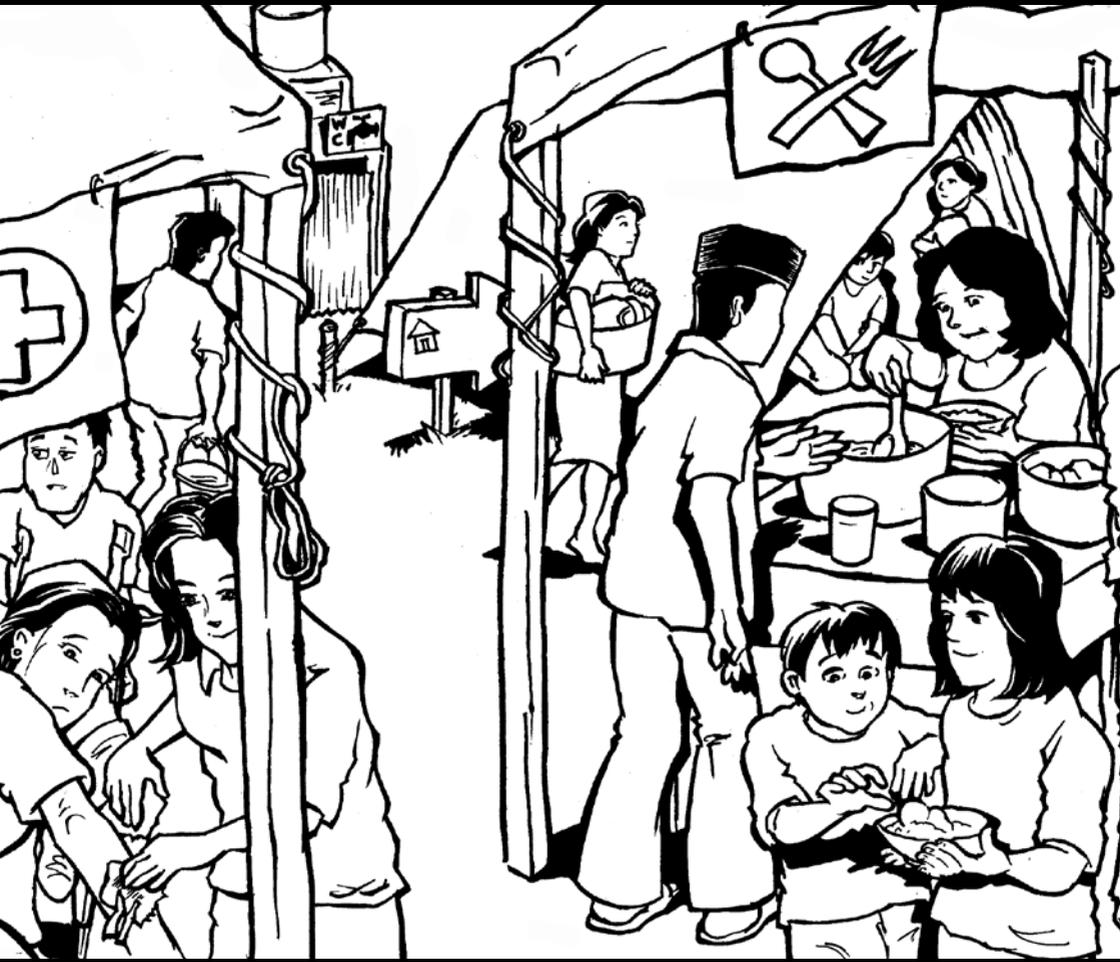




# Guide book for disaster areas



## Community Based Disaster Management (CBDM)

More information: [www.idepfoundation.org](http://www.idepfoundation.org)



Developed by IDEP Foundation • [info@idepfoundation.org](mailto:info@idepfoundation.org)

# Organizations that can help manage disasters

When disasters happen, communities can work together with various agencies that work in disaster response.

**Search and Rescue Teams** – There are various organizations that can help to search for, rescue, and assist people who have been affected or are missing in times of disaster.

**Department of Social Welfare** – A government agency that coordinates and can provide for welfare needs (e.g. food, clothing, shelter, etc).

