Comparison of four methods to assess the prevalence of use and estimates of nutrient intakes from dietary supplements among U.S. adults Cowan AE et al.

Online Supplementary Material

Supplemental Table 1. Prevalence (%) of dietary supplement (DS) use among U.S. adult supplement users ( $\geq$  19y), estimated from those who reported DS intakes on  $\geq$ 1 24HR but not on the DSMQ, by type of DS taken, NHANES 2011-2014<sup>1,2</sup>

		DS Use Repo	orted on ≥1 24HR Only <sup>3</sup>	Mentions of DS on ≥1 24HR Only						
	n reporting DS	n	% (SE)	$m^4$	Exact/Probable/ Generic m (%)	Reasonable/ Default  m (%)	No Match/ Unknown m (%)			
Any Supplement	6150	561	8.8 (0.4)	1349	539 (40.0%)	745 (55.2%)	65 (4.8%)			
Type of supplement										
$MVM^5$	3553	371	10.3 (0.6)	340	140 (41.2%)	200 (58.8%)				
Multivitamin <sup>6</sup>	531	87	16.1 (2.1)	45	20 (44.4%)	25 (55.6%)				
Multimineral <sup>6</sup>	197	34	17.9 (3.2)	9	5 (55.6%)	4 (44.4%)				
Calcium and Vitamin D <sup>7</sup>	802	139	17.0 (2.1)	60	20 (33.3%)	40 (66.7%)				
Single Vitamin	2711	281	10.2 (0.6)	270	136 (50.4%)	134 (49.6%)				
Single Mineral	1089	175	14.8 (1.6)	124	60 (48.4%)	64 (51.6%)				

Abbreviations: MVM, Multivitamin-mineral; DSMQ, Dietary Supplement and Prescription Medication Questionnaire; 24HR, 24-hour dietary recall; SE, standard error.

<sup>&</sup>lt;sup>1</sup> The analytic sample used in this table reflects the n=561 non-pregnant, non-lactating U.S. adults who report DS use on ≥1 24HR, but not on the DSMQ. These individuals had complete information for the DSMQ and >1 24HR dietary recall.

<sup>&</sup>lt;sup>2</sup> Estimated prevalence of DS use on the DSMQ, 24HR Day 1, or 24HR Day 2 was constructed based on whether the participant responded "yes" to the question "Have you used or taken any vitamins, minerals or other dietary supplements in the past 30 days?" or "All day yesterday, [day], between midnight and midnight, did [you/SP] take any vitamins, minerals, herbals or other dietary supplements?" respectively.

<sup>&</sup>lt;sup>3</sup> Estimated prevalence of DS use among DS users only, as defined in footnote #2.

<sup>4&</sup>quot;m" is the number (unweighted) of "mentions" of each product.

<sup>&</sup>lt;sup>5</sup> MVMs are categorized as DS containing ≥3 vitamins and ≥1 mineral.

<sup>&</sup>lt;sup>6</sup> Multivitamins and multiminerals are categorized as non-MVM DS products containing ≥2 vitamins or minerals, respectively.

<sup>&</sup>lt;sup>7</sup> Calcium and vitamin D are categorized as non-MVM DS products containing calcium and vitamin D, which may contain other vitamins/minerals.

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Supplemental Table 2. Estimated number of mentions of dietary supplements (DS) used during a given 30-day period as reported on the DSMQ and the percent of those on at least one 24 hour recall by type of DS taken, among U.S. adult supplement users (≥19y) with 2 days of 24HR (n=8881), NHANES 2011-2014<sup>1-3</sup>

	1-9 d. of use			10-19 d. of use		20-24 d. of use		25-29 d. of use			30 d. of use				
•			%			%			%			%			%
	$m^4$	%	on 24HR	$m^4$	%	on 24HR	$m^4$	%	on 24HR	$m^4$	%	on 24HR	$m^4$	%	on 24HR
Type of supplement															
MVM <sup>5</sup>	348	12.7	44.3	360	13.1	51.9	193	7.0	68.9	155	5.6	83.2	1695	61.6	89.4
Multivitamin <sup>6</sup>	55	13.1	41.8	52	12.4	46.2	25	6.0	68.0	19	4.5	79.0	269	64.1	85.9
Multimineral <sup>6</sup>	22	14.7	50.0	17	11.3	35.3	11	7.3	63.6	8	5.3	87.5	92	61.3	91.3
Calcium and Vitamin D <sup>7</sup>	34	6.2	55.9	45	8.2	64.4	43	7.8	74.4	22	4.0	90.9	405	73.8	93.3
Single Vitamin	360	13.7	36.7	266	10.1	51.1	144	5.5	63.9	84	3.2	70.2	1778	67.6	78.5
Single Mineral	73	9.6	31.5	86	11.3	43.0	36	4.7	47.2	28	3.7	67.9	540	70.8	72.4

Abbreviations: MVM, Multivitamin-mineral; DSMQ, Dietary Supplement Questionnaire.

<sup>&</sup>lt;sup>1</sup>The analytic sample includes individuals  $\geq$  19y who were not pregnant or lactating and had complete information for the DSMQ, and reported DS intakes > 0 on the DSMQ. The unweighted estimates in this table are reported at the product level for select product types where U.S. adults reported intakes on the DSMQ.

<sup>&</sup>lt;sup>2</sup> Estimated prevalence of DS use on the DSMQ was constructed based on whether the participant responded "yes" to the question "Have you used or taken any vitamins, minerals or other dietary supplements in the past 30 days?"

<sup>&</sup>lt;sup>3</sup> Estimated prevalence of DS use among DS users only, as defined in footnote #2.

<sup>4&</sup>quot;m" is the number (unweighted) of "mentions" of each product.

<sup>&</sup>lt;sup>5</sup> MVMs are categorized as DS containing ≥3 vitamins and ≥1 mineral.

<sup>&</sup>lt;sup>6</sup> Multivitamins and multiminerals are categorized as non-MVM DS products containing ≥2 vitamins or minerals, respectively.

<sup>&</sup>lt;sup>7</sup>Calcium and vitamin D are categorized as a non-MVM DS products containing calcium and vitamin D, which may contain other vitamins/mineral