_T1**: M for Michigan Lab, and I for Indiana lab

**F\_qualitycheck\_T2**: quality controlled urinary fluoride samples measured on at trimester 2

**RSD\_T2**:

**source\_T2**:

**F\_qualitycheck\_T3**: quality controlled urinary fluoride samples measured on at trimester 3

**RSD\_T3**:

**Source\_T3**:

**creat\_11**: creatinine levels at trimester 1 collected from the same (big) urine sample (although different alloquat)

**creat\_12**: creatinine levels at trimester 2 collected from the same (big) urine sample (although different alloquat)

**creat\_13**: creatinine levels at trimester 3 collected from the same (big) urine sample (although different alloquat)

**spec\_grav\_T1**: specific gravity at trimester 1, from another urine analysis

**spec\_grav\_T2**: specific gravity at trimester 2, from another urine analysis

**spec\_grav\_T3**: specific gravity at trimester 3, from another urine analysis

**Calculating the adjusted fluoride**

Using creatinine

To adjust the fluoride values for creatinine, these formulas should be used:

mom\_FL\_creat\_adj\_1=F\_qualitycheck\_T1\*100.7731190/ creat\_11;

mom\_FL\_creat\_adj\_2=F\_qualitycheck\_T2\*81.6489949/ creat\_12;

mom\_FL\_creat\_adj\_3=F\_qualitycheck\_T3\*72.3715447/ creat\_13;

F\_qualitycheck\_TX is fluoride value at trimester X; creat\_1X is creatinine at trimester X; the values in red are trimester-specific average creatinine. This was the agreed formula (see Biomarkers paper).

Using specific gravity

Since we know also have specific gravity from BPA and Pthalate measures (although only for 250 subjects), this F\_qualitycheckvariable could be combined with SG measures that match at the same trimester.

The recommended formula for adjustment is:

SG.adjusted.fluoride = fluoride.value \* (1.020-1) / (specific.gravity-1);

Some people may argue if the 1.020 is the “right” value. This should be good in the vast majority of cases.