

4th research poll on food waste

The 4th research poll on food waste aimed at analyzing people's views on food waste reduction strategies. The poll was conducted online through websites of the Dias Group (Sigmalive, Sportime.com.cy, I love style, City.com.cy, Check In, Economy today, MyCyprusTravel.com) between 11/08/2021 to 17/08/2021. The sample for each question varied from 922 to 1599 persons some of which are not living in Cyprus. The poll introduced and questioned the willingness of people to adopt 4 different waste reduction strategies, with a 5 points scale to choose from ('very willing', 'considerably willing', 'somewhat willing', 'not so much' and 'not at all willing').

Analysis and description of the proposed food waste strategies below:

The first proposed strategy was the sale of good quality but disfigured or ugly fruits and vegetables at lower prices. The first poll question was to what extent are people willing to buy good quality but ugly fruits and vegetables at lower prices. Figure 1 below indicates the results for each of the 5 options.

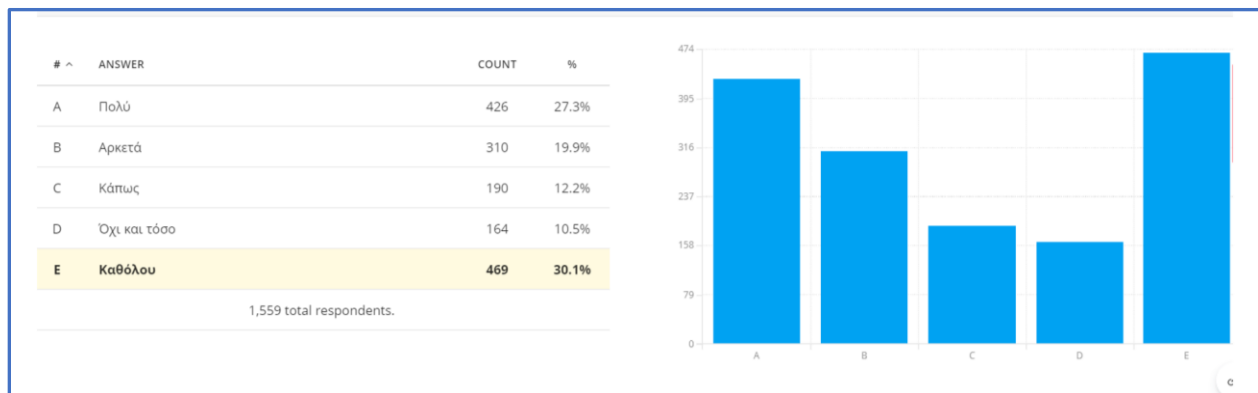


Figure 1. Poll question 1 results

Results are at the two extremes. The highest percentage of people (30.1%) responded 'Not at all willing' and the next lowest percentage (27.3%) responded 'very willing'. Even though the highest percentage of the sample is not willing to buy ugly fruits and vegetables at lower prices, a total of 47.2% are very willing or considerably willing to buy them. We could infer from these responses that offering ugly fruits and vegetables at lower prices could be a successful tool in minimizing food waste. Further analysis can be conducted to understand what an appropriate price for these products could be. Producers and retailers can co-operate in order to introduce these schemes at lower prices. The retail shops could also prioritize such actions by facilitating a better display of such products in their shops. For example, by promoting the initiative in their existing advertising campaigns and by placing the ugly fruits and vegetables in prominent positions in their shops, as part of their Corporate social responsibility strategies.

The second question and food waste reduction strategy refer to retailers' waste. Specifically, the discard of fruits and vegetables that are not as fresh or a little wilted. The poll question was to what extent are people willing to buy not as fresh fruits and vegetables at considerably lower prices. Figure 2 below indicates the results for each of the 5 options.

