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memo

Intake and frequency of use of dietary supplements in the Netherlands

Datum
15 juni 2026

Ons kenmerk
MN001

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Introduction

The European Food Safety Authority (EFSA) is reviewing the existing scientific evidence and provide tolerable upper intake levels (UL) for the European population. The European Commission (EC) requested EFSA to do this at first for iron, folate/folic acid, manganese, vitamin A, vitamin B6, vitamin E, vitamin D, and beta-carotene. In the draft guidance for establishing and applying the UL[1] an intake assessment step is foreseen in order to inform risk characterization. This means that the habitual total intake distribution of a nutrient is the general population is evaluated together with the adverse effects, expressed as the UL, to determine the risk of adverse effects in this population. This requires insight in the total nutrient intake in European populations, including fortification and dietary supplements. In addition, insight in the separate sources of a nutrient (natural, fortified, dietary supplement) may help to refine the risk characterization.

For this purpose, the European Commission requested European Union Member States to provide insight in the frequency of use and intake of the above mentioned micronutrients from dietary supplements only. The Dutch ministry of Health, Welfare and Sports, requested RIVM to compile this information for EFSA. The requested information can be digested from the Dutch Food Consumption Survey 2012-2016. Some of the requested information is already available in 'The diet of the Dutch. Results of the Dutch national Food Consumption Survey 2012-2016'[2,3]. This report also contains detailed information about the dataset and methodologies. In this memo, the information lacking which could be obtained from the Dutch Food Consumption Survey 2012-2016 as well as from the Dutch Supplement Database (NES) is presented. Additional to

[1] EFSA NDA Panel (EFSA Panel on Nutrition, Novel Foods and Food Allergens), 2022. Guidance for establishing and applying tolerable upper intake levels for vitamins and essential minerals. EFSA Journal 2022;20(1):e200102, 27 pp. doi: 10.2903/j.efsa.2022.e200102
[2] The diet of the Dutch (rivm.nl) (accessed 6 December 2022)
[3] Voedselconsumptiepeiling | Voedselconsumptiepeiling (wateetnederland.nl) (accessed 6 December 2022)

this memo, in a separate Excel-file details on the composition of food supplements, as consumed in DNFCS 2019-2021, was provided to EFSA. This Excel-file can be provided upon request. As manganese is not included in the Dutch Food Consumption Survey, no information is presented. In addition, the legal rules[4] regarding labeling of dietary supplements for vitamin A makes it difficult to divide the content in dietary supplements between retinol and the pro-vitamin A carotenoids. The vitamin A content should be labeled as vitamin A in µg, however from most dietary supplement labels it is not clear in what chemical form vitamin A or pro-vitamin A is present in the product. In addition it is not clear if total vitamin A from different sources is labeled in retinol equivalents or retinol activity equivalents. Therefore, in the tables below vitamin A is only presented as retinol. This might be an overestimation, as we do not know if all vitamin A is indeed present as retinol. All analyses were weighted for social-demographic characteristics, season and day of the week, to make the results representative for the Dutch population. Some subgroups for which results are presented have small sample size and results should be interpreted with care due to the larger uncertainty related to the small sample size. This is especially the case for the observed intakes as these analyses were performed for these small groups. The habitual intake was estimated with an age-dependent model using all ages to fit the model where after the results were presented in smaller age-groups (see also below).

Proportion users of dietary supplements

In the Dutch Food Consumption Survey 2012-2016 participants are, amongst others, questioned about their use of dietary supplements in two separate ways. First of all during the two 24-hr recalls the consumption of dietary supplements is recorded, including information on amount and information on the specific product (which helps to combine it with right the composition). In addition, a general questionnaire also contains questions on the use of specific types of dietary supplements; these were multivitamin with mineral, multivitamin without mineral, beta-carotene, folic acid, vitamin B12, vitamin B-complex, vitamin C, vitamin D, vitamin E, iron, calcium, calcium with vitamin D, magnesium, fish oil or omega 3 fatty acids, garlic, ginseng, ginkgo, glucosamine, Echinaforce®, Q10, cranberry, or other (namely). For each type of dietary supplements the frequency of use was requested during winter as well as rest of the year. Frequency was recorded as never, less than once a month, 1-3 days a month, 1 day per week, 2-3 days per week, 4-5 days per week, and 6-7 days per week.

Users of dietary supplements were those participants who recorded use of dietary supplements in winter or in rest of the year in the general questionnaire. As well as subjects who were not included as user based on the general questionnaire, but who had consumed a dietary supplement on at least one recall day. In Table 1, the proportion users of dietary supplements in general as well as dietary supplements (potentially) containing specific micronutrients is provided. Users of

[4] Annex XIII of Regulation (EU) No 1169/2011 on the provision of food information to consumers

dietary supplements in general is perhaps a small underestimation of the total, as only the above mentioned types of dietary supplements were included and other types e.g. herbal supplements were not requested.

Not all subjects who recorded use of dietary supplements in the general questionnaire, also used (all) these type of supplements during a 24-hr recall. As such, for these subjects only information is available on the general type of dietary supplements used and the frequency of use during winter and/or rest of the year. No exact information is available on the dietary supplements used (e.g. brand) and therefore the composition of dietary supplements could not be verified. It was therefore assumed, that the subgroups of dietary supplements reported in the general questionnaire could potentially contain specific micronutrients. For instance, multivitamins without minerals could potentially contain all (pro)vitamins, whereas a vitamin B-complex could potentially contain all B-vitamins. This might have resulted in an overestimation of the proportion users, especially for micronutrients less often present in these multi-nutrient supplements.

About half of the population is using dietary supplements (Table 1). Generally this proportion is higher among women compared to men, except for 1 to 10 year olds, for which the proportion is more or less equal for boys and girls. Overall vitamin D has the largest proportion users (23%), for vitamin A, B6, E, folic acid and iron the proportion is 15-18%. This is similar for most age groups. However vitamin D use is higher among children 1-3 yrs. old (about 75%) In general, the proportion of use of dietary supplements with specific micronutrients was low for teenagers (14-18 yrs.), namely 8-12% depending the micronutrient.

In Table 2 the proportion of use of dietary supplements containing specific micronutrients is presented for users of dietary supplements only. Among users of dietary supplements about one-third used supplements containing vitamin A, B6, E, folic acid, or iron. Almost half used supplement containing vitamin D. This proportion was much higher for children 1-3 yrs. old (nearly 90%) and lower for teenagers (14-18 yrs. almost 30%). No large differences were observed for male and female, although among adult male a high proportion used vitamin A containing supplements compared to female.

Habitual intake

The habitual intake of the selected micronutrients from dietary supplements was calculated using SPADE version 4.1.17. The SPADE 3-part model was applied [5]. This model is developed to calculated the habitual total intake from food sources as well as dietary supplements using as first shrink then add approach, using an age-dependent model

[5] Verkaik-Kloosterman et al. 2011 the Journal of Nutrition, Three-Part, Mixed-Effects Model to Estimate the Habitual Total Vitamin D Intake Distribution from Food and Dietary Supplements in Dutch Young Children | The Journal of Nutrition | Oxford Academic (oup.com) (accessed 6 December 2022)

separately for men and women. In the age-dependent model, the model is fit over all ages in the dataset instead of estimating the habitual intake separately for each age-gender group separately. Based on the model, the habitual intake for the age-gender groups is estimated. The habitual intake distributions of the separate sources (food or dietary supplements) is provided next to the habitual total intake. In addition, next to the habitual intake distributions for the whole population, also the habitual intake distribution for only users of dietary supplements is provided as output. For this memo only the habitual intake distribution from dietary supplements for the whole population as well as (potential) users of dietary supplements containing the specific micronutrient are reported (Table 3-8). The A Tables present the habitual intake distribution for the whole population, the B Tables for users only. The habitual intake from dietary supplements is the probability to take a dietary supplement multiplied with the dosage on days a supplement is taken. With the SPADE 3-part model all (potential) users of dietary supplements containing a specific supplement are included in the analyses. For subjects with only information on intake frequency for specific type of supplements from the general questionnaire a consumed amount in imputed from the distribution of the mean consumption day dosages based on the subjects with known dosage information taking into account characteristics like age and type(s) of supplement reported. For subjects with known dosage information from the 24-hr recalls this dosage was used as habitual amount on a consumption day, or the mean over 2 days was applied.

