

**Food shopping and food hygiene related knowledge and practices during the COVID-19 pandemic: The case of a developing country**

Hani Dimassi, Rita Haddad,  
Lama Mattar, Rana Awada,  
Hussein F. Hassan

*©Copyright: the Author(s), 2021  
Licensee PAGEPress, Italy  
Italian Journal of Food Safety 2021; 10:9384  
doi:10.4081/ijfs.2021.9384*

**SUPPLEMENTARY TABLES**

**Supplementary Table S1. Frequency of handwashing, hand sanitizer usage and mask placing since the emergence of the COVID-19 pandemic.**

<b>A. Since the emergence of the Coronavirus pandemic, how frequently have you been <u>washing your hands with soap</u>?</b>	<b>Not applicable to me <i>n (%)</i></b>	<b>Never <i>n (%)</i></b>	<b>Rarely <i>n (%)</i></b>	<b>Sometimes <i>n (%)</i></b>	<b>Often <i>n (%)</i></b>	<b>Always <i>n (%)</i></b>
Upon entering your home	19 (1.4)	2 (0.1)	9 (0.7)	19 (1.4)	73 (5.5)	1215 (90.9)
After touching your face	20 (1.5)	49 (3.7)	151 (11.3)	329 (24.6)	456 (34.1)	332 (24.8)
After sneezing or coughing on your hand	28 (2.1)	16 (1.2)	31 (2.3)	125 (9.3)	243 (18.2)	894 (66.9)
After receiving a food delivery	151 (11.4)	4 (0.3)	12 (0.9)	36 (2.7)	45 (3.4)	1080 (81.3)
After handling grocery items	12 (0.9)	3 (0.2)	14 (1.0)	31 (2.3)	63 (4.7)	1214 (90.8)
<b>B. Since the emergence of the Coronavirus pandemic, how frequently have you been using <u>hand sanitizers</u>?</b>	<b>Not applicable to me <i>n (%)</i></b>	<b>Never <i>n (%)</i></b>	<b>Rarely <i>n (%)</i></b>	<b>Sometimes <i>n (%)</i></b>	<b>Often <i>n (%)</i></b>	<b>Always <i>n (%)</i></b>
Upon entering your home	50 (3.7)	78 (5.8)	129 (9.6)	179 (13.4)	198 (14.8)	703 (52.6)
After touching your face	45 (3.4)	108 (8.1)	187 (14.0)	293 (21.9)	341 (25.5)	363 (27.2)
After sneezing or coughing on your hand	52 (3.9)	68 (5.1)	108 (8.1)	191 (14.3)	259 (19.4)	659 (49.3)
After receiving a food delivery	165 (12.3)	65 (4.9)	84 (6.3)	127 (9.5)	158 (11.8)	738 (55.2)
After handling grocery items	36 (2.7)	66 (4.9)	83 (6.2)	128 (9.6)	164 (12.3)	860 (64.3)
<b>C. Since the emergence of the Coronavirus pandemic, how frequently have you been <u>placing the mask</u>?</b>	<b>Not applicable to me <i>n (%)</i></b>	<b>Never <i>n (%)</i></b>	<b>Rarely <i>n (%)</i></b>	<b>Sometimes <i>n (%)</i></b>	<b>Often <i>n (%)</i></b>	<b>Always <i>n (%)</i></b>
While interacting with people outside your home	146 (10.9)	77 (5.8)	54 (4)	74 (5.5)	124 (9.3)	862 (64.5)
During driving	186 (13.9)	228 (17.1)	215 (16.1)	231 (17.3)	154 (11.5)	323 (24.2)
While walking outside the home	143 (10.7)	182 (13.6)	172 (12.9)	177 (13.2)	159 (11.9)	504 (37.7)
<b>D. If you shopped for food yourself during the Coronavirus pandemic:</b>	<b>Not applicable to me <i>n (%)</i></b>	<b>Never <i>n (%)</i></b>	<b>Rarely <i>n (%)</i></b>	<b>Sometimes <i>n (%)</i></b>	<b>Often <i>n (%)</i></b>	<b>Always <i>n (%)</i></b>
Did you place a face mask while shopping?	5 (0.6)	38 (4.6)	20 (2.40)	45 (5.4)	64 (7.7)	659 (79.3)
Did You put gloves on while shopping?	5 (0.6)	43 (5.2)	32 (3.9)	56 (6.7)	83 (10)	612 (73.6)
Did You kept a distance from other shoppers while shopping?	4 (0.5)	0 (0.0)	3 (0.4)	15 (1.8)	107 (12.9)	702 (84.5)

