SAY NO TO FOOD WASTE!

A guide to reduce household food waste
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by

Mariam Ghamrawy
Regional Office for the Near East and North Africa - FAO
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1 Food Waste

Food waste is all the food thrown away that could have been good to eat.

Food is wasted when we:

- Buy more than we need
- Store food incorrectly
- Throw away leftovers
- Cook too much

HOW TO REDUCE FOOD WASTE

Lower your grocery bills and environmental footprint by reducing your food waste.

1. Ask for smaller portions.
2. Always check your pantry for foods that need to be consumed first.
3. Always store food properly.
4. Get creative with your leftovers and reuse them in other meals.
5. Understand date labels on your food.
6. Shop smart and avoid bulk shopping.
7. Do not forget the food stored at the back of the fridge.
8. Always practice FIFO: First in, First out!
9. Use irregularly shaped fruits and vegetables.
10. Get creative with food processing at home.
11. Sharing is caring.
2 PROPER STORAGE, LEFTOVER RECIPES, AND FOOD PROCESSING AT HOME

for the five main food groups: Fruits, Vegetables, Protein, Grains, and Dairy.

Proper arrangement of your fridge

The temperature of your fridge should be between 0 to 5°C at all times!

Ready to Eat Food
Such as dairy products, yoghurt and cream

Ready to Eat Food
Such as cream cakes, butter, cooked meats, leftovers & other packaged food.

Raw Meat Poultry & Fish
Always cover & keep in sealed containers.

Salad, Fruits & Vegetables
Keep ready to eat fruit and vegetables in sealed bags or containers, always wash before use.

Proper freezing
Foods that do not freeze well

- Custards
- Sour cream
- Fried food
- Hard cooked eggs
- Cooked egg whites
- Raw potatoes
- Gelatin
- Cream based soups and sauces
- Meringue
- Unbaked cake batter
- Mayonnaise
- Salad greens and other raw salad ingredients eg. cucumber, lettuce and radishes
Proper dry storage

Do not store food or drinks near cleaning products or other chemicals

Keep food in sealed bags or containers

Do not store food on the floor, because this can encourage mice, ants and other pests

Do not use old food containers to store household chemicals, and do not store food in containers that have been used for other purposes

Keep the storage area dry and not too warm

Nidirect - https://www.nidirect.gov.uk/articles/storing-food-safely
2.1 Protein

PROPER STORAGE

Beef may be frozen in foam plates for short-term storage or repackaged in plastic wrap, or freezer paper or inside a freezer bag if freezing for long-term storage. It is always recommended to freeze beef into smaller portions that would fit one meal.

Proper wrapping prevents “freezer burn”! Cut freezer-burned portions away either before or after cooking the beef. Heavily freezer-burned products may have to be thrown away because they may be too dry or tasteless.

### Storage times for beef products

<table>
<thead>
<tr>
<th>Product</th>
<th>Refrigerator</th>
<th>Freezer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh beef roast, steaks, chops, or ribs</td>
<td>3 to 5 days</td>
<td>6 to 12 months</td>
</tr>
<tr>
<td>Fresh beef liver</td>
<td>1 or 2 days</td>
<td>3 to 4 months</td>
</tr>
<tr>
<td>Home cooked beef, soups, or casseroles</td>
<td>3 to 4 days</td>
<td>2 to 3 months</td>
</tr>
<tr>
<td>Beef hot dogs or lunch meats, sealed in package</td>
<td>2 weeks (or 1 week after a “Use-By” date)</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td>Beef hot dogs, opened package</td>
<td>1 day</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td>Lunch meats, opened package</td>
<td>3 to 5 days</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td>Canned beef products in pantry</td>
<td>2 to 5 years in pantry, 3 to 4 days after opening</td>
<td>After opening, 2 to 3 months</td>
</tr>
</tbody>
</table>
## Storage times for chicken products

<table>
<thead>
<tr>
<th>Product</th>
<th>Refrigerator</th>
<th>Freezer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh Chicken, whole</td>
<td>1 to 2 days</td>
<td>1 year</td>
</tr>
<tr>
<td>Fresh Chicken, parts</td>
<td>1 to 2 days</td>
<td>4 months</td>
</tr>
<tr>
<td>Ground Chicken</td>
<td>1 to 2 days</td>
<td>3 to 4 months</td>
</tr>
<tr>
<td>Cooked Chicken, Leftover</td>
<td>3 to 4 days</td>
<td>4 months</td>
</tr>
<tr>
<td>Chicken Broth</td>
<td>3 to 4 days</td>
<td>2 to 3 months</td>
</tr>
<tr>
<td>Cooked Chicken Pieces, covered</td>
<td>3 to 4 days</td>
<td>6 months</td>
</tr>
<tr>
<td>with broth or gravy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooked Chicken Nuggets, Patties</td>
<td>3 to 4 days</td>
<td>1 to 3 months</td>
</tr>
<tr>
<td>Chicken Luncheon Meat</td>
<td>3 to 5 days</td>
<td>1 to 2 months</td>
</tr>
<tr>
<td>Chicken Hotdogs, unopened</td>
<td>2 weeks (after opening 1 week)</td>
<td>1 to 2 months</td>
</tr>
</tbody>
</table>
Safe thawing for beef and chicken

Refrigerator

Never thaw beef/chicken on the counter or in other locations. It's best to plan ahead for slow, safe thawing in the refrigerator. During this time, if chicken/beef thawed in the refrigerator is not used, it can safely be refrozen without cooking it first.

Cold water

Chicken/beef may be thawed in cold water in airtight packaging or in a leak-proof bag. Change the water every 30 minutes to be sure it stays cold. Cook immediately after thawing.

Microwave

Chicken that was thawed in the microwave should be cooked immediately after thawing because some areas of the food may become warm and begin to cook during microwaving.

Eggs

Here are some important storage tips that you need to know when it comes to eggs:

- Do not wash eggs before storing them. If you need to clean them, clean eggs using fine sandpaper or a brush.

- Discard eggs with broken or cracked shells.

- Crack eggs into a bowl before using in order to avoid using bad eggs in your recipe. Throw away if you see any defects.³

- Eggs with blood spots are safe to eat. A blood spot found on an egg yolk is most often a ruptured blood vessel, which happens during the yolk formation.
Storage method and timing for eggs

**Fresh eggs (in shell)**

**Refrigerator**

3 - 5 weeks

It is ideal to store eggs in their carton packaging. If you are buying per piece make sure that eggs are not stored on the refrigerator door, but in the main body of the refrigerator to ensure that they keep a consistent and cool temperature.

**Freezer**

Don’t freeze in shell

Beat eggs just until blended, pour into freezer containers or bags and seal tightly. Label the container with the number of eggs and the date, and freeze.

**Hard-cooked eggs**

**Refrigerator**

Within 1 week

When storing hard-cooked eggs, you may notice a “gassy” odor in your refrigerator. It is harmless and usually dissipates in a few hours.

**Freezer**

Within 4 months

Not recommended: Hard-cooked whole eggs and whites become tough and watery when frozen so do not freeze them.