Observed intake

The observed micronutrient intake from dietary supplements only is calculated as mean intake over the 2-survey days per subject. Subjects that indicated to have used dietary supplements in the additional questionnaire, but did not actually have consumed a dietary supplement during the 24-hr recall were not included as users of dietary supplements in this calculation. Due to this, the number of subjects is different from the habitual intake calculations (Table 3-8) and the proportions (Table 1-2). Observed intake from dietary supplements is presented per micronutrient for the whole population (i.e. including both users and non-users of dietary supplements during the 24-hr recall) in Tables 9A-14A. As well as for users of dietary supplements only in Tables 9B-14B.

Besides the mean micronutrient intake over the 2 survey days also the actual intake on consumption days is calculated. Subjects with an intake from dietary supplements on both 24-hr recall days are included twice, separately for day 1 and day 2. This information is provided in Tables 9C-14C.

Only users of dietary supplements (possibly) containing the specific micronutrient of interest were included (see above in paragraph on habitual intake for more details). Analyses were performed separately for the presented age-gender groups. Be aware that some age-gender groups have a small sample size.

Table 1. Proportion users[1] of dietary supplements[2], overall, per age-gender group, and for specific micronutrients[3], for the whole population. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Proportion users (%)						
Gender	**Age (yr)**	**N**	**All types[2]**	**Vitamin A (retinol[5])**	**Vitamin B6**	**Vitamin D**	**Vitamin E**	**Folic acid**	**Iron**
Both[4]	≥ 1 to < 80	4313	48	15	18	23	18	18	16
Male	≥ 1 to < 80	2165	39	13	15	18	15	15	13
Male	≥ 1 to < 3	227	86	15	15	77	15	15	12
Male	≥ 3 to < 10	408	56	23	22	33	23	22	19
Male	≥ 10 to < 14	217	40	15	14	15	15	14	12
Male	≥ 14 to < 18	241	33	9	10	10	10	10	8
Male	≥ 18 to < 65	726	37	13	15	15	14	15	13
Male	≥ 65 to < 80	346	34	13	13	16	15	14	12
Female[4]	≥ 1 to < 80	2148	57	17	22	28	21	22	19
Female	≥ 1 to < 3	213	87	15	16	76	16	16	14
Female	≥ 3 to < 10	445	60	20	23	33	23	23	20
Female[4]	≥ 10 to < 14	201	49	18	19	21	18	20	15
Female[4]	≥ 14 to < 18	211	41	9	11	12	9	9	8
Female[4]	≥ 18 to < 65	752	58	18	22	26	21	22	19
Female[4]	≥ 65 to < 80	326	59	18	24	36	27	22	19

[1] Users are defined as subjects that consumed dietary supplements during at least one 24-hr recall and/or subjects that had indicated in the additional questionnaire to have used dietary supplements during winter and/or rest of the year.

[2] Not all dietary supplements were included in the DNFCS, the focus is on dietary supplements containing vitamins and/or minerals, as well as some other nutritious substances like fish oil. In the additional questionnaire information on use of specific categories of dietary supplements was requested.

[3] Subjects for which dietary supplement use was based only on the additional questionnaire were selected to be a potential user of a supplement containing a specific supplement, if this nutrient could be content of the category of dietary supplements selected. E.g. all vitamins could be content of multivitamins, whereas only B-vitamins could be content of a B vitamin-complex.

[4] Pregnant and lactating women were excluded

[5] Due to labeling legislation, it is impossible to divide the amount vitamin A in dietary supplements between retinol and pro-vitamin A carotenoids. It is assumed that all vitamin A is retinol, unless specifically otherwise stated.

Table 2. Proportion users[1] of dietary supplements[2], overall, per age-gender group, and for specific micronutrients[3], for users of any type[2] dietary supplements only. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Proportion users (%)						
Gender	**Age (yr)**	**N**	**All types[2]**	**Vitamin A (retinol[5])**	**Vitamin B6**	**Vitamin D**	**Vitamin E**	**Folic acid**	**Iron**
Both[4]	≥ 1 to < 80	2297	100	32	38	47	37	38	33
Male	≥ 1 to < 80	1017	100	35	39	46	39	39	34
Male	≥ 1 to < 3	195	100	17	17	89	18	17	14
Male	≥ 3 to < 10	247	100	40	40	58	42	40	34
Male	≥ 10 to < 14	91	100	36	35	38	37	35	31
Male	≥ 14 to < 18	81	100	27	31	29	30	29	24
Male	≥ 18 to < 65	270	100	35	41	41	39	41	36
Male	≥ 65 to < 80	133	100	37	39	48	44	40	35
Female[4]	≥ 1 to < 80	1280	100	30	37	37	38	38	32
Female	≥ 1 to < 3	187	100	17	19	87	19	19	16
Female	≥ 3 to < 10	283	100	33	38	55	38	38	33
Female[4]	≥ 10 to < 14	99	100	38	40	44	37	41	32
Female[4]	≥ 14 to < 18	89	100	21	26	28	22	23	20
Female[4]	≥ 18 to < 65	415	100	30	38	44	36	39	34
Female[4]	≥ 65 to < 80	207	100	30	40	60	45	38	32

[1] Users are defined as subjects that consumed dietary supplements during at least one 24-hr recall and/or subjects that had indicated in the additional questionnaire to have used dietary supplements during winter and/or rest of the year.

[2] Not all dietary supplements were included in the DNFCS, the focus is on dietary supplements containing vitamins and/or minerals, as well as some other nutritious substances like fish oil. In the additional questionnaire information on use of specific categories of dietary supplements was requested.

[3] Subjects for which dietary supplement use was based only on the additional questionnaire were selected to be a potential user of a supplement containing a specific supplement, if this nutrient could be content of the category of dietary supplements selected. E.g. all vitamins could be content of multivitamins, whereas only B-vitamins could be content of a B vitamin-complex.

[4] Pregnant and lactating women were excluded

[5] Due to labeling legislation, it is impossible to divide the amount vitamin A in dietary supplements between retinol and pro-vitamin A carotenoids. It is assumed that all vitamin A is retinol, unless specifically otherwise stated.

Table 3 Habitual retinol[4] intake from dietary supplements for A) the whole Dutch population and B) (potential[2]) users[1] of retinol containing supplements, by age-gender category, based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

A			vitamin A (retinol[4]) µg/d – whole population					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	4313	87	0	7	338	624	790
Male	≥ 1 to < 80	2165	72	0	0	268	551	772
Male	≥ 1 to < 3	227	28	0	0	100	200	290
Male	≥ 3 to < 10	408	73	0	59	262	390	497
Male	≥ 10 to < 14	217	78	0	4	292	520	733
Male	≥ 14 to < 18	241	53	0	0	144	439	718
Male	≥ 18 to < 65	726	73	0	0	285	577	774
Male	≥ 65 to < 80	346	76	0	0	295	687	882
Female[3]	≥ 1 to < 80	2148	103	0	33	389	688	798
Female	≥ 1 to < 3	213	35	0	0	147	275	352
Female	≥ 3 to < 10	445	59	0	40	230	332	439
Female[3]	≥ 10 to < 14	201	62	0	15	228	391	617
Female[3]	≥ 14 to < 18	211	52	0	0	163	370	630
Female[3]	≥ 18 to < 65	752	120	0	56	479	745	806
Female[3]	≥ 65 to < 80	326	86	0	3	353	649	814

B			vitamin A (retinol[4]) µg/d – user[1] dietary supplements					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	699	272	137	400	759	849	1013
Male	≥ 1 to < 80	328	282	164	427	769	879	1041
Male	≥ 1 to < 3	33	113	72	188	291	379	448
Male	≥ 3 to < 10	98	173	103	250	400	520	750
Male	≥ 10 to < 14	32	260	159	390	682	792	942
Male	≥ 14 to < 18	22	269	150	448	751	796	800
Male	≥ 18 to < 65	92	296	178	481	776	855	1142
Male	≥ 65 to < 80	51	385	303	692	947	999	1027
Female[3]	≥ 1 to < 80	371	265	120	396	751	837	1000
Female	≥ 1 to < 3	33	139	93	223	351	423	502
Female	≥ 3 to < 10	94	128	57	212	351	449	559
Female[3]	≥ 10 to < 14	37	162	60	242	446	694	779
Female[3]	≥ 14 to < 18	18	183	58	264	579	758	797
Female[3]	≥ 18 to < 65	130	294	140	466	777	879	1076
Female[3]	≥ 65 to < 80	59	284	164	433	790	959	1000

[1] Users are defined as subjects that consumed dietary supplements during at least one 24-hr recall and/or subjects that had indicated in the additional questionnaire to have used dietary supplements during winter and/or rest of the year. Not all dietary supplements were included in the DNFCS, the focus is on dietary supplements containing vitamins and/or minerals, as well as some other nutritious substances like fish oil. In the additional questionnaire information on use of specific categories of dietary supplements was requested.

