Erratum

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Erratum: Analysis of dietary behavior and intake related to glycemic control in patients with type 2 diabetes aged 30 years or older in Korea: Utilizing the 8th Korea National Health and Nutrition Examination Survey (2019–2021)

Jin-Ah Seok 💿 and Yeon-Kyung Lee 💿

Department of Food Science & Nutrition, Kyungpook National University, Daegu 41566, Korea

This corrects the article "Analysis of dietary behavior and intake related to glycemic control in patients with type 2 diabetes aged 30 years or older in Korea: Utilizing the 8th Korea National Health and Nutrition Examination Survey (2019–2021)" in volume 18 on page 239.

To The Editor,

There was an error in our published article titled "Analysis of dietary behavior and intake related to glycemic control in patients with type 2 diabetes aged 30 years or older in Korea: Utilizing the 8th Korea National Health and Nutrition Examination Survey (2019–2021)" *Nutrition Research and Practice* 2024 Feb; 18(2): 239-256. https://doi.org/10.4162/nrp.2024.18.2.239; pISSN 1976-1457 eISSN 2005-6168.

We found that the crosstab sums in Tables 1-3 were recorded incorrectly. We also want to revise the results and discussion as shown below. These errors did not influence the subsequent analyses/statistics at all. Thus, changes for these errors do not impact the conclusions of the paper.

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ORCID iDs

Jin-Ah Seok D https://orcid.org/0009-0002-5659-5712 Yeon-Kyung Lee D https://orcid.org/0000-0002-5975-3969

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After correction

1. On page 243, Table 1:

Variables	Good glycemic control group	Poor glycemic control group	Total (n = 2,233)	P-value
	(n = 560)	(n = 1,673)		
Sex				0.522
Men	287 <u>(57.9)</u>	807 <u>(56.1)</u>	1,094 (56.5)	
Women	273 <u>(42.1)</u>	866 <u>(43.9)</u>	1,139 (43.5)	
Age groups (yrs)				0.036
30-39	19 <u>(5.7)</u>	44 <u>(3.9)</u>	63 (4.4)	
40-49	36 <u>(10.1)</u>	152 <u>(13.5)</u>	188 (12.6)	
50-59	80 <u>(21.0)</u>	304 <u>(25.6)</u>	384 (24.4)	
60-69	172 <u>(26.0)</u>	526 <u>(26.8)</u>	698 (26.6)	
≥ 70	253 <u>(37.2)</u>	647 <u>(30.2)</u>	900 (32.0)	
Education level				0.937
≤ Elementary school	192 <u>(28.2)</u>	564 <u>(28.9)</u>	756 (28.6) ¹⁾	
Middle school	85 <u>(15.2)</u>	232 <u>(14.0)</u>	317 (14.3)	
High school	133 (30.0)	417 (30.9)	550 (30.8)	
≥ College	99 <u>(26.6)</u>	320 (26.2)	419 (26.3)	
Occupation				0.464
Office-worker	50 <u>(14.3)</u>	185 <u>(15.8)</u>	235 (15.4) ¹⁾	
Service worker	39 <u>(9.4)</u>	157 <u>(11.2)</u>	196 (10.7)	
Manufacturing	144 (27.7)	444 (29.5)	588 (29.1)	
Unemployed	277 <u>(48.6)</u>	747 (43.5)	1,024 (44.8)	
Marital status				0.592
Married	397 <u>(77.2)</u>	1,142 <u>(76.0)</u>	1,539 (76.3) ¹⁾	
Single	142 <u>(22.8)</u>	460 (24.0)	602 (23.7)	
Household size				0.220
Alone	112 <u>(14.7)</u>	354 <u>(16.8)</u>	466 (16.2)	
With family/relatives	448 <u>(85.3)</u>	1,319 <u>(83.2)</u>	1,767 (83.8)	
Individual income (quartile)				0.946
Low	149 <u>(26.2)</u>	472 <u>(27.3)</u>	621 (27.0) ¹⁾	
Moderately low	149 <u>(26.4)</u>	429 <u>(25.0)</u>	578 (25.3)	
Moderately high	133 <u>(23.6)</u>	394 <u>(24.2)</u>	527 (24.1)	
High	127 <u>(23.8)</u>	373 <u>(23.5)</u>	500 (23.6)	
Diabetes duration (yrs)				< 0.001
< 1	32 <u>(7.3)</u>	40 <u>(4.1)</u>	72 (5.0) ¹⁾	
1-2	97 <u>(21.1)</u>	140 <u>(14.5)</u>	237 (16.3)	
3-4	68 <u>(17.0)</u>	135 <u>(12.8)</u>	203 (13.9)	
5-9	94 <u>(21.7)</u>	245 <u>(22.6)</u>	339 (22.3)	
≥ 10	139 <u>(32.9)</u>	543 <u>(46.0)</u>	682 (42.5)	
Diabetes treatment				0.196
Only OHA	345 <u>(87.3)</u>	906 <u>(84.9)</u>	1,251 (85.5) ¹⁾	
OHA and insulin	42 <u>(12.7)</u>	151 <u>(14.0)</u>	193 (13.7)	
Exercise and diet	0 <u>(0.0)</u>	12 <u>(1.1)</u>	12 (0.8)	

