

A Survey on Use of Plastic versus Biodegradable Bottles for Drinking Water Packaging in the United Arab Emirates

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Figure S1: Questionnaire about use of plastic versus biodegradable bottles for drinking water in the UAE.

Questionnaire about Use of Plastic versus Biodegradable Bottles for Drinking Water in the UAE

Your Rights to Know as a Participant

- **Topic:** You have been invited to take part in a study to investigate your views on environmental impacts associated with bottled water (not including refillable water containers) and sustainable alternatives.
- **Researchers:** This study will be conducted by Dr. Ashraf Aly Hassan and Dr. Munjed Maraqa in the Department of Civil & Environmental Engineering at United Arab Emirates University at Al Ain, UAE. For any question, please contact Dr. Hassan via email: alyhassan@uaeu.ac.ae
- **Study purpose:** This study is intended for educational and research purposes.
- **Duration:** Participation in this study takes 15 minutes – [5 minutes explanation and 10 minutes for answering the questions].
- **Monetary benefits:** There are no monetary benefits associated with this study.
- **Procedure:** The questionnaire is available as a hard copy in Arabic and English. A digital copy will be available on survey monkey
- **Safety:** The questionnaire does not involve any type of risk either physical or psychological.
- **Confidentiality:** The participants' private information will not be revealed. Writing your name on the back side is voluntary.
- **Right to withdraw:** Your participation is voluntary. You can withdraw at any stage in the process.

1.	In which emirate do you live? <input type="checkbox"/> Abu Dhabi <input type="checkbox"/> Dubai <input type="checkbox"/> Sharjah <input type="checkbox"/> Ajman <input type="checkbox"/> Umm Al Quwain <input type="checkbox"/> Fujairah <input type="checkbox"/> Ras Al Khaimah																																										
2.	Which age bracket do you fall under? <input type="checkbox"/> 15-20 <input type="checkbox"/> 21-35 <input type="checkbox"/> 36-45 <input type="checkbox"/> 46-55 <input type="checkbox"/> 56 or older																																										
3.	What is your gender? <input type="checkbox"/> Male <input type="checkbox"/> Female																																										
4.	What is your nationality? <input type="checkbox"/> UAE national <input type="checkbox"/> Expatriate [Please specify] _____																																										
5.	If you are not a national of the UAE, how long have you been living in the country? <input type="checkbox"/> Less than 1 year <input type="checkbox"/> 1-2 years <input type="checkbox"/> 3-4 years <input type="checkbox"/> 5 years or more																																										
6.	Please mark the highest level of education you have received <input type="checkbox"/> No school <input type="checkbox"/> Primary school <input type="checkbox"/> Secondary school <input type="checkbox"/> University degree																																										
7.	What is your monthly income in AED (Please, divide your income by the number of people in your household)? <input type="checkbox"/> I don't have an income <input type="checkbox"/> I prefer not to tell <input type="checkbox"/> Less than 5,000 <input type="checkbox"/> 5,000 – 10,000 <input type="checkbox"/> 10,000 – 35,000 <input type="checkbox"/> 35,000 – 50,000 <input type="checkbox"/> over 50,000																																										
8.	How frequently do you drink tap water? <input type="checkbox"/> Never <input type="checkbox"/> Rarely <input type="checkbox"/> Most of the time <input type="checkbox"/> All the time																																										
9.	Do you use tap water for cooking <input type="checkbox"/> Never <input type="checkbox"/> Rarely <input type="checkbox"/> Most of the time <input type="checkbox"/> All the time																																										
10.	When do you drink tap water? (Select all that apply) <input type="checkbox"/> At home <input type="checkbox"/> At work <input type="checkbox"/> At restaurants <input type="checkbox"/> While travelling <input type="checkbox"/> I don't drink tap water at all																																										
11.	What are the reasons why you usually drink bottled water over tap water most often? (Select all that apply) <input type="checkbox"/> Taste <input type="checkbox"/> Color <input type="checkbox"/> Chlorine smell <input type="checkbox"/> Like to have cold water <input type="checkbox"/> Turbidity <input type="checkbox"/> Not applicable <input type="checkbox"/> Convenience/portability <input type="checkbox"/> Does not have a proper blend of minerals <input type="checkbox"/> Social habit <input type="checkbox"/> Concerns about microbial contamination <input type="checkbox"/> Concerns about chemical pollution <input type="checkbox"/> Never tasted tap water <input type="checkbox"/> Other [Specify] _____																																										
12.	On average, how much do you spend on single-use plastic bottled water per week (Please, state the amount either for yourself or per person in your household)? [amount is in AED] <input type="checkbox"/> Less than 10 <input type="checkbox"/> 10 - 30 <input type="checkbox"/> 30 - 100 <input type="checkbox"/> More than 100 <input type="checkbox"/> I am not sure <input type="checkbox"/> I don't buy bottled water																																										
13.	Do you consider the cost of bottled water to be? <input type="checkbox"/> Cheap <input type="checkbox"/> Reasonable <input type="checkbox"/> Expensive																																										
14.	Regarding bottled water, do you prefer to drink: <input type="checkbox"/> Locally manufactured brands <input type="checkbox"/> Imported brands <input type="checkbox"/> No preference when choosing between locally and imported brands <input type="checkbox"/> I don't drink bottled water																																										
15.	Please rate the criteria you use to purchase a bottled water: <table border="1"> <thead> <tr> <th></th> <th>Strongly disagree</th> <th>Disagree</th> <th>Neutral</th> <th>Agree</th> <th>Strongly agree</th> </tr> </thead> <tbody> <tr> <td>Cost</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Brand</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Quality</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Availability</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Personal preferences (taste, low sodium, pH level, etc)</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Packaging (specify) _____</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Cost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Brand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Availability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Personal preferences (taste, low sodium, pH level, etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Packaging (specify) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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16.	Do you care about plastic pollution especially single-use plastic bottles? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> I don't know enough about the topic																																										