[2] Subjects for which dietary supplement use was based only on the additional questionnaire were selected to be a potential user of a supplement containing a specific supplement, if this nutrient could be content of the category of dietary supplements selected. E.g. all vitamins could be content of multivitamins, whereas only B-vitamins could be content of a B vitamin-complex.

[3] Pregnant and lactating women were excluded

[4] Due to labeling legislation, it is impossible to divide the amount vitamin A in dietary supplements between retinol and pro-vitamin A carotenoids. It is assumed that all vitamin A is retinol, unless specifically otherwise stated

Table 4 Habitual vitamin B6 intake from dietary supplements for A) the whole Dutch population and B) (potential[2]) users[1] of vitamin B6 containing supplements, by age-gender category, based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

A			vitamin B6 mg/d – whole population					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	4313	1.1	0.0	0.1	1.4	3.0	10.0
Male	≥ 1 to < 80	2165	0.7	0.0	0.0	1.0	2.0	5.1
Male	≥ 1 to < 3	227	0.1	0.0	0.0	0.2	0.4	0.7
Male	≥ 3 to < 10	408	0.3	0.0	0.1	0.5	0.9	1.5
Male	≥ 10 to < 14	217	0.3	0.0	0.0	0.6	1.3	1.9
Male	≥ 14 to < 18	241	0.3	0.0	0.0	0.3	0.8	1.4
Male	≥ 18 to < 65	726	0.9	0.0	0.0	1.3	2.8	8.2
Male	≥ 65 to < 80	346	0.5	0.0	0.0	0.9	1.8	3.4
Female[3]	≥ 1 to < 80	2148	1.4	0.0	0.3	1.7	4.4	14.8
Female	≥ 1 to < 3	213	0.3	0.0	0.0	0.2	0.5	0.9
Female	≥ 3 to < 10	445	0.2	0.0	0.1	0.6	1.0	1.5
Female[3]	≥ 10 to < 14	201	0.2	0.0	0.0	0.5	0.9	1.4
Female[3]	≥ 14 to < 18	211	0.3	0.0	0.0	0.5	1.1	2.0
Female[3]	≥ 18 to < 65	752	1.8	0.0	0.5	2.0	6.4	18.7
Female[3]	≥ 65 to < 80	326	1.4	0.0	0.3	2.1	5.5	15.4

B			vitamin B6 mg/d - user[1] dietary supplements					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	801	3.1	0.5	1.6	5.2	16.5	26.6
Male	≥ 1 to < 80	352	2.6	0.5	1.5	4.7	13.5	24.8
Male	≥ 1 to < 3	35	0.4	0.2	0.4	0.8	1.3	2.1
Male	≥ 3 to < 10	98	0.8	0.2	0.5	1.0	1.8	3.8
Male	≥ 10 to < 14	31	0.9	0.3	0.9	1.8	3.2	5.6
Male	≥ 14 to < 18	25	1.5	0.3	0.7	1.4	4.8	14.0
Male	≥ 18 to < 65	108	3.2	0.7	1.8	7.7	19.0	30.6
Male	≥ 65 to < 80	55	2.6	0.9	1.8	4.0	14.8	21.7
Female[3]	≥ 1 to < 80	449	3.4	0.5	1.7	6.0	17.6	27.8
Female	≥ 1 to < 3	38	1.1	0.2	0.4	0.9	1.3	25.7
Female	≥ 3 to < 10	104	0.4	0.2	0.5	1.1	1.6	2.4
Female[3]	≥ 10 to < 14	39	0.6	0.2	0.5	1.1	1.5	2.6
Female[3]	≥ 14 to < 18	22	0.9	0.2	0.7	1.6	2.9	7.6
Female[3]	≥ 18 to < 65	165	4.1	0.7	1.9	8.4	20.9	35.9
Female[3]	≥ 65 to < 80	81	3.8	0.9	2.5	11.6	19.9	34.2

[1] Users are defined as subjects that consumed dietary supplements during at least one 24-hr recall and/or subjects that had indicated in the additional questionnaire to have used dietary supplements during winter and/or rest of the year. Not all dietary supplements were included in the DNFCS, the focus is on dietary supplements containing vitamins and/or minerals, as well as some other nutritious substances like fish oil. In the additional questionnaire information on use of specific categories of dietary supplements was requested.

[2] Subjects for which dietary supplement use was based only on the additional questionnaire were selected to be a potential user of a supplement containing a specific supplement, if this nutrient could be content of the category of dietary supplements selected. E.g. all vitamins could be content of multivitamins, whereas only B-vitamins could be content of a B vitamin-complex.

[3] Pregnant and lactating women were excluded

Table 5 Habitual synthetic folic acid intake from dietary supplements for A) the whole Dutch population and B) (potential[2]) users[1] of synthetic folic acid containing supplements, by age-gender category, based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

A

			Synthetic folic acid µg/d – whole population					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	4313	42	0	14	153	243	354
Male	≥ 1 to < 80	2165	36	0	1	112	199	299
Male	≥ 1 to < 3	227	12	0	0	42	75	112
Male	≥ 3 to < 10	408	24	0	21	90	133	186
Male	≥ 10 to < 14	217	19	0	2	71	115	174
Male	≥ 14 to < 18	241	18	0	0	49	112	190
Male	≥ 18 to < 65	726	38	0	1	136	200	341
Male	≥ 65 to < 80	346	46	0	0	120	243	299
Female[3]	≥ 1 to < 80	2148	49	0	38	185	280	387
Female	≥ 1 to < 3	213	12	0	0	46	95	112
Female	≥ 3 to < 10	445	22	0	21	81	117	156
Female[3]	≥ 10 to < 14	201	22	0	9	80	120	188
Female[3]	≥ 14 to < 18	211	16	0	1	64	104	151
Female[3]	≥ 18 to < 65	752	58	0	58	200	305	400
Female[3]	≥ 65 to < 80	326	47	0	25	184	276	395

B

			Synthetic folic acid µg/d - user[1] dietary supplements					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	795	121	66	175	296	399	537
Male	≥ 1 to < 80	352	129	68	170	292	399	556
Male	≥ 1 to < 3	34	52	34	71	119	177	212
Male	≥ 3 to < 10	98	58	37	88	147	195	224
Male	≥ 10 to < 14	31	64	34	90	150	221	346
Male	≥ 14 to < 18	24	83	43	107	196	332	488
Male	≥ 18 to < 65	109	137	80	187	311	447	585
Male	≥ 65 to < 80	56	225	114	239	311	590	959
Female[3]	≥ 1 to < 80	443	116	64	178	298	399	529
Female	≥ 1 to < 3	38	47	33	81	112	145	186
Female	≥ 3 to < 10	104	47	27	74	123	163	197
Female[3]	≥ 10 to < 14	40	56	26	82	145	203	334
Female[3]	≥ 14 to < 18	19	53	28	85	142	185	227
Female[3]	≥ 18 to < 65	166	131	81	196	334	400	550
Female[3]	≥ 65 to < 80	76	128	78	192	300	477	590

[1] Users are defined as subjects that consumed dietary supplements during at least one 24-hr recall and/or subjects that had indicated in the additional questionnaire to have used dietary supplements during winter and/or rest of the year. Not all dietary supplements were included in the DNFCS, the focus is on dietary supplements containing vitamins and/or minerals, as well as some other nutritious substances like fish oil. In the additional questionnaire information on use of specific categories of dietary supplements was requested.

[2] Subjects for which dietary supplement use was based only on the additional questionnaire were selected to be a potential user of a supplement containing a specific supplement, if this nutrient could be content of the category of dietary supplements selected. E.g. all vitamins could be content of multivitamins, whereas only B-vitamins could be content of a B vitamin-complex.

