



Safe and Nutritious Food

A Shared Responsibility

www.snfportal.in

THE YELLOW BOOK



LEVEL I

Grades 1-5

YOUR GUIDE TO
SAFE AND NUTRITIOUS FOOD
@SCHOOL





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Preface

If ever there was a time to take charge of our food choices and habits, it is now. With our fast changing lifestyles, India faces a silent epidemic of childhood obesity coupled with under nutrition and micronutrient deficiencies. Each one of us, be it parents, teachers or children, has a right and responsibility to make informed choices towards safe and nutritious food (SNF). **‘The Yellow Book’** of the Food Safety and Standards Authority of India (FSSAI) can serve as a guide to make informed choices for a better health.

The Yellow Book Level 1 aims at inculcating wholesome food habits at a younger age, as habits formed in our early years stay with us for life. The book would aid the School Health and Wellness Teams in introducing concepts pertaining to safe and nutritious food in a way which is easy to understand and put into routine practice by children. The content is divided into age appropriate modules. The activities and guidelines have been designed to encourage adoption of safe and nutritious food practices at schools. The book is a resource-pool of facts, information and concepts, along with a diverse range of supportive material and tools.

The SNF program mascots, 'Master Sehat' and 'Miss Sehat', are the superheroes and 'health champs' to carry the messages forward. They come with a 'School Crew', additional characters who provide an interactive means of bringing the central themes into focus.

A team of food technologists and nutritionists has brought the key information together from various premier institutions in the country and is being carefully reviewed by the experts. The FSSAI would welcome any suggestions and feedback on this publication so that **‘The Yellow Book’** becomes a trusted companion and a part of the School Curriculum in the Country.

Let's join hands in building a Healthy and Happy India.

Pawan Agarwal
CEO, FSSAI

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About the YELLOW BOOK

With the belief that habits formed in our early years stay with us for life, ‘**The Yellow Book**’ aims at inculcating healthy food habits at a young age. The book is an authentic technical resource, easy to understand, written and designed in an interactive, illustrative way to address the issues around food safety and nutrition. The ‘Yellow Book’ is authored by academicians, practitioners and domain experts

The series has two levels: **Level 1** (5 Modules) is crafted for students of primary classes. It presents basic concepts in food safety and nutrition with more emphasis on activities to encourage ‘learning by doing’. **Level 2** (7 Modules) is an advanced version of Level 1, delving into details of concepts already learnt and introducing contemporary issues around food safety and nutrition.

‘SNF Alerts’ help to identify the actions/activities which can be deleterious to health and thus should be avoided; ‘Did You Know’ presents facts, figures or undocumented lingo as extra information about the topic; and “Fun Times” are either classroom-based or outdoor activities to reinforce the concept in an enjoyable way. Each module culminates via a section ‘Now you Know!’ to assist teachers to recapitulate important concepts with students. There is a section on ‘Tools and Trackers’ to help children gauge their own eating habits.

The five modules in Level 1 include:

Module 1- I Stay Clean, Master and Miss Sehat and their crew highlight the importance of personal hygiene. They urge the children to inculcate good habits to prevent spread of diseases through microorganisms present in and on our bodies.

Module 2- I Eat Safe and Clean Food deals with the need for food safety, factors affecting their growth and spread and ways to control the spread of disease-causing microorganisms. Food-borne illnesses are also explained in this module.

Module 3- I Stay Nourished is an introduction to nutrition basics, micro and macronutrients and energy value of different foods.

Module 4- I Plan My Meals reiterates the importance of consuming a balanced diet. The healthy eating plate concept is well explained through stories and fun time activities.

Tools and Trackers: Parents and teachers need to assist the students of classes 1 and 2 while students in classes 3, 4 and 5 can easily take up these tested habit-forming tools as self evaluation exercises.

The books supplement the curriculum of Primary and Middle School. The school authorities are encouraged to include ‘The Yellow Book’ as part of their curriculum to reinforce the issues concerning food safety and nutrition in an interactive way. It can be used independently as a guide, an activity book or in conjunction with the learning aids provided as part of a comprehensive toolkit in the form of Training manual, Power Point presentations, activities, posters and handouts.

ROLE OF SCHOOLS

In this context, schools will play a vital role in ensuring the information reaches every household through the children. The teacher is their role model and children have a lot of faith in what is taught in school and what their teachers have to say and do. Schools need to set examples by taking measures to ensure that food hygiene, personal hygiene and environmental hygiene i.e. hygiene of the classrooms and surroundings is maintained. Food served in schools must be healthy and palatable.

Physical activity plays an important role in the overall growth and development of the child and this should not be neglected. Children will speak about the cleanliness, care and good food habits taught in school to their parents and this message in turn will percolate to the community.

Two sets of **Tools and Trackers** for assessment are provided at the end of the book. Encourage children to use them to assess their eating habits before and after using the book.

Panel of Experts and Contributors

Technical Experts and Contributors

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Information provided in this book is for educational purposes only. Please consult a medical professional for specific health and nutritional advice.

Team Sehat

Hi!

**Did you ever think
food and health could be fun?**

Let Team Sehat show you how. They will teach you a fun way of safe and healthy eating. Let's play games and do lots of enjoyable activities that will give us tips on health and nutrition.

Master and Miss Sehat are keen to become partners on a journey into a world of safe and nutritious food, so that, you can enjoy your life to the fullest !

Turn the pages and let the fun with food, nutrition and hygiene begin.



Miss
Sehat



Master
Sehat



Rohan

Dr. Sara

Riya

I Stay Clean

FOOD SAFETY AND STANDARDS
AUTHORITY OF INDIAInspiring Trust, Assuring Safe & Nutritious Food
Ministry of Health and Family Welfare, Government of India

1	I Stay Clean	1
2	I Eat Safe and Clean Food	11
3	I Stay Nourished!	23
4	Why Should I Eat Healthy?	39
5	I Plan My Meals	51
6	Tools and Trackers – Assessment Set 1 and 2	63



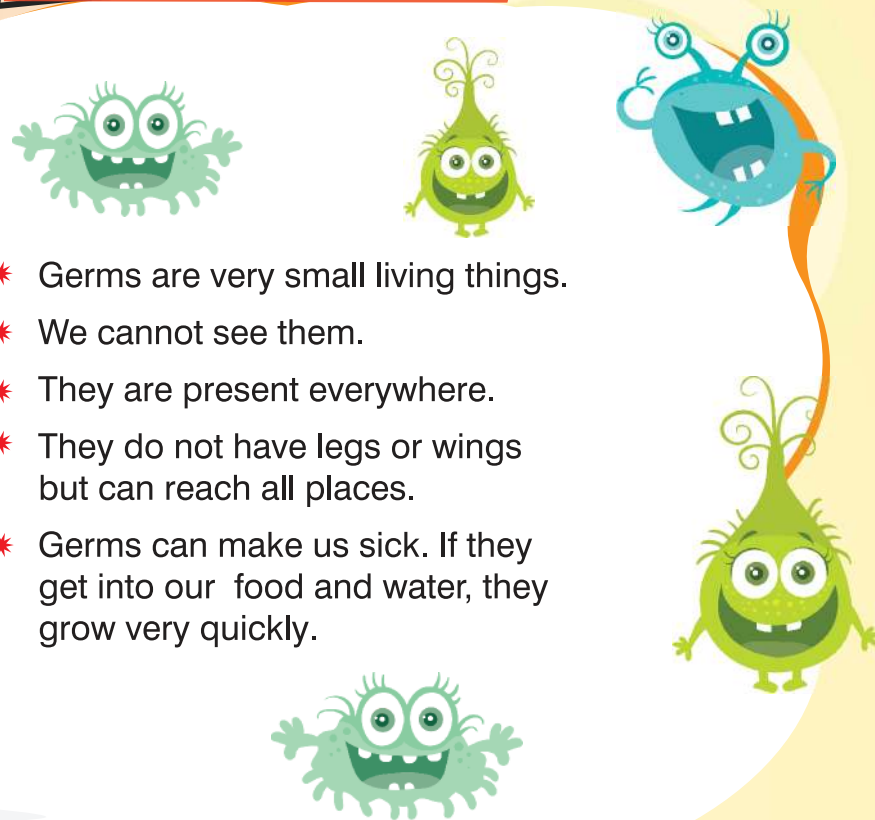
- Invisible Germs
- How Do Germs Spread?
- I Do These Everyday

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FUNDA

Invisible Germs



- * Germs are very small living things.
- * We cannot see them.
- * They are present everywhere.
- * They do not have legs or wings but can reach all places.
- * Germs can make us sick. If they get into our food and water, they grow very quickly.



Do You Know?

There are over millions of germs hiding between our finger tips and elbow. Personal hygiene is much more than just keeping our hands clean. It also means keeping our whole body clean so that we do not spread germs to others around us.



How Do Germs Spread?

The 5 Fs responsible for the spread of diseases



FOOD: Water and food get contaminated by improper handling.

FINGERS: Unwashed hands and dirty fingernails contain germs that cause diseases.



FAECES: Food contaminated by sewage or dirty water carry disease-causing germs. Not washing hands with soap and water after using the toilet!

FOMITES: Touching objects that carry germs such as unclean utensils, door knobs, taps, towels and others.



FLIES and PESTS: Houseflies, cockroaches, rats carry germs that spread diseases.



Understanding How Germs Spread

Fun Time 1

Glittery Germs

Let me show you!



Glittery Germs

All you need is some glitter or sawdust and some cream or a drop of oil. Rub the cream or oil on your hands. Now sprinkle some glitter on your hands. You will see how the glitter or the 'pretend germs' travel from your hands to any object you touch. This is how germs spread all over but you cannot see them.



Germs in the Air

A single cough may contain as many as 1 million (10,00,000) germs.

Remember to cough in your elbow to avoid coughing onto somebody if you do not have a tissue or handkerchief handy.

Fun Time 3

Germs in the Air

Throw some talcum powder in the air. Observe how long the talcum powder hangs in the air and how long it takes to settle down.

This is how germs spread when a person coughs. We inhale the same air and can get infected!

Wash Your Hands Like This

We need to wash away germs hiding on our hands with soap and water



1 Wash your palms.



2 Scrub each finger and between fingers.



3 Rub back of hands and between fingers.



4 Rub the base of the thumbs.



5 Back of fingers.



6 Scrub your finger tips.



7 Wash your wrist.



8 Dry hands with a clean towel or tissue.

It takes just 20 seconds to wash your hands clean (sing 'HAPPY BIRTHDAY' song twice).