17.	Rate how important it is for you to purchase a product that has minimal or no harm on the environment.	
	<div style="text-align: center;"> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> Not Important Very Important </div>	
18.	Do you recycle your single-use plastic water bottles or other plastic products? <input type="checkbox"/> Always <input type="checkbox"/> Occasionally (more than 50% of the time) <input type="checkbox"/> Rarely (less than 50% of the time) <input type="checkbox"/> Never (please explain why) _____	
19.	Do you know the difference between 100% biodegradable versus recyclable plastic? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> I'm not interested to know (please explain)	
20.	How likely are you willing to purchase water that is packaged in a 100% biodegradable bottle that decomposes in 90 days and creates zero waste, is carbon neutral and contains no harmful chemicals? <div style="text-align: center;"> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> Never Very Likely </div>	
21.	How much more are you willing to pay per bottle to switch from single-use plastic bottled water to water packaged in 100% biodegradable material? <div style="text-align: center;"> None <input type="checkbox"/> AED 0.25 <input type="checkbox"/> AED 0.5 <input type="checkbox"/> AED 0.75 <input type="checkbox"/> AED 1 <input type="checkbox"/> AED 1.5 <input type="checkbox"/> AED 2 <input type="checkbox"/> AED 2.5 <input type="checkbox"/> AED 3 <input type="checkbox"/> AED 3.5 <input type="checkbox"/> AED 4 <input type="checkbox"/> </div>	
22.	In your opinion, what can be done to encourage consumers to buy water in biodegradable bottles? (Select all that apply)	
	<input type="checkbox"/> Provide more information about the positive impact of biodegradable bottles on the environment <input type="checkbox"/> Provide incentives to switch to biodegradable plastic <input type="checkbox"/> Provide bins in convenient locations to dispose of biodegradable bottles <input type="checkbox"/> Introduce legislation to phase out or ban single use plastic	<input type="checkbox"/> Price it the same as plastic bottles <input type="checkbox"/> Make biodegradable bottles more accessible and available <input type="checkbox"/> Improve awareness on plastic pollution through social campaigns <input type="checkbox"/> Other [specify] _____
23.	From where do you usually obtain information about recycling initiatives in the UAE? <input type="checkbox"/> TV <input type="checkbox"/> Newspaper <input type="checkbox"/> Internet <input type="checkbox"/> Friends/relatives <input type="checkbox"/> Books/Journals <input type="checkbox"/> None <input type="checkbox"/> Other [Specify] _____	
24.	From where do you usually obtain information about bottled water quality? <input type="checkbox"/> TV <input type="checkbox"/> Newspaper <input type="checkbox"/> Internet <input type="checkbox"/> Friends/relatives <input type="checkbox"/> Bottle label <input type="checkbox"/> Books/Journals <input type="checkbox"/> None <input type="checkbox"/> Other [Specify] _____	
25.	What is your occupation? <input type="checkbox"/> Hospitality <input type="checkbox"/> Agriculture <input type="checkbox"/> Medical professions <input type="checkbox"/> Education & Academia <input type="checkbox"/> Retail <input type="checkbox"/> Banking <input type="checkbox"/> Engineering <input type="checkbox"/> Business <input type="checkbox"/> Other [Specify] _____	
26.	Which one describes your job better? <input type="checkbox"/> Private sector <input type="checkbox"/> Public sector	

Optional Consent Form

1. I confirm that I have read and understood the above information sheet and have had the opportunity to ask questions.
2. I understand that my participation is voluntary and that I am free to withdraw.
3. I understand that my data will be kept confidential and if published, the data will not be identifiable as mine.

I agree to take part in this study:

(Name and signature of participant)	(Date)
(Name and signature of witness (if participant unable to read/write))	(Date)
(Name and signature of parent/guardian/next of kin (when participant unable to give consent due to age or incapacity))	(Date)

Thank you very much for your time and opinions

Collected by: _____ ID no.: _____ Date: _____
Serial number: _____