[3] Pregnant and lactating women were excluded

Table 6 Habitual vitamin D intake from dietary supplements for A) the whole Dutch population and B) (potential[2]) users[1] of vitamin D containing supplements, by age-gender category, based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

A			**vitamin D µg/d – whole population**					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	4313	1.7	0.0	1.1	5.0	9.5	14.5
Male	≥ 1 to < 80	2165	1.1	0.0	0.1	4.0	6.5	10.0
Male	≥ 1 to < 3	227	4.6	3.3	8.4	10.0	11.2	14.9
Male	≥ 3 to < 10	408	1.7	0.0	2.0	5.1	9.4	10.1
Male	≥ 10 to < 14	217	0.7	0.0	0.1	2.9	4.8	6.4
Male	≥ 14 to < 18	241	0.5	0.0	0.0	1.8	4.2	5.0
Male	≥ 18 to < 65	726	0.9	0.0	0.0	3.4	5.0	9.2
Male	≥ 65 to < 80	346	1.3	0.0	0.0	3.8	7.5	14.2
Female[3]	≥ 1 to < 80	2148	2.4	0.0	2.1	7.0	11.0	18.8
Female	≥ 1 to < 3	213	4.9	3.5	8.5	10.0	10.8	15.0
Female	≥ 3 to < 10	445	2.6	0.0	2.0	5.6	9.6	12.9
Female[3]	≥ 10 to < 14	201	0.8	0.0	0.5	2.5	4.7	7.5
Female[3]	≥ 14 to < 18	211	1.0	0.0	0.3	3.2	6.3	9.7
Female[3]	≥ 18 to < 65	752	2.1	0.0	1.8	5.5	10.0	16.2
Female[3]	≥ 65 to < 80	326	4.1	0.0	4.5	13.7	20.0	27.1

B			**vitamin D µg/d - user[1] dietary supplements**					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	1283	4.4	2.1	5.0	10.0	16.6	21.5
Male	≥ 1 to < 80	568	3.6	2.0	4.8	9.4	12.6	18.6
Male	≥ 1 to < 3	174	5.3	4.9	9.1	10.0	11.7	15.0
Male	≥ 3 to < 10	154	3.2	1.8	4.7	9.2	10.0	14.0
Male	≥ 10 to < 14	34	2.3	1.5	3.6	5.0	7.5	9.2
Male	≥ 14 to < 18	24	2.2	1.3	3.9	5.0	5.8	9.8
Male	≥ 18 to < 65	112	3.3	1.8	4.5	8.0	12.3	18.1
Male	≥ 65 to < 80	70	5.3	2.9	6.9	14.8	20.0	28.3
Female[3]	≥ 1 to < 80	715	4.9	2.2	5.1	11.4	19.1	24.3
Female	≥ 1 to < 3	167	5.6	4.6	9.0	10.0	10.9	16.4
Female	≥ 3 to < 10	171	4.7	1.6	4.3	9.2	11.3	20.0
Female[3]	≥ 10 to < 14	43	2.0	1.0	2.5	5.0	8.5	10.5
Female[3]	≥ 14 to < 18	24	3.0	1.3	3.8	8.9	10.4	16.0
Female[3]	≥ 18 to < 65	184	4.3	2.1	4.9	10.0	17.0	22.5
Female[3]	≥ 65 to < 80	126	8.3	4.6	10.0	20.0	27.3	39.0

[1] Users are defined as subjects that consumed dietary supplements during at least one 24-hr recall and/or subjects that had indicated in the additional questionnaire to have used dietary supplements during winter and/or rest of the year. Not all dietary supplements were included in the DNFCS, the focus is on dietary supplements containing vitamins and/or minerals, as well as some other nutritious substances like fish oil. In the additional questionnaire information on use of specific categories of dietary supplements was requested.

[2] Subjects for which dietary supplement use was based only on the additional questionnaire were selected to be a potential user of a supplement containing a specific supplement, if this nutrient could be content of the category of dietary supplements selected. E.g. all vitamins could be content of multivitamins, whereas only B-vitamins could be content of a B vitamin-complex.

[3] Pregnant and lactating women were excluded

Table 7 Habitual vitamin E intake from dietary supplements for A) the whole Dutch population and B) (potential[2]) users[1] of vitamin E containing supplements, by age-gender category, based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

A			vitamin E mg/d – whole population					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	4313	3	0	1	8	13	23
Male	≥ 1 to < 80	2165	2	0	0	6	11	17
Male	≥ 1 to < 3	227	1	0	0	2	5	7
Male	≥ 3 to < 10	408	1	0	1	5	7	9
Male	≥ 10 to < 14	217	1	0	0	4	7	10
Male	≥ 14 to < 18	241	1	0	0	2	5	9
Male	≥ 18 to < 65	726	2	0	0	7	12	20
Male	≥ 65 to < 80	346	2	0	0	5	11	18
Female[3]	≥ 1 to < 80	2148	5	0	2	10	17	39
Female	≥ 1 to < 3	213	1	0	0	3	6	10
Female	≥ 3 to < 10	445	2	0	1	5	9	12
Female[3]	≥ 10 to < 14	201	2	0	0	5	10	16
Female[3]	≥ 14 to < 18	211	3	0	0	5	10	19
Female[3]	≥ 18 to < 65	752	5	0	2	11	18	43
Female[3]	≥ 65 to < 80	326	9	0	2	12	29	91

B			vitamin E mg/d - user[1] dietary supplements					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	793	10	3	9	18	34	73
Male	≥ 1 to < 80	362	7	3	9	16	24	35
Male	≥ 1 to < 3	36	3	2	4	7	10	12
Male	≥ 3 to < 10	101	3	2	5	7	10	12
Male	≥ 10 to < 14	33	4	2	5	9	11	16
Male	≥ 14 to < 18	24	3	2	5	9	12	14
Male	≥ 18 to < 65	104	8	4	11	19	29	41
Male	≥ 65 to < 80	64	10	5	11	18	24	36
Female[3]	≥ 1 to < 80	431	12	3	9	20	48	100
Female	≥ 1 to < 3	38	4	2	6	10	12	17
Female	≥ 3 to < 10	105	5	1	5	9	12	18
Female[3]	≥ 10 to < 14	36	5	2	5	12	19	37
Female[3]	≥ 14 to < 18	19	10	2	7	16	42	115
Female[3]	≥ 18 to < 65	152	11	3	10	20	46	87
Female[3]	≥ 65 to < 80	81	23	6	13	61	136	236

[1] Users are defined as subjects that consumed dietary supplements during at least one 24-hr recall and/or subjects that had indicated in the additional questionnaire to have used dietary supplements during winter and/or rest of the year. Not all dietary supplements were included in the DNFCS, the focus is on dietary supplements containing vitamins and/or minerals, as well as some other nutritious substances like fish oil. In the additional questionnaire information on use of specific categories of dietary supplements was requested.

[2] Subjects for which dietary supplement use was based only on the additional questionnaire were selected to be a potential user of a supplement containing a specific supplement, if this nutrient could be content of the category of dietary supplements selected. E.g. all vitamins could be content of multivitamins, whereas only B-vitamins could be content of a B vitamin-complex.