Aaaachoooo! The Germs

You will learn how germs can spread everywhere when you cough or sneeze. When you sneeze, the germs are spread through droplets and can travel upto six feet to another person.

Remember to cover your mouth and nose when you sneeze or cough. Sneeze into a tissue or a handkerchief to avoid the spread of germs.

Fun Time 2

Germs in Spray

Look at a spray bottle! When you squirt it, all the coloured water droplets spread in the air. Similarly, germs travel upto six feet when you sneeze.



Brushing Teeth



Dental caries (cavities) are small holes in the teeth caused by germs. We need to protect our teeth from germs because they cause:

- 1 discomfort and pain.
- 2 infection and pus formation.
- 3 loss of tooth.
- 4 bad breath.

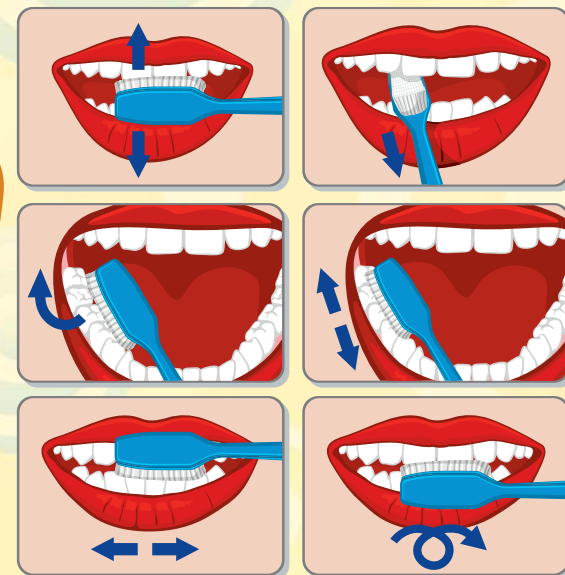


Do You Brush Like This?



SNF ALERT

Spaces in between the teeth should be brushed properly to remove any food that may be stuck.



Team Sehat's Fact File



SNF FUNDA

- Cover your mouth and nose while sneezing and coughing.
- Keep food and drinks covered.
- Wash your hands with soap and water after using the toilet
- Wash your hands with soap and water before and after meals.

My Germi-check Score Card

Tick 'Y' or 'N'

- I bathe everyday in winter and summer.
- I take a bath even when I have a cold.
- I brush my teeth in the morning and after dinner.
- I clean my tongue with a tongue cleaner.
- I rinse my mouth after eating.
- I wash my hands with soap and water.
- I wear clean clothes.
- I polish my shoes everyday.
- I wash my hair regularly and comb my hair daily.
- I clean my nose daily while bathing and do not pick my nose.
- I clip my nails regularly and keep them dirt free.

Y	N
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐
☐	☐

Fun Time 4

Germi-check score



I Do These Everyday



I wash my hands properly after using the toilet.

I brush my teeth in the morning and after dinner.
I rinse my mouth after eating.



I take a bath everyday.

I clean and clip my nails regularly.



I wear clean clothes and clean shoes.

I wash, comb and tie my hair neatly.



NOTE for TEACHER

The Hygiene Superstars!

Make a chart with names of your students. Mark a rising sun against their names on a weekly basis whenever you find that there is a noticeable positive change in their habits. Mark them finally as Superstars.



Now You Know

Germs are invisible.

Germs can make us fall sick.

We can fight germs by keeping ourselves clean.



“My Learning Library”



Identify 10 students from the class to create a skit on 'Germs make me sick!'.



Teacher or parents can conduct a live demo on hand-washing techniques using soap and water.

Ask children to turn off the tap while they are soaping their hands.

Module

2

I Eat Safe and Clean Food

- Fungu and Gergy
- How Do Germs Grow?
- Keep Your Food Safe!
- Food-borne Illnesses



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Fungu and Germy

Fungu and Germy are friends. They will take you on their germy journey .

GERMY: Aarav, Bina and Tarun are friends. One morning, when they were playing, Bina sneezed and Fungu, my germ friend came flying out of her nose. He was so happy to see me. We both decided to live together on Aarav's hands.



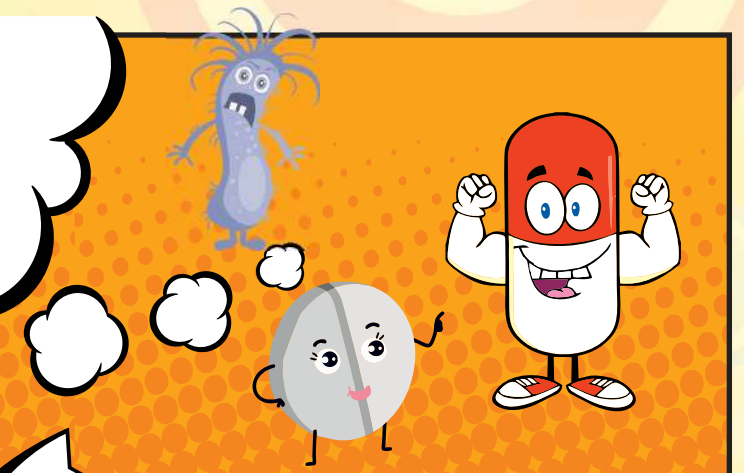
GERMY: At school, Aarav opened his lunch box. He did not wash his hands. He picked up his food and popped it into his mouth and he stuffed us too!



GERMY: The next day, Aarav woke up with a sore throat because we both were now inside him. He was not allowed to go to school as he was down with a terrible cough and fever. His mother had to give him medicines.



FUNGU: I dislike medicines! These medicines have soldiers who attack Germy and me. We were very weak after their attack. Aarav felt better. Germy lost the battle and died, but I escaped.



FUNGU: I waited for Aarav to use the hand towel. I quickly jumped onto the towel and stayed there.



FUNGU: Next day, Aarav's friend, Tarun came to visit him. Aarav's mother gave Tarun a chocolate. Tarun ate it, washed his hands and wiped them with the hand towel. I quickly climbed onto his hand from the towel. Now I sit here, on Tarun's hands, looking for a new germy friend.



How Do Germs Grow?

Like us, germs and fungi also need certain conditions for their growth and multiplication. These are their basic growth requirements.

FOOD – Germs grow rapidly in protein-rich foods such as milk, meat and poultry. They also grow in uncovered food.



MOISTURE – Moisture helps germs grow.



TEMPERATURE – Germs grow fast when the temperature is between 5°C and 63°C.



TIME – Germs and fungi need time to grow to numbers large enough to spoil our food.



What Makes Food Unsafe?

Overripe fruits and vegetables.



Food has passed its date of expiry.



Flies and pests spoil food.



Fungus grows on moist food.



When non-permitted colours and dyes are used.



How to Prevent Growth of Germs?

We must follow these rules to keep germs away.



Before eating, wash hands with soap and water. Dry your hands using a clean towel.



Drink clean water.

Eat food in a clean plate and bowl. Finish your lunch soon after opening your lunch box.



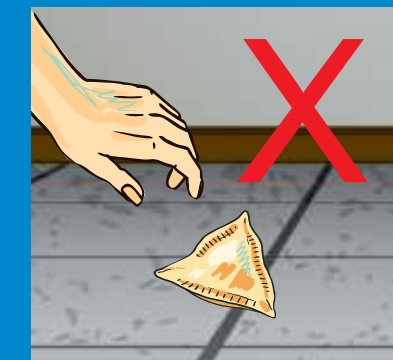
Keep food and water covered.



Do not eat food that has flies on it.



If food falls on the ground, do not eat it.



Wash fruits and vegetables well before eating them.



Keep Your Food Safe

Keep food safe from microorganisms that spoil it. Following food safety practices protects us from microorganisms that enter into our body through food. Children need to be more careful as they have a higher risk of getting infected.

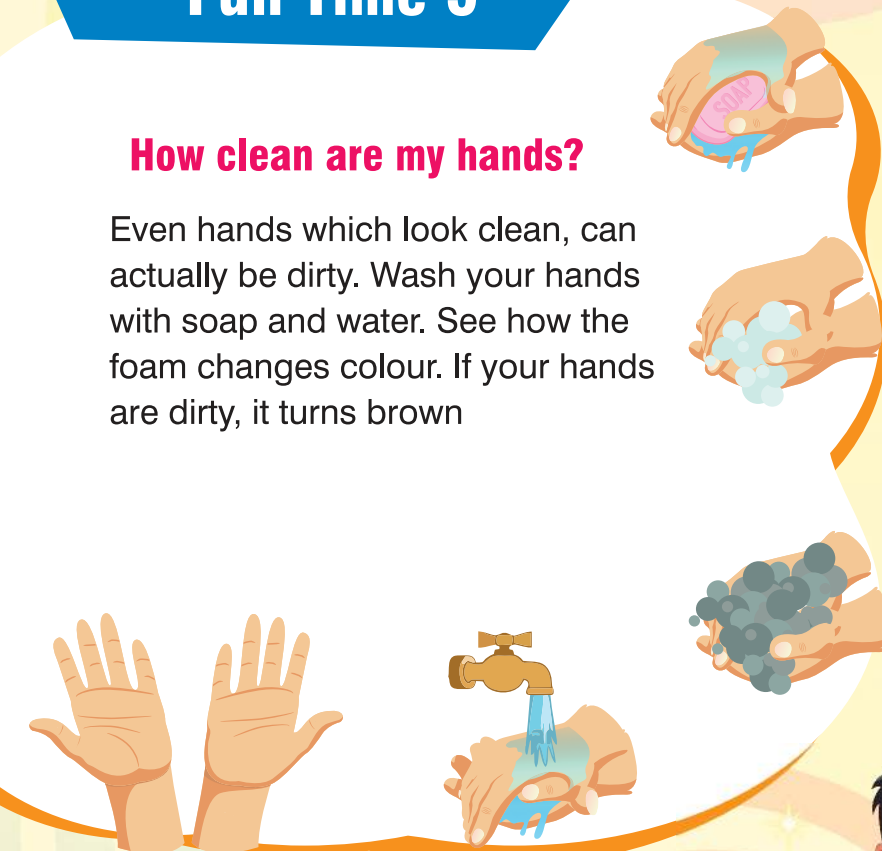


Keep Clean

Fun Time 5

How clean are my hands?

