Supplement Table 1. Full Results of Auxiliary Analyses ( $N=317$ unless otherwise specified)

| Domain <br> Measure | $\text { Profile } 1(n=117)$ $M(S D)$ | $\text { Profile } 2(n=106)$ $M(S D)$ | Profile 3 ( $n=75$ ) $M(S D)$ | $\begin{aligned} & \text { Profile } 4(n=19) \\ & M(S D) \end{aligned}$ | Test statistic | Significant post-hoc differences, $p<.05$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sociodemographic Variables |  |  |  |  |  |  |
| Age | 42.26 (1.43) | 40.02 (1.42) | 41.28 (1.78) | 37.95 (3.15) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 2.22, p=.53 \end{aligned}$ | -- |
| Sex | $\begin{aligned} & \text { Male }=0.14 \\ & \text { Female }=0.85 \\ & \text { Other }=0.01 \end{aligned}$ | $\begin{aligned} & \text { Male }=0.08 \\ & \text { Female }=0.91 \\ & \text { Other }=0.02 \end{aligned}$ | $\begin{aligned} & \text { Male }=0.14 \\ & \text { Female }=0.86 \\ & \text { Other }=0.00 \end{aligned}$ | $\begin{aligned} & \text { Male }=0.09 \\ & \text { Female }=0.91 \\ & \text { Other }=0.00 \end{aligned}$ | $\begin{aligned} & \chi^{2}(6,317)= \\ & 5.35, p=.50 \end{aligned}$ | -- |
| Race (White, Other) | $\begin{aligned} & \text { White }=.87 \\ & \text { Other }=.13 \end{aligned}$ | $\begin{aligned} & \text { White }=.95 \\ & \text { Other }=.05 \end{aligned}$ | $\begin{aligned} & \text { White }=.95 \\ & \text { Other }=.05 \end{aligned}$ | $\begin{aligned} & \text { White }=.95 \\ & \text { Other }=.05 \end{aligned}$ | $\begin{aligned} & \chi^{2}(3,317)= \\ & 4.14, p=.25 \end{aligned}$ | -- |
| Education level ( $n=$ 278) | No school $=.01$ <br> Some primary school $=.05$ <br> HS diploma $=.15$ <br> Vocational, <br> Associates Degree, <br> Trade School = . 10 <br> Some college $=.42$ <br> Bachelors $=.04$ <br> Masters $=.19$ <br> Doctorate $=.05$ | No school $=.01$ <br> Some primary school $=.03$ <br> HS diploma $=.15$ <br> Vocational, <br> Associates Degree, <br> Trade School $=.12$ <br> Some college $=.40$ <br> Bachelors $=.03$ <br> Masters $=.20$ <br> Doctorate $=.07$ | No school $=.02$ <br> Some primary school $=.04$ <br> HS diploma $=.13$ <br> Vocational, <br> Associates Degree, <br> Trade School $=.25$ <br> Some college $=.32$ <br> Bachelors $=.02$ <br> Masters $=.19$ <br> Doctorate $=.04$ | No school $=.00$ <br> Some primary school $=.07$ <br> HS diploma $=.12$ <br> Vocational, <br> Associates Degree, <br> Trade School $=.34$ <br> Some college $=.42$ <br> Bachelors $=.00$ <br> Masters $=.07$ <br> Doctorate $=.00$ | $\begin{aligned} & \chi^{2}(21,277)= \\ & \mathbf{4 5 . 0 5}, p= \\ & .002 \end{aligned}$ | $\begin{aligned} & 1 \mathrm{v} .4 \\ & 2 \mathrm{v.} .4 \end{aligned}$ |
| Household income level ( $n=228$ ) | $\begin{aligned} & \text { Less than } \$ 50 \mathrm{~K}=.22 \\ & \$ 50 \mathrm{~K}-100 \mathrm{~K}=.38 \\ & \$ 100 \mathrm{~K}-200 \mathrm{~K}=.35 \\ & \$ 200 \mathrm{~K} \text { or more }=.10 \end{aligned}$ | $\begin{aligned} & \text { Less than } \$ 50 \mathrm{~K}=.24 \\ & \$ 50 \mathrm{~K}-100 \mathrm{~K}=.36 \\ & \$ 100 \mathrm{~K}-200 \mathrm{~K}=.26 \\ & \$ 200 \mathrm{~K} \text { or more }=.14 \end{aligned}$ | $\begin{aligned} & \text { Less than } \$ 50 \mathrm{~K}=.24 \\ & \$ 50 \mathrm{~K}-100 \mathrm{~K}=.41 \\ & \$ 100 \mathrm{~K}-200 \mathrm{~K}=.29 \\ & \$ 200 \mathrm{~K} \text { or } \text { more }=.06 \end{aligned}$ | $\begin{aligned} & \text { Less than } \$ 50 \mathrm{~K}=.31 \\ & \$ 50 \mathrm{~K}-100 \mathrm{~K}=.45 \\ & \$ 100 \mathrm{~K}-200 \mathrm{~K}=.24 \\ & \$ 200 \mathrm{~K} \text { or more }=.00 \end{aligned}$ | $\begin{aligned} & \chi^{2}(9,277)= \\ & 36.45, p< \\ & .001 \end{aligned}$ | $\begin{aligned} & 1 \text { v. } 4 \\ & 2 \text { v. } 4 \end{aligned}$ |
| Disease Factors |  |  |  |  |  |  |
| Age at diagnosis | 35.77 (1.41) | 34.30 (1.43) | 35.78 (1.78) | 31.94 (3.22) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 1.64, p=.65 \end{aligned}$ | -- |
| Years since diagnosis | 6.31 (0.77) | 5.71 (0.67) | 5.50 (0.78) | 6.13 (1.74) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 0.64, p=.89 \end{aligned}$ | -- |
| Reason for diagnostic testing | Probabilities <br> Symptomatic $=.74$ <br> Other $=.26$ | Probabilities <br> Symptomatic $=.77$ <br> Other $=.23$ | Probabilities <br> Symptomatic $=.80$ <br> Other $=.21$ | Probabilities <br> Symptomatic $=.79$ <br> Other $=.21$ | $\begin{aligned} & \chi^{2}(3,317)= \\ & 0.74, p=.86 \end{aligned}$ | -- |