[3] Pregnant and lactating women were excluded

Table 8 Habitual iron intake from dietary supplements for A) the whole Dutch population and B) (potential[2]) users[1] of iron containing supplements, by age-gender category, based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

A			iron mg/d – whole population					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	4313	1.3	0.0	0.1	3.9	8.4	13.1
Male	≥ 1 to < 80	2165	1.1	0.0	0.0	2.6	6.4	11.1
Male	≥ 1 to < 3	227	0.2	0.0	0.0	0.8	1.8	2.2
Male	≥ 3 to < 10	408	0.9	0.0	0.3	2.6	4.9	8.9
Male	≥ 10 to < 14	217	0.9	0.0	0.0	2.3	5.2	8.8
Male	≥ 14 to < 18	241	0.6	0.0	0.0	1.1	4.3	8.0
Male	≥ 18 to < 65	726	1.2	0.0	0.0	3.2	7.1	12.5
Male	≥ 65 to < 80	346	1.3	0.0	0.0	2.0	6.4	8.9
Female[3]	≥ 1 to < 80	2148	1.6	0.0	0.4	5.0	9.9	13.8
Female	≥ 1 to < 3	213	0.3	0.0	0.0	1.1	2.0	3.1
Female	≥ 3 to < 10	445	0.5	0.0	0.2	1.9	2.7	3.9
Female[3]	≥ 10 to < 14	201	0.7	0.0	0.1	2.1	4.5	8.1
Female[3]	≥ 14 to < 18	211	1.3	0.0	0.0	3.0	8.8	13.6
Female[3]	≥ 18 to < 65	752	1.9	0.0	0.7	6.7	11.6	14.0
Female[3]	≥ 65 to < 80	326	1.3	0.0	0.0	4.6	8.7	13.7

B			iron user mg/d - user[1] dietary supplements					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	674	4.4	1.6	5.4	11.9	14.0	20.7
Male	≥ 1 to < 80	300	4.7	1.7	5.2	11.3	14.5	21.0
Male	≥ 1 to < 3	28	1.3	0.8	1.9	2.8	4.2	5.4
Male	≥ 3 to < 10	83	2.6	1.1	2.9	6.3	11.4	14.8
Male	≥ 10 to < 14	27	3.1	1.3	3.8	8.0	13.0	14.8
Male	≥ 14 to < 18	19	3.3	1.3	4.8	10.3	13.5	14.0
Male	≥ 18 to < 65	96	5.0	2.0	5.9	12.7	16.4	21.0
Male	≥ 65 to < 80	47	7.1	2.2	6.8	9.5	23.5	65.6
Female[3]	≥ 1 to < 80	374	4.2	1.5	5.5	12.1	14.0	20.3
Female	≥ 1 to < 3	34	1.3	0.9	1.9	3.2	4.1	4.2
Female	≥ 3 to < 10	90	1.2	0.7	1.9	3.2	4.1	5.0
Female[3]	≥ 10 to < 14	31	2.1	0.8	2.4	6.0	10.0	12.6
Female[3]	≥ 14 to < 18	17	4.5	1.3	5.6	13.2	18.9	26.1
Female[3]	≥ 18 to < 65	143	4.7	1.8	6.7	12.8	14.4	20.9
Female[3]	≥ 65 to < 80	59	4.4	2.1	6.4	13.2	15.0	21.8

[1] Users are defined as subjects that consumed dietary supplements during at least one 24-hr recall and/or subjects that had indicated in the additional questionnaire to have used dietary supplements during winter and/or rest of the year. Not all dietary supplements were included in the DNFCS, the focus is on dietary supplements containing vitamins and/or minerals, as well as some other nutritious substances like fish oil. In the additional questionnaire information on use of specific categories of dietary supplements was requested.

[2] Subjects for which dietary supplement use was based only on the additional questionnaire were selected to be a potential user of a supplement containing a specific supplement, if this nutrient could be content of the category of dietary supplements selected. E.g. all vitamins could be content of multivitamins, whereas only B-vitamins could be content of a B vitamin-complex.

[3] Pregnant and lactating women were excluded

Table 9A. Observed[1] vitamin A(retinol[2]) intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99), whole population. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Vitamin A (retinol[2]) µg/d – whole population					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	4313	87	0	0	392	795	800
Male	≥ 1 to < 80	2165	74	0	0	264	588	791
Male	≥ 1 to < 3	227	28	0	0	98	215	285
Male	≥ 3 to < 10	408	74	0	0	251	387	495
Male	≥ 10 to < 14	217	64	0	0	250	395	525
Male	≥ 14 to < 18	241	39	0	0	0	383	397
Male	≥ 18 to < 65	726	75	0	0	295	625	789
Male	≥ 65 to < 80	346	92	0	0	351	796	962
Female[3]	≥ 1 to < 80	2148	99	0	0	396	797	837
Female	≥ 1 to < 3	213	41	0	0	182	252	374
Female	≥ 3 to < 10	445	65	0	0	275	422	526
Female[3]	≥ 10 to < 14	201	63	0	0	179	382	770
Female[3]	≥ 14 to < 18	211	39	0	0	0	325	481
Female[3]	≥ 18 to < 65	752	107	0	0	387	795	904
Female[3]	≥ 65 to < 80	326	120	0	0	640	791	966

[1] Mean over 2 survey days, only based on users of retinol-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Due to labeling legislation, it is impossible to divide the amount vitamin A in dietary supplements between retinol and pro-vitamin A carotenoids. It is assumed that all vitamin A is retinol, unless specifically otherwise stated

[3] Pregnant and lactating women were excluded

Table 9B. Observed[1] vitamin A (retinol[2]) intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99), supplement-users[1] only. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Vitamin A (retinol[2]) µg/d – users[1] dietary supplements					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	699	560	399	797	990	1095	1522
Male	≥ 1 to < 80	328	548	30	51	52	147	1538
Male	≥ 1 to < 3	33	191	143	271	295	368	505
Male	≥ 3 to < 10	98	327	249	379	515	778	1038
Male	≥ 10 to < 14	32	437	382	441	680	772	1261
Male	≥ 14 to < 18	22	431	385	398	692	746	773
Male	≥ 18 to < 65	92	590	400	777	987	1159	1536
Male	≥ 65 to < 80	51	719	765	942	885	1233	1619
Female[3]	≥ 1 to < 80	371	569	399	797	944	1084	1196
Female	≥ 1 to < 3	33	273	207	294	503	581	683
Female	≥ 3 to < 10	94	321	274	420	573	596	793
Female[3]	≥ 10 to < 14	37	345	188	394	778	789	795
Female[3]	≥ 14 to < 18	18	445	349	518	687	744	772
Female[3]	≥ 18 to < 65	130	611	432	796	962	1114	1604
Female[3]	≥ 65 to < 80	59	668	751	796	998	1114	1174

[1] Mean over 2 survey days, only based on users of retinol-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Due to labeling legislation, it is impossible to divide the amount vitamin A in dietary supplements between retinol and pro-vitamin A carotenoids. It is assumed that all vitamin A is retinol, unless specifically otherwise stated

[3] Pregnant and lactating women were excluded

Table 9C. Vitamin A (retinol[2]) intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99) on consumption days[4], only for users[1] of retinol containing dietary supplements. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Vitamin A (retinol[2]) µg/d – consumption days					
Gender	**Age (yr)**	**Number consumption days**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[3]	≥ 1 to < 80	1100	701	782	796	998	1548	1593
Male	≥ 1 to < 80	521	674	708	789	965	1361	1579
Male	≥ 1 to < 3	49	271	227	288	407	505	573
Male	≥ 3 to < 10	151	438	328	449	699	1014	1296
Male	≥ 10 to < 14	46	601	436	650	895	1557	1986
Male	≥ 14 to < 18	31	598	569	701	767	789	800
Male	≥ 18 to < 65	148	721	755	789	970	1390	1583
Male	≥ 65 to < 80	96	776	782	907	999	1277	1627
Female[3]	≥ 1 to < 80	579	723	784	797	998	1545	1590
Female	≥ 1 to < 3	55	313	231	371	516	536	600
Female	≥ 3 to < 10	149	410	375	494	594	742	789
Female[3]	≥ 10 to < 14	49	523	363	775	793	799	1390
Female[3]	≥ 14 to < 18	25	654	427	688	1070	1335	1467
Female[3]	≥ 18 to < 65	200	785	787	799	1000	1381	1927
Female[3]	≥ 65 to < 80	101	768	767	798	962	1522	1561

[1] only based on users of retinol-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Due to labeling legislation, it is impossible to divide the amount vitamin A in dietary supplements between retinol and pro-vitamin A carotenoids. It is assumed that all vitamin A is retinol, unless specifically otherwise stated

[3] Pregnant and lactating women were excluded

[4] All consumption days with a retinol-containing dietary supplement were included. So subjects consuming those supplements on both 24-hr recall days were included twice.