Even hands which look clean, can actually be dirty. Wash your hands with soap and water. See how the foam changes colour. If your hands are dirty, it turns brown



SNF FUNDA



Do you know children can easily catch common infections such as cold, cough, flu and diarrhoea caused by germs? Unhealthy children lose their appetite and stop eating. Overall growth and development of the child gets affected.



NOTE for TEACHER

Explain how germs spread through this activity **Everything You Touch**: Get children to use smiley stickers or *bindis* and stick these (little germs) onto everything they touch for the next 20 minutes. Then ask them to look around the classroom to understand how germs spread.



NOW YOU KNOW

What are microorganisms?

5 F's through which germs spread.

Factors that are needed for their growth and multiplication.



Safe Food Selection

Fun Time 6

Safe Food vs. Unsafe Food

Circle the foods that you will not eat.



How To Store Food?

Fun Time 7

Grocery Bag

Store food in the right place.



Store eggs, milk, fresh vegetables and fruits in the refrigerator.

Store poultry, fish and meat in the freezer.

Illnesses caused by contaminated food

Food-poisoning

Food-poisoning is caused when we consume food that contains microorganisms such as bacteria and fungi. The bacteria and fungi multiply in large numbers and cause vomiting, stomach ache, diarrhoea and fever.



Food allergy

An allergy is defined as a reaction of an individual to a specific ingredient in food. Some people show abnormal sensitivity to certain foods which are otherwise harmless to most people. Substances which cause allergies are called allergens.

Foods that commonly cause allergies



- Nuts – peanuts and all types of tree nuts such as walnuts, pistachios, cashews, almonds, chilgoze



- Eggs



- Fish and sea foods



- Milk and milk products



- Sesame seeds, mustard and celery



- Wheat products



- Soya and its products such as tofu, bean, curd, soya milk, soya *chaap*/chunks

Some people are also allergic to

- chillies • tomatoes • brinjals • mushrooms • barley • oats



SNF Alert!

Watch out for symptoms of food allergy.

- Redness of skin
- Swelling of throat and mouth
- Severe breathing problems
- Sudden feeling of weakness
- Fall in blood pressure
- Rashes on the body
- Difficulty in swallowing and speaking
- Stomach ache, nausea and vomiting

Now You Know

• The importance of food safety to preserve food quality. •

• Storing food at the right temperature keeps the food safe from spoiling. •

• Some children are allergic to common foods we eat everyday such as eggs, milk, wheat, peanuts, other nuts, soya beans, fish and shellfish. These foods cause severe reactions when eaten and should be avoided. •

• Foods spoil naturally or when germs enter food. Food can also spoil due to any physical damage or by chemical reactions. •

• Just like personal hygiene is important for good health, our surroundings also need to be neat and clean. •



Friends of Team Sehat have something to share about food allergies.

I am allergic to nuts.
My friends and
classmates do not
give me food that
contains peanuts.



I can't have cow's milk,
so I have soy-milk.



If I have seafood, my
body gets swollen
and I am not able to
breathe properly.



I am allergic to eggs,
I avoid eating foods that
contain eggs.



I am allergic to wheat and foods made out of
wheat products such as cakes and breads. I can
eat rice, corn and oats.



My Learning Library



Video : Food Poisoning Signs and
Symptoms

Watch the link:
[https://www.youtube.com/
watch?v=UkV2dxdGXo8](https://www.youtube.com/watch?v=UkV2dxdGXo8)

Module

3

I Stay Nourished!



- Why Do I Need Food?
- Rohan's Day Out
- Go, Grow, Glow Foods



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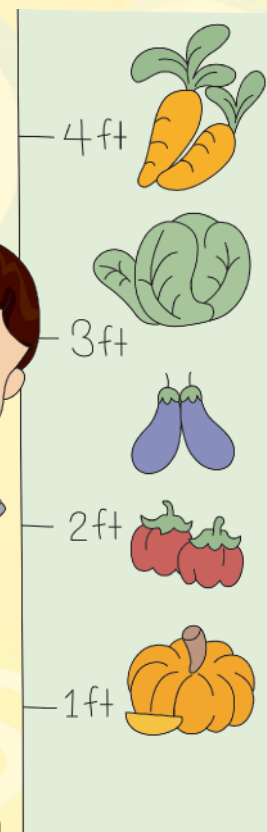
Why Do I Need Food?

Food gives me energy to work and play.



Food helps me fight illness and infections.

Food helps me grow tall and strong.



Introduction to Nutrition

Play outdoors regularly and be physically active



Adapted from NIN pyramid

FOOD COMES FROM PLANTS AND ANIMALS

We get foods such as wheat, rice, pulses and nuts from plants.

We get foods such as milk, meat, eggs, chicken and fish from animals.



Rohan's Day Out

During his vacation, Rohan decided to visit his grandmother in his village. He was very excited, as he could go to fields and see many new things.



Rohan's grandmother always prepared mouth-watering dishes for him.

One day, as they were eating lunch, Rohan asked, 'Grandma, how do you make rotis and from where do you get this powder?'

Rohan's grandmother smiled and replied 'Rohan, let me take you to the farm once you finish your lunch.'



Once they reached the farm, Grandmother said, 'Rohan, these are fields of wheat. Can you see the grains on the stalks? These tiny grains of wheat are ground in a mill. I use the flour to make chapati. Do you know we can also make cakes, pooris, parathas and other food items out of this flour?'



Rohan replied, 'Grandma, are there more farms like this?'

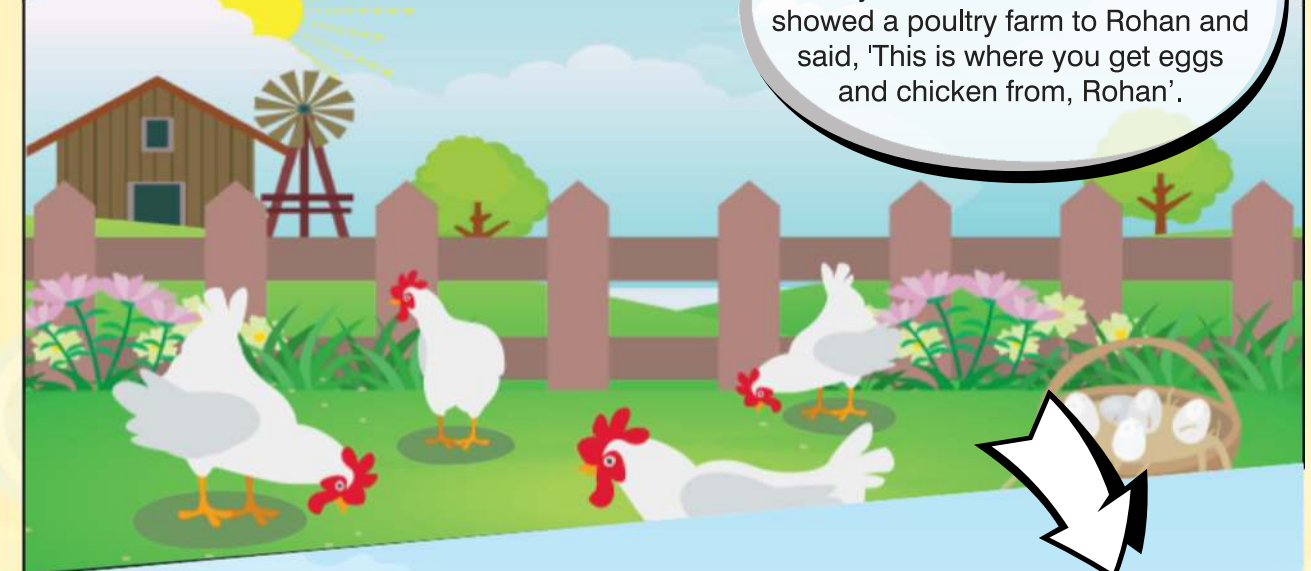
Grandmother replied, 'Yes, my dear Rohan, I will take you to a vegetable farm.'

Grandma took Rohan to the farm and asked, 'Can you spot red juicy tomatoes?' She plucked a few tomatoes and showed them to Rohan.

Grandmother dug out a few carrots and potatoes. They thanked the farmer for allowing them to take the vegetables.



As they headed home, Grandmother showed a poultry farm to Rohan and said, 'This is where you get eggs and chicken from, Rohan'.



Rohan asked, 'What about milk?'

Grandma smiled and said, 'Rohan, the milk you drink, the milk in the ice creams and milkshakes comes from cows and buffaloes.'

Rohan was happy to learn about the different sources of food. He said, 'Thank you, Grandma'.

Where Does Food Come From ?

Match the food with its source.

FUN TIME 8



popcorn



bread



milk



egg



juice



SNF Funda



A balanced diet is one that contains food from all the food groups in the right quantities.

Can you see the food groups on my Shield? We get energy and strength from grains and proteins, fruit and vegetables along with dairy products. The super powers in these foods protect us from infections, keep us healthy and make us strong .



