

Supplemental material

Table S1. Study population metadata.

Characteristic	CeD (n=49)	NC1R (n=64)
Education level		
No formal education, n	1	2
Elementary school, n	7	19
High school, n	15	12
Vocational course, n	1	6
Bachelor's degree, n	18	15
Master's/Doctoral degree, n	7	10
Occupation		
Employee, n	23	31
Self-employed, n	6	7
Unemployed, n	1	2
Student, n	18	14
Retired, n	1	10
Birthplace		
Portugal, n	42	54
Other, n	7	10
Living location		
Rural, n	22	29
Urban, n	27	35
House sharing		
No, n	4	0
with 1-2 people, n	11	20
with 3-4 people, n	30	36
with > 4 people, n	4	8
Age of CeD diagnosis, mean (SD), median, range	22 (15), 21, 1-51	N/A

Have 1 st -degree relatives with CeD, n	12	64
Self-rated health		
Excellent	8	9
Good	31	38
Fair	10	14
Poor	0	3
Very poor	0	0
Presence of medical conditions other than CeD, n	25	24
Regular medication		
None, n	27	38
Proton-Pump Inhibitors, n	2	5
Diabetes medication/Insulin, n	4	7
Hormonal medication, n	10	9
Antidepressants, n	2	3
Antihypertensives/heart medication, n	1	7
Anticoagulants, n	0	3
Statins, n	0	8
Laxatives, n	1	0
Other, n	12	6
Anti-inflammatory medication 2 weeks prior to sample collection, n	5	12
Smoking habit, n	3	3
Perceived stress level		
Low, n	14	15
Moderate, n	26	34
High, n	9	15
Alcohol consumption, n	14	24
Coffee consumption, n	31	48

Physical activity, n	35	34
Sleeping hours per day		
< 6h sleep/day, n	5	6
6-7h sleep/day, n	16	24
7-8h sleep/day, n	22	30
> 8h sleep/day, n	6	4
Water intake		
< 1.5 L of water/day, n	29	41
1.5 - 2 L of water/day, n	17	20
> 2 L of water/day, n	3	3

CeD, celiac disease subjects; NC1R, non-celiac 1st-degree relatives.

Food consumption frequency questionnaire applied:

Are you currently following a gluten-free diet?

- ☐ Yes
- ☐ No

How do you classify your eating schedule?

- ☐ Regular (you eat your meals at the same time every day)
- ☐ Irregular (you do not eat your meals at the same time every day)

On a regular day, how many meals do you have?

- ☐ < 3 meals/day
- ☐ 3 meals/day
- ☐ > 3 meals/day

On a regular day, how many portions of grains/grain products do you eat?

- ☐ None
- ☐ < 3 portions/day
- ☐ 3 portions/day
- ☐ > 3 portions/day

On a regular day, how many portions of vegetables do you eat?

- ☐ None
- ☐ < 3 portions/day
- ☐ 3 portions/day
- ☐ > 3 portions/day

On a regular day, how many portions of fruits do you eat?

- ☐ None
- ☐ < 3 portions/day
- ☐ 3 portions/day

- ☐ > 3 portions/day

On a regular day, how many portions of pulses do you eat?

- ☐ None
- ☐ < 3 portions/day
- ☐ 3 portions/day
- ☐ > 3 portions/day

On a regular day, how many portions of dairy do you eat?

- ☐ None
- ☐ < 3 portions/day
- ☐ 3 portions/day
- ☐ > 3 portions/day

On a regular day, how many portions of fish, poultry and eggs do you eat?

- ☐ None
- ☐ < 3 portions/day
- ☐ 3 portions/day
- ☐ > 3 portions/day

On a regular day, how many portions of fats/oils do you eat?

- ☐ None
- ☐ < 3 portions/day
- ☐ 3 portions/day
- ☐ > 3 portions/day

On a regular day, how many portions of sugary drinks and sweets do you eat?

- ☐ None
- ☐ < 3 portions/day
- ☐ 3 portions/day

☐ > 3 portions/day

Do you take, or have you taken in the last month, any nutritional supplements (vitamins, minerals, or weight-loss dietary supplements) and/or probiotics?

☐ Yes

☐ No

If so, please indicate which: _____