**Armed Forces** – Local branches of the armed forces can help during times of disaster and also sometimes provide training to communities that can help improve local capacity for emergency response activities.

**Meteorology and Geophysics Agency** – A government agency that can provide information about developments in weather, earthquakes, and volcanic activity, as well as early warnings to communities.

**Hospitals** – In the event of a disaster, hospitals are usually the best equipped medical facilities to handle emergency cases. If there are hospitals in your area, check which ones are the closest and what help they can provide if a disaster happens.

**Community Health Centers** – Community health centers can provide basic medical assistance to local communities in times of disaster. They can offer care for people injured in disasters before they can be evacuated to hospitals.

**The Red Cross** – The International Federation of the Red Cross has local branches worldwide. In many places the local Red Cross is the key organization responsible for helping to relieve the suffering of communities struck by disaster.

**The Police** – Your local police force is responsible for your community's safety, law, and order. They can be very helpful in providing assistance to communities in times of disaster. When making community disaster management plans it is a good idea to involve the local police force and ask them for their input.

**Local Civil Security Units** – Some areas have local civil security units or groups that are responsible for helping the police to maintain safety in a specific area. These groups are usually made up of elected community members, who are entrusted to watch over the safety and order of the area.

**Non-Government Organizations (NGOs)** – Local NGOs can work together with communities to manage disasters and help communities develop relationships with outside organizations. Sometimes international NGOs (NGOs that work in many countries) also have community programs to develop disaster management in local areas.

**Media Organizations** – Local, national, and international print, television, radio, and Internet media organizations can help to spread critical news about a disaster and also help communities search for assistance and aid if needed.

**Community Disaster Management Group (CDMG)** – A CDMG can be formed in your local area by electing community members who will have various responsibilities in the community before, during, and after disasters. IDEP's CBDM Manual has lots of information about how to establish and run a CDMG.

## Special needs and abilities

The capability and knowledge of men and women is important in the process of decision-making when dealing with disaster. Both have their strength and weakness, needs and capabilities, which are different within each cultural context. For example, women tend to have more experience and take a practical approach in dealing with matters related to sustaining the basics of life. This is really needed to support community preparedness, emergency, and recovery needs. Men are usually more knowledgeable about land use, which is useful for making maps in preparation for disaster, and for search and rescue efforts during and after disasters occur.

# Nutrition during times of emergency

Food must be kept, prepared, cooked and consumed in a way that is safe and appropriate.

## For babies aged 0-6 months

---

Make sure the baby is only fed breast milk. There is no need to give additional food. Breast milk is the best food for babies in this age group. It gives enough nutrition needed for a baby's life and growth. Giving breast milk will help the baby's body resistance and the growth of the brain.

During times of emergency, you might find babies in the age group of 0-6 months without their mothers. In that situation, quickly look for breast milk from other nursing mothers. A nursing mother who is healthy can provide milk for 2 babies. Milk production will increase on its own if nursing is done continuously. However, it is important to ensure that the mother is given additional and nutritious food so as to ensure her health and the smooth production of her milk.

If there is no mother who can provide milk for babies who are 0-6 months in age who have lost their mothers, or if their mothers are incapable of providing milk for them, give only formula milk to babies below the age of 6 months. But remember, giving formula milk that is not controlled (non-hygienic storage, unclean water) can give rise to new problems such as diarrhea.

## For babies aged 6-24 months

---

Giving additional food together with breast milk must be done using water supply that is clean and has been boiled properly. It is also possible to give baby biscuits and advanced formula milk suitable for the baby's age. The mother who gives milk to her baby should not reduce the amount of time and the volume of milk given to the baby, even if the baby is receiving additional food.

**Additional food should be given as follows:**

- 2-3 times a day for babies aged 6-8 months.
- 3-4 times a day for babies aged 9-24 months.
- Add 1-2 times a day consumption of light food if the child asks for it.
- Children outside of this age group need more frequent feeding.

## For children aged 2-5 years

---

Food given is the same as what is given to adults. On top of this, additional milk and biscuits should also be given.