NOW YOU KNOW

☛ We get food from plants and animals. ☛

☛ A balanced diet has all the 3 food groups. ☛

☛ Food helps us to Go, Grow and Glow. ☛

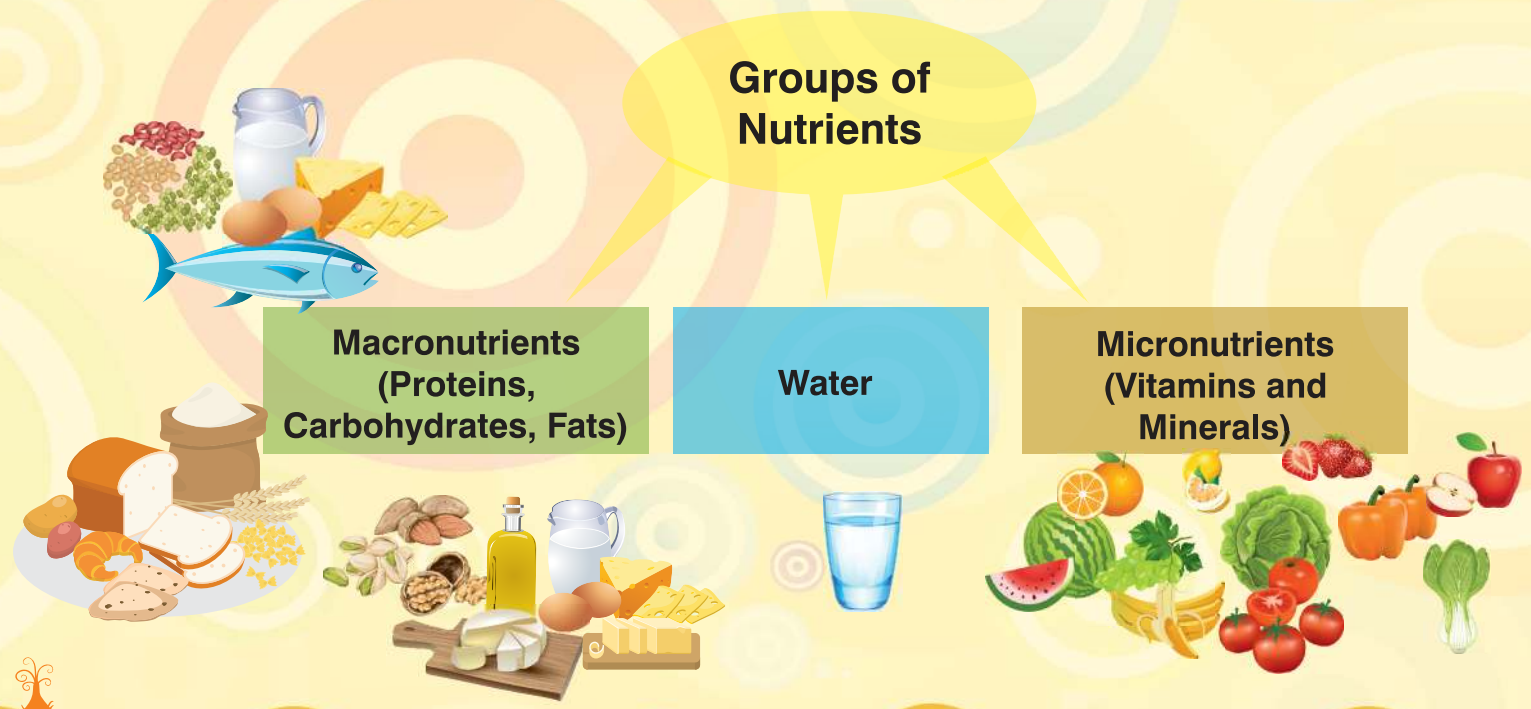
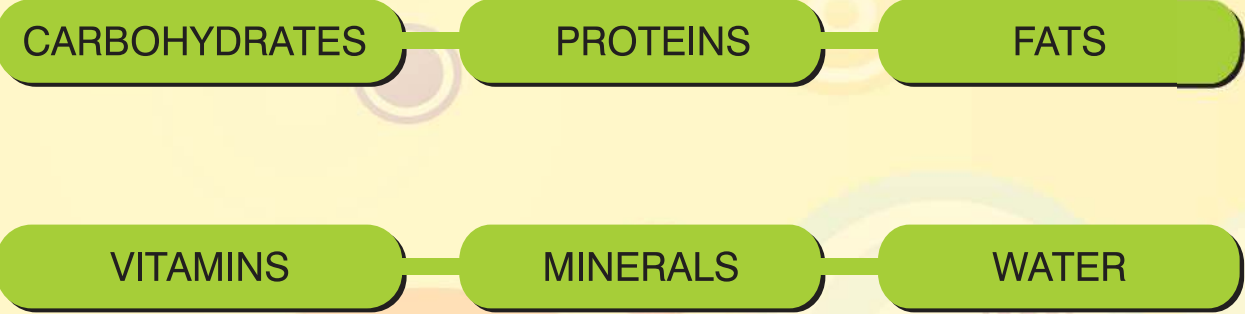


“NUTRIENT GROUPS”

Nutrients are chemical substances obtained from the food we eat and are used by our body for growth, maintenance, repair and protection from infections.



There are 6 basic nutrients required to Go, Grow and Glow.



Go, Grow, Glow Foods

Carbohydrates–Go Foods

Go foods give us energy to run, walk, hop, skip and jump.

The main nutrients in the Go food group are carbohydrates and fats.

Carbohydrate-rich foods: Chapati, poori, idli, rice, maize, potatoes, bread.

Fats: Cooking oil, butter and ghee.



Proteins–Grow Foods

Grow foods are body-building foods.

The main nutrient in this group is protein.

Protein-rich foods: Meat, fish, poultry, eggs, milk and milk products such as curd and cheese.

Pulses, sprouts, beans and nuts such as almonds and walnuts are also rich in proteins.



Vitamins and Minerals–Glow foods

Glow foods are for good health and well-being. They provide good eyesight, healthy skin and the ability to fight infections.

Vitamin and mineral-rich foods: Fruits and vegetables (green leafy, red, orange, yellow) are rich in vitamins and minerals.



SNF Funda

We should eat GO, GROW AND GLOW foods to stay healthy and super strong!



Water

Did you know that water is also a nutrient?

Water is essential for all body functions

- Water is required to transport nutrients throughout the body.
- Water helps in regulating the body temperature, digestion, absorption, transportation, dissolving nutrients and elimination of waste products.

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FUNDA



Remember to drink water. Our body needs water to keep us healthy. Drink at least 5 to 6 glasses of water everyday. You should drink more water on a hot summer day.

WATER

Did You Know?

Humans can survive for a few weeks without food, but they cannot go without water for more than two to three days.

Circle Time

FUN TIME 9

Ask students to discuss what they eat for breakfast.

Did you eat a healthy breakfast today?



GOOD

My Nutri-baskets



Fun Time 10

Collect food wrappers, packets and pictures of foods. Write their names in the Go, Grow and Glow baskets.



SNF Funda



Rainbow on your plate!
Eat fruits and vegetables of all colours.



Fun Time 11

Can you draw lines to match the colours of fruits and vegetables with the colours of the chart paper.



Nutrient Quiz

Fun Time 12

Fill in the blanks. Choose the words from the box.

vitamins, fats, minerals, protein, water, carbohydrates

1. Rice and chapati are rich in _____.
2. Green leafy vegetables are good sources of _____ and _____.
3. Ghee and butter are examples of _____.
4. _____ helps in regulating body temperature.
5. The main nutrient in body-building foods is _____.



NOW YOU KNOW

☛ The importance of food and the nutrients present in them. ☛

☛ Macronutrients are carbohydrates, fats, proteins and water. They are required by the body in large amounts. ☛

☛ Micronutrients are vitamins and minerals. They are required in relatively smaller amounts by the body. ☛

My Learning Library

You can also organise a 'Food Rainbow Day'. Ask students to bring vegetables or fruits of different colours in their lunch boxes.



Request a vegetable vendor to visit your school. Ask students to observe the different vegetables.



NOTE for TEACHER

Ask the child to fill the 'My Fruit Tracker' and 'My Veggie Tracker'. This will encourage the child to eat a variety of colourful fruits and vegetables.



Module

4

Why Should I Eat Healthy?

- You Are What You Eat!
- Nutritional Deficiencies



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You Are What You Eat!



UNDERWEIGHT

If you eat less than what your body needs, you will not grow strong or be healthy.



NORMAL

When you eat as much as you need, and exercise, your weight is normal and you are strong and healthy.



OVERWEIGHT

When you eat more than you need and don't exercise, you become overweight and unfit.

Mirror, Mirror on the Wall

Fun Time 13

When I stand in front of the mirror, I see....

Eyes bright and shiny.

Smooth skin with a healthy glow.

Lips soft and moist.

Healthy pink gums and teeth.

Straight legs.



What is Nutritional Deficiency?



When your body does not get enough of one or more nutrients, a deficiency occurs.



- When you do not eat healthy food, you can fall ill or show signs of poor health.
- This is because the nutrients present in the food are not absorbed well by the body and your growth and development is affected.

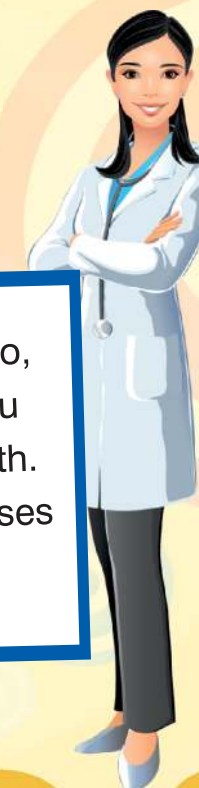


Do you look like any of them?
These are signs of not eating a healthy diet.



No Go, No Grow, No Glow!

When you eat less of Go, Grow, Glow foods, you lack energy and strength. The ability to fight diseases goes down.



When You Eat Less of Carbohydrates



Eating less of carbohydrates reduces the energy levels in the body. You will feel tired soon. You will not be energetic at all.

Deficiency of fibre causes constipation

When You Eat Less of Protein

- You lose weight
- You feel tired
- You are prone to infection
- Wounds take longer to heal
- Muscles become weak
- Hair and nails become brittle



Protein is needed to maintain and repair the body



WHEN YOU EAT LESS OF FATS



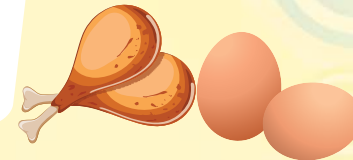
- Skin becomes rough and dry, growth is poor and the body weight is low.
- Fat deficiency can lead to deficiency of other vitamins such as A, D, E and K. These vitamins are soluble in fats.

Iron Deficiency



Did You Know?

Our body needs **iron** to make blood that keeps us healthy and strong!



Iodine Deficiency

Iodine deficiency results in poor physical and mental growth

Symptoms of iodine deficiency

- Goitre or swelling in the neck.
- Flabby muscles.
- Dry skin.
- Less intelligent
- In case of severe iodine deficiency, stunted growth and mental retardation occurs.



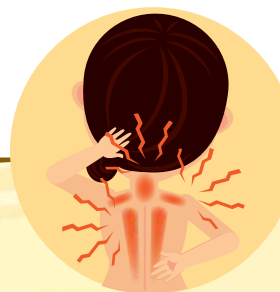
Vitamin A Deficiency

Results in lower immunity. Immunity is the ability to resist infection by the action of antibodies or white blood cells present in the blood.



