

Actions to support local charitable organizations in countering the spread of food insecurity

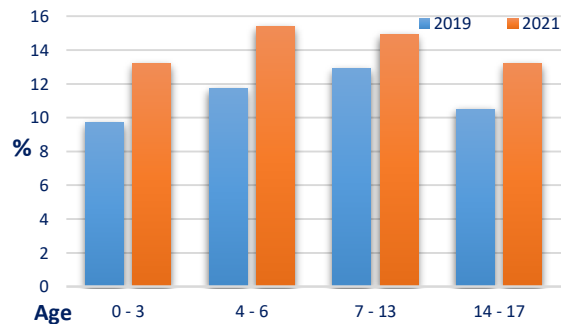
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Background

According to the Italian Statistic Institute data (ISTAT), in Italy between 2007 – 2020 individual absolute poverty (AP) grew from 4.1 to 9.4%. In 2021 14.3% of minors lived in AP, furthermore in 2017 22.3% of Italians lived in conditions of food poverty or food insecurity (FI), between 2018 – 2019 1 in 7 minors lived in conditions of FI. In 2021, families in AP of employees with low professional profiles and young children spent 24.1% of the budget on the purchase of food products. The scientific literature underlines how inadequate food access is one of the risk factors for the onset of chronic non-communicable diseases.

ISTAT (2022) Incidence of absolute poverty among young children by age group, percentage values – years 2019 - 2021



The aims of the project were to evaluate in the 3 main local charitable organizations (LCOs) the qualitative and quantitative profile of the food basket and the content of protective components present in fruits and vegetables (FV) available for socially disadvantaged communities (SDCs); determine the main nutritional critical points (NCPs); and identify possible corrective actions (CAs).

Methods

The qualitative profile of the food basket available at the LCOs come from three main channels: 1 Fund for European Aid to the Most Deprived (FEAD); 2 food donation from large-scale retail; 3 and direct purchases by the LCOs, according to the NOVA classification, was evaluated.

The average quantitative composition of the product groups was calculated with the form used for the evaluation of the collective service catering in the Autonomous Region of Friuli Venezia Giulia. The average composition of the food baskets available in 2021 for 1600 users by the 3 LCOs was compared with national nutritional recommendations.

The content of protective components present in 23 samples of fruits and vegetables was determined by the University of Trieste (UT). In particular the UT researched the Total Polyphenolic compounds Contents (TPC) and Trolox Equivalent Antioxidant Capacity (TEAC).

Results

The qualitative profile of the food basket share from the FEAD channel was characterized by: cured meats, cheeses, pasta, rice, UHT milk, olive oil and sunflower oil; canned products: cereal soups, minestrone, preserved vegetables, fruit puree, fruit salad, legumes, stew with beans, meats and tuna; not provided fresh products such as fruit and vegetables, meat, fish and milk.

The share relating to food donations was represented by fresh fruit, fresh vegetables including IV range, fresh eggs, fresh meat, cured meats, cheeses; and the food basket of purchases was composed of fresh fruit, fresh vegetables, fresh eggs, extra virgin olive oil, UHT milk, legumes, tuna and canned meats.

Average of quantitative composition of fresh food basket groups

Fresh food	Grams
Vegetables	43 to 85 per day
Fruits	7 to 60 per day
Milk	8 to 18 per day
Meat	1 to 132 per week
Cheeses	26 to 200 per week
Eggs	15 to 50 per week

Content of Total Polyphenolic compounds Contents (TPC) and Trolox Equivalent Antioxidant Capacity (TEAC)

	TPC mg/kg	TPC mg/kg ref	Δ	TEA C	TEAC ref	Δ
Mixed salad	1030	1469	42,58	1,31	1,55	18,09
Lettuce	964	1495	55,03	0,83	1,14	37,68
Fennel	1086	1576	45,14	1,46	1,87	27,65
Baby lettuce fourth range	1114	1729	55,22	1,68	2,22	32,56
Salad leaves	878	1315	49,80	1,11	1,44	29,56
Broccoli pack	1663	2321	39,55	2,33	2,93	26,03

The main nutritional critical points were:

- FEAD basket absence of fresh food;
- baskets donations and purchases limited average availability of fresh: fruit, vegetables, milk, meat and fish;
- lack of monitoring systems for balancing the food basket;
- some significant losses of TPC and TEAC in donated fruits and vegetables.

The main corrective actions were:

- improve awareness of the LCOs for better adherence in the food basket to nutritional recommendations;
- develop a food basket monitoring system;
- promote and share the application of Regulation (EU) 2021/1374 which amends Annex III of Regulation (EC) 853/2004.... (d) in Chapter VII, point 4 is replaced by the following *Food business operators who carry out a retail activity can, however, freeze meat for redistribution for the purpose of food donations under the following conditions.*

Conclusions

The evidence revealed by the project has made it possible to orientate the first initiatives of the institutional table "Food insecurity" envisaged actions taken by the Plan of Prevention 2021 – 2025 by the Autonomous Region of Friuli Venezia Giulia to support the social health system and Non-Governmental Organizations.