2. On page 244, Paragraph 1:

... were women, with <u>57.9%</u> and <u>42.1%</u> having good glycemic control, respectively. Regarding age, 4.4% of the participants were in their 30s, 12.6% in their 40s, 24.4% in their 50s, and 26.6% in their 60s, and those who were in their 70s and older accounted for the highest percentage at 32.0%. The age group with the highest rate of good glycemic control was in their <u>70s</u> at <u>37.2%</u>, and the lowest rate was in their <u>30s</u> at <u>5.7%</u>.



3. On page 245, Table 2:

Variables	Good glycemic	Poor glycemic	Total	P-value	
	(n = 560)	(n = 1.673)	(11 = 2,233)		
Frequency of eating out	(11 000)	(,,,,,,)		0.063	
≥ 1 /dav	48 (11.6)	208 (16.5)	256 (15.3)		
1-6 /wk	221 (43.7)	693 (43.1)	914 (43.3)		
≤ 3 /mon	291 (44.7)	772 (40.4)	1.063 (41.4)		
Frequency of vegetables (containing kimchi)					
≥ 1 /day	553 (98.7)	1,664 <u>(99.4)</u>	2,217 (99.2)		
1-6/wk	6 <u>(1.2)</u>	8 <u>(0.5)</u>	14 (0.7)		
≤ 3 /mon	1 (0.1)	1 (0.1)	2 (0.1)		
Frequency of vegetables (excluding kimcl	ni)			0.105	
≥ 1 /day	545 <u>(96.3)</u>	1,638 <u>(98.1)</u>	2,183 (97.6)		
1-6/wk	13 <u>(3.3)</u>	33 <u>(1.8)</u>	46 (2.2)		
≤ 3 /mon	2 <u>(0.4)</u>	2 (0.1)	4 (0.2)		
Frequency of fruit consumption				0.015	
≥ 1 /day	227 <u>(37.5)</u>	688 <u>(39.1)</u>	915 (38.7)		
1-6 /wk	227 <u>(43.1)</u>	754 <u>(47.5)</u>	981 (46.4)		
≤ 3 /mon	106 <u>(19.4)</u>	231 <u>(13.4)</u>	337 (14.9)		
Frequency of breakfast				0.644	
5–7 /wk	473 <u>(79.2)</u>	1,359 <u>(77.1)</u>	1,832 (77.6)		
3-4 /wk	24 <u>(6.3)</u>	81 <u>(6.0)</u>	105 (6.1)		
1-2/wk	63 <u>(14.5)</u>	233 <u>(16.9)</u>	296 (16.3)		
Frequency of lunch				0.048	
5-7 /wk	498 <u>(86.6)</u>	1,521 <u>(90.9)</u>	2,019 (89.8)		
3-4 /wk	28 <u>(5.4)</u>	74 <u>(4.3)</u>	102 (4.6)		
1-2/wk	34 <u>(8.0)</u>	78 <u>(4.8)</u>	112 (5.6)		
Frequency of dinner				0.044	
5-7 /wk	536 <u>(95.2)</u>	1,577 <mark>(93.5)</mark>	2,113 (94.0)		
3-4 /wk	13 <u>(2.3)</u>	66 <u>(4.8)</u>	79 (4.1)		
1-2/wk	11 <u>(2.5)</u>	30 <u>(1.7)</u>	41 (1.9)		
Nutritional education				0.710	
Yes	29 <u>(6.0)</u>	114 <u>(6.5)</u>	143 (6.4) ¹⁾		
No	531 <u>(94.0)</u>	1,558 <u>(93.5)</u>	2,089 (93.6)		
Awareness of nutrition labeling				0.275	
Yes	298 <u>(60.0)</u>	968 <u>(62.9)</u>	$1,266 (62.2)^{1)}$		
No	262 <u>(40.0)</u>	704 <u>(37.1)</u>	966 (37.8)		
Utilization of nutrition labeling				0.782	
Yes	96 <u>(33.6)</u>	298 <u>(32.6)</u>	394 (32.9) ¹⁾		
No	202 <u>(66.4)</u>	670 <u>(67.4)</u>	872 (67.1)		
Eating alone ²⁾				0.845	
Companion	362 <u>(80.0)</u>	1,042 <u>(79.5)</u>	$1,404(79.7)^{1)}$		
Eating alone	100 <u>(20.0)</u>	306 <u>(20.5)</u>	406 (20.3)		