Symptoms

- Eyes become dull and weak
- Eyeballs dry and lusterless
- Eyes sensitive to bright light
- Night blindness
- Skin becomes dry and pale
- Skin rough, dry and scaly
- Stunted bones and growth



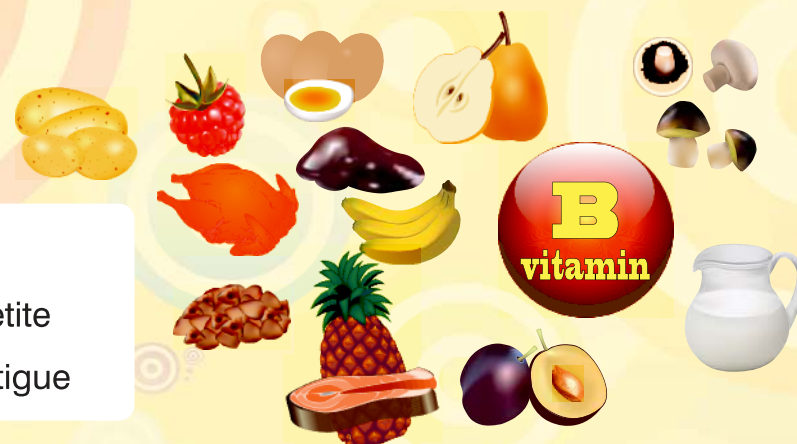
Vitamin B Group Deficiency

- Vitamin B1 or Thiamin
- Vitamin B2 or Riboflavin
- Vitamin B3 or Niacin
- Folic acid or Folate B9
- Vitamin B12 or Cobalamin

Vitamin B is a family of water soluble vitamins!

Symptoms

- General apathy
- Irritability
- Depression
- Loss of appetite
- Indigestion
- Tiredness/fatigue



Vitamin C Deficiency

Symptoms

- Bleeding gums
- Frequent cold and fever
- Low resistance to infection
- Easy bruising
- Slow healing of wounds



Vitamin D and Calcium Deficiency

If legs are not straight, it indicates that bones are not strong.

Weak bones can bend and even break.

Vitamin D and calcium are needed to make the bones and teeth strong.



Straight



Bow legs



Knock knees

Drink fortified milk everyday to keep bones healthy and strong.





Food Funda

Minerals are as important as vitamins.
A diet insufficient in minerals can lead to deficiencies.



Look for +F logo on food items like wheat flour, rice, oil, milk and salt for a healthy you.



Did You Know?

The main source of sodium is salt!

Always use iodised salt in cooking.



You can even opt for double fortified salt, which has both iron and iodine.

Water Deficiency

The word for water deficiency is **DEHYDRATION!**

Mild to severe dehydration leads to

- Dry mouth and sunken eyes. Skin when pinched remains elevated.
- Restlessness
- Irritability
- Lethargy
- Unconsciousness in extreme cases



EXTREME THIRST



DRY MOUTH



LESS FREQUENT URINATION



HEADACHE

Fun Time 14

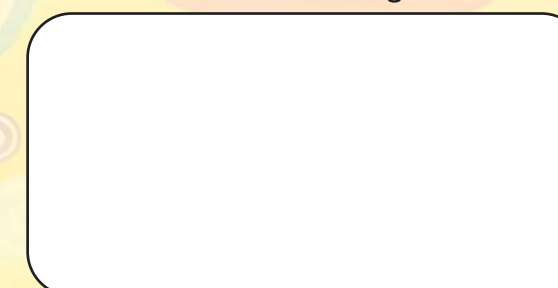
THE GREAT GRAINS

Fill in the blanks with words from the box.

rice, dalia, energy, bread, starch, chapati

Grains are great because they give us lots of _____ to run and play. Grains have _____ which our body turns into the energy we need. There are lots of grains to choose from. We can eat _____, _____, _____, or _____. Grains are great!

Draw and label your favourite food made out of grains.



Help Bunny Find the Carrots

Carrots are rich in Vitamin A which is good for eyes.

Fun Time 15

It's night time and Bunny is not able to find carrots.

He cannot see properly and fumbles in the dark.

Let us go to the farm and help Bunny find the carrots. The carrots will give him the power to see clearly all the time.



This or That?

Fun Time 16

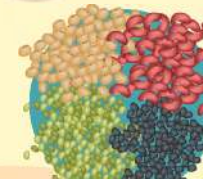
For each of the pictures given alongside, select the better option.



FUN WITH FOOD 17

THUMBS UP FOODS
THUMBS DOWN FOODS

Circle the correct box



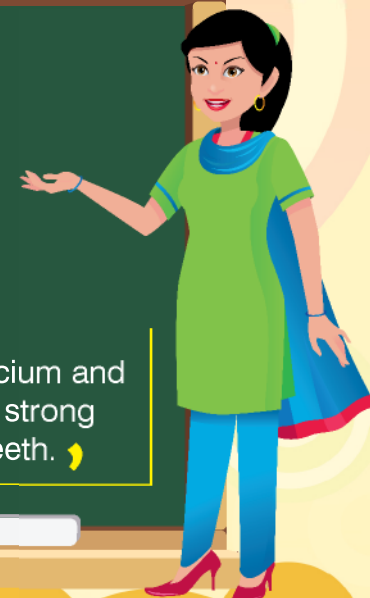
Now You Know

Our body needs nutrients to stay healthy and fit.

When our body does not get enough of one or more nutrients, a deficiency occurs.

We should eat in the right amounts required by the body.

We need calcium and vitamin D for strong bones and teeth.



My Learning Library



Video on Balanced Diet
<https://www.youtube.com/watch?v=YimuldeZSNY>

The Berenstain Bear story on junk food
<https://www.youtube.com/watch?v=VkqMiKlc6wE>



NOTE for TEACHER

Create interest using stories on healthy eating habits to avoid nutrient deficiencies. You could also do a quick recall on what students ate for dinner the previous night and help them find out if it was a healthy balanced diet.



Module 5

I Plan My Meals



- Balanced Meals
- Choose Your Food Wisely!



TEAM SEHAT
KA
FOD FUNDA



A Balanced Meal

What is a balanced diet?

A **balanced diet** is a diet which contains all nutrients –carbohydrates, proteins, fats, vitamins and minerals and water in the right quantity and proportion.

A balanced diet meets our day-to-day nutritional requirements and provides for an extra allowance of nutrients to be stored in our body, to be used during illness or injury.

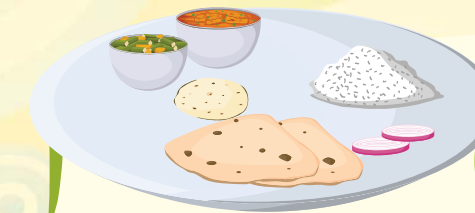
Did You Know?

This is what you should eat everyday–food from all groups.

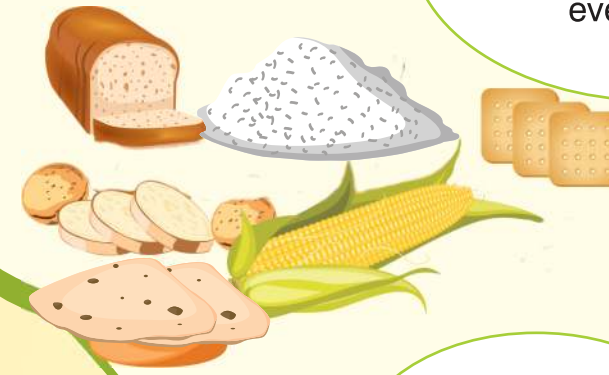


Adapted from NIN pyramid

Cereals and Grains: Bread, Chapati, Rice



These foods give us energy. We should eat a variety of such foods every day.



I love rice, idli, chapati and parantha.



Drink Milk, Eat Dairy Foods



Milk helps us have strong bones and teeth. What foods can you see? Have you eaten any of these foods today? If so, what were they?



Yummy! This is my favourite food group. I love curd and smoothie.



Protein: Meat, Fish, Eggs, Beans

Eat some foods from this group every day.



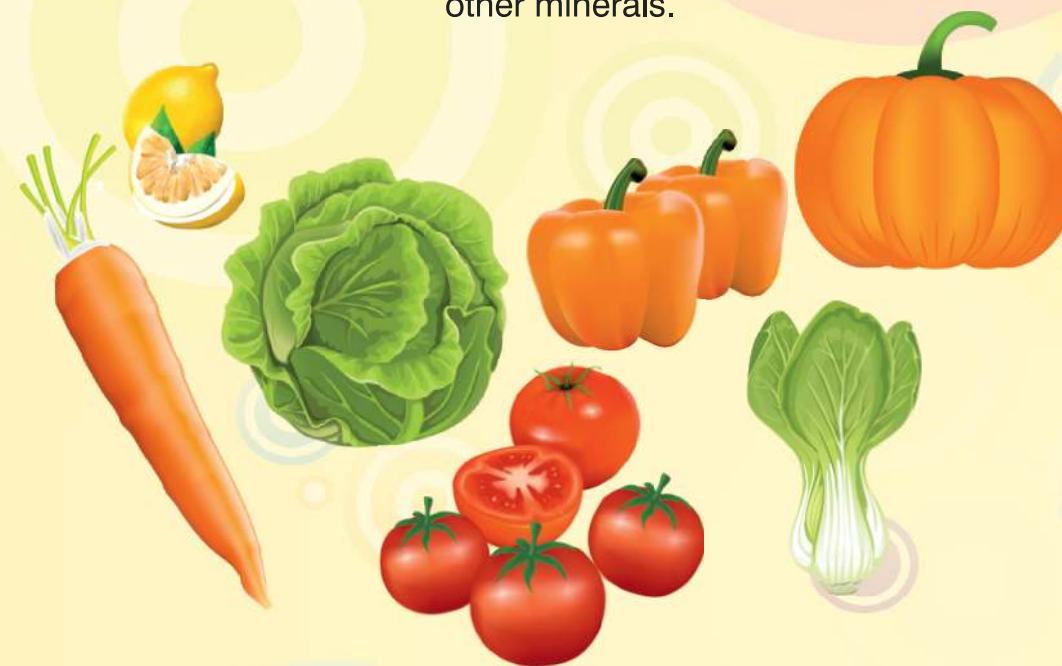
I eat an egg everyday. It makes me strong!

These foods eaten in right quantities make us strong and healthy.



Vegetables

Vegetables provide fibre, carbohydrates and vitamins, particularly Vitamins A and C and other minerals.



Fruits

Fruits are a good source of Vitamin C and other vitamins. The peel provides fibre.



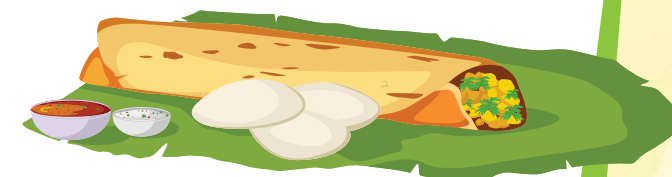
Composite Foods

Many dishes that we eat are made up of foods from more than one group.