**Egg yolks & whites (separate)**

**Refrigerator**

2 - 4 days

Leftover raw egg whites and yolks should be put in airtight containers and stored in the refrigerator immediately. To prevent yolks from drying out, cover them with a little cold water. Drain the water before using.

**Freezer**

1 year

*Whites:* Break and separate the eggs. Pour the whites into freezer containers or bags, seal tightly, label with the number of egg whites and the date, and freeze.

*Yolks:* Beat in either ⅛ tsp (0.5 mL) salt or 1½ tsp (7 mL) sugar or corn syrup per ¼ cup (50 mL) egg yolks (4 yolks). Label the container with the number of yolks, the date, and whether you’ve added salt (for main dishes) or sweetener (for baking or desserts).
LEFTOVER RECIPES

Use your leftover chicken in another casserole, pasta dish or shawerma dish. As for the bones of your cooked chicken, use them in making chicken soup once again.

Leftover chicken bones soup

Do not waste the bones! If you are short on time, you can stockpile chicken bones in the freezer and keep them frozen until you get around to making the stock.

Ingredients:
For the bones from one chicken, add:
• 1 medium onion
• 1 celery stalk
• 1 medium carrot
• 1 bay leaves
• 4 black peppercorns
• 1 sprigs thyme (optional)

Instead of the vegetables and herbs above, you could make use of odds and ends that are leftover after you have cooked. Any of these scraps are good additions to chicken stock:

Directions:
1. Put the vegetables, optional herbs, and chicken bones into a large pot. Cover with water.

2. Bring to a simmer. Do not let the stock boil or it will be cloudy. Reduce heat so that there are just a few bubbles appearing on the surface of the stock as it cooks.

3. Cook, uncovered, topping up with boiling hot water if necessary for 3 - 4 hours.

4. Strain through a fine mesh strainer. Blot the top of the chicken bone stock with a clean paper or cloth towel to remove excess fat, or refrigerate and remove the layer of fat that will congeal on top of the chilled stock.

Note: When making bone-based stocks, add a splash of vinegar to the water. You will not taste the vinegar in the final product. It helps to release the calcium from the bones resulting in a more nutritious stock.
Homemade luncheon meat means NO high fructose corn syrup, nitrates/nitrites, fillers/thickeners/gums, artificial flavors or colors, GMOs, MSG, solutions, BHT and carrageenan.

**Ingredients:**
- 0.5 kg beef, chicken or turkey
- 2 tsp. salt
- 1 tsp. sugar
- 1/2 tsp. garlic powder
- 1/2 cup. water
- Liver (optional)

**Directions:**
1. Combine all of the ingredients in a food processor and process until well combined and smooth.

2. Split the meat mixture into two equal parts.

3. Place each half in a 2-cup glass container (like a Pyrex dish).

4. Spread the mixture in the dish and smooth the top.

5. Place each glass dish in a large pot. Fill with water half way up the glass. Cover with a lid.

6. Bring the water to a low simmer and cook for 45 minutes.

7. Remove the glass container from the pan and drain any excess liquid.

8. Allow the glass to cool at room temperature for 15 minutes.

9. Chill the glass dishes in the refrigerator, about 2 hours.

10. Remove the meat from the glass dishes and slice to desired thickness.

11. Store in a sealed container in the refrigerator or freezer.

**Notes:** You can add as much liver as you tolerate. You can also add extra seasoning if adding liver. This is a very mildly flavored meat. You can add any extra herbs or seasonings you like to change the flavor.
## 2.2 VEGETABLES

### PROPER STORAGE

#### Vegetables that GO together

<table>
<thead>
<tr>
<th>Name</th>
<th>Perfect match</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onion</td>
<td>Garlic</td>
</tr>
<tr>
<td>Cucumber</td>
<td>Peppers</td>
</tr>
<tr>
<td>Carrots</td>
<td>Beetroot</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>Broccoli</td>
</tr>
<tr>
<td>Corn</td>
<td>Peas</td>
</tr>
<tr>
<td>Potato</td>
<td>Sweet Potato</td>
</tr>
</tbody>
</table>

#### Vegetables that DO NOT go together

Onions & Potatoes
## Storage location and method for vegetables

<table>
<thead>
<tr>
<th>Vegetable</th>
<th>Where to store it</th>
<th>How to store it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh artichoke / Corn</td>
<td>Fridge</td>
<td>Store loose</td>
</tr>
<tr>
<td>Arugula / Asparagus</td>
<td>Fridge</td>
<td>Remove bands and ties. Store in a sealed container lined with a damp towel.</td>
</tr>
<tr>
<td>Beans</td>
<td>Fridge</td>
<td>Store in a sealed container with a dry towel.</td>
</tr>
<tr>
<td>Beets / Carrots</td>
<td>Fridge</td>
<td>Store in a sealed container with a dry towel.</td>
</tr>
<tr>
<td>Bell peppers</td>
<td>Fridge - drawer</td>
<td>Store loose. Store a half pepper with the stalk and seeds still in - it will last longer.</td>
</tr>
<tr>
<td>Broccoli / Leeks</td>
<td>Fridge - drawer</td>
<td>Wrap in a damp towel</td>
</tr>
<tr>
<td>Butternut squash / Garlic</td>
<td>Pantry</td>
<td>Store loose</td>
</tr>
<tr>
<td>Cabbage / Eggplant / Hot peppers / Lemons / Limes</td>
<td>Fridge - drawer</td>
<td>Store loose</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>Fridge - drawer</td>
<td>Store in a plastic bag or sealed container</td>
</tr>
<tr>
<td>Celery</td>
<td>Fridge</td>
<td>Store in a sealed container</td>
</tr>
<tr>
<td>Chives</td>
<td>Pantry</td>
<td>Remove bands and ties. Trim stems and store upright in a glass of water with a plastic bag over the top.</td>
</tr>
<tr>
<td>Vegetable</td>
<td>Where to store it</td>
<td>How to store it</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Cucumber</td>
<td>Fridge - drawer</td>
<td>Store loose or for longer shelf life see the section below.*</td>
</tr>
<tr>
<td>Green onions</td>
<td>Fridge</td>
<td>Wrap in a damp towel</td>
</tr>
<tr>
<td>Herbs - leafy</td>
<td>Fridge</td>
<td>Remove bands and ties. Trim stems and store upright in a glass of water with a plastic bag over the top. Exception: Basil.</td>
</tr>
<tr>
<td>(cilantro, parsley)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herbs - woody</td>
<td>Fridge</td>
<td>Remove bands and ties. Wrap in a damp towel and store in a sealed container.</td>
</tr>
<tr>
<td>(rosemary, sage)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leafy greens</td>
<td>Fridge</td>
<td>Remove bands and ties. Store in a sealed container lined with a damp towel.</td>
</tr>
<tr>
<td>Mushrooms / Okra</td>
<td>Fridge</td>
<td>Store in a paper bag</td>
</tr>
<tr>
<td>Onions / Potatoes</td>
<td>Pantry</td>
<td>Store loose or in a mesh bag separate from potatoes. Do not store potatoes and onions, under the sink. Leakage from the pipes can damage the food. A great way to prevent sprouting is to store an apple with potatoes.†</td>
</tr>
<tr>
<td>Peas</td>
<td>Fridge</td>
<td>Store in a sealed container</td>
</tr>
<tr>
<td>Radishes</td>
<td>Fridge</td>
<td>Store in a sealed container with a dry towel.</td>
</tr>
<tr>
<td>Spinach / Jewels</td>
<td>Fridge</td>
<td>Remove bands and ties. Store in a sealed container lined with a damp towel.</td>
</tr>
<tr>
<td>Zucchini</td>
<td>Fridge</td>
<td>Wrap whole or cut ends in a damp towel.</td>
</tr>
</tbody>
</table>

*FDI - https://www.fda.gov/ForConsumers/ConsumerUpdates/ucm093704.htm
† © Kisspng  ‡ © pingfly
Plastic wrap storage: wrap the cucumber in plastic wrap (or a group of four to six cucumbers). After wrapping put the cucumbers in the refrigerator. This should keep it cold enough to stay fresh for one week to 10 days.

