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Abstract

Evaluation of the Emergency Meal Kitchen Menus Meeting the Daily Nutritional Requirements †

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Abstract: On 6 February 2023, two major and subsequent aftershocks were experienced in Kahramanmaraş in Türkiye. In these earthquakes, disasters occurred in the provinces of Kahramanmaraş, Hatay, Gaziantep, Osmaniye, Malatya, Adana, Diyarbakır, Şanlıurfa, Adıyaman and Kilis. More than 40,000 people lost their lives. The day after the earthquakes, disaster/emergency kitchens were created in these cities through the initiatives of various institutions and organizations. One of these kitchens is "Anadolu Cuisine", where Anadolu University operated until 2023. Every day, approximately 15,000 people benefited from the emergency kitchen located in the Belen district of Hatay. In the study, the task of meeting the daily requirements of adults who eat at this kitchen was evaluated. For this, the breakfast, lunch, and dinner menus served in the emergency kitchen were followed on site by the researcher for a week, examining the amounts offered to one person. Then, the energy and nutritional values of the menus were calculated using the nutrition information system. Then, these values were evaluated using the Türkiye Nutrition Guide 2022 reference values. As a result, the energy intake of adults fed from the emergency kitchen was found to be sufficient; it has been determined that the recommended daily intake of important minerals and vitamins such as calcium and vitamin E, D, C cannot be met. In addition, it has been observed that the daily water consumption of individuals is insufficient. Moreover, to all these factors, it has been understood that those with chronic diseases have difficulties in accessing the special foods they need. In such crisis situations, it is recommended to develop strategies for community nutrition and to implement them with immediate coordination.

Keywords: earthquake; disaster kitchen; crisis kitchen; disaster nutrition; soup kitchen; nutrition assessment; energy intake; nutritional value; daily intake; food consumption

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DSGR62 Evaluation of the Emergency Meal Kitchen Menu's Meeting the Daily Nutritional Requirements

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Introduction:

- There were earthquakes with a magnitude of 7.7 and 7.6 in Kahramanmaraş and Hatay, Türkiye on February 2023.



- Forty thousand people died.
- Declared in Türkiye and a Call for National Assistance.
- National Aid.
- Field kitchens, hospitals and veterinary aid (field) tents…
- Anatolian Cuisine (disaster/emergency kitchen) was established in Hatay's Belen district on February - offered service until June 2023.



Table 1. *A weekly menu served in disaster/emergency kitchen*

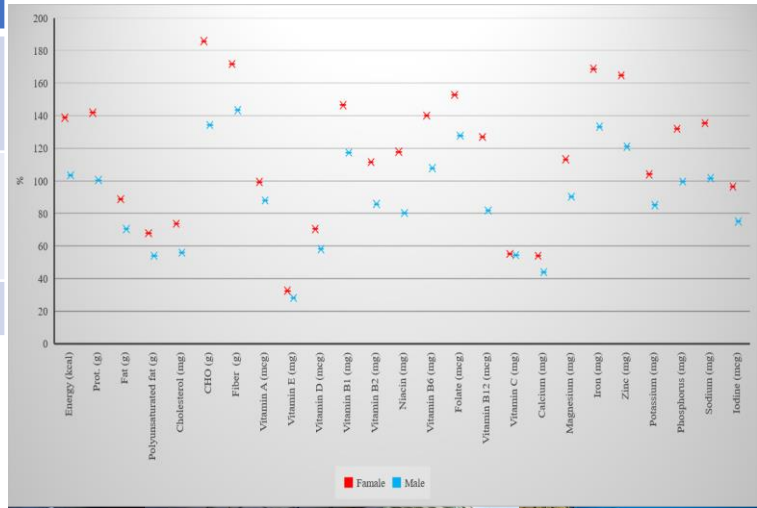
Meal / Day	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
Breakfast	Lentil soup Bread	Cheese Tahini Grape molasses Bread	Cheese Olives Tomato Cucumber Bread	Cheese Tahini halva Bread	Chicken broth soup Bread	Cheese Olives Rose jam Bread	Ezogelin soup Bread
Lunch	Pasta Green beans Semolina halva Bread	Bulgur pilaf Potato dish Bread	Vermicelli rice pilaf Roast Pickles Bread	Sorpa soup Pasta Spinach Bread	Yayla soup Bulgur pilaf Chickpea meal Bread	Bulgur pilaf Vegetable dish with meat Ashura Bread	Rice pilaf Dried beans Orange Bread
Dinner	Same as lunch						

Conclusion: In the study, the situation of meeting the daily requirements of adults who eat from "Anadolu Cuisine" was evaluated. For this, the breakfast, lunch, and dinner menus (Table 1) served in the emergency kitchen were followed on site by the researcher for a week with the amounts offered to one person. Then, the energy and nutritional values of the menus were calculated with the Nutrition Information System. Then, these values were evaluated with Türkiye Nutrition Guide 2022 reference values for females and males (Figure 1). It is seen that legumes, grains and pasta can be used; It is understood that varieties such as salads made from raw vegetables cannot be offered due to unsuitable hygiene conditions. In addition, due to problems in food supply, there is a lack of fruit and dairy products such as yoghurt.

As a result, the energy intake of adults fed from the emergency kitchen is sufficient; It has been determined that daily intake of important mineral and vitamins such as calcium and vitamin E, D, C cannot be met. In addition, it has been observed that the daily water consumption of individuals is insufficient. In addition to all these, it has been understood that those with chronic diseases have difficulties in accessing the special foods they need. In such crisis situations, it is recommended to develop strategies for community nutrition and to implement them with immediate coordination.

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Figure 1. *Average percentage of a weekly menu served in a disaster kitchen meeting the weekly requirement of an adult (18-64 years old, 50th percentile)*





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