Table 10A. Observed[1] vitamin B6 intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99), whole population. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Vitamin B6 mg/d – whole population					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[2]	≥ 1 to < 80	4313	1.1	0	0	1.4	2.5	9.7
Male	≥ 1 to < 80	2165	0.6	0	0	0.7	1.9	3.9
Male	≥ 1 to < 3	227	0.1	0	0	0.2	0.3	0.7
Male	≥ 3 to < 10	408	0.1	0	0	0.4	0.6	0.7
Male	≥ 10 to < 14	217	0.1	0	0	0.3	0.7	1.0
Male	≥ 14 to < 18	241	0.3	0	0	0.0	0.6	0.9
Male	≥ 18 to < 65	726	0.8	0	0	1.0	2.1	5.0
Male	≥ 65 to < 80	346	0.5	0	0	1.2	1.8	2.7
Female[2]	≥ 1 to < 80	2148	1.6	0	0	1.7	4.1	17.1
Female	≥ 1 to < 3	213	0.1	0	0	0.2	0.5	0.8
Female	≥ 3 to < 10	445	0.1	0	0	0.5	0.7	1.0
Female[2]	≥ 10 to < 14	201	0.3	0	0	0.3	0.7	1.4
Female[2]	≥ 14 to < 18	211	0.3	0	0	0.2	0.8	0.8
Female[2]	≥ 18 to < 65	752	2.0	0	0	1.8	5.7	20.0
Female[2]	≥ 65 to < 80	326	1.7	0	0	2.2	5.2	19.8

[1] Mean over 2 survey days, only based on users of vitamin B6-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

Table 10B. Observed[1] vitamin B6 intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99), supplement-users[1] only. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Vitamin B6 mg/d – users[1] dietary supplements					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[2]	≥ 1 to < 80	801	6.1	1.4	2.8	17.0	26.1	48.5
Male	≥ 1 to < 80	352	4.2	1.4	2.1	6.4	23.1	37.6
Male	≥ 1 to < 3	35	0.4	0.2	0.4	0.7	0.9	1.0
Male	≥ 3 to < 10	98	0.5	0.3	0.5	0.7	1.2	1.8
Male	≥ 10 to < 14	31	1.0	0.6	0.3	1.4	3.7	5.3
Male	≥ 14 to < 18	25	3.1	0.6	0.9	2.3	11.1	31.1
Male	≥ 18 to < 65	108	5.4	1.4	3.1	12.8	24.0	44.0
Male	≥ 65 to < 80	55	3.9	1.7	2.1	4.6	18.4	21.9
Female[2]	≥ 1 to < 80	449	7.5	1.5	3.0	19.8	27.2	55.7
Female	≥ 1 to < 3	38	0.5	0.3	0.5	0.9	1.0	1.2
Female	≥ 3 to < 10	104	0.5	0.4	0.7	1.0	1.1	1.4
Female[2]	≥ 10 to < 14	39	1.7	0.4	0.8	1.8	5.0	12.3
Female[2]	≥ 14 to < 18	22	2.4	0.7	1.7	3.8	7.8	13.4
Female[2]	≥ 18 to < 65	165	9.2	1.8	4.7	23.1	39.2	67.8
Female[2]	≥ 65 to < 80	81	7.2	2.0	4.7	19.9	40.3	46.2

[1] Mean over 2 survey days, only based on users of vitamin B6-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

Table 10C. Vitamin B6 intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99) on consumption days[3], only for users[1] of vitamin B6 containing dietary supplements. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Vitamin B6 mg/d – consumption days					
Gender	**Age (yr)**	**Number consumption days**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[2]	≥ 1 to < 80	1275	7.6	1.8	3.0	22.8	42.1	51.9
Male	≥ 1 to < 80	564	5.1	1.4	2.7	8.2	24.0	43.0
Male	≥ 1 to < 3	51	0.5	0.3	0.6	1.0	1.3	1.7
Male	≥ 3 to < 10	160	0.7	0.5	0.6	1.0	1.2	1.9
Male	≥ 10 to < 14	46	1.3	0.6	1.0	2.0	4.8	5.8
Male	≥ 14 to < 18	36	4.3	1.1	1.3	4.3	22.7	36.2
Male	≥ 18 to < 65	172	6.7	1.8	4.2	16.5	29.1	42.6
Male	≥ 65 to < 80	99	4.3	1.7	2.1	7.6	22.0	28.6
Female[2]	≥ 1 to < 80	711	9.4	1.9	4.2	25.4	47.3	71.5
Female	≥ 1 to < 3	67	0.5	0.3	0.6	1.0	1.1	1.3
Female	≥ 3 to < 10	164	0.7	0.6	0.7	1.1	1.4	1.9
Female[2]	≥ 10 to < 14	51	2.5	0.7	1.4	3.1	15.4	22.8
Female[2]	≥ 14 to < 18	32	3.3	1.3	2.4	6.9	12.3	18.6
Female[2]	≥ 18 to < 65	256	11.6	1.9	5.3	26.6	52.2	74.9
Female[2]	≥ 65 to < 80	141	8.2	2.0	5.2	23.0	44.3	48.5

[1] Only based on users of vitamin B6-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

[3] All consumption days with a vitamin B6-containing dietary supplement were included. So subjects consuming those supplements on both 24-hr recall days were included twice.

Table 11A. Observed[1] synthetic folic acid intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99), whole population. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Synthetic folic acid µg/d – whole population					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[2]	≥ 1 to < 80	4313	45	0	0	200	279	393
Male	≥ 1 to < 80	2165	39	0	0	99	200	298
Male	≥ 1 to < 3	227	9	0	0	34	69	93
Male	≥ 3 to < 10	408	21	0	0	74	119	157
Male	≥ 10 to < 14	217	16	0	0	53	98	147
Male	≥ 14 to < 18	241	14	0	0	0	91	134
Male	≥ 18 to < 65	726	45	0	0	100	246	357
Male	≥ 65 to < 80	346	48	0	0	159	281	298
Female[2]	≥ 1 to < 80	2148	50	0	0	199	289	396
Female	≥ 1 to < 3	213	14	0	0	51	98	131
Female	≥ 3 to < 10	445	22	0	0	98	135	160
Female[2]	≥ 10 to < 14	201	22	0	0	54	129	191
Female[2]	≥ 14 to < 18	211	11	0	0	0	81	137
Female[2]	≥ 18 to < 65	752	57	0	0	199	296	394
Female[2]	≥ 65 to < 80	326	62	0	0	259	298	551

[1] Mean over 2 survey days, only based on users of synthetic folic acid-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

Table 11B. Observed[1] synthetic folic acid intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99), supplement-users[1] only. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Synthetic folic acid µg/d - users[1] dietary supplements					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[2]	≥ 1 to < 80	795	245	200	284	399	563	664
Male	≥ 1 to < 80	352	261	200	274	405	532	675
Male	≥ 1 to < 3	34	64	45	88	98	140	195
Male	≥ 3 to < 10	98	95	72	102	163	188	202
Male	≥ 10 to < 14	31	114	85	110	178	195	325
Male	≥ 14 to < 18	24	146	93	139	243	344	422
Male	≥ 18 to < 65	109	297	183	281	461	579	692
Male	≥ 65 to < 80	56	347	268	292	387	500	1517
Female[2]	≥ 1 to < 80	443	234	199	285	399	562	597
Female	≥ 1 to < 3	38	84	63	99	157	198	199
Female	≥ 3 to < 10	104	96	90	128	171	199	200
Female[2]	≥ 10 to < 14	40	109	54	131	197	272	412
Female[2]	≥ 14 to < 18	19	121	86	146	185	198	240
Female[2]	≥ 18 to < 65	166	256	198	291	400	564	610
Female[2]	≥ 65 to < 80	76	279	227	293	559	592	670

[1] Mean over 2 survey days, only based on users of synthetic folic acid-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

Table 11C. Synthetic folic acid intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99) on consumption days[3], only for users[1] of synthetic folic acid containing dietary supplements. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Synthetic folic acid µg/d – consumption days					
Gender	Age (yr)	Number consumption days	mean	median	P75	P90	P95	P97.5
Both[2]	≥ 1 to < 80	1263	306	195	391	493	598	764
Male	≥ 1 to < 80	561	324	182	293	476	591	774
Male	≥ 1 to < 3	49	92	72	94	162	192	250
Male	≥ 3 to < 10	159	122	91	141	184	217	294
Male	≥ 10 to < 14	46	151	94	159	259	395	497
Male	≥ 14 to < 18	34	206	159	187	317	483	544
Male	≥ 18 to < 65	173	371	190	337	532	674	914
Male	≥ 65 to < 80	100	387	272	293	400	491	787
Female[2]	≥ 1 to < 80	702	293	197	392	492	604	749
Female	≥ 1 to < 3	67	93	86	103	147	181	198
Female	≥ 3 to < 10	164	123	94	144	191	198	261
Female[2]	≥ 10 to < 14	52	168	104	189	362	386	398
Female[2]	≥ 14 to < 18	27	175	105	186	301	350	375
Female[2]	≥ 18 to < 65	257	325	252	395	504	669	769
Female[2]	≥ 65 to < 80	135	311	200	339	565	660	726

[1] Only based on users of synthetic folic acid-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

[3] All consumption days with a synthetic folic acid-containing dietary supplement were included. So subjects consuming those supplements on both 24-hr recall days were included twice.