Paper towel wrap: wrap the cucumber in a paper towel (or a group of two to three cucumbers). Put the wrapped cucumbers into the vegetable drawer.

**LEFTOVER RECIPES**

Vegetable scraps

Do not throw away those vegetable scraps! Use them to make your own *delicious vegetable broth* instead. What you should do is collect all the scraps (peels and skins) in a freezer bag and when you have a few cups worth, you use them to make healthy vegetable broth.

Recipe yields around 6 cups of broth

**Ingredients:**
- 1 tbsp oil
- 5 cloves garlic
- 2 large onions
- 3 ribs celery
- 3 carrots
- 8 cups water
- 2 – 3 cups of frozen vegetable scraps (make sure they are clean)
- 2 bay leaves
- A few sprigs of parsley and/or thyme
- Salt and pepper to taste

**Directions:**
1. Heat the oil in a large pot over medium heat.
2. Add the garlic, onions, celery, and carrots. Cook until softened, about 5 minutes, stirring often.
3. Add the water, frozen vegetable scraps, bay leaves, parsley, and thyme.
4. Reduce heat to low and simmer, partially covered, for 45 minutes.
5. Pour the broth through a fine mesh strainer into a large heat proof bowl or pot; discard solids.
6. One the broth has cooled, transfer it to airtight plastic containers or freezer bags and store it in the freezer.
   (I usually freeze it in 2-cup portions so I do not have to thaw all the broth every time I use it.)
Vegetable Jammie

using your frozen vegetable scraps
Recipe yields around 6 cups

**Ingredients:**
- 1 small eggplant
- 5 cloves garlic
- 1 large onion
- 3 ribs celery - chopped
- 2 carrots – chopped
- 2 medium zucchinis
- 1-2 green peppers
- 500gm tomatoes
- 2 – 3 cups of frozen vegetable scraps (NO SKINS – can include eggplant peels etc.)
- 1 sprig basil
- 4 cups of water
- Salt and pepper to taste (do not add if you are only making stock for storage)

**Potato peel crisps**

Before peeling your potatoes, make sure you wash your potatoes thoroughly to avoid dirt stuck on the potato peel.
Recipe yields 2-4 cups

**Ingredients:**
- Potato peel
- 1-2 tsp of oil
- Salt and pepper – for seasoning
- Cumin, paprika or chili powder (optional)

**Directions:**
1. First of all you will need to peel your potatoes with a potato peeler. The skin might be too thick if you use a knife.
2. Potato peel does not keep well, so get the peelings straight onto a baking tray.
3. Drizzle the oil over your peelings and sprinkle over your chosen seasoning/spices.
4. Use your hands to mix everything together, until the peelings are evenly coated in the oil and seasoning.
5. Make sure the peelings are in an even layer and then place into the preheated oven until slightly brown and crunchy, about 8–10 minutes.
Mixed pickles

Preparation time: 45 minutes
Recipe yields 6 jars

Ingredients:
- 2 pcs carrots – peeled
- 3 pcs small - medium cucumbers – peeled
- 6 cloves of garlic
- ¼ cup baby onions
- 6 bay leaves
- ½ cup hot red pepper (optional)
- ½ cup hot green pepper (optional)
- 2 pcs turnip
- ½ cup cauliflower
- 4 pcs lemon – sliced into 4 but not till the end
- 2 cups water
- 1 cup white vinegar
- ½ cup salt
- 1 tbsp nigella seeds (optional)
- 1 tbsp black pepper – whole
- 3 tbsp olive oil (can be replaced by any vegetable oil)

Directions:
1. Cut the carrots, turnips and cucumbers into slices. You could use a serrated knife in order for the vegetables to look nice and special;
2. Peel the onions and garlic;
3. Sterilize the jar that will be used for the pickles by dipping it in boiling water in order to remove any bacteria present.
4. Put the sterilized jar in another container/tray - tilt the jar when filling it for easier use, and create whatever shape you want with the vegetables (optional);
5. Boil the water, vinegar, bay leaves, salt. Nigella seeds and black pepper together;
6. Add the cucumbers as the first layer in the jar, then add two cloves of garlic, two bay leaves, and 1 layer of hot red pepper (optional);
7. Pour some of the boiled vinegar mixture on top;
8. Layer the turnips then carrots, then add some more of the vinegar mixture;
9. Add two cloves of garlic, one sliced lemon, two bay leaves and then the hot green pepper.
10. Add the cauliflower then onions as the final layer of vegetables. Then add the sliced lemon, garlic and bay leaves.
11. Pour the remaining vinegar mixture, then add the olive oil on top.
12. Seal the jars tightly and move it around.
13. Store in a dry area for fermentation

Your pickles will be ready to consume or sell within two to two and a half months!
**Onion pickles**

Preparation time: 100 mins  
Recipe yields 6 jars

**Ingredients:**  
- 1 kg baby onions  
- 1 cup salt (used for step 1)  
- 2 cups white vinegar  
- 1 tsp salt  
- ½ tsp white sugar  
- ½ tsp pickle spices (or any spices you like)  
- 1 tsp black pepper

**Directions:**  
1. Combine the onions (without peeling them) with the salt in a container, add some boiling water until the onions are covered;  
2. Cover and leave for two days, stirring occasionally;  
3. Remove the water through a sieve, then start peeling the onions carefully, taking care not to destroy the end of the bud;  
4. Place the peeled onions in a container and add some boiling water. Leave for 3 minutes then remove the water;  
5. Repeat step 4 twice, then move the hot onions to a sterile hot and dry jar;  
6. Boil the remaining ingredients together, and leave on high heat for 15 minutes;  
7. Pour the mixture into the jar until all onions are completely covered.  
8. Cover and store in a dry and dark area.