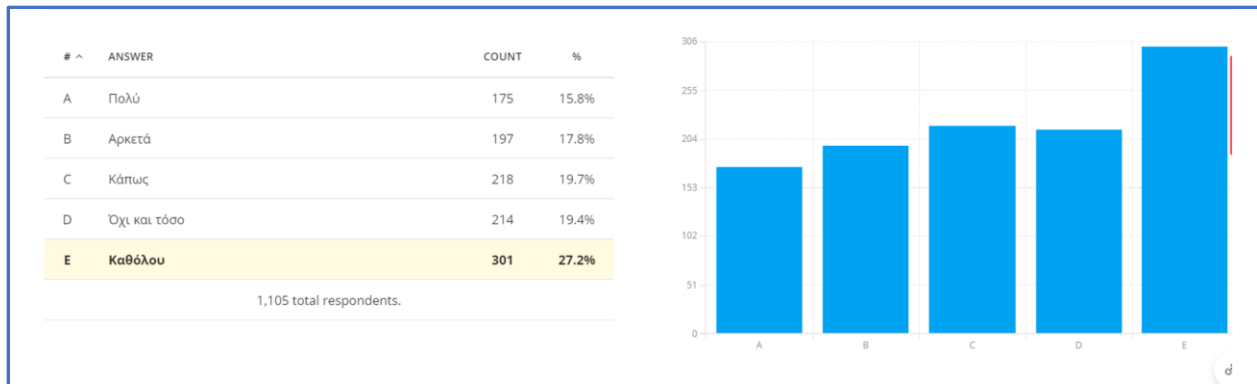


Figure 2. Poll question 2 results

As seen in Figure 2, responses are skewed towards ‘not at all willing’ with the highest percentage of 27.2%. Only 15.8% responded ‘very willing’ in this case. Since the question specifies that these items will be sold at considerably lower prices, results indicate that price may not be the most important factor in making the decision to purchase them. It seems that freshness is more important than price. Potentially, the results are linked to culture and habits in Cyprus, being a country that cultivates fresh fruits and vegetables, and consumers are used to buying fresh produce. We can conclude that this strategy will not have significant success in Cyprus. However, this is a practice we have seen happening in many vegetable/fruit stores and in some smaller supermarkets, which means there is a market for such products. Maybe we face here one of these cases where the self-declaration is different from the actual behavior. It could be the case that in theory people would prioritize freshness, but still would buy not as fresh fruits and vegetables when they are significantly discounted. We can safely though assume that ugly fruits and vegetables would sell better than not as fresh ones when discounted.

The motivation to buy these items is predominately the price. A common practice in Cypriot supermarkets is the sale of wilted tomatoes, for use in making tomato sauce. This is a well-established habit of Cypriot consumers. Is it possible that this food waste reduction strategy can be promoted through information campaigns? What other uses can these fruits and vegetables have? An example could be using them to make vegetable broth. As price is not the motivator perhaps more information and suggestions of use could make this strategy more successful than simply lowering the price.

The 3rd question and waste reduction strategy referred to household food waste, specifically not consumed food and expired items. The question was to what extent are people willing to participate in a give-away program where they can give unwanted food for consumption by others in need, for free. Figure 3 below indicates results for each of the 5 options.

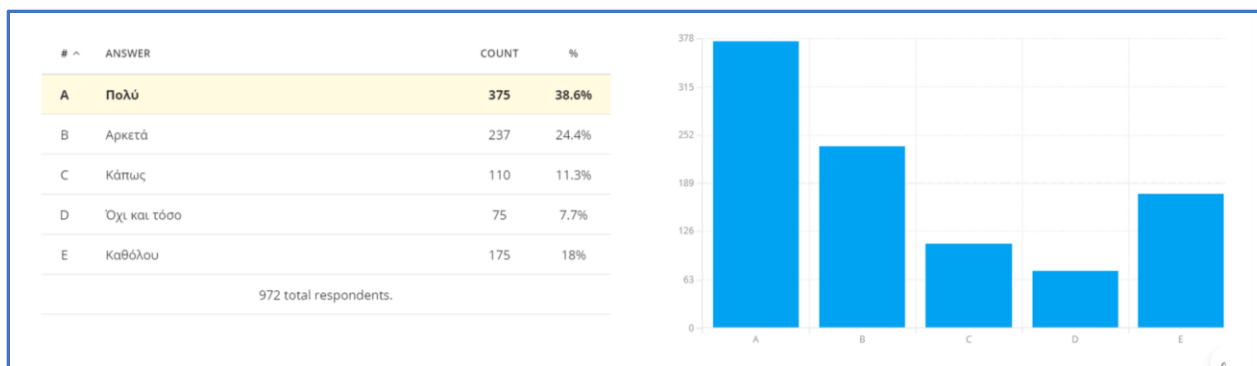


Figure 3. Poll question 3 results

Results show that most respondents (38.6%) are 'very willing' to participate in a food give-away program. Only 18% responded 'not at all willing'. The results are encouraging as more people are 'very willing' or 'considerably willing' (that is 63% of the sample) to join such a program than 'not at all' and 'not so much' (that is 25.7% of the sample). Results indicate that such programs could be successful in Cyprus. Apparently, such programs are limited or non-existent today because people do not have access to such networks. This is an interesting finding for the Life Foodprint project which has developed and currently promotes a food exchange platform. Further analysis could indicate as to 'how' people are willing to participate. Are people willing to get out of their way to enter such a program? How easy and convenient should this program be in order to succeed, and how long will it be successful for?