Table 12A. Observed[1] vitamin D intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99), whole population. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Vitamin D µg/d – whole population					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[2]	≥ 1 to < 80	4313	1.8	0	0	5.0	9.9	14.7
Male	≥ 1 to < 80	2165	1.2	0	0	4.5	7.5	9.9
Male	≥ 1 to < 3	227	6.8	8.7	9.9	10.6	12.1	16.3
Male	≥ 3 to < 10	408	1.9	0	2.1	6.4	9.7	12.3
Male	≥ 10 to < 14	217	0.6	0	0	2.4	3.5	4.7
Male	≥ 14 to < 18	241	0.3	0	0	0	2.3	3.9
Male	≥ 18 to < 65	726	0.9	0	0	2.4	4.9	8.1
Male	≥ 65 to < 80	346	1.5	0	0	4.7	9.1	13.2
Female[2]	≥ 1 to < 80	2148	2.4	0	1.8	7.2	12.1	19.3
Female	≥ 1 to < 3	213	6.6	6.8	9.7	10.5	10.9	16.6
Female	≥ 3 to < 10	445	2.9	0	2.2	6.7	9.5	12.2
Female[2]	≥ 10 to < 14	201	0.8	0	0	2.2	4.3	5.4
Female[2]	≥ 14 to < 18	211	0.6	0	0	1.2	3.1	4.7
Female[2]	≥ 18 to < 65	752	2.0	0	0.9	5.0	9.9	16.6
Female[2]	≥ 65 to < 80	326	4.4	0	4.2	14.5	19.9	25.5

[1] Mean over 2 survey days, only based on users of vitamin D-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

Table 12B. Observed[1] vitamin D intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99), supplement-users[1] only. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Vitamin D µg/d - users[1] dietary supplements					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[2]	≥ 1 to < 80	1283	7.8	5.0	9.8	14.9	21.7	25.2
Male	≥ 1 to < 80	568	6.5	4.7	9.7	10.8	18.5	23.2
Male	≥ 1 to < 3	174	8.9	9.8	10.0	10.8	13.2	17.8
Male	≥ 3 to < 10	154	5.8	4.6	8.6	10.9	14.4	18.6
Male	≥ 10 to < 14	34	3.7	2.5	4.0	5.3	7.3	11.3
Male	≥ 14 to < 18	24	3.1	2.3	3.9	4.6	4.8	4.9
Male	≥ 18 to < 65	112	6.0	4.6	6.2	9.7	17.8	22.5
Male	≥ 65 to < 80	70	9.0	6.5	9.5	15.7	25.3	34.0
Female[2]	≥ 1 to < 80	715	8.6	5.0	9.8	19.0	23.7	29.2
Female	≥ 1 to < 3	167	8.7	9.3	9.9	10.6	11.8	21.3
Female	≥ 3 to < 10	171	8.9	5.0	7.8	10.8	18.2	28.9
Female[2]	≥ 10 to < 14	43	3.8	2.1	4.2	6.2	10.3	20.3
Female[2]	≥ 14 to < 18	24	5.1	2.5	4.4	9.0	15.6	22.5
Female[2]	≥ 18 to < 65	184	7.8	4.9	9.5	15.8	20.9	24.7
Female[2]	≥ 65 to < 80	126	12.3	9.1	15.1	23.2	27.2	40.6

[1] Mean over 2 survey days, only based on users of vitamin D-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

Table 12C. Vitamin D intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99) on consumption days[3], only for users[1] of vitamin D containing dietary supplements. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Vitamin D µg/d – consumption days					
Gender	**Age (yr)**	**Number consumption days**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[2]	≥ 1 to < 80	2130	9.6	4.9	10.0	19.2	24.5	29.7
Male	≥ 1 to < 80	955	7.9	4.8	9.2	15.8	19.8	24.0
Male	≥ 1 to < 3	311	9.9	9.2	9.9	12.3	17.7	19.0
Male	≥ 3 to < 10	256	7.1	4.9	9.5	13.3	17.6	19.4
Male	≥ 10 to < 14	52	4.8	3.8	4.8	8.4	10.9	12.9
Male	≥ 14 to < 18	33	4.5	4.2	4.7	5.0	8.0	9.0
Male	≥ 18 to < 65	177	7.4	4.6	7.3	15.7	20.4	23.1
Male	≥ 65 to < 80	126	9.9	6.8	9.1	19.5	28.5	36.2
Female[2]	≥ 1 to < 80	1175	10.8	5.0	10.0	19.8	24.9	38.5
Female	≥ 1 to < 3	304	9.6	8.9	9.9	10.6	13.4	21.9
Female	≥ 3 to < 10	278	11.2	4.8	10.0	11.7	19.3	26.6
Female[2]	≥ 10 to < 14	57	5.7	2.5	4.9	11.3	15.8	19.4
Female[2]	≥ 14 to < 18	35	7.2	3.6	7.1	16.8	19.8	24.7
Female[2]	≥ 18 to < 65	284	10.1	4.9	9.6	19.1	23.4	33.6
Female[2]	≥ 65 to < 80	217	14.0	9.1	18.2	24.9	33.1	44.7

[1] Only based on users of vitamin D-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

[3] All consumption days with a vitamin D-containing dietary supplement were included. So subjects consuming those supplements on both 24-hr recall days were included twice.

Table 13A. Observed[1] vitamin E intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99), whole population. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Vitamin E mg/d – whole population					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[2]	≥ 1 to < 80	4313	3.3	0	0	8.1	14.1	23.7
Male	≥ 1 to < 80	2165	1.9	0	0	5.9	11.6	18.0
Male	≥ 1 to < 3	227	0.6	0	0	1.8	4.3	5.8
Male	≥ 3 to < 10	408	1.2	0	0	4.8	6.3	9.8
Male	≥ 10 to < 14	217	1.0	0	0	3.5	6.6	9.5
Male	≥ 14 to < 18	241	0.6	0	0	0	4.8	5.7
Male	≥ 18 to < 65	726	2.1	0	0	5.8	11.9	20.1
Male	≥ 65 to < 80	346	2.7	0	0	9.1	16.0	19.8
Female[2]	≥ 1 to < 80	2148	4.7	0	0	10.0	15.0	39.4
Female	≥ 1 to < 3	213	0.9	0	0	2.9	5.7	9.6
Female	≥ 3 to < 10	445	1.2	0	0	5.0	7.0	8.9
Female[2]	≥ 10 to < 14	201	0.9	0	0	2.9	5.9	10.1
Female[2]	≥ 14 to < 18	211	0.8	0	0	0	5.3	9.1
Female[2]	≥ 18 to < 65	752	4.8	0	0	10.7	16.9	45.3
Female[2]	≥ 65 to < 80	326	9.1	0	5.4	14.6	33.7	91.9

[1] Mean over 2 survey days, only based on users of vitamin E-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

Table 13B. Observed[1] vitamin E intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99), supplement-users[1] only. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Vitamin E mg/d - users[1] dietary supplements					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[2]	≥ 1 to < 80	793	18.3	9.4	14.9	33.4	69.5	109.7
Male	≥ 1 to < 80	362	12.8	8.9	14.9	23.8	33.6	42.9
Male	≥ 1 to < 3	36	3.7	2.8	5.0	6.0	8.7	10.6
Male	≥ 3 to < 10	101	5.2	3.9	5.9	9.8	10.1	13.8
Male	≥ 10 to < 14	33	6.7	5.7	7.3	11.0	14.6	20.8
Male	≥ 14 to < 18	24	5.8	4.8	5.7	9.6	12.2	13.6
Male	≥ 18 to < 65	104	14.4	10.7	17.7	31.2	36.3	47.7
Male	≥ 65 to < 80	64	18.0	10.8	16.8	24.2	28.3	83.2
Female[2]	≥ 1 to < 80	431	22.2	9.9	14.8	61.1	94.5	139.1
Female	≥ 1 to < 3	38	5.6	4.1	6.3	10.0	13.1	15.9
Female	≥ 3 to < 10	105	5.2	4.8	6.1	9.1	10.5	14.1
Female[2]	≥ 10 to < 14	36	5.2	3.1	6.7	10.9	11.7	13.9
Female[2]	≥ 14 to < 18	19	8.5	5.5	9.3	11.2	11.9	28.4
Female[2]	≥ 18 to < 65	152	23.0	10.6	16.2	67.3	91.8	139.4
Female[2]	≥ 65 to < 80	81	34.1	11.9	21.5	90.6	133.2	173.9

