Environment-wide association study on body mass index of 12-18 year-old, US NHANES 2003-2004 and 2013-2014

Water and Health Laboratory - Cyprus University of Technology

# Sensitivity Analysis: non-obese target study participants for 2003-2004 dataset

## Univariate regressions non-obese target study participants 2003-2004

Univariate regression results for the non-obese study participants - FDR - BH method <0.05

| summary | Section | estimate | std.error | statistic | p.value | fdr |
| --- | --- | --- | --- | --- | --- | --- |

## Multivariable regressions non-obese target study participants 2003-2004

Multivariable regression results for the non-obese study participants - FDR - BH method <0.05

| summary | Section | estimate | std.error | statistic | p.value | fdr |
| --- | --- | --- | --- | --- | --- | --- |

# Sensitivity analysis in replication dataset: 2013-2014

## Univariate regressions non-obese target study participants 2013-2014

Univariate regression results for the non-obese study participants - FDR<0.05

| summary | Section | estimate | std.error | statistic | p.value | fdr |
| --- | --- | --- | --- | --- | --- | --- |
| Vitamin B12 (mcg) | Dietary | -0.078 | 0.016 | -4.825 | 0.000 | 0.019 |
| Gamma glutamyl transferase (U/L) | Laboratory | 0.173 | 0.038 | 4.547 | 0.000 | 0.019 |
| Albumin (g/L) | Laboratory | -0.111 | 0.025 | -4.532 | 0.000 | 0.019 |
| Alanine aminotransferase ALT (U/L) | Laboratory | 0.177 | 0.040 | 4.391 | 0.001 | 0.019 |
| Triglycerides, refrigerated (mmol/L) | Laboratory | 0.180 | 0.041 | 4.343 | 0.001 | 0.019 |
| Folic acid (mcg) | Dietary | -0.091 | 0.023 | -3.902 | 0.002 | 0.033 |
| Cholesterol (mg) | Dietary | -0.057 | 0.015 | -3.822 | 0.002 | 0.033 |
| Blood urea nitrogen (mmol/L) | Laboratory | 0.096 | 0.025 | 3.813 | 0.002 | 0.033 |
| White blood cell count (1000 cells/uL) | Laboratory | 0.110 | 0.031 | 3.545 | 0.003 | 0.050 |

## Multivariable regressions non-obese target study participants 2013-2014

Multivariable regression results for the non-obese study participants - FDR<0.05

| summary | Section | estimate | std.error | statistic | p.value | fdr |
| --- | --- | --- | --- | --- | --- | --- |

# Session Information

sessionInfo()