## The physically challenged (handicapped)

---

In emergency situations, the physically challenged should be given the same food as others, as well as eating aids if needed such as a straw.

## HIV/AIDS Sufferers

---

In many situations, HIV/AIDS sufferers have more energy needs due to their health condition. During times of emergency, this must be addressed. HIV/AIDS sufferers need to get more food rations compared to a typical healthy adult, food that is easier to digest, and has additional vitamins and minerals.



## For pregnant and breastfeeding mothers

Pregnant and breastfeeding mothers need nutritious food to ensure the healthy condition of the body so as to produce healthy babies and to guarantee milk production for those breastfeeding.

Pregnant and breastfeeding mothers must get additional food. Usually, additional foods given during times of emergency are biscuits, milk, and sugar.

### Important matters for pregnant and breastfeeding mothers:

- Make sure that drinking water is clean and supply is sufficient. For breastfeeding mothers, during or after nursing, quickly drink clean fluid to substitute the fluid that has left the mother's body
- Eat vegetables every day.
- Try to get protein 2 times a day. Examples of protein include egg, chicken, tofu, tempe, beef, fish, and beans/nuts.

- Eat 3 times a day.
- Do not put MSG or artificial flavor enhancers into the food (also for babies). **MSG can cause gum disease, heartburn, and can aid the growth of cancer cells in the human body.**

### Some questions about breastfeeding during emergency situations

- **Is it true that stress can stop the production of breast milk?**  
Heavy stress or fright will cause the flow of breast milk to reduce. This is a physiological response to stress. However, this is only temporary. In fact, nursing can produce hormones that overcome stress until the mother feels calm and can give her love to her baby, and produce breast milk.
- **Is it true that mothers who do not have enough nutrition cannot nurse?**  
Only mothers who experience very severe nutrition deficiency are not capable of nursing. A mother with light nutrition deficiency can still nurse with good quality breast milk. Mothers require additional food so that they can remain healthy and continue to nurse.
- **Is it true that babies with diarrhea need additional fluids?**  
Breast milk contains 90% water. Babies who drink only breast milk (exclusively) and are suffering from diarrhea do not need other fluids, especially when clean water is difficult to obtain. If the diarrhea is bad, the baby can be given *Oralit*.
- **Is it true that when breastfeeding stops, it cannot be continued?**  
When breastfeeding stops, it can be continued by using re-lactation techniques which help the mother to breast feed day and night, because the more frequent the baby suckles for breast milk, the more breast milk is produced.



# BREASTFEEDING WITH BREAST MILK

During the first 6 months, breast milk is the best thing for your baby. Whenever possible, breast feed babies so that they receive the nutrition they need. You can breast feed babies until they are 4 years of age or more. Doing this will help ensure that your baby grows strong and healthy. Breast milk protects your baby from diseases by strengthening their own ability to fight off diseases.



With breast milk you won't need bottles, clean water (that is sometimes difficult to find), or expensive baby formula. Your body produces milk that is perfect for your baby; anytime you need it, it is always fresh and clean. To make sure that your baby can get the best nutrition from your breast milk, you need to take care of your own nutrition intake. Make sure that you are getting enough protein, vegetables, and fruit every day.

Using baby formula can cause disease, malnutrition, and dehydration (lack of liquid) for your baby. Breast milk is free, no money is needed. In a disaster area where clean water, sanitation, and nutrition are a big challenge, breastfeeding is the best option.

**Do not mix baby formula with dirty water.  
Breastfeeding your baby is the best and  
safest way to ensure your baby's survival.**



Made by Bumi Sehat Foundation  
More information: [www.bumisehatbali.org](http://www.bumisehatbali.org)

# Gurih Gurih Gizi (GGG) Recipe

## A SIMPLE RECIPE FOR GOOD HEALTH

One tablespoon of GGG has all your daily needs for vitamin A, iron, and iodine, and it tastes great. This formula has been approved by nutrition scientists as being good for children, pregnant, and lactating women. GGG is easy to make and can be stored for a long time. The main ingredients for making it are vegetables that you can harvest from your own garden.

