2 Table S1 Dietary habits regarding legumes consumption in all respondents and in the subgroup related to frequency of

legume consumption; [% (n)]

Dietary habits	Total group	Frequent legume consumers	Rare legume consumers	
Type of legumes	n=1077	n=259	n=818	р
Beans	71.9 (775)	69.5 (180)	72.7 (595)	0.314
Peas	50.9 (548)	32.8 (85)	56.6 (463)	< 0.001
Chickpeas	39.6 (427)	68.3 (177)	30.6 (250)	< 0.001
Lentils	33.3 (359)	63.3 (164)	23.8 (195)	< 0.001
Soybeans	16.1 (173)	33.2 (86)	10.6 (87)	< 0.001
Peanuts	48.9 (527)	40.5 (105)	51.6 (422)	0.002
Broad bean	25.5 (275)	22.0 (57)	26.7 (218)	0.131
Forms of legumes	n=1061	n=258	n=803	р
Canned	57.7 (612)	62.0 (160)	56.3 (452)	0.104
Only cooked	26.2 (278)	24.4 (63)	26.8 (215)	0.452
Soaked and cooked	53.6 (569)	54.6 (141)	53.3 (428)	0.705
Raw	10.8 (115)	10.5 (27)	10.3 (88)	0.824
Bought in the grocery store: sandwich spreads, hummus, flour	24.6 (261)	33.3 (86)	21.8 (175)	<0.001
Homemade: sandwich spreads, hummus, flour	17.7 (188)	39.5 (102)	10.7 (86)	< 0.001

 n, number; significant differences in distribution are presented with chi-square test (p<0.05).

8 Table S2 Reasons for consuming legumes in all respondents and in the subgroup of frequent and rare legume

9 consumers; [% (n)]

Reasons	Total group	Frequent legume consumers	Rare legume consumers	
	n=1077	n=259	n=818	р
Taste	53.4 (575)	46.3 (120)	55.6 (455)	0.009
Variety of diet	50.2 (541)	43.6 (113)	52.3 (428)	0.015
Health benefits	41.3 (445)	76.1 (197)	30.3 (248)	< 0.001
Low cost	4.1 (44)	4.2 (11)	4.0 (33)	0.886

10 n, number; significant differences in distribution are presented with chi-square test (p<0.05).

11

12 Table S3 Reasons for not consuming legumes among never legume consumers; [% (n)]

Baagang	Never legume consumers
Reasons	Never legume consumer n=58 24.1 (14) 20.7 (12) 24.1 (14) 10.3 (6) 18.9 (11)
Taste	24.1 (14)
Difficulties in cooking	20.7 (12)
Digestive tract symptoms	24.1 (14)
Health problems	10.3 (6)
I don't know	18.9 (11)
n, number.	

¹³ 14

16 Table S4 Coefficients of regression for the structural equation model built based on sociodemographic factors and

17 health-related behaviour in all respondents and in the subgroups related to frequency of legume consumption

Sociodemographic		T 	Unstan	dardized	0.50		Standardized		
factors		Latent variable	ficient	95%	% CI	coefficient			
			Mean	SE	LL	UL	Mean		
Total group									
(n=1135)									
Sex	\rightarrow	Health-related behaviour	-0.03	< 0.01	-0.05	-0.02	-0.168		
Age [years]	\rightarrow	Health-related behaviour	<-0.01	< 0.01	<-0.01	< 0.01	-0.029		
Place of residence	\rightarrow	Health-related behaviour	<-0.01	< 0.01	-0.01	< 0.01	-0.012		
Years of education	\rightarrow	Health-related behaviour	0.03	< 0.01	0.02	0.04	0.563		
Number of co-residents	\rightarrow	Health-related behaviour	-0.01	< 0.01	-0.01	<-0.01	-0.115		
Frequent legume									
consumers (n=259)									
Sex	\rightarrow	Health-related behaviour	-0.06	< 0.01	-0.08	-0.04	-0.24		
Age [years]	\rightarrow	Health-related behaviour	0.56	< 0.01	<-0.01	< 0.01	0.01		
Place of residence	\rightarrow	Health-related behaviour	-0.02	< 0.01	-0.03	<-0.01	-0.29		
Years of education	\rightarrow	Health-related behaviour	< 0.01	< 0.01	-0.01	0.02	0.07		
Number of co-residents	\rightarrow	Health-related behaviour	-0.03	< 0.01	-0.04	-0.01	-0.25		

¹⁵

Doro logumo							
Kait itguille							
consumers (n=818)							
Sex	\rightarrow	Health-related behaviour	-0.04	< 0.01	-0.05	-0.03	-0.18
Age [years]	\rightarrow	Health-related behaviour	< 0.01	< 0.01	<-0.01	< 0.01	0.02
Place of residence	\rightarrow	Health-related behaviour	< 0.01	< 0.01	<-0.01	0.01	0.07
Years of education	\rightarrow	Health-related behaviour	0.04	< 0.01	0.03	0.04	0.56
Number of co-residents	\rightarrow	Health-related behaviour	<-0.01	< 0.01	0.61	0.01	-0.02
Never legume							
consumers (n-58)							
Sex	\rightarrow	Health-related behaviour	-0.04	< 0.01	-0.06	-0.03	-0.17
Age [years]	\rightarrow	Health-related behaviour	<-0.01	< 0.01	-0.01	<-0.01	-0.10
Place of residence	\rightarrow	Health-related behaviour	0.01	< 0.01	< 0.01	0.01	0.11
Years of education	\rightarrow	Health-related behaviour	0.02	< 0.01	0.01	0.03	0.32
Number of co-residents	\rightarrow	Health-related behaviour	0.03	< 0.01	0.01	0.03	0.23

