Celiac disease consequences

**HIGH RED BLOOD CELLS (RBC), MCV (abnormal erythropoiesis)**

https://ac.els-cdn.com/S1590865800803990/1-s2.0-S1590865800803990-main.pdf?\_tid=366395f2-fc2f-11e7-9168-00000aab0f27&acdnat=1516266716\_c352be8f9cd3ea34fd1e60b5f40c486f

**Anemia**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1785098/>

**THYROID ABNORMALITIES (ALSO SUPPORTS THE REVERSE LINK, from thyroid** abnormalietes to CeD)

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5435852/>

**INCREASED CD4+ Tcells**

Here this studies shows that we have a decrease of CD4+ in PBMC during inflammation (Figure 1)

http://www.sciencedirect.com/science/article/pii/S1074761316301431?via%3Dihub#mmc1

**HYPER-CHOLESTEROLEMIA**

<https://www.glutenfreesociety.org/gluten-and-high-cholesterol/>

Note that your results go in the opposite direction… and also weird, because you have reduced levels of all cholesterol types

I removed **CHOLESTEROL**. IT is not significant after Q pruning

**HYPERTENSION**

<https://www.nature.com/articles/1001404>

**THROMBOCYTOSIS (high platelets) and trombocytopenia (low platelets)**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1785098/>

**OTHER AUTOIMMUNE DISEASES**

<https://www.ncbi.nlm.nih.gov/pubmed/29076940>

**Narcolepsy**

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4894018/

narcolepsy has never been reported as a consequence but observed as co-occurance with CeD. We can now see the direction

more general neurological disorders:

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3641836/

The link between schizoprenia however appears to be very weak, but this agree with the effect size you see in your analyses. Narcolepsy is much much stronger than schizoprenia

**INCREASED EOSINOPHILS/ DECREASED LYMPHOCYTES**

Firstly reported by Astle et al Cells using MR . I put it as a new because it is new connection made with MR method. Now we also see the reverse direction

**Overlap with infection diseases/allergies.**

I think that observation on tonsilities is quite new