### Ingredients needed to make +/- 50 GGG servings:

- 1 kg fresh greens (5 types listed below).
- 1½ tablespoons of iodized salt.
- 1½ tablespoons of sugar.
- ½ a cup of roasted peanuts or sesame seeds.
- 3 tablespoons of milk powder or coconut shavings.
- 1 cup of rice flour.
- 1 ltr fresh frying oil (after making GGG, you can use the oil again to cook something else).



iodized salt



sugar

### 5 types of greens:



marunggai



water spinach



sweet potato  
leaves



spinach



pakchoi



rice flour



milk powder  
or coconut  
shavings



peanuts



cooking  
oil

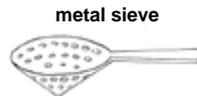
### Cooking utensils needed:



spoon



pestle and  
mortar



metal sieve



frying pan



wok



sterile and air tight  
container for storage

# HOW TO COOK GURIH GURIH GIZI (GGG)



1

Separate leaves from their stems.



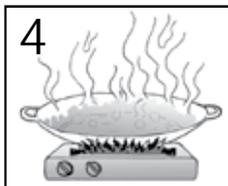
2

Wash the leaves thoroughly.



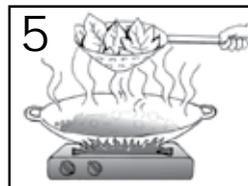
3

Dry the leaves.



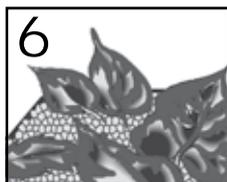
4

Heat enough oil to cover the leaves in the wok.



5

Fry the leaves until they are completely dry, then strain.



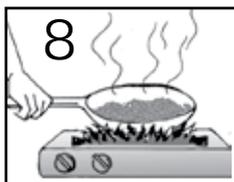
6

Make sure to drain all the oil from the fried leaves.



7

Crush the crispy leaves with a pestle.



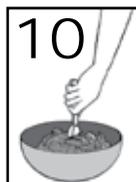
8

Toast the peanuts and flour, without oil, until they turn golden brown.



9

Put all the ingredients into a bowl.



10

Mix everything together.

IF YOU LIKE, YOU CAN ADD CHILLI, SUGAR, OR SALT TO TASTE

## 11 Sieve together...



With one tablespoon of GGG everyday, all your iron, iodine, and vitamin A needs will be fulfilled.

**How to enjoy GGG:**  
Sprinkle it on rice, porridge, noodles, or something else.

You need to store Gurih Gurih Gizi in air tight and sterile containers. Stored in this way, GGG will keep for 3 months, or if kept in a refrigerator it will keep for 6 months.



This fact sheet was developed by IDEP Foundation  
More information: [www.idepfoundation.org](http://www.idepfoundation.org)



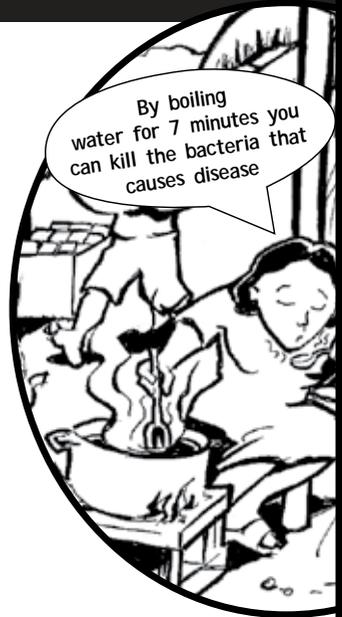
# Protect yourself and your family from disease!

Always boil water and let it simmer for at least 7 minutes before you use it.

**Once it has been boiled you can use it for drinking, cooking, washing dishes, brushing teeth, etc.**

Make sure that you and your children wash their hands with soap and clean water...