**Pickled green olives**

Preparation time: 90 mins  
Recipe yields 6-8 jars

**Ingredients:**  
- 2kg green olives  
- 5 pcs lemon  
- 100gm hot green peppers (optional)  
- ¾ cup olive oil  
- 4 cups water  
- 1/3 cup coarse salt

**Directions:**  
1. Go through the olives and select the big olives and get rid of any damaged or bad olives;  
2. Wash the olives thoroughly, then slice the olives twice deep enough for the knife to touch the olive seed;  
3. Place the olives in a large container and soak in cold water and leave aside for four hours;  
4. Remove the water and repeat again for another four hours;  
5. Boil 2 cups of water, then add the salt and stir. Then add the remaining water and stir again;  
6. Leave the mixture to cool aside;  
7. Slice the lemon and hot green peppers into medium pieces;  
8. Place the olives in a big container, add the lemon slices, olive oil, hot green peppers and lemon juice from 2-3 lemons; stir well;  
9. Divide the mixture into separate jars, press the olives in the jar tightly by using the base of a cup and pressing the olives, then cover the olives with lemon peel/slices. Seal the jars tightly.
Pickled carrots with garlic\textsuperscript{12}

Preparation time: 25 mins  
Recipe yields 6-8 jars

**Ingredients:**
- 1 kg carrots  
- Reasonable amounts of the following ingredients with the following ratios: 1 cup water to 3 tbsp of vinegar to 1 full tsp of salt – add around 2 cups of water  
- 10 cloves of garlic  
- Vine leaves or celery stalks to cover the carrots in the jar  
- 1 tsp mustard / jar (optional)

**Directions:**
1. Wash the carrots thoroughly and slice into whatever shape, size or design you prefer – easiest is to cut into four long slices;  
2. Place the carrots into the jar;  
3. Peel the garlic cloves and add into the jar with carrots;  
4. Mix the water, vinegar and salt in the recommended ratios, until the salt has dissolved;  
5. Pour the water mixture into the jars;  
6. Cover the carrots with a final layer of vine leaves or celery stalks in order to avoid letting the air get out;  
7. You can add 1 tsp of mustard in each jar for extra flavor, but this will increase the time needed to ferment;  
8. Seal properly and store in a dry area until fermented.

Sweetened pickled carrots\textsuperscript{13}

Preparation time: 30 mins  
Recipe yields 6-8 jars

**Ingredients:**
- 1 kg carrots  
- 8 tbsp white sugar  
- 2/3 cup white vinegar  
- 4 tbsp salt  
- 8 cups warm water

**Directions:**
1. Wash the carrots thoroughly, then slice into very thin vertical slices;  
2. Divide and place the carrots into the jars;  
3. Melt the salt and sugar in the warm water and mix well;  
4. Pour the water mixture into the jars filled with carrots;  
5. Seal the jars tightly and refrigerate for at least 3 days before consuming or selling.
**Sun-dried tomatoes**

Total time: Drying tomatoes in the sun can take up to 4 to 14 days, depending on type of tomato, temperature, and humidity during drying.

**Ingredients:**
- Plum tomatoes (use tomatoes of uniform size for most even results).
- Salt
- Peppercorns – slightly crushed / Oregano / Garlic (all are optional)

**Equipment needed:**
- Baking tray
- Cheese cloth or tight net

**Directions:**
1. Wash and dry tomatoes.

2. Remove skins (optional). With a knife, cut an X on the bottom of the tomato, just deep enough to penetrate the skin. Drop tomato into boiling water for 20-30 seconds. Use a slotted spoon to remove tomato from boiling water. Immerse tomato in ice water and the skin will slip off.

3. Cut tomatoes into halves or quarters

4. Seed tomatoes (optional). With a spoon or your finger, scoop seeds from tomato, leaving pulp. Blot extra juice on tomatoes with a paper towel.

5. Place tomatoes cut-side up on baking dish/tray, about 1 cm apart. Do not allow tomatoes to touch. Sprinkle tomatoes with salt, garlic powder, or fresh herbs (as desired). Do not use galvanized metal screening, which will interact with acid in tomatoes.

6. Set the trays outdoor in the direct sun on a raised surface so air circulation is better.

7. Spread a tight net or cheesecloth over tomatoes to allow for ventilation and avoid insect infestation.

8. Turn tomatoes once a day.

9. Bring tomatoes indoors in the evening in order to prevent dew from falling on them.

10. Check tomatoes each day for dryness. Making sun dried tomatoes can take anywhere from 4 days to 2 weeks, depending on moisture in tomatoes, slice thickness, outdoor temperature, and humidity in the air.

11. When tomatoes reach the desired dryness, pack tightly in freezer bags, plastic containers, or jars.

12. Keep the sun dried tomatoes in a dry place until you want to use them. When you do, put them in warm water over night and drain them the next day. Put the tomatoes in a bowl with oil and whatever else you would like to add, like garlic and salt.
Sun-dried Jews mallow (Egyptian molokheya)\(^{15}\)

**Note.** This recipe is also applicable for any leafy or woody herbs, spinach and onions.

**Ingredients:** Jews mallow or spinach

**Equipment needed:**
- Baking tray
- Cheesecloth or tight net

**Directions:**
1. Wash the leaves, then separate the leaves from the shoots
2. Layer the leaves on a baking tray/dish, making sure leaves do not overlap.
3. Cover the tray in netting or cheesecloth and leave to dry completely in your roof/terrace. The cover should prevent bugs getting to the grapes. If the nights are damp, take the trays inside on an evening and put them out again the next day.
4. When completely dry, crush the leaves using your and store in airtight containers. You can also grind them until powder smooth.

---

### Fruits

#### 2.3 PROPER STORAGE

<table>
<thead>
<tr>
<th>Fruits that <strong>GO</strong> together</th>
<th>Fruits that <strong>DO NOT</strong> go together</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grapes</strong></td>
<td><strong>Watermelons</strong></td>
</tr>
<tr>
<td><strong>Cherries</strong></td>
<td><strong>Apples</strong></td>
</tr>
<tr>
<td><strong>Plums</strong></td>
<td><strong>All</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Banana</strong></td>
</tr>
<tr>
<td><strong>Strawberries</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Apples</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tomatoes</strong></td>
<td></td>
</tr>
</tbody>
</table>

\(^{15}\)
<table>
<thead>
<tr>
<th>Fruits</th>
<th>How to store it</th>
<th>Where to store it</th>
<th>Storage location and method for fruits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples</td>
<td>Fridge</td>
<td>Separate from other produce</td>
<td></td>
</tr>
<tr>
<td>Apricots / Cantaloupe / Honeydew / Kiwi / Mangoes / Melons / Nectarines / Peaches / Pears / Pineapple / Plums / Watermelon</td>
<td>Ripe on counter, then store in fridge</td>
<td>Store loose</td>
<td></td>
</tr>
<tr>
<td>Bananas</td>
<td>Counter</td>
<td>Store away from other fruits and vegetables. Bananas will go black in the fridge! So instead, just keep them somewhere nice and cool</td>
<td></td>
</tr>
<tr>
<td>Cherries / Grapes</td>
<td>Fridge</td>
<td>Store in a plastic bag or sealed container. Wash only when ready to eat. Note. One rotten cherry / grape can spoil the rest. Remove rotting fruit before storing</td>
<td></td>
</tr>
<tr>
<td>Citrus fruits / Grapefruit</td>
<td>Fridge - drawer</td>
<td>Store loose</td>
<td></td>
</tr>
<tr>
<td>Pomegranate</td>
<td>Fridge</td>
<td>Store loose</td>
<td></td>
</tr>
<tr>
<td>Pumpkin</td>
<td>Pantry</td>
<td>Store loose</td>
<td></td>
</tr>
<tr>
<td>Strawberries</td>
<td>Fridge</td>
<td>Store in a shallow container lined with a dry towel, leave lid slightly cracked. Wash only when ready to eat</td>
<td></td>
</tr>
<tr>
<td>Tomatoes</td>
<td>Ripen on counter, then store in fridge</td>
<td>Store out of direct sunlight</td>
<td></td>
</tr>
</tbody>
</table>
Banana bread using overripe bananas

One of the easiest and most popular recipes which uses overripe bananas is Banana Bread.