**Supplementary Table S2. Handwashing OR hand sanitizing practices since the emergence of the Coronavirus pandemic.**

<b>Since the emergence of the Coronavirus pandemic, have you been washing your hands with soap or using hand sanitizer all the time?</b>	<b>Not always n (%)</b>	<b>Always n (%)</b>
Upon entering your home	85 (6.4%)	1252 (93.6%)
After touching your face	839 (62.8%)	498 (37.2%)
After sneezing or coughing on your hand	330 (24.7%)	1007 (75.3%)
After receiving a food delivery	215 (16.1%)	1122 (83.9%)
After handling grocery items	82 (6.1%)	1255 (93.9%)

**Supplementary Table S3. Pre- and post-COVID-19 pandemic changes in methods of sanitizing the produce.**

<b>Practice Question</b>	<b>Before n (%)</b>	<b>After n (%)</b>	<b>p</b>
<i>What were the methods used for the sanitation of fruits and vegetables at your home?</i>			
a. Using water with vinegar or salt	809 (60.5)	908 (67.9)	<.001
b. Using soap and water	473 (35.4)	629 (47.0)	<.001
c. Using water with chemicals/antiseptic	167 (12.5)	376 (28.1)	<.001
d. Using water only	389 (29.1)	142 (10.6)	<.001
e. We do not sanitize fruits and vegetables	10 (0.7)	6 (0.4)	.344
f. I am not sure	37 (2.8)	8 (0.6)	<.001
<b><i>Best practice (options b and/or c)</i></b>	<b>569 (42.6)</b>	<b>833 (62.3)</b>	<b>&lt;.001</b>

**Supplementary Table S4. Produce/packaged foods sanitation and grocery bags handling since the COVID-19 emerged.**

<i>Have you been sanitizing your fruits and vegetables before storing them in the fridge of your home?</i>		
a. No		161 (12.0)
b. Yes		1099 (82.2)
c. I do not know		77 (5.8)
<i>Have you been spraying the grocery bags and packaged items with a disinfecting solution upon getting them home?</i>		
a. No		141 (10.5)
b. Yes, all the time		1037 (77.6)
c. Yes, sometimes		159 (11.9)
<i>Have you been throwing away the grocery bags after emptying them?</i>		
a. No		227 (17.0)
b. Yes, all the time		778 (58.2)
c. Yes, sometimes		332 (24.8)

**Supplementary Table S5. Frequency of using home delivery service of food shops and restaurants before and after the emergence of the COVID-19 pandemic.**

<b>Answer Options</b>	<b>Before n (%)</b>	<b>After n (%)</b>	<b>p</b>
Delivery service not available in my area	27 (2.0)	35 (2.6)	
Never/Rarely	394 (29.4)	906 (67.8)	
Sometimes/Often/Always	916 (68.5)	396 (29.6)	<.001

**Supplementary Table S6. Changes in the frequency of visits to food shops, in general, and to smaller ones due to the coronavirus pandemic.**

<b>After the emergence of the Coronavirus pandemic, did the frequency of your visits to the food shops get affected?</b>	<b>n (%)</b>	<b>p</b>
Not Applicable - I do not shop for food	65 (4.9)	
Yes, decreased	916 (68.5)	
No Change	142 (10.6)	
Yes, increased	214 (16.0)	<.001
<b>Have you shifted from shopping in big supermarkets to smaller markets/shops due to the emergence of the Coronavirus pandemic?</b>	<b>n (%)</b>	<b>p</b>
No	649 (48.5)	
Yes	406 (30.4)	
I already shop at smaller markets/ shops	165 (12.3)	
Not Applicable- I do not shop for food	117 (8.8)	<.001

**Supplementary Table S7. Changes in the meat and produce consumption since the emergence of the COVID-19 pandemic.**

<b>Food Item</b>	<b>I do not consume it anyway <i>n (%)</i></b>	<b>Decreased <i>n (%)</i></b>	<b>No Change <i>n (%)</i></b>	<b>Increased <i>n (%)</i></b>	<b>p</b>
Fresh Meat	390 (29.2)	495 (37.0)	393 (29.4)	59 (4.4)	<.001
Frozen Meat	243 (18.2)	248 (18.6)	653 (48.8)	193 (14.4)	.009
Frozen Fruits And Vegetables	324 (24.2)	102 (7.7)	698 (52.2)	213 (15.9)	<.001
Canned Fruits And Vegetables	381 (28.5)	137 (10.3)	631 (47.2)	188 (14.0)	.005
Fresh Fruits And Vegetables	2 (0.1)	77 (5.7)	668 (50.0)	590 (44.1)	<.001