- **Before cooking or eating.**
- **After using the toilet.**
- **After cleaning.**



Rats, ticks, flies, and mosquitoes can infect you and your family with dangerous diseases! Protect yourselves by:

**Keeping the area clean, covering water containers, covering food, getting rid of any stagnant water in the area, and using mosquito nets and repellents.**



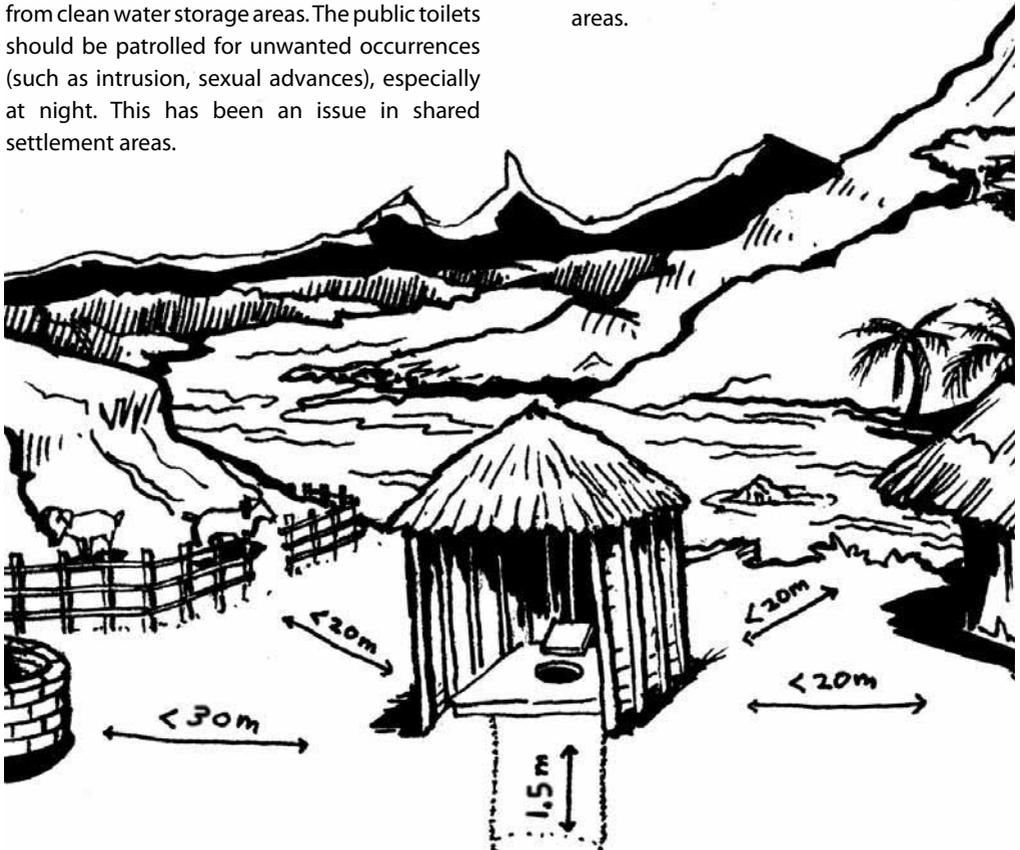
This fact sheet was developed by IDEP Foundation  
More information: [www.idepfoundation.org](http://www.idepfoundation.org)

## Temporary settlements

*The settlement location influences the health and state of affairs of the community. Although it is used only for temporary settlement, the choice of location should be made with long term use in mind.*

In a settlement, there must be enough space for residences, medical facilities, a common kitchen, a dish washing area, clean water, sanitation (separate male and female toilets), a temporary meeting area, and a place for garbage disposal. The kitchen should be placed in a safe and protected location.

The distance between the public toilet and the garbage area should be at least 20m from the residential area. The distance between the toilet and garbage area should be at least 30m from clean water storage areas. The public toilets should be patrolled for unwanted occurrences (such as intrusion, sexual advances), especially at night. This has been an issue in shared settlement areas.