**Ingredients:**
- 7 tbsp of butter/oil
- 7 tbsp of white/brown sugar
- 1 egg
- 4 overripe bananas – mashed
- 3 small cups yoghurt or 2 big (can use other flavors such as coconut yogurt or chocolate for more flavor)
- 1 pack vanilla
- 1.5 cups flour
- 1 tsp bi-carbonate soda
- 1 tsp ground cinnamon
- ¼ tsp salt
- ½ cup nuts – preferably walnuts (optional)

**Directions:**
1. Preheat oven.
2. Grease a loaf/or bunt tin.
3. Beat the butter/oil and sugar together until creamy and then add the egg and continue beating until smooth.
4. Add the mashed bananas, yoghurt and vanilla.
5. Sift together flour, bicarb, cinnamon and salt and beat this gradually into the banana mix.
6. Finally stir in the chopped nuts (optional).
7. Bake for about an hour until a knife inserted comes out clean.
FOOD PROCESSING AT HOME

Low fat-fruit jam

This is a basic low-fat recipe for all the people who love jam but are also health-conscious. You can use any of your favorite fruits (strawberries, berries, apricot, peach, figs etc.).

**Ingredients:**
- 4 cups fruit – roughly chopped
- 1 whole lemon – juiced
- ½ cup sugar
- Mason jars (sterile)

**Directions:**
1. Toss all ingredients in a pot and turn the heat to medium until the mixture begins to bubble. Then, reduce the heat to simmer and stir.
2. Allow mixture to cook and the fruit/berries to break down. Be sure to stir every 20 minutes or so, even more frequently when the jam begins to thicken.
3. When the jam has reached the consistency you desire, carefully pour hot jam into clean and sterile mason jars.
4. Being sure the rim of the jar is clean and jam-free, wipe the lid with a damp cloth, place on the seal and tighten the lid until a slight resistance is met.
5. Carefully place the jar on a kitchen towel where the jar will not be disturbed for twelve hours.
6. Once the jam begins to cool, the seal will create a popping sound, assuring you that the jar is sealed.
7. Refrigerate for immediate use or store in a cool dry place for up to six months.

Fig jam

Recipe yields 4 jars (175ml)

**Ingredients:**
- 7 cups fresh figs (1.4kg)
- 2 cups sugar
- 1 lemon – juice and finely grated zest

**Directions:**
1. To prepare fruit. Sort and wash the figs; remove any stems.
2. In a large pot, combine the figs, sugar, lemon juice, and lemon zest.
3. Bring to a simmer over medium-low heat, stirring constantly. Cover and simmer over low heat for 1 hour, stirring occasionally.
4. When the mixture gets quite thick, begin to stir constantly to keep from scorching.
5. Test a small amount on a very cold saucer by putting the saucer in the freezer for a few minutes, put a little of the fig mixture on it, then returning it to the freezer for 1 minute. When a good gel stage is reached (220 F), the surface of the fruit mixture will wrinkle slightly when pushed with a finger.
6. Remove from heat; skim and stir alternately for 5 minutes.
7. Ladle jam into hot containers and seal immediately.
8. Carefully place the jar on a kitchen towel where the jam will not be disturbed for twelve hours.
9. Once the jam begins to cool, the seal will create a popping sound, assuring you that the jar is sealed.
**Grape jelly**

Recipe yields around 5 jars (175ml)

**Ingredients:**
- 4 cups grape juice
- 3 cups sugar

7. Boil over high heat until jelly mixture sheets from a spoon.
8. Remove from heat; skim off foam quickly.
9. Pour jelly immediately into hot containers and seal.
10. Carefully place the jar on a kitchen towel where the jar will not be disturbed for twelve hours.
11. Once the jelly begins to cool, the seal will create a popping sound, assuring you that the jar is sealed.

**Apricot-orange conserve**

Recipe yields around 7 jars (175ml)

**Ingredients:**
- 3 1/2 cups chopped fresh apricots (around 500gm) – can use dried ones (see how to prepare)
- 1 1/2 cups orange juice (around 3 or 4 medium-sized oranges)
- Peel of 2 oranges, shredded very fine
- 2 tablespoons lemon juice
- 3 cups sugar
- 1/2 cup chopped nuts (optional)

To prepare dried apricots. Cook the apricots uncovered in 3 cups water until tender (about 20 minutes); drain and chop.

**Directions:**
1. To make conserve. Combine all ingredients except the nuts.
2. Crush grapes, add water, cover, and bring to boil on high heat.
3. Reduce heat and simmer for 10 minutes.
4. Extract juice by using filtering the cooked juice through a strain.
5. To prevent formation of tartrate crystals in the jelly, let juice stand in a cool place overnight, then strain through two thicknesses of damp cheesecloth to remove crystals that have formed.
6. To make Jelly- Add the grape juice in a pot, along with the sugar and stir well.
7. Boil over high heat until jelly mixture sheets from a spoon.
8. Remove from heat; skim off foam quickly.
9. Pour jelly immediately into hot containers and seal.
10. Carefully place the jar on a kitchen towel where the jar will not be disturbed for twelve hours.
11. Once the jelly begins to cool, the seal will create a popping sound, assuring you that the jar is sealed.
Citrus marmalade

Recipe yields 4-5 jars (175ml)

**Ingredients:**
- 1 cup grapefruit juice (1 grapefruit) – can replace with 3 oranges
- 1 ½ cups orange juice (4 medium oranges)
- 1 cup lemon juice
- Peel of 1 grapefruit (optional)
- 1 liter cold water
- 2 cups boiling water
- 3 cups sugar

**Directions:**
1. To prepare fruit- Wash fruit and extract juice.
2. Remove membrane from inside of the peel. Cut peel into very thin strips about 2cm long.
3. To make marmalade. Add the cold water to the peel and simmer slowly in a covered pot (30 minutes).
4. Drain off and discard the liquid; add the boiling water to the peel.
5. Add the sugar and boil rapidly (about 20 minutes).
6. Add the fruit juices and cook again to the same temperature (about 25 minutes), stirring frequently.
7. Remove from heat; skim and stir alternately for 5 minutes.
8. Ladle marmalade into hot containers and seal immediately.
9. Carefully place the jar on a kitchen towel where the jar will not be disturbed for twelve hours.