Examples of composite foods.

- Idli / dosa and sambhar
- Stuffed vegetable parantha
- Kathi rolls
- Sindhi Kadhi

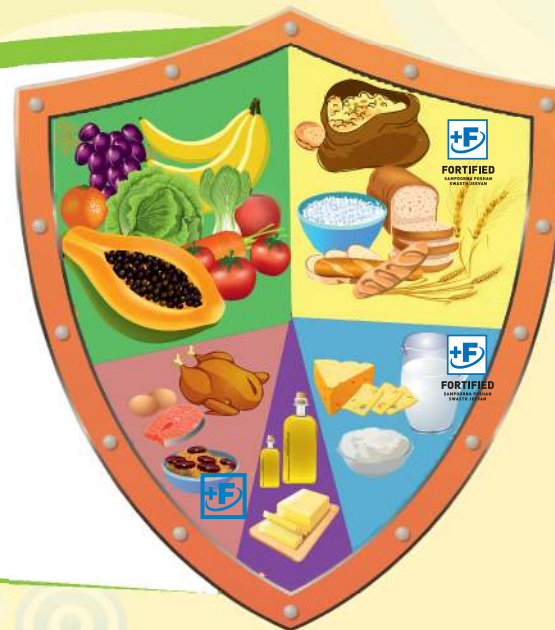
Can you think of some more examples?



Choose Your Food Wisely!

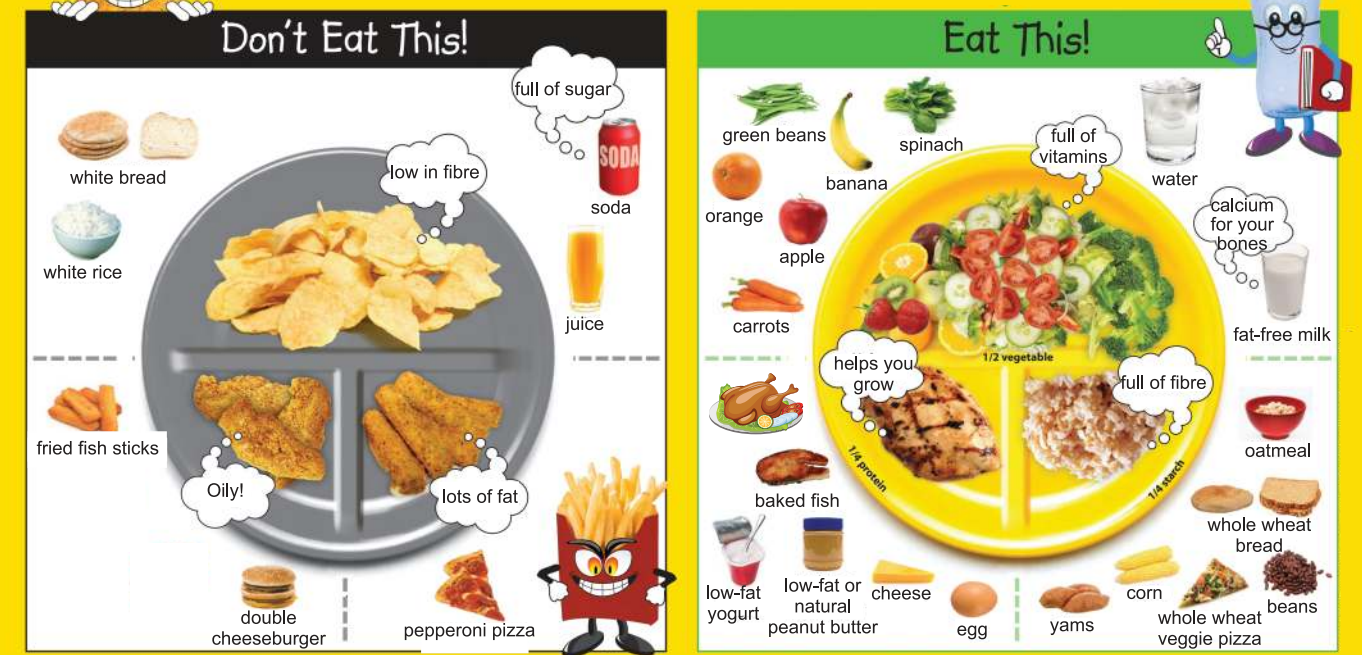
SNF Funda

Look at the food groups on my Shield. I eat all the food groups daily to stay healthy and fit!



Fun Time 18

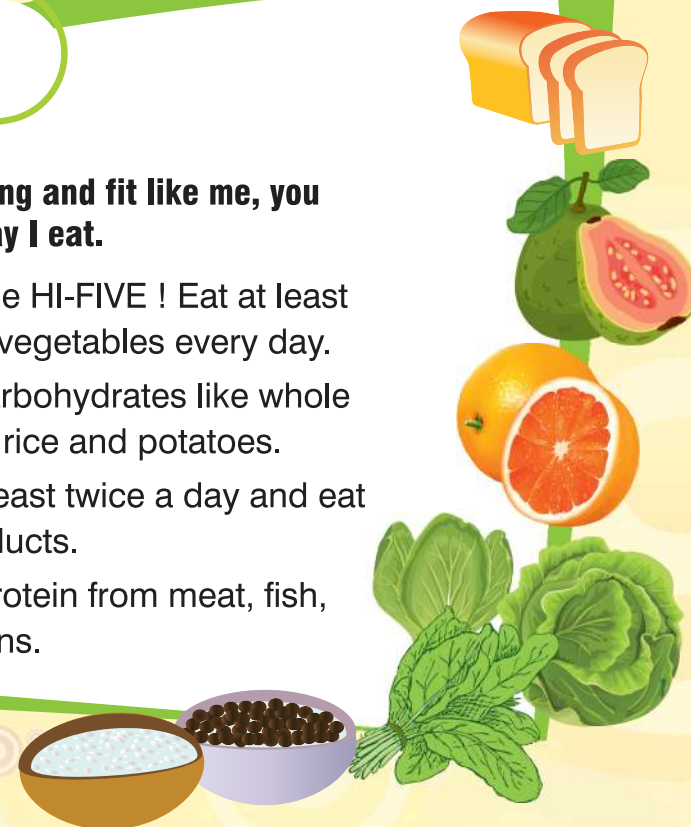
How to Choose Healthy Food



SNF Funda

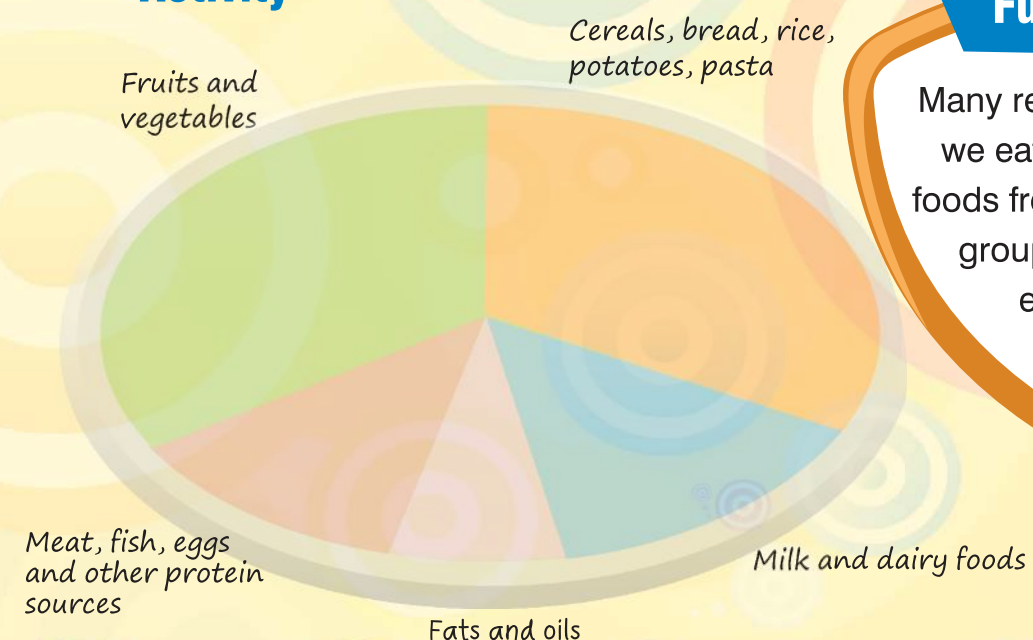
To be healthy, strong and fit like me, you need to eat the way I eat.

- Remember the HI-FIVE ! Eat at least five fruits and vegetables every day.
- Eat healthy carbohydrates like whole grains, brown rice and potatoes.
- Drink milk at least twice a day and eat two dairy products.
- Eat enough protein from meat, fish, eggs and beans.



Let's draw foods to make a 'Healthy Eating Plate'

Activity



Fun Time 19

Many recipes and dishes we eat are made up of foods from more than one group of the healthy eating plate.

Run And Grab A Bite

Activity

Fun Time 20

Food Group Relay

Place individually labelled food group bags at the finish line. Ask students to run a relay race grabbing one food bag from each group placed in their running track and drop them in the respective food group bags.



laddu (sweet)

☐


spinach

☐

Tick the two foods which belong to the milk and dairy foods group.



apple

☐


butter

☐


curd

☐


grapes

☐


egg

☐

Tick the two foods which belong to the meat, fish, eggs and legumes group.



fish

☐


carrot

☐


tomato

☐

Correct Food Groups

Fun Time 21

Tick the two foods which belong to the fruit and vegetables group.



cabbage

☐


chicken

☐

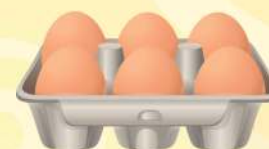
Tick the two foods which belong to fats and carbohydrates group.



apple

☐


bread

☐


egg

☐


chocolate

☐


samosa

☐


strawberry

☐


banana

☐


candies

☐

My Healthy Lunch Box

What will a healthy lunch box contain?



A healthy, balanced and nutritious lunch will provide energy and nutrients required to go, grow and glow, develop and learn.

1

Carbohydrates will give energy to sustain you till afternoon.



2

Fruits and vegetables will provide vitamins and minerals to protect against illness.