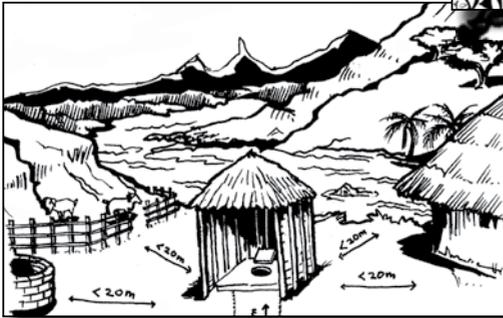


## Sanitation and garbage

- Keep wells and clean water storage areas as clean as possible.
- Do not allow animals near water storage areas. If needed, build a fence around the well or the clean water storage area to prevent animals from entering.
- Do not go to the toilet near the well or clean water storage area.
- Take care of the cleanliness of the river and keep upstream areas free of waste.
- Burn garbage that can be burned. Garbage that cannot be burned should be buried in a hole located at least 20m away from residential areas and clean water storage areas.

# SANITATION IS VERY IMPORTANT

Burn all garbage that can be burned. Garbage that cannot be burned should be buried in a hole located at least 20m away from residential areas and water storage areas.



Build gates around water storage areas so that animals cannot enter.

Do not go to the toilet near clean water sources or residential areas.

Throw away all things that have been contaminated by dirty flood waters.



**Good sanitation will reduce the possibility of contracting diseases.**

## Public toilets

Sanitation is very important in temporary settlement areas. Many types of diseases develop because of unsanitary conditions.

### Parts of an emergency public toilet

---

- Hole in the ground (minimum 2m deep).
- Toilet base (squat toilet).
- Roof and walls around it.

### Using an emergency public toilet

---

- To reduce odors so as to not attract flies, place lime, soil, or ash in the hole every time it is used.
- Add ash to the hole to accelerate the decomposing process.
- When the hole is  $\frac{2}{3}$  full, cover it with soil.
- The roof, walls, and toilet bowl can be used again for a new toilet.

### How to build an emergency public toilet

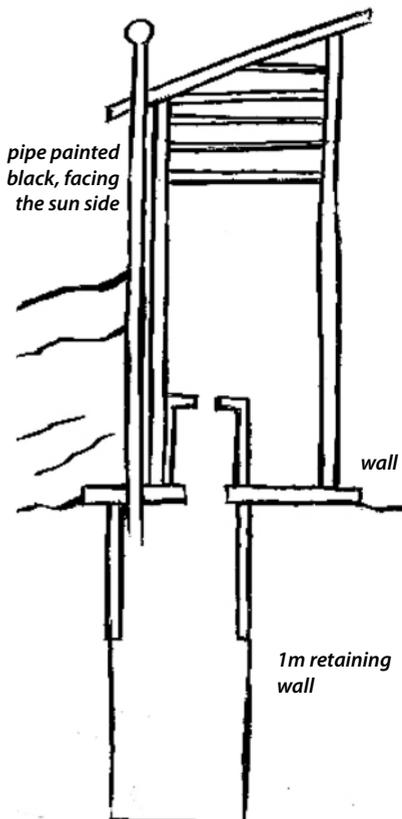
---

1. Dig a hole, minimum 1m<sup>2</sup> and more than 2m deep.
2. Increase the height of the side of the hole to about 15cm from ground level using stones or cement.
3. Dig a drain around the sides to drain off excess water.
4. Make a retaining wall 1m from the top to prevent the wall of the hole from collapsing.

There may be some odor and insect problems with this type of toilet, but these problems can be reduced with proper ventilation, sprinkling kerosene, and using a cover (see illustration).



*mosquito netting*



# Guide book for disaster areas

## Nutrition in times of emergency Temporary settlements Water, sanitation, and cleanliness



**This guide book** is designed so that the reader will understand Community Based Disaster Management (CBDM). This book is the result of experience and research from within and outside the country, as well as input from advisors. This guide book is written using simple language and illustrations to ensure that the information it contains can be easily understood by anyone. It is a useful reference for those involved in community development, including community groups, NGOs, government officers, universities, and other organizations. The contents of this guide book are based on information from the Community Based Disaster Management (CBDM) Manual developed by IDEP Foundation. The complete CBDM kit contains a self-help manual, a resource book, several comic books, DVDs, posters, and other resources.

This guide book was developed by IDEP Foundation

More information: [www.idepfoundation.org](http://www.idepfoundation.org)