Sun-dried raisins/sultanas

**Time:** at least 3 days

**Ingredients:**
- Fresh red seedless grapes or sultanas

**Equipment needed:**
- Baking tray/dish
- Cheesecloth or tight net

**Directions:**
1. Wash and gently dry the grapes.
2. Spread the grapes on the baking tray/dish. Make sure the grapes are not touching each other.
3. Cover the grapes up with netting, cheesecloth or a pillowcase. Make sure whatever you are covering the grapes with will not blow away. You might need to weigh it down.
4. Take the grapes outside and leave them for at least three days. The cover should prevent bugs getting to the grapes. If the nights are damp, take the grapes inside on an evening and put them out again the next day.
5. When grapes reach the desired dryness, pack tightly in freezer bags, plastic containers, or jars.
2.4 GRAINS

PROPER STORAGE

Storage timings for intact whole grains and whole grain flour/meal

<table>
<thead>
<tr>
<th>Grain</th>
<th>Intact whole grain (berries or groats)</th>
<th>Whole grain flour / meal</th>
</tr>
</thead>
</table>
| Barley / Corn / Popcorn / Wheat | Pantry: 6 months  
Freezer: 1 year | Pantry: 3 months  
Freezer: 6 months |
| Oats / Rice                  | Pantry: 4 months  
Freezer: 8 months | Pantry: 2 months  
Freezer: 4 months |

LEFTOVER RECIPES

Rice

1. Keep in the fridge for 1 day and reheat only once!

2. Freeze, defrost overnight and eat hot.

3. Transform cooked rice into another recipe.

4. Use as a thickener to soups and stews.
Vegetable fried rice

**Ingredients:**
- 2 cups cooked white rice
- 2 tablespoons vegetable oil
- 1 small onion – finely chopped
- 1 medium carrot – peeled and cut into small dice
- 2 scallions - thinly sliced
- 2 medium cloves – minced
- 1 teaspoon soya sauce / 1 cube stock / 1 cup stock
- 1 teaspoon sesame
- Salt and ground black pepper to taste
- 1 large egg
- 120gm / 1 cup peas

**Directions:**
1. Break up the leftover rice with your hands into individual grains before proceeding.

2. Heat 1/2 tablespoon vegetable oil in a pot over high heat.

3. Add rice and cook, stirring and tossing, until the rice is pale brown and toasted and has a lightly chewy texture, about 3 minutes.

4. Press the rice up the sides, leaving a space in the middle. Add 1/2 tablespoon oil to the space. Add onion, carrot, scallions, and garlic and cook, stirring gently, until lightly softened and fragrant, about 1 minute.

5. Toss with rice to combine. Add soy sauce or substitutes and sesame and toss to coat. Season to taste with salt and white pepper.

6. Cook egg in 1/2 teaspoon oil, and season with a little salt. Toss the eggs to the remaining rice mixture.

7. Add peas and continue to toss and stir until peas are thawed and every grain of rice is separate. Serve immediately.
**Ingredients:**
- ½ cup chopped celery
- ½ cup chopped onion
- 2 tbsp butter/margarine
- 300gm cooked broccoli (can use cauliflower)
- 2 cups cooked rice
- 1 cup chicken soup
- 2 cups cooked chicken – chopped (optional)

**Directions:**
1. Sautee celery and onions in butter in a skillet.
2. Mix with remaining ingredients in a bowl.
3. Pour into 9x13 baking dish.
4. Bake for 45-60 minutes or until bubbly.

**Chicken Broccoli / Cauliflower Casserole**

**Ingredients:**
- 750gm ground beef
- 1 to ½ cup of leftover rice
- 1 cup of onion – chopped
- 3 cloves garlic – minced
- ¼ cup of parsley –
- ¼ cup grated cheese
- 3 tbsp of ketchup
- 4 eggs
- ½ tsp white pepper
- ¼ tsp black pepper
- 1 tsp salt
- ¼ tsp onion powder
- ¼ tsp garlic powder
- 2-3 cups tomato salsa
- 1 cup chicken soup
- Oil

**Directions:**
1. In a large bowl, add the meat, rice, onion, garlic, parsley, grated cheese, ketchup, eggs, white pepper, black pepper, salt, onion powder and garlic powder.
2. Mix gently until all ingredients are incorporated and then form into tangerine-sized balls.
3. Rub a 13x9x2 pan with oil and then place the meatballs in an even row.
4. Bake in the oven for 20 minutes.
5. While the meatballs are browning on one side, add the tomato sauce and chicken broth to a saucepan and warm, stirring to incorporate.
6. After the meatballs have been in the oven for 20 minutes, remove them from the oven, turn the meatballs over and pour the sauce over all of them.
7. Return to the oven and let the meatballs braise in the sauce for 15-20 more minutes.
8. Remove from the oven and let sit 5 minutes before serving.
Bread and butter pudding using stale flat bread

If you have stale flat bread at home and wondering what to do with it, here is a great recipe that you and your family will enjoy!

Preparation time: 30 mins / Cooking time: 45-60 mins

Ingredients:
- 6 pieces flat bread (old)
- 3.5 tbsp butter – melted
- 6 Eggs
- 1.25 cup milk or thickened cream for richer flavour
- 1/4 cup powdered sugar
- 1 vanilla
- 1 cup sultanas (optional)
- 1/2 Cup white chocolate (optional)

Directions:
1. Melt the butter and using a pastry brush, brush each side of the flat bread and the dish you will be baking it in.

2. Cut the flat bread in to triangle quarters. Lay alternating sides into your dish.

3. In a large bowl lightly whisk the eggs, cream/milk, sugar and vanilla.

4. Pour over the flat bread in the dish, making sure to pour evenly over.

5. Top with the sultanas and/or white chocolate melts (optional).

6. Allow to sit for 1 hour so that the flat bread can soak up the custard mix.

7. Bake in a preheated oven for 45mins to 1 hour. All until golden and the custard has just set.

Eat as is or serve with ice cream and extra sultanas. A white chocolate sauce would also be perfect.
## 2.5 DAIRY

### PROPER STORAGE

**Storage timings for dairy products in the refrigerator**

<table>
<thead>
<tr>
<th>Dairy product</th>
<th>Storage time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pasteurized whole milk</td>
<td>12 to 14 days. Note: Skimmed andavored milk has a shorter shelf life.</td>
</tr>
<tr>
<td>Yoghurt</td>
<td>4 weeks</td>
</tr>
<tr>
<td>Hard and semi-hard cheese</td>
<td>From 3 to 6 weeks</td>
</tr>
<tr>
<td>Cottage cheese, white cheese and cream cheese</td>
<td>1 to 2 weeks</td>
</tr>
<tr>
<td>Butter</td>
<td>4 weeks</td>
</tr>
<tr>
<td>Ice cream</td>
<td>Freezer: 2 to 6 months</td>
</tr>
</tbody>
</table>

### What are the advantages of milk processing?

- Provides regular income
- Improves nutrition
- Selling processed milk products is more profitable than selling fresh milk

Pasteurization is the first step in milk processing. Pasteurization means heating every particle of the milk or milk product to a specific temperature for a specified period of time (63°C for 30 minutes). This destroys bacteria and other microorganisms that may affect consumers’ health. It makes the milk safe and healthy, and also improves the keeping quality, so that milk and milk products can be stored for longer periods without being spoilt.
Cream

Cream is created by separating the fats in milk.