## Gluten-Free Diet Adherence

| CDAT total score | 13.41 (0.33) | 13.67 (0.24) | 12.05 (0.37) | 15.18 (0.89) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 17.04, p= \\ & .001 \end{aligned}$ | $1,2,4>3$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CDAT without symptom items | 7.68 (0.23) | 7.74 (0.24) | 7.68 (0.29) | 7.81 (0.57) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 0.07, p=.99 \\ & \hline \end{aligned}$ | -- |
| Anxiety and Depression |  |  |  |  |  |  |
| PROMIS-29 Anxiety | 55.22 (0.89) | 53.85 (0.91) | 52.87 (1.12) | 58.35 (2.07) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 6.72, p=.08 \end{aligned}$ | $4>2,3$ |
| PROMIS-29 Depression | 52.89 (0.89) | 51.28 (0.89) | 50.04 (1.07) | 56.96 (2.04) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 10.83, p= \\ & \mathbf{0 0 1}, \\ & \hline \end{aligned}$ | $4>2,3$ |
| General Health-Related Quality of Life and Functioning |  |  |  |  |  |  |
| SF-36 Physical Functioning | 80.37 (2.14) | 81.80 (2.10) | 85.08 (2.28) | 71.88 (6.11) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 5.14, p=.16 \end{aligned}$ | $3>4$ |
| SF-36 Role Limitations due to Physical Health | 53.72 (4.01) | 52.71 (4.10) | 66.97 (4.74) | 40.97 (9.20) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 9.00, p=.03 \end{aligned}$ | $3>1,2,4$ |
| SF-36 Role Limitations due to Emotional Health | 51.36 (3.98) | 61.50 (3.98) | 61.82 (4.88) | 31.63 (8.49) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 13.47, p= \\ & .004 \end{aligned}$ | $1,2,3>4$ |
| SF-36 Emotional Wellbeing | 61.20 (1.85) | 65.63 (1.81) | 69.65 (2.13) | 50.73 (4.50) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 18.71, p< \\ & .001 \end{aligned}$ | $\begin{aligned} & 1,2,3>4 \\ & 3>1 \end{aligned}$ |
| SF-36 Energy/Fatigue | 38.37 (2.20) | 38.17 (2.25) | 45.02 (2.87) | 23.69 (4.16) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 18.24, p< \\ & .001 \end{aligned}$ | $1,2,3>4$ |
| SF-36 Social Functioning | 68.14 (2.47) | 72.08 (2.43) | 76.33 (2.81) | 60.26 (6.03) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 8.27, p=.04 \end{aligned}$ | $3>1,4$ |
| SF-36 Bodily Pain | 61.88 (2.29) | 59.32 (2.40) | 65.15 (2.82) | 52.68 (5.73) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 4.87, p=.18 \end{aligned}$ | $3>4$ |
| SF-36 General Health | 49.72 (2.20) | 49.93 (2.27) | 57.36 (2.71) | 42.84 (5.14) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 8.59, p=.04 \end{aligned}$ | $3>1,2,4$ |
| PROMIS-29 Pain <br> Interference | 52.69 (0.87) | 52.80 (0.90) | 51.55 (1.07) | 53.37 (2.10) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 1.13, p=.77 \end{aligned}$ | -- |