18

95% CI, 95% confidence interval; SE, standard error; LL, lower limit; UL, upper limit;

19 The acceptance rate for the built model was 0.288. Model convergence was assessed with the potential scale reduction factor 20 (PSRF) diagnostic parameter; a PSRF value of 1.1 or smaller was regarded as evidence of convergence. BSEM model fit was assessed 21 with posterior p value = 0.56 and the associated 95% credibility interval. Unstandardized coefficients <0.01 indicate no associations 22 between sociodemographic factors and health-related behaviour. Health-related behaviour was a latent, endogenous construct inferred 23 from exogenous, observed health-related variables (prevalence of chronic diseases, endocrine diseases, vegetarian diet, other diets, 24 intake and type of dietary supplements, frequency of dietary supplementation, as well as frequency and type of leisure-time physical 25 activity); sociodemographic factors: sex, age, place of residence, years of education, and number of co-residents were all exogenous, 26 observed variables.

Table S5 Standardized coefficients for the indirect associations between sociodemographic factors and health-related variables in total respondents and in the subgroups	
related to frequency of legume consumption	

Health related		Total group (n=1135)					Frequent legume consumers (n = 259)			Rare legume consumers (n = 818)			Never legume consumers (n = 58)			
variables	Sex	Age [years]	Place of residence	Years of education	Number of co-residents	Sex	Place of residence	Number of co-residents	Sex	Years of Education	Sex	Age [years]	Place of residence	Years of education	Number of co- residents	
Prevalence of chronic diseases	-0.03*	<-0.01	<-0.01	0.11*	-0.02*	-0.06*	-0.07*	-0.06*	-0.04*	0.12*	-0.04*	-0.02*	0.02*	0.07*	0.05*	
Endocrine diseases	-0.05*	-0.01	<-0.01	0.15*	-0.03*	-0.06*	-0.07*	-0.06*	-0.07*	0.24*	-0.01*	-0.01	0.01	0.02	0.01	
Vegetarian diet	-0.06*	-0.01	<-0.01	0.19*	-0.04*	-0.03*	-0.04*	-0.03*	0.01	-0.02	-0.11*	-0.06*	0.07*	0.20*	0.15*	
Other diets	-0.05*	-0.01	<-0.01	0.18*	-0.04*	-0.06*	-0.07*	-0.06*	-0.05*	0.17*	-0.08*	-0.04*	0.05*	0.14*	0.10*	
Intake of dietary supplements	-0.16*	-0.02	-0.01	0.54*	-0.11*	-0.22*	-0.27*	-0.24*	-0.17*	0.53*	-0.17*	-0.09*	0.10*	0.30*	0.22*	
Frequency of dietary supplementation	-0.14*	-0.02	-0.01	0.45*	-0.09*	-0.22*	-0.27*	-0.24*	-0.15*	0.46*	-0.14*	-0.08*	0.09*	0.26*	0.19*	
Multivitamin- multimineral supplements	-0.15*	-0.02	-0.01	0.50*	-0.10*	-0.19*	-0.23*	-0.20*	-0.14*	0.45*	-0.14*	-0.08*	0.09*	0.26*	0.19*	
Magnesium supplements	-0.16*	-0.02	-0.01	0.54*	-0.11*	-0.23*	-0.27*	-0.24*	-0.17*	0.54*	-0.17*	-0.09*	0.11*	0.31*	0.23*	
Vitamin D supplements	-0.13*	-0.02	-0.01	0.44*	-0.09*	-0.20*	-0.24*	-0.21*	-0.14*	0.45*	-0.15*	-0.09*	0.09*	0.27*	0.20*	
Omega-3 fatty acid supplements	-0.12*	-0.01	-0.01	0.39*	-0.08*	-0.15*	-0.19*	-0.16*	-0.12*	0.37*	-0.03*	-0.02*	0.02*	0.06*	0.04*	
Herbal supplements	-0.06*	-0.01	<-0.01	0.19*	-0.04*	-0.03*	-0.04*	-0.03*	-0.04*	0.11*	-0.01*	-0.01*	0.01*	0.02*	0.01*	
Frequency of leisure- time physical activity	0.02*	< 0.01	0.01	-0.08*	0.02*	0.01*	0.01	0.01	0.04*	-0.12*	0.04*	0.02*	-0.03*	-0.07*	-0.05*	

Endurance training	-0.02*	<-0.01	<-0.01	0.07*	0.01*	<-0.01*	<0.01	<-0.01	-0.02*	0.07*	-0.01*	<-0.01	0.01	0.01	0.01
Weight training	-0.03*	<-0.01	<-0.01	0.10*	-0.02*	-0.03*	-0.03*	-0.03*	-0.04*	0.13*	-0.08*	0.11*	0.05*	0.15*	-0.05*
Stretching	-0.04*	<-0.01	<-0.01	0.14*	-0.03*	-0.04*	-0.05*	-0.04*	-0.07*	0.21*	-0.08*	-0.04*	0.05*	0.14*	0.10*
Team sports	0.02*	< 0.01	< 0.01	-0.08*	0.02*	-0.05*	-0.06*	-0.06*	0.03*	-0.09*	-0.05*	0.06*	0.03*	0.09*	-0.03*

Sociodemographic factors: and health-related variables are all exogenous, observed variables. Indirect associations are presented via health-related behaviour (general latent construct); * p < 0.05.



Figure S1 Model of SEM built for presenting the interrelationships between sociodemographic factors (exogenous, observed variables) and health-related behaviour (endogenous, latent construct) inferred from health-related variables (exogenous, observed variables).