**Directions:**
1. Prepare the cream milk - filtration and standardization
2. Heat the milk to 50°C
3. Separate cream from fresh milk by using one of two methods:
   a. Gravitational separation: allow the milk to settle. The cream is lighter than the other milk components. It rises to the top, and can be separated.
   b. Centrifugal separation: this requires a simple machine called a centrifuge. The centrifuge can be driven (i.e. rotated) by hand, or by an electric motor.
4. Sterilize the cream at 90°C then cool.
**Butter**

**Directions:**
1. Following the steps of the cream until the separated milk reaches a temperature of 90 – 95°C.

2. Cool down in a cold water bath until temperatures reaches inoculation - 45°C.

3. Inoculate the cream using a stirrer and thermometer.

4. Leave the cream aside for 2 to 3 hours (45°C) covered with a cheese cloth, then cool down until it reaches 8°C.

5. Mix the butter solution either in a jar, mixer, butter churn (manual or automatic), or hand mixer for 5 to 10 minutes until the butter granules reach the size of grains of wheat (texture should be firm but not hard). Make sure that the temperature is kept as low as possible during churning.

6. Shape the butter in whichever form you want (jar, twist in a cloth, tray) and refrigerate.

**Ghee**

Ghee is milk fat free from any water particles. It is usually made after finishing butter, where all water is evaporated.

**Directions:**
1. Finish all steps of producing butter

2. Heat butter on low heat until water has evaporated and temperature of the mix is around 120 – 125°C.

Yoghurt

Directions:
1. Prepare the yoghurt milk – filtration and standardization
2. Heat the milk at a temperature of 90-95 oC for 30-45 minutes.
3. Pour yoghurt milk into clean cups
4. Cool until it reaches inoculation temperature - 45oc
5. Inoculate the milk by whisking the thinned yoghurt into the milk
6. Leave the mixture aside covered with a cheesecloth at 45 oC for 3 to 4 hours.
7. Cool down in the fridge (4-8 oC)
8. Ready for consumption or sale

Dry yoghurt / labnah

Dry yoghurt / labnah is a result of intensifying the flavor and consistency of yoghurt.

Directions:
1. Conduct all the steps in producing yoghurt
2. Pack the yoghurt in a cheese cloth and hang it overnight in room temperature in order to get rid of all the water in the yoghurt milk.
3. After all water has been removed from the labnah, and the labnah has intensified, pack the labnah in the right containers.
4. Ready for consumption or sale
White Cheese

Every 3-4 liters of sheep milk produces around 1 kg of cheese, and same goes for 8 liters of cow milk. As white cheese is one of the fresh cheeses, it must be served cold and should be stored in a refrigerator.

**Directions:**
1. Prepare the cheese milk – filtration and standardization

2. Pasteurize the milk at the right temperature (63-65°C) for 30 minutes

3. Cool in a water bath until temperature reaches

4. As per instructions, prepare the rennet* mixture (1 ml rennet per 4 liters of milk)

5. Add rennet in the cheese milk. The milk will coagulate in 20-30 minutes

6. Gently slice the cheese curds after 60 minutes, then leave to rest for 10 mins, and finally stir for another 10 minutes.

7. Transfer the cheese curds into a rectangular coriander or tray lined with a cheesecloth.

8. Cover the cheese with the cheesecloth and apply pressure on the cheese (weights, heavy plate etc.) for 1 to 6 hours.

9. Cut the cheese into cubes, and sprinkle them with salt and leave for another hour.
Feta Cheese

Salty white cheese produced from goat or sheep milk, where every 4 liters of milk produce 1 kg of cheese. Feta cheese should be stored in a brine solution up to 5-6 months.

Directions:
1. Prepare the cheese milk – filtration and standardization
2. Pasteurize the milk at the right temperature (63-65 °C) for 30 minutes
3. Cool in a water bath until temperature reaches 38 °C
4. Add the rennet to the cheese milk and leave until the curds are ready, this process will be ready in 50 to 60 minutes
5. Cut the curds into cubes with a distance of 2 to 3 cm, and leave for 15 mins. Then stir slowly to separate the cubes
6. Transfer the cheese curds into a rectangular wooden box lined with a cheese cloth. Cover the cheese with the cheese cloth and apply pressure on the cheese (weights, heavy plate etc) and leave in the box for 1 day.
7. Cut the cheese into cubes, and sprinkle them with salt.
8. Place the cheese cubes in brine solution (16%), and cheese is ready for consumption and sale.
3 FOOD SAFETY AND HYGIENE

Clean
Wash kitchen equipment and surfaces with water and dish detergent.

Sanitize
Heat white vinegar in a saucepan until hot, but not boiling. Immediately transfer the solution to a spray bottle and apply to kitchen equipment to sanitize, and then rinse.

Storage
Before storage, make sure all drawers, cupboards and shelving are disinfected with a commercial disinfectant OR with warm vinegar.

3.1 Personal Hygiene

1
2
3
4
5
6
7
8
9
3.2 Pantry Pests

How to get rid of pantry pests?

1. Thoroughly clean cabinets and shelves, especially in cracks and corners (use a vacuum cleaner if available).

2. If you sanitize, make sure that it is cleaned properly and no chemical residues are leftover to avoid contact between chemicals and food. It is best to wipe the surface using vinegar or hot soapy water.

3. To prevent re-infestation, store foods in sealable glass, metal, or heavy plastic containers or in the freezer or refrigerator until you are sure that the infestation is gone.

If you are not sure if some food is infested or are certain that it is, you can put them in the freezer for at least four days or in a baking sheets or pan in an oven at low temperature for at least 30 minutes. These temperatures will kill any eggs or insects. However remember the moths and beetles bodies will remain in the food, so you must sift it out.
3.3 FOOD PROCESSING AT HOME FOR PERSONAL CONSUMPTION OR RESALE

Some requirements that home food processors need to know and abide by:

• No part of the home kitchen may be used for business food preparation – so schedule your time wisely!
• Separate ingredients used for your food business from ingredients for personal use.
• No animals are permitted in the home at any time.

3.4 PORTION CONTROL

Thumb tip = 1 teaspoon
1 tablespoon = 3 teaspoons

1 tennis ball = ½ cup of fruit and vegetables

A fist or cupped hand = 1 cup
Palm = used for meats, fish and chicken.
## Recommended cooked portions for adults and children

