

Food and Nutrition in Disasters

Guidelines prepared by the PAHO/WHO Institute of Nutrition of Central America and Panama (INCAP).



Food Handling in Emergencies

How do disasters affect the status of food and nutrition?

Not all disasters produce food shortages which are so severe as to have a critical impact on the nutritional status of the affected population.

The nature of food and nutrition problems depends on the type of disaster, its duration and the size of the area affected, and the nutritional status of the population prior to the disaster.

Earthquakes usually have little effect on long-term food supplies. By contrast, hurricanes, floods, and tsunamis directly affect the availability of food, by ravaging crops, killing livestock and domestic animals, and destroying stored food.

Any type of disaster will disorganize transportation systems, communications, and social and economic routines. Thus, even though food stores may exist, the population may not have access to them.

What is the purpose of food aid?

Prevent malnutrition in the population affected by the disaster.

It is necessary, however, to plan for the treatment and management of cases of malnutrition that existed prior to the disaster or which have become acute, and will become evident during aid operations.

What are the steps to follow in order to ensure an effective food aid program?

Estimate the quantity of food available.

Calculate the dietary needs of the affected population.

Determine the food rations in accordance with the characteristics of the population and estimated duration of the effects of the disaster.

What are the priorities of a food aid program during disasters?

Immediately provide food where need is urgent, or appears to be, as in isolated populations, institutions, hospitals, refugee camps, and among rescue teams and aid personnel.

Make an initial estimate of the food needs of the affected population, taking into account its demographic characteristics.

Identify food stocks, (food stockpiles elsewhere in the country, food assistance organizations, etc.), transportation, storage, and distribution.

Ensure the safety and suitability of locally available food and supplies received.

Monitor the food and nutrition situation closely, so that the supply and rationing of food can be modified in keeping with changing conditions.

What is the proper management of food supplies?

The objective is to ensure safety and prevent the transmission of disease through food.

It is necessary to inspect the food received; identify and discard damaged supplies and confirm that containers or grain sacks are in good condition. Discard tins that are bulging, broken, or rusted, and reject products whose expiration date has passed.

Verify that transportation units have not been used to transport hazardous or contaminating products.

Make sure that warehouses have good ventilation and light, and that the food is placed on stands which allow air to circulate freely.

Store food by its date of entry so that it can be distributed on a First In/First Out basis.

Feeding the Victims of Disaster

How do we ensure an appropriate diet, given the circumstances?

As an immediate measure, provide any population group that is or appears to be at high nutritional risk with 3 or 4 kg of food per person per week. The important thing at this stage is to provide a sufficient quantity of energy, even if it is not a balanced diet.

For a short period of time 1700 Kcal daily will prevent severe deterioration of the nutritional status, and

famine.

How are food aid rations to be calculated?

The food should be part of the food pattern of the population.
The quantity of food in a ration should depend on the stage of the crisis and on available resources.
For a period of weeks or even months, and while the victims depend exclusively or almost exclusively on food aid, rations should aim to provide 1700 to 2000 Kcal per person/day.

What factors should be considered when preparing rations?

The food ration should be as simple as possible: a basic food (e.g. rice, corn, wheat flour), a concentrated source of energy, (oil or another fat) and a concentrated source of protein (e.g. dried or canned fish or canned meat).

Although dried vegetables are an excellent source of protein, it is necessary to take cooking difficulties into account.

Along with the basic ration, vulnerable groups (children under 5, pregnant and breast-feeding women, and malnourished persons) need to receive a supplement.

How can we estimate the medium-term needs for food, based on food rations?

Take into account the effect of the disaster on harvests, livestock, and environmental factors (extensive damming, mudslides, avalanches, volcanic ashfalls, etc.)

Approximate number and composition of the affected population.

If the victims are in shelters, without the ability to cook their meals, food must be distributed already cooked.

Raw rations ("dry") are to be given ---preferably by family--- over a certain period of time (e.g. for a week).

Composition of a food ration that provides approximately 1700 Kcal:

Basic grain (e.g. rice) 400g

A fat (e.g. oil) 15g

Protein rich food (e.g. dried fish) 45g

Simple arithmetic will yield the food needs for a family of five, a population of 1000, per day, per month, etc.

What is the role of PAHO in food aid programs after disasters?

Collaborate with national and local authorities in priority activities.
Collaborate with relevant agencies and organizations, and organize a coordinating group if there is none.

Identify sources of supply.

Provide experienced personnel.