| PROMIS-29 Physical Function | 49.11 (0.77) | 48.83 (0.79) | 50.94 (0.90) | 45.60 (1.88) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 7.60, p=.06 \end{aligned}$ | $3>4$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PROMIS-29 Ability to Participate in Social Roles/Activities | 48.79 (0.87) | 50.51 (0.90) | 51.88 (1.11) | 44.04 (1.93) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 14.40, p= \\ & \mathbf{. 0 0 2} \end{aligned}$ | $\begin{aligned} & 1,2,3>4 \\ & 3>1 \end{aligned}$ |
| PROMIS-29 Fatigue | 58.09 (1.04) | 58.43 (1.07) | 54.61 (1.36) | 63.28 (2.2) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 12.11, p= \\ & .007 \end{aligned}$ | $4>1,2>3$ |
| PROMIS-29 Sleep <br> Disturbance | 53.76 (0.75) | 52.91 (0.77) | 50.20 (0.95) | 57.99 (1.76) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 17.70, p= \\ & .001 \end{aligned}$ | $4>1,2>3$ |
| Coeliac Disease-Specific Quality of Life |  |  |  |  |  |  |
| CD-QOL Total | 62.72 (1.51) | 62.62 (1.54) | 60.59 (1.89) | 65.80 (3.56) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 1.90, p=.59 \end{aligned}$ | -- |
| CD-QOL Limitations | 29.72 (0.77) | 29.84 (0.79) | 28.94 (0.97) | 31.76 (1.79) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 1.97, p=.58 \end{aligned}$ | -- |
| CD-QOL Dysphoria | 9.50 (0.38) | 9.08 (0.38) | 8.87 (0.45) | 10.22 (0.96) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 2.39, p=.50 \end{aligned}$ | -- |
| CD-QOL Health concerns | 16.66 (0.46) | 17.13 (0.46) | 16.24 (0.58) | 17.38 (1.05) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 1.84, p=.61 \end{aligned}$ | -- |
| CD-QOL Inadequate treatment | 6.85 (0.19) | 6.58 (0.20) | 6.55 (0.24) | 6.40 (0.46) | $\begin{aligned} & \chi^{2}(3,317)= \\ & 1.68, p=.64 \end{aligned}$ | -- |

Note. $M=$ mean; $S D=$ standard deviation; CSI = Celiac Symptom Index; CDAT = Celiac Dietary Adherence Test; PROMIS = Patient-Reported Outcomes Measurement Information System®; SF-36 = Short-Form 36; CD-QOL = Coeliac Disease Quality of Life Survey. All values are raw scores except for PROMIS measures, which are $t$-scores. Bold text indicates $p \leq .05$.