## R version 4.1.2 (2021-11-01)  
## Platform: x86\_64-w64-mingw32/x64 (64-bit)  
## Running under: Windows 10 x64 (build 19043)  
##   
## Matrix products: default  
##   
## locale:  
## [1] LC\_COLLATE=English\_United Kingdom.1252   
## [2] LC\_CTYPE=English\_United Kingdom.1252   
## [3] LC\_MONETARY=English\_United Kingdom.1252  
## [4] LC\_NUMERIC=C   
## [5] LC\_TIME=English\_United Kingdom.1252   
##   
## attached base packages:  
## [1] grid stats graphics grDevices utils datasets   
## [7] methods base   
##   
## other attached packages:  
## [1] corrplot\_0.92 patchwork\_1.1.1 jtools\_2.2.0   
## [4] report\_0.5.1 knitr\_1.37 broom\_0.7.12   
## [7] tableone\_0.13.0 survey\_4.1-1 Matrix\_1.4-0   
## [10] childsds\_0.8.0 srvyr\_1.1.1 flextable\_0.7.0   
## [13] DT\_0.21 Hmisc\_4.7-0 Formula\_1.2-4   
## [16] survival\_3.3-1 lattice\_0.20-45 data.table\_1.14.2  
## [19] tictoc\_1.0.1 XML\_3.99-0.9 janitor\_2.1.0   
## [22] forcats\_0.5.1 stringr\_1.4.0 dplyr\_1.0.8   
## [25] purrr\_0.3.4 readr\_2.1.2 tidyr\_1.2.0   
## [28] tibble\_3.1.6 ggplot2\_3.3.5 tidyverse\_1.3.1   
## [31] haven\_2.4.3   
##   
## loaded via a namespace (and not attached):  
## [1] readxl\_1.3.1 uuid\_1.0-3 backports\_1.4.1   
## [4] systemfonts\_1.0.4 plyr\_1.8.6 splines\_4.1.2   
## [7] TH.data\_1.1-0 digest\_0.6.29 htmltools\_0.5.2   
## [10] fansi\_1.0.2 magrittr\_2.0.2 checkmate\_2.0.0   
## [13] cluster\_2.1.2 tzdb\_0.2.0 ggfittext\_0.9.1   
## [16] modelr\_0.1.8 vroom\_1.5.7 xslt\_1.4.3   
## [19] officer\_0.4.2 sandwich\_3.0-1 prettyunits\_1.1.1   
## [22] jpeg\_0.1-9 colorspace\_2.0-3 rvest\_1.0.2   
## [25] mitools\_2.4 xfun\_0.30 crayon\_1.5.0   
## [28] jsonlite\_1.8.0 lme4\_1.1-28 zoo\_1.8-9   
## [31] glue\_1.6.2 gtable\_0.3.0 emmeans\_1.7.2   
## [34] sjstats\_0.18.1 sjmisc\_2.8.9 scales\_1.1.1   
## [37] mvtnorm\_1.1-3 DBI\_1.1.2 ggeffects\_1.1.1   
## [40] Rcpp\_1.0.8.2 xtable\_1.8-4 progress\_1.2.2   
## [43] performance\_0.8.0 htmlTable\_2.4.0 bit\_4.0.4   
## [46] foreign\_0.8-82 proxy\_0.4-26 datawizard\_0.3.0   
## [49] htmlwidgets\_1.5.4 httr\_1.4.2 RColorBrewer\_1.1-2   
## [52] ellipsis\_0.3.2 pkgconfig\_2.0.3 farver\_2.1.0   
## [55] nnet\_7.3-17 dbplyr\_2.1.1 utf8\_1.2.2   
## [58] tidyselect\_1.1.2 labeling\_0.4.2 rlang\_1.0.2   
## [61] effectsize\_0.6.0.1 munsell\_0.5.0 cellranger\_1.1.0   
## [64] tools\_4.1.2 cli\_3.2.0 generics\_0.1.2   
## [67] sjlabelled\_1.1.8 evaluate\_0.15 fastmap\_1.1.0   
## [70] yaml\_2.3.5 bit64\_4.0.5 fs\_1.5.2   
## [73] pander\_0.6.4 zip\_2.2.0 nlme\_3.1-155   
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## [82] reprex\_2.0.1 stringi\_1.7.6 highr\_0.9   
## [85] parameters\_0.17.0 gdtools\_0.2.4 nloptr\_2.0.0   
## [88] vctrs\_0.3.8 pillar\_1.7.0 lifecycle\_1.0.1   
## [91] locatexec\_0.1.1 inspectdf\_0.0.11 estimability\_1.3   
## [94] insight\_0.16.0 R6\_2.5.1 latticeExtra\_0.6-29  
## [97] gridExtra\_2.3 codetools\_0.2-18 boot\_1.3-28   
## [100] MASS\_7.3-55 assertthat\_0.2.1 withr\_2.5.0   
## [103] multcomp\_1.4-18 parallel\_4.1.2 bayestestR\_0.11.5   
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## [109] coda\_0.19-4 class\_7.3-20 minqa\_1.2.4   
## [112] rmarkdown\_2.13 snakecase\_0.11.0 gamlss.dist\_6.0-3   
## [115] lubridate\_1.8.0 base64enc\_0.1-3

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