[1] Mean over 2 survey days, only based on users of vitamin E-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

Table 13C. Vitamin E intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99) on consumption days[3], only for users[1] of vitamin E containing dietary supplements. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Vitamin E mg/d - consumption days					
Gender	**Age (yr)**	**Number consumption days**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[2]	≥ 1 to < 80	1268	22.7	11.5	17.9	36.0	85.5	138.2
Male	≥ 1 to < 80	579	15.9	11.5	17.7	26.4	40.7	66.4
Male	≥ 1 to < 3	53	5.2	3.6	5.7	10.5	11.7	14.5
Male	≥ 3 to < 10	165	6.5	2.3	8.2	10.5	13.5	19.3
Male	≥ 10 to < 14	49	8.9	6.0	10.9	16.2	23.4	28.9
Male	≥ 14 to < 18	33	8.3	7.1	10.7	11.8	13.0	14.0
Male	≥ 18 to < 65	165	17.9	11.6	19.3	33.0	48.5	68.5
Male	≥ 65 to < 80	114	20.3	11.3	17.5	29.6	37.6	101.3
Female[2]	≥ 1 to < 80	689	27.6	11.6	19.5	65.4	107.1	211.6
Female	≥ 1 to < 3	67	6.2	4.6	7.9	10.7	13.1	20.8
Female	≥ 3 to < 10	166	6.7	5.4	7.5	10.3	11.8	17.1
Female[2]	≥ 10 to < 14	48	7.9	5.7	10.3	12.8	16.6	19.6
Female[2]	≥ 14 to < 18	27	12.2	9.0	11.0	21.6	29.7	44.3
Female[2]	≥ 18 to < 65	242	28.7	11.3	20.0	66.7	119.1	202.1
Female[2]	≥ 65 to < 80	139	39.8	12.0	23.7	87.5	170.9	270.2

[1] Only based on users of vitamin E-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

[3] All consumption days with a vitamin E-containing dietary supplement were included. So subjects consuming those supplements on both 24-hr recall days were included twice.

Table 14A. Observed[1] iron intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99), whole population.
Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Iron mg/d - whole population					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[2]	≥ 1 to < 80	4313	1.4	0	0	3.4	8.9	13.7
Male	≥ 1 to < 80	2165	1.3	0	0	2.5	6.9	13.5
Male	≥ 1 to < 3	227	0.2	0	0	0.8	2.0	2.1
Male	≥ 3 to < 10	408	0.6	0	0	2.0	3.2	4.1
Male	≥ 10 to < 14	217	0.8	0	0	1.9	4.6	7.9
Male	≥ 14 to < 18	241	0.5	0	0	0	4.0	6.6
Male	≥ 18 to < 65	726	1.5	0	0	2.4	8.3	13.1
Male	≥ 65 to < 80	346	1.4	0	0	2.1	8.4	9.0
Female[2]	≥ 1 to < 80	2148	1.4	0	0	4.9	10.4	13.7
Female	≥ 1 to < 3	213	0.3	0	0	1.1	2.2	3.1
Female	≥ 3 to < 10	445	0.5	0	0	2.1	3.3	4.2
Female[2]	≥ 10 to < 14	201	0.7	0	0	1.1	4.6	6.6
Female[2]	≥ 14 to < 18	211	0.6	0	0	0	3.9	9.1
Female[2]	≥ 18 to < 65	752	1.6	0	0	6.3	12.0	13.8
Female[2]	≥ 65 to < 80	326	1.8	0	0	6.7	10.9	14.2

[1] Mean over 2 survey days, only based on users of iron-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

Table 14B. Observed[1] iron intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99), supplement-users[1] only. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Iron mg/d - users[1] dietary supplements					
Gender	**Age (yr)**	**N**	**mean**	**median**	**P75**	**P90**	**P95**	**P97.5**
Both[2]	≥ 1 to < 80	674	8.7	5.5	10.3	14.0	19.5	28.0
Male	≥ 1 to < 80	300	10.0	5.1	9.5	14.0	20.9	65.9
Male	≥ 1 to < 3	28	1.7	1.3	2.1	2.3	2.8	3.1
Male	≥ 3 to < 10	83	3.0	2.0	3.2	4.2	9.6	13.2
Male	≥ 10 to < 14	27	6.5	3.2	7.0	12.1	14.6	26.5
Male	≥ 14 to < 18	19	5.8	5.6	6.9	9.8	11.9	13.0
Male	≥ 18 to < 65	96	11.6	6.4	12.3	16.9	24.0	49.2
Male	≥ 65 to < 80	47	12.0	6.9	9.0	13.4	19.5	61.4
Female[2]	≥ 1 to < 80	374	7.8	5.5	11.6	14.0	17.3	27.4
Female	≥ 1 to < 3	34	2.1	2.0	2.4	3.6	4.2	4.4
Female	≥ 3 to < 10	90	2.4	2.1	3.4	4.2	4.9	5.4
Female[2]	≥ 10 to < 14	31	4.3	2.5	5.7	8.7	12.2	13.9
Female[2]	≥ 14 to < 18	17	7.4	5.2	10.8	13.5	14.2	14.5
Female[2]	≥ 18 to < 65	143	8.5	6.5	12.8	14.4	17.9	27.9
Female[2]	≥ 65 to < 80	59	9.3	7.0	11.3	15.4	22.4	25.6

[1] Mean over 2 survey days, only based on users of iron-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

Table 14C. Iron intake from dietary supplements (mean, median, P75, P90, P95, P97.5, P99) on consumption days[3], only for users[1] of vitamin E containing dietary supplements. Based on DNFCS 2012-2016, weighted for social-demographic characteristics, season and day of the week.

			Iron mg/d - consumption days					
Gender	Age (yr)	Number consumption days	mean	median	P75	P90	P95	P97.5
Both[2]	≥ 1 to < 80	1070	10.8	6.9	12.8	16.0	25.3	40.8
Male	≥ 1 to < 80	479	12.4	6.6	11.8	18.9	26.9	67.3
Male	≥ 1 to < 3	40	2.4	2.0	2.1	4.1	4.1	4.2
Male	≥ 3 to < 10	131	4.0	2.1	4.0	6.5	8.4	18.2
Male	≥ 10 to < 14	40	8.7	5.1	9.8	15.4	31.1	37.7
Male	≥ 14 to < 18	28	7.7	5.7	10.9	13.2	14.0	14.4
Male	≥ 18 to < 65	153	14.4	8.0	12.7	20.8	27.8	56.5
Male	≥ 65 to < 80	87	13.2	7.9	8.9	13.0	24.1	69.2
Female[2]	≥ 1 to < 80	591	9.7	7.2	12.9	14.8	24.3	27.1
Female	≥ 1 to < 3	57	2.5	2.1	2.9	4.0	4.2	4.4
Female	≥ 3 to < 10	141	3.1	2.1	4.2	4.2	6.3	7.0
Female[2]	≥ 10 to < 14	41	6.6	4.5	7.6	12.1	13.6	14.2
Female[2]	≥ 14 to < 18	22	11.6	7.1	13.0	22.7	28.1	28.9
Female[2]	≥ 18 to < 65	226	10.6	8.5	13.2	16.0	24.5	27.2
Female[2]	≥ 65 to < 80	104	10.3	8.1	12.8	14.0	23.5	28.6

[1] Only based on users of iron-containing dietary supplements which consumed those on at least one 24-hr survey day

[2] Pregnant and lactating women were excluded

[3] All consumption days with an iron-containing dietary supplement were included. So subjects consuming those supplements on both 24-hr recall days were included twice.