

**Supplementary Table S1.** Determinants of loneliness, perceived social isolation and objective social isolation (with dichotomized oral health-related quality of life). Results of multiple linear regressions.

Independent variables	Loneliness	Perceived social isolation	Objective social isolation
Oral health-related quality of life (dichotomized: Reference category: score of zero)	0.20*** (0.02)	0.28*** (0.03)	0.46* (0.21)
Potential confounders	✓	✓	✓
Observations	3,075	3,075	3,075
Adjusted R <sup>2</sup>	0.16	0.21	0.16
R <sup>2</sup>	0.17	0.22	0.17
F-value (p-value)	21.79 (p<.001)	33.08 (p<.001)	22.21 (p<.001)

Notes: Unstandardized beta-coefficients are displayed; Robust standard errors in parentheses; \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10; Potential confounders include sex, age, marital status, education, presence of children in the same household, smoking status, alcohol intake, sports activities, vaccinated against Covid-19, presence of chronic diseases and self-rated health.

**Supplementary Table S2.** Determinants of loneliness, perceived social isolation and objective social isolation (with interaction terms: denture usage x oral health-related quality of life). Results of multiple linear regressions.

Independent variables	Loneliness	Perceived social isolation	Objective social isolation
Oral health-related quality of life	0.04*** (0.00)	0.06*** (0.01)	0.07+ (0.04)
Denture usage (Ref.: without dentures):			
- With removable dentures	0.01 (0.05)	0.02 (0.05)	-0.21 (0.44)
- With complete dentures	0.01 (0.08)	0.04 (0.05)	-0.28 (0.79)
Interaction terms (Denture usage x oral health-related quality of life):			
With removable dentures (Ref.: without dentures) x oral health-related quality of life	-0.02* (0.01)	-0.01 (0.51)	-0.01 (0.08)
With complete dentures (Ref.: without dentures) x oral health-related quality of life	0.00 (0.02)	0.01 (0.58)	0.05 (0.14)
Potential confounders	✓	✓	✓
Observations	3,075	3,075	3,075
Adjusted R <sup>2</sup>	0.17	0.24	0.17
R <sup>2</sup>	0.18	0.23	0.16
F-value (p-value)	20.49 (p<.001)	32.87 (p<.001)	19.71 (p<.001)

Notes: Unstandardized beta-coefficients are displayed; Robust standard errors in parentheses; \*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.10; Potential confounders include sex, age, marital status, education, presence of children in the same household, smoking status, alcohol intake, sports activities, vaccinated against Covid-19, presence of chronic diseases and self-rated health.