3

Meat, fish, eggs, beans and other non-dairy sources of protein will help in growth.



4

Milk and dairy foods will give calcium for strong bones and teeth.



5

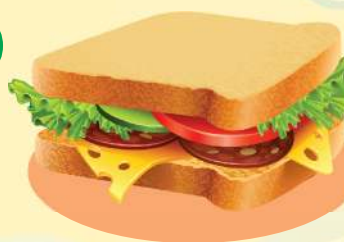
Water will keep you hydrated.



My School Tiffin

Good and not so good food choices

Choose a whole wheat sandwich instead of white bread sandwich! Eat with veggies.



Choose whole fruit instead of its juice!



Salads in lunch box taste yummy!



Carry fruit in your lunch box instead of sweets!



Note: Lunch box should be made of food grade material only

Fun Bhi, Health Bhi

Play

Regular play and exercise are important to maintain healthy weight, develop strong bones and muscles and reduce the risk of getting sick later in life. Play outdoors for an hour everyday.



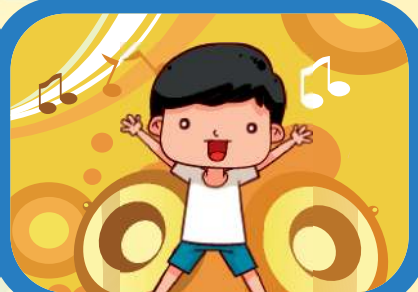
Sleep



Sleep for eight to ten hours to be active and alert.

Fun

Listening to music, dancing, singing, painting are some forms of recreation that are necessary for a healthy mind.



Tools and Trackers

Habit Forming Tools and Assessment Trackers Set 1 and 2



TEAM SEHAT KA
F  **D**
FUNDA



Habit Forming Tools and Assessment Trackers Set 1

“My Dairy—Dot Tracker”

Name _____

Class _____ Section _____

My Dairy Calendar

Draw 1 dot for each dairy serving. Let us see how strong you are.



ice cream



butter



paneer



cheese



yogurt/
curd



milk

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15



Source: Tools and Trackers—arney’s Fitkids—promoting Healthy Child Development

My Sugar Tracker

Name _____

Class _____ Section _____

Look at the example. Put a tick against the food item eaten in a day. You can put more than one tick in the same box if the food has been eaten more than once.

FOOD ITEM	EXAMPLE	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	DAY 6	DAY 7	FOOD TYPE TOTAL
dairy 	✓✓✓								
cold drinks and juices 	✓								
chocolates and candies 	✓✓								
packaged foods jams and syrups 	✗								
cup cakes cookies 	✓								
ice cream and ice lolly 	✓								
Mithai 	✓								
Day's total									

“My Water Tracker”

Name _____

Class _____ Section _____

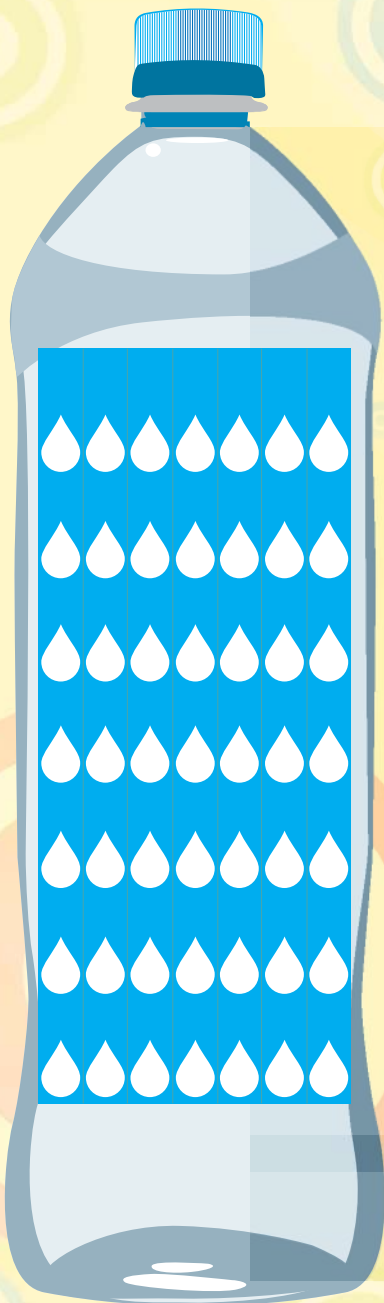
Track your water intake over a week by colouring one drop blue each time you drink a cup of water. (1 cup = 150 ml)

Recommended Daily Amount of total water intake (including other beverages)

5-6 cups for 4 to 8 years

7-8 cups for 9 to 12 years

8 to 10 cups for 13+ years



Source: Tools and Trackers–arney’s Fitkids–promoting Healthy Child Development

My Healthy Food Tracker

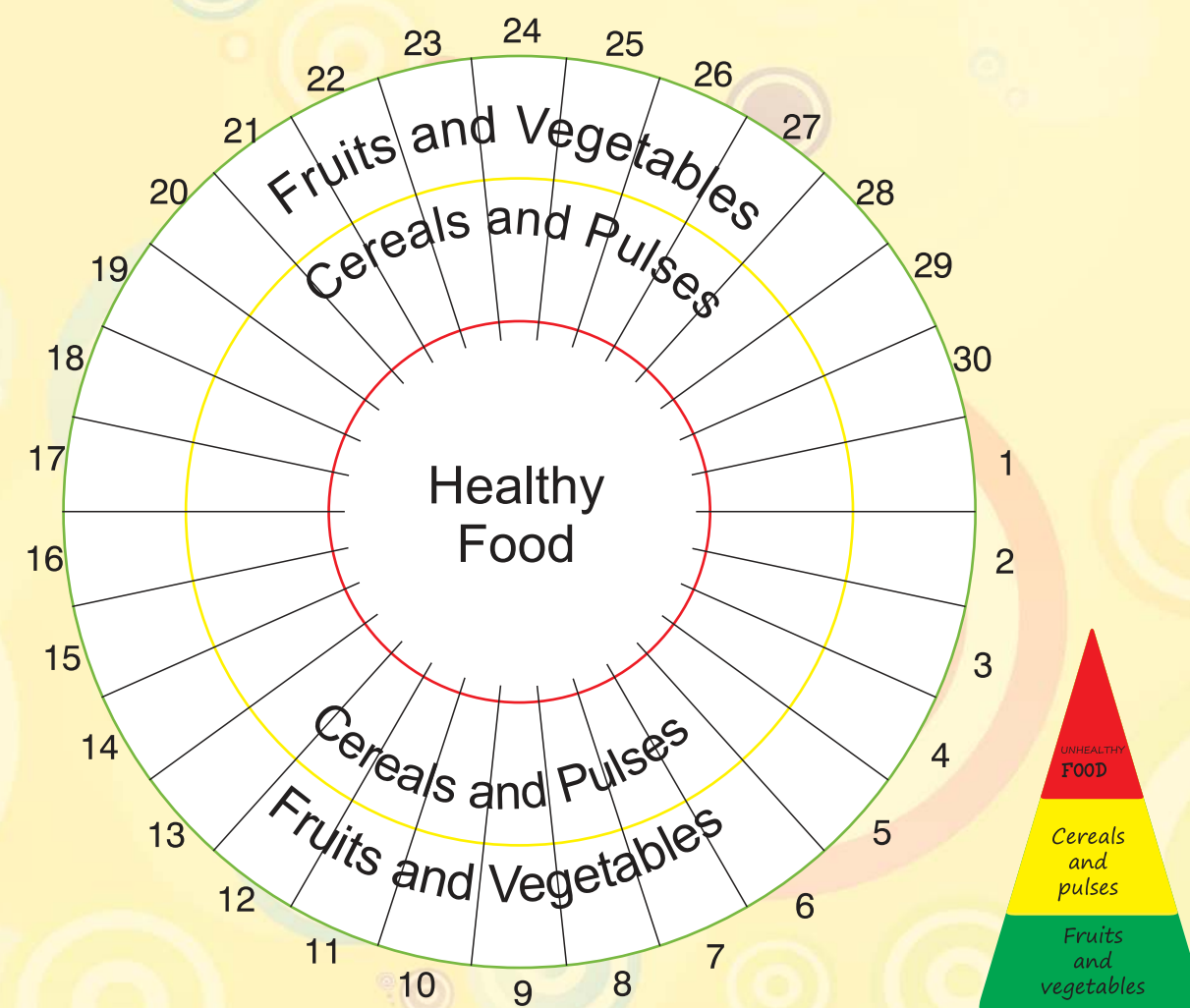
Name _____

Class _____ Section _____

Unhealthy Food Explained

Each numbered band indicates a day of a month. Match and tick the colour of the food group consumed on each day on the tracker. Ensure the consumption of unhealthy food goes down daily.

Unhealthy food is defined as ‘any food, which is low in essential nutrients and high in calories and sodium. These foods contain little or no proteins, vitamins or minerals but are high in salt, sugar and fats’.



“MY HYGIENE TRACKER”

Name _____

Class _____ Section _____

1. Work on your tracker by slaying the germs with your pencil.
2. Kill one germ each time you perform the personal hygiene activity.