<table>
<thead>
<tr>
<th>Product</th>
<th>Portion cooked - Adult</th>
<th>Child 4-10 years</th>
<th>Child 11-18 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice (White, brown, basmati) / Pasta</td>
<td>2-3 tbsp</td>
<td>1-2 tbsp</td>
<td>2-3 tbsp</td>
</tr>
<tr>
<td>Black eye beans / Lentile</td>
<td>4 tbsp</td>
<td>1-2 tbsp</td>
<td>3 tbsp</td>
</tr>
<tr>
<td>Breakfast cereal</td>
<td>6 tbsp</td>
<td>4-5 tbsp</td>
<td>like adult</td>
</tr>
<tr>
<td>Cheese</td>
<td>1 small matchbox size</td>
<td>0.5 small matchbox size</td>
<td>like adult</td>
</tr>
<tr>
<td>Eggs</td>
<td>2 Medium</td>
<td>1 medium</td>
<td>like adult</td>
</tr>
<tr>
<td>Milk</td>
<td>1 medium glass</td>
<td>1 small to medium glass</td>
<td>like adult</td>
</tr>
<tr>
<td>Yoghurt</td>
<td>3 tbsp</td>
<td>2 tbsp</td>
<td>like adult</td>
</tr>
<tr>
<td>Beef / Chicken</td>
<td>2-3 thin slices / 1 palm</td>
<td>1-2 thin slices</td>
<td>like adult</td>
</tr>
<tr>
<td>Fish</td>
<td>1 pc palm sized</td>
<td>1 pc child palm sized</td>
<td>like adult</td>
</tr>
<tr>
<td>Tuna (canned)</td>
<td>1 pc palm sized</td>
<td>1 pc child palm sized</td>
<td>1 pc child palm sized</td>
</tr>
<tr>
<td>Bread</td>
<td>2 slices (medium)</td>
<td>1-2 slices</td>
<td>like adult</td>
</tr>
<tr>
<td>Spinach / Carrots</td>
<td>3 heaped tbsp</td>
<td>1-2 tbsp</td>
<td>like adult</td>
</tr>
<tr>
<td>Tomato</td>
<td>1 medium</td>
<td>1 small medium pc</td>
<td>like adult</td>
</tr>
<tr>
<td>Potatoes</td>
<td>3 egg sized pcs</td>
<td>15 egg sized pc</td>
<td>25 egg sized pc</td>
</tr>
<tr>
<td>Apples</td>
<td>1 apple</td>
<td>1 small apple</td>
<td>1 medium apple</td>
</tr>
</tbody>
</table>
Vegetables and legumes

Most adults should eat at least 5 serves from the vegetable groups per day.
One serve is equivalent to:

- **½ cup** cooked green or orange vegetables (for example, broccoli, spinach, carrots, pumpkin)
- **½ cup** cooked dried or canned beans, peas or lentils
- **1 cup** green leafy or raw salad vegetables
- **½ medium** potato or other starchy vegetables (sweet potato, taro or cassava)
- **½ cup** sweet corn
- **1 medium** tomato
**Fruit**

Adding different fruits to your daily diet enhances your health. By the age of nine, 2 serves of fruit per day are recommended. One serve is equivalent to:

- **1 medium**
  - apple, banana, orange or pear

- **2 small**
  - apricots, kiwi fruits or plums

Or only occasionally:

- **125ml (½ cup)**
  - fruit juice (no added sugar)

- **30g**
  - dried fruit (for example, 4 dried apricot halves, 1 and a half tablespoons of sultanas)

Eating dried fruit regularly is not recommended as it is high in calories, can stick to the teeth and increases the risk of dental decay.

**Grains**

Adding different fruits to your daily diet enhances your health. By the age of nine, 2 serves of fruit per day are recommended. One serve is equivalent to:

- **1 slice (40g)**
  - bread

- **½ medium (40g)**
  - roll or flat bread

- **½ cup (75-120g)**
  - cooked rice, pasta, noodles, semolina

- **2/3 cup (30g)**
  - wheat cereal flakes
Protein

It is recommended that 1 to 3 serves of protein from the different sub-groups are consumed daily. During pregnancy, 3 to 4 serves are recommended. However, variety is the key! One serve is equivalent to:

- **65g** cooked lean red meats such as beef, lamb, veal, pork, goat or kangaroo (about 90-100g raw)
- **80g** cooked lean poultry such as chicken or turkey (100g raw)
- **100g** cooked fish fillet (about 115g raw) or one small can fish
- **2 large (120g)** eggs
- **1 cup (150g)** cooked or canned legumes/beans such as lentils, chick peas or split peas
- **170g** tofu
- **30g** nuts, seeds, peanut or almond butter or tahini or other-nut or seed paste

Dairy

Most people need at least 2 to 3 serves a day, where women over 51 years need 4 serves a day as their calcium requirements are high. One serve is equivalent to:

- **1 cup (250ml)** fresh, UHT long life, reconstituted powered milk or buttermilk
- **½ cup (120ml)** evaporated milk
- **2 slices (40g)** or 4 x 3 x2cm cube (40g) of hard cheese, such as cheddar
- **½ cup (120ml)** ricotta cheese
- **3/4 cup (200g)** yoghurt
The perfect meal should consist of ingredients from the five food groups.

Make most of your meal **vegetables and fruits** – HALF of your plate

Go for whole grains – QUARTER of your plate

Protein power – QUARTER of your plate

Healthy plant oils (in moderation): choose **healthy vegetable oils** like olive, canola, corn, sunflower, peanut, and others.

Drink water - skip **sugary drinks**, limit milk and dairy products to one to two servings per day, and limit juice to a small glass per day.
Salt

Most of us eat more salt than we should, even without realizing it. It is not only the salt that we add to our cooking, but also the salt that is already in the food that we buy.

Recommended maximum daily amounts of salt for adults and children

<table>
<thead>
<tr>
<th>Age</th>
<th>Maximum daily intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 - 6 years</td>
<td>0.25 tsp (3gm)</td>
</tr>
<tr>
<td>7 - 10 years</td>
<td>0.75 tsp (5gm)</td>
</tr>
<tr>
<td>11+ years</td>
<td>1 tsp (6gm)</td>
</tr>
</tbody>
</table>

Sugar

Kids are having nearly three times more sugar than they should. They are getting a lot of their sugar from fizzy drinks, juice, cakes, pastries, biscuits, yoghurts, sweets, chocolate and ice cream.

Recommended maximum daily amounts of sugar for adults and children

<table>
<thead>
<tr>
<th>Age</th>
<th>Maximum daily Intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 - 6 years</td>
<td>3.75 tsp (19gm)</td>
</tr>
<tr>
<td>7 - 10 years</td>
<td>4.5 tsp (26gm)</td>
</tr>
<tr>
<td>11+ years</td>
<td>5.25 tsp (30gm)</td>
</tr>
</tbody>
</table>

Saturated fats

We get a lot of our saturated fat from butter, cheese, cakes, pastries, chocolate, biscuits, sausages, pizza. Having unsaturated fat instead of saturated fat can help lower blood cholesterol to protect your heart. Foods like fish, nuts and seeds are rich in unsaturated fat.

Recommended maximum daily amounts ofunsaturated fats for adults and children

<table>
<thead>
<tr>
<th>Age</th>
<th>Maximum daily intake</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 - 6 years</td>
<td>3.5 tsp (18gm)</td>
</tr>
<tr>
<td>7 - 10 years</td>
<td>4.5 tsp (22gm)</td>
</tr>
<tr>
<td>11+ years</td>
<td>5.5 tsp (28gm)</td>
</tr>
</tbody>
</table>
Key biosecurity measures

- Reduce where possible the movements of people, vehicles or equipment into areas where farm animals are kept.
- Where people come in direct contact with farm animals, cleanse and disinfect protective clothing, footwear, equipment, vehicles before and after contact.
- To avoid disease in a poultry flock, provide clean drinking water and food, preferably indoors or in a chicken coop to prevent contamination by wild birds and other animals.
- Isolate new birds, and thoroughly cleaning and disinfecting housing at the end of a cycle.
References

Ghamrawy, M. 2019. *Say no to food waste! A guide to reduce household food waste*. Cairo, FAO.