4. On page 246, Table 3:

Variables	Good glycemic control group (n = 560)	Poor glycemic control group (n = 1.673)	Total (n = 2,233)	P-value
Weight change over 1 yr				0.077
No changes Weight loss Weight gain	326 <u>(60.4)</u> 139 <u>(24.0)</u> 83 <u>(15.6)</u>	1,084 <u>(64.9)</u> 294 <u>(18.8)</u> 274 <u>(16.3)</u>	1,410 (63.8) ¹⁾ 433 (20.1) 357 (16.1)	
Subjective health evaluation				0.976
Good Average Poor	87 <u>(19.3)</u> 261 <u>(49.0)</u> 169 <u>(31.7)</u>	284 <u>(18.8)</u> 764 <u>(49.5)</u> 496 <u>(31.7)</u>	371 (19.0) ¹⁾ 1,025 (49.3) 665 (31.7)	
Physical activity ²⁾				0.917
Practicing group Nonpracticing group	178 <u>(36.6)</u> 333 <u>(63.4)</u>	548 <u>(36.3)</u> 983 <u>(63.7)</u>	726 (36.3) ¹⁾ 1,316 (63.7)	
Days of walking				0.969
≥ 6 days/wk 3–5 days/wk 1–2 days/wk	166 <u>(34.1)</u> 145 <u>(28.2)</u> 71 <u>(16.2)</u>	542 <u>(34.1)</u> 423 <u>(29.1)</u> 204 <u>(15.2)</u>	708 (34.1) ¹⁾ 568 (28.9) 275 (15.5)	
Never	127 <mark>(21.5)</mark>	363 <u>(21.6)</u>	490 (21.5)	
Days of strength training ≥ 3 days/wk 1–2 days/wk Never	97 <u>(19.8)</u> 25 <u>(5.1)</u> 388 (75.1)	229 <u>(15.2)</u> 78 <u>(5.3)</u> 1 228 (79 5)	326 (16.3) ¹⁾ 103 (5.3) 1 616 (78 4)	0.114
Drinking	000 <u>(70.17</u>	1,220 <u>(70.07</u>	1,010(70.1)	0.147
≥ 1 cup in mon < 1cup in mon	232 <u>(49.4)</u> 317 <u>(50.6)</u>	669 <u>(45.2)</u> 986 <u>(54.8)</u>	901 (46.2) ¹⁾ 1,303 (53.8)	
Smoking				0.255
Current None & past	86 <u>(19.3)</u> 461 <u>(80.7)</u>	295 <u>(22.4)</u> 1,358 <u>(77.6)</u>	381 (21.6) ¹⁾ 1,819 (78.4)	
Hypertension Normal ³⁾ Prehypertension ⁴⁾ Hypertension ⁵⁾	85 <u>(15.6)</u> 106 <u>(22.0)</u> 362 <u>(62.4)</u>	309 <u>(20.5)</u> 345 <u>(22.5)</u> 1,012 <u>(57.0)</u>	394 (19.3) ¹⁾ 451 (22.4) 1,374 (58.3)	0.090
Hypercholesterolemia ⁶⁾ Yes No	252 <u>(43.9)</u> 308 <u>(56.1)</u>	822 <u>(48.5)</u> 851 <u>(51.5)</u>	1,074 (47.3) 1,159 (52.7)	0.115
Hypertriglyceridemia ⁷⁾				0.066
Yes No	73 <u>(17.5)</u> 431 <u>(82.5)</u>	285 <u>(22.6)</u> 1,159 <u>(77.4)</u>	358 (21.3) ¹⁾ 1,590 (78.7)	
Obesity ⁸⁾				0.645
Underweight Normal Overweight Class I	8 <u>(0.8)</u> 149 <u>(24.5)</u> 126 <u>(23.9)</u> 218 (20.7)	18 <u>(1.2)</u> 365 <u>(21.4)</u> 385 <u>(22.3)</u>	$26 (1.1)^{1)}$ 514 (22.2) 511 (22.7) 900 (41.7)	
Class II Class III	38 <u>(9.6)</u> 6 <u>(1.5)</u>	158 <u>(10.5)</u> 29 <u>(2.2)</u>	196 (10.3) 35 (2.0)	