I am
A Hygiene
Superstar



BRUSH TEETH

- Morning
- After big meal
- At bedtime



BATHE

- Morning
- After play
- Before bedtime



CHANGE CLOTHES

- After bath
- After school
- Before play
- Before bedtime



WASH HANDS

- Before brushing
- Before any meal
- After any meal
- After play
- After visiting the toilet
- Before bedtime

Activities							
BRUSH TEETH	 	 	 	 	 	 	 
BATHE	 	 	 	 	 	 	 
CHANGE CLOTHES	 	 	 	 	 	 	 
WASH HANDS	     	     	     	     	     	     	     



Source: Tools and Trackers–arney’s Fitkids–promoting Healthy Child Development

MY FRUIT TRACKER

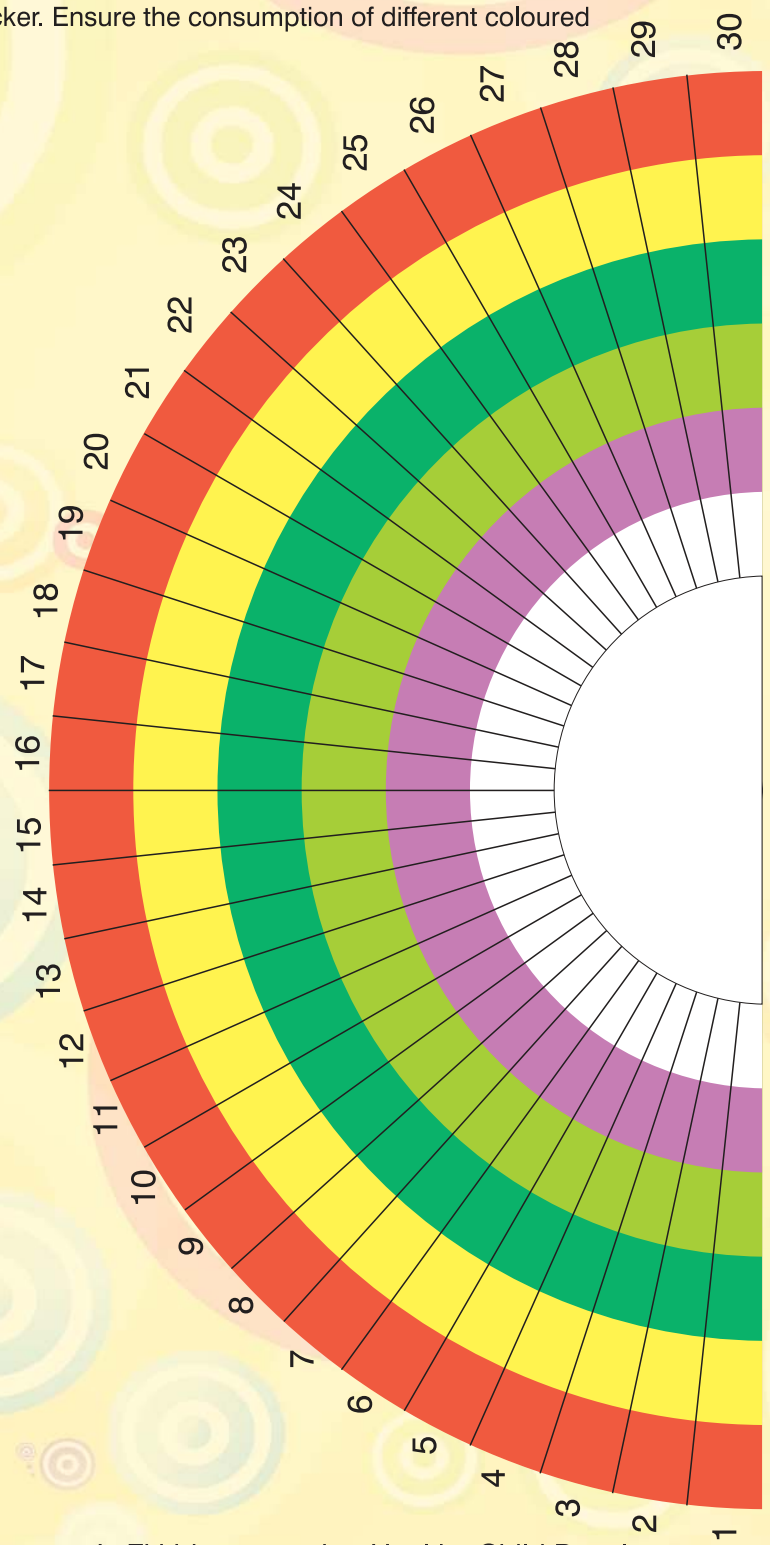
Name _____

Class _____ Section _____

Each numbered band indicates a day of a month . Match and tick the colour of the fruit consumed on each day on the tracker. Ensure the consumption of different coloured fruits goes up daily.

FRUIT COLOUR KEY

- Red : apple with skin, pomegranate, cherries, strawberries, water melon
- Orange : papaya, orange
- Yellow : pineapples, golden apple, mango, Indian ras-bhari
- Green : pears, green apple kiwi
- Purple : jamun, black grapes
- White : banana, litchi, mangosteen, dragon fruit



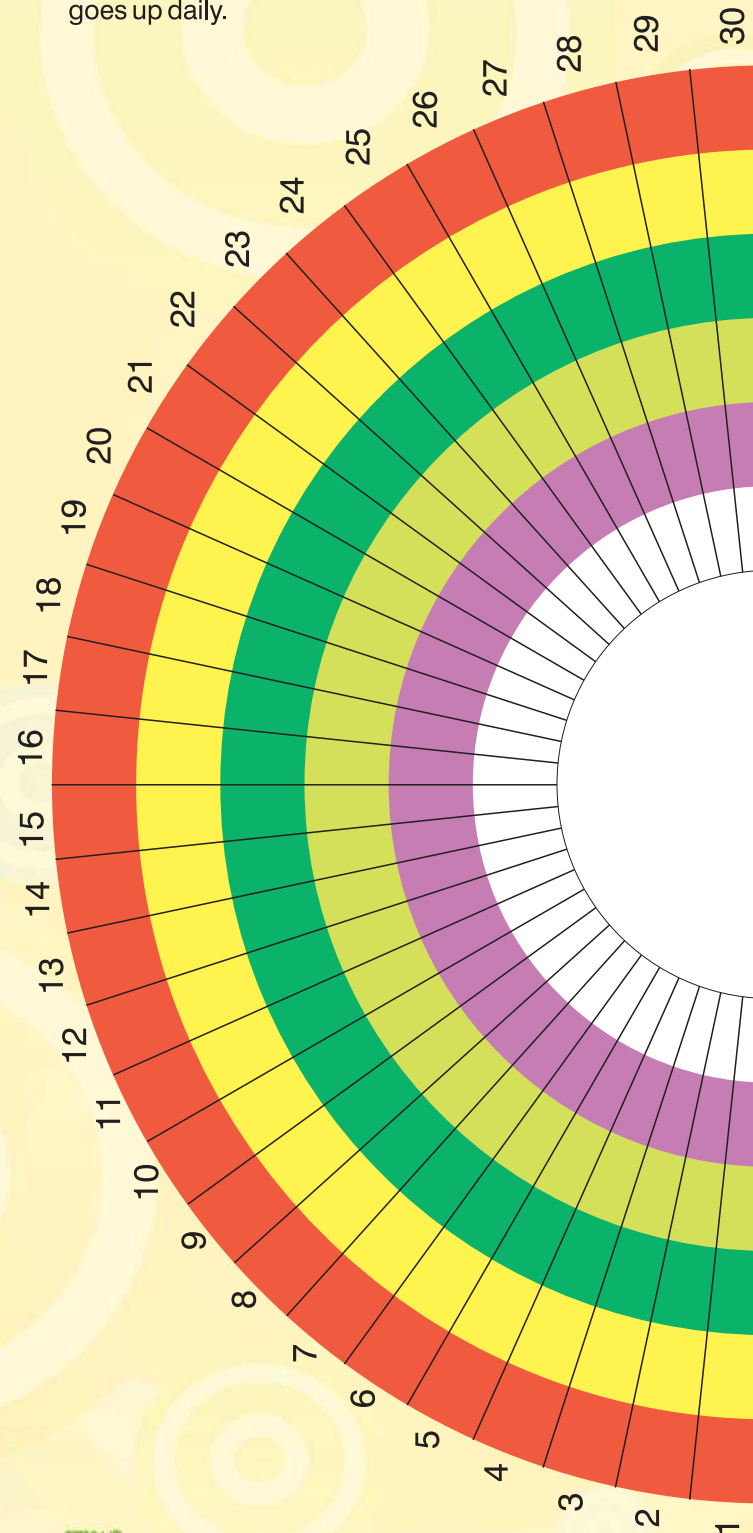
MY VEGGIE TRACKER

Name _____

Class _____ Section _____

INSTRUCTIONS

Each numbered band indicates a day of a month. Match and tick the colour of the vegetable consumed on each day on the tracker. Ensure the consumption of different-coloured vegetables goes up daily.



VEGETABLE COLOUR KEY

- Red : tomatoes, carrot, beet, red peppers
- Yellow : bell pepper, yellow squash, sweet corn, yellow tomato, pumpkin, sweet potato
- Dark green : spinach, *methi*, broccoli, green beans, capsicum, spring onions, zucchini, *karela*, *torai*, okra, green pumpkin, *parwal*
- Light green : cabbage, cucumber, peas, *lauki*, *tinda*, lettuce, celery
- Purple : purple cabbage, brinjal, black olives
- White : potato, *arbi*, turnip, lotus stem, cauliflower, raddish, onions

**Habit Forming Tools
and
Assessment
Trackers
Set 2**

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Name _____

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butter



paneer



cheese



yogurt/
curd



milk

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ice cream and ice lolly 	✓								
Mithai 	✓								
Day's total									

My Water Tracker

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Class _____ Section _____

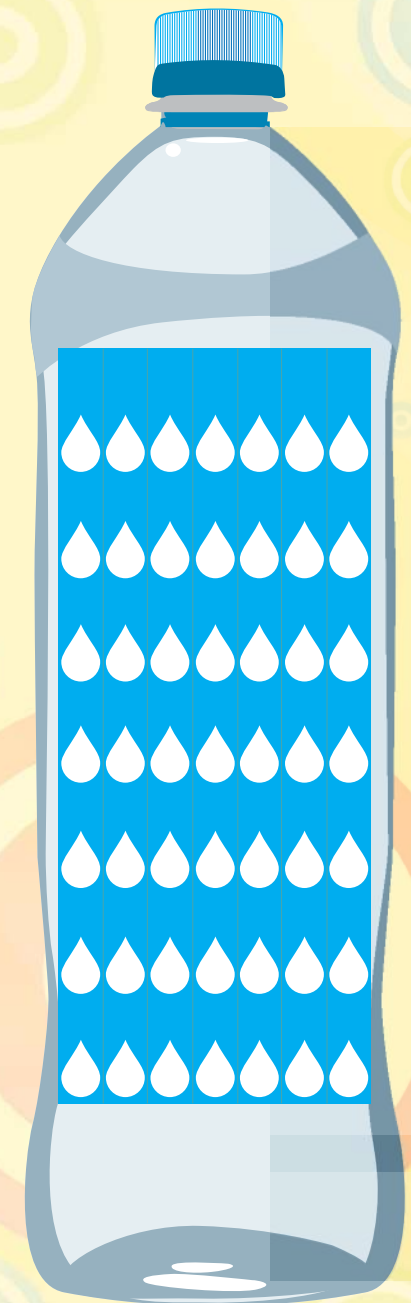
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