The 4th question and waste reduction strategy refer to the idea of buying pre-packaged, complete food ingredients for meal preparation and therefore reducing food waste while cooking. The question was to what extent are people willing to buy complete pre-packaged food ingredients for meal preparation. Figure 4 below indicates the results for each of the 5 options.

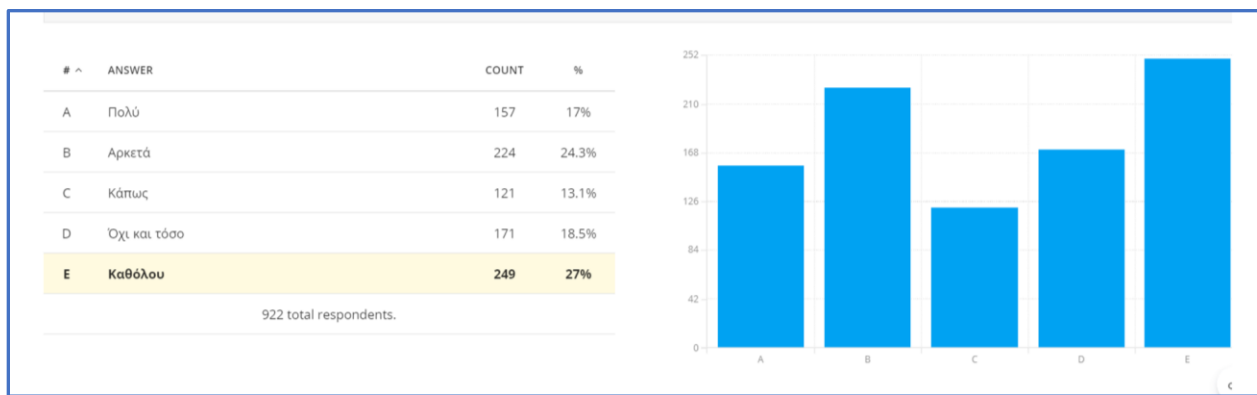


Figure 4. Poll question 4 results

Results show that most respondents (27%) are 'not at all willing' to buy pre-packaged ingredients for a meal. Only 17% responded 'very willing'. However, a high percentage of 24.3% responded 'considerably willing'. As this is a new and untested concept for the many in Cyprus, there can be other factors influencing the results such as uncertainty, existing habits, convenience, price, not tested solution, never done it before, etc;. It is not clear yet given these results, whether this strategy will be successful in Cyprus. Perhaps an information campaign explaining how this strategy supports the reduction in food waste will be the first step in adopting such a strategy.

This research can aid municipalities, producers, retailers and other food related stakeholders in deciding which solutions are mostly suited in minimizing food waste in Cyprus. Overall, results indicate that adoption of strategies such as the purchase of ugly fruits and vegetables at lower prices and entering a food give-away program can be successful. Buying not as fresh fruits and vegetables at considerably lower prices and purchasing of pre-packaged ingredients for the preparation of meals proved to be less popular strategies.

The findings of the survey are very useful for the Life Foodprint project. They can support the better design of information campaigns and of course they can boost our work on the food exchange platform. Furthermore, there is useful information that can be used for practical action by the producers and retailers of fruits and vegetables. For instance, a program to develop ugly fruits at discounted prices seems to be a feasible option, more favorable than selling discounted not as fresh fruits and vegetables. However, discounting not as fresh fruits and vegetables should also be enhanced and supported with recipes and options for the use of such products as these have already entered the retail chain and if left unwanted, they will most probably be wasted. So, this is a priority strategy too, despite its lower attractiveness.

This research has given an indication as to which strategies could be successful for food waste reduction in Cyprus. There are other food waste reduction strategies to consider and usually the recipe for success is not one strategy, but many put in place together.