5. On page 250, Paragraph 3:

Regarding the general characteristics of the participants, the 70s age group had the highest rate of patients with diabetes (32.0%). The <u>70s</u> age group had the highest rate of participants with good glycemic control (<u>37.2%</u>), and there was significant difference among the groups (P = 0.036). Previous studies have reported that the probability of poor glycemic control decreases as age increases [16].



6. On page 250, Paragraph 6:

In the lunch and dinner intake frequency variable that demonstrated significant results (P = 0.048, P = 0.044 respectively), the rate of good glycemic control was <u>86.6%</u> and <u>95.2%</u> among participants who consumed lunch and dinner more than 5 times a week, whereas the rate of good glycemic control was <u>5.4%</u> and <u>2.3%</u> among those who consumed lunch and dinner 3–4 times a week. Park *et al.* [19], who studied the frequency of meal intake, reported that men who consumed 2 meals a day were more likely to develop metabolic syndrome than men who consumed 3 meals a day. Furthermore, women who eat 2 meals a day and skip breakfast were more likely to have elevated fasting blood sugar and triglyceride levels. In addition, among participants who rarely consumed dinner 1–2 times a week, <u>2.5%</u> had good glycemic control, which is consistent with the results of a study in which fasting blood sugar levels decreased in women who skipped dinner [20].

7. On page 251, Paragraph 3:

According to the survey results, only 6.4% received nutritional education within the past year, and the proportion of those in the group with good glycemic control was only 6.0%. In this study, the nutritional education experience of the KNHANES VIII was lower than the results of the KNHANES V study [23], where 8.4% had nutritional education within 1 year and 20.3% had diabetes management education experience. These results are still insufficient compared to reports recommending that education and support are needed at 4 key points for diabetes self-management: at diagnosis, every year or when treatment goals are not achieved, when complications occur, and during life transitions [24]. A study by Lee et al. [25] also explored the awareness, utilization, and effect of nutrition labels on food selection in participants with diabetes, and the results were 48.8%, 11.4%, and 9.6%, respectively, and the utilization of nutrition labels among participants with diabetes in Korea was only < 50%. According to these results, people who have not received diet therapy education have low nutrition label utilization, and that utilizing nutrition labels as a means to show interest in health and practice proper eating habits will be helpful in managing a healthy diet for patients with diabetes [25]. In this study, the rate of good glycemic control among participants who were aware of nutrition labels (60.0%) was not significantly different from the rate of good glycemic control (40.0%) among those who were unaware of nutrition labels. Furthermore, the rate of good glycemic control among participants who received nutritional education (6.0%) was not significantly different from the rate of good glycemic control (94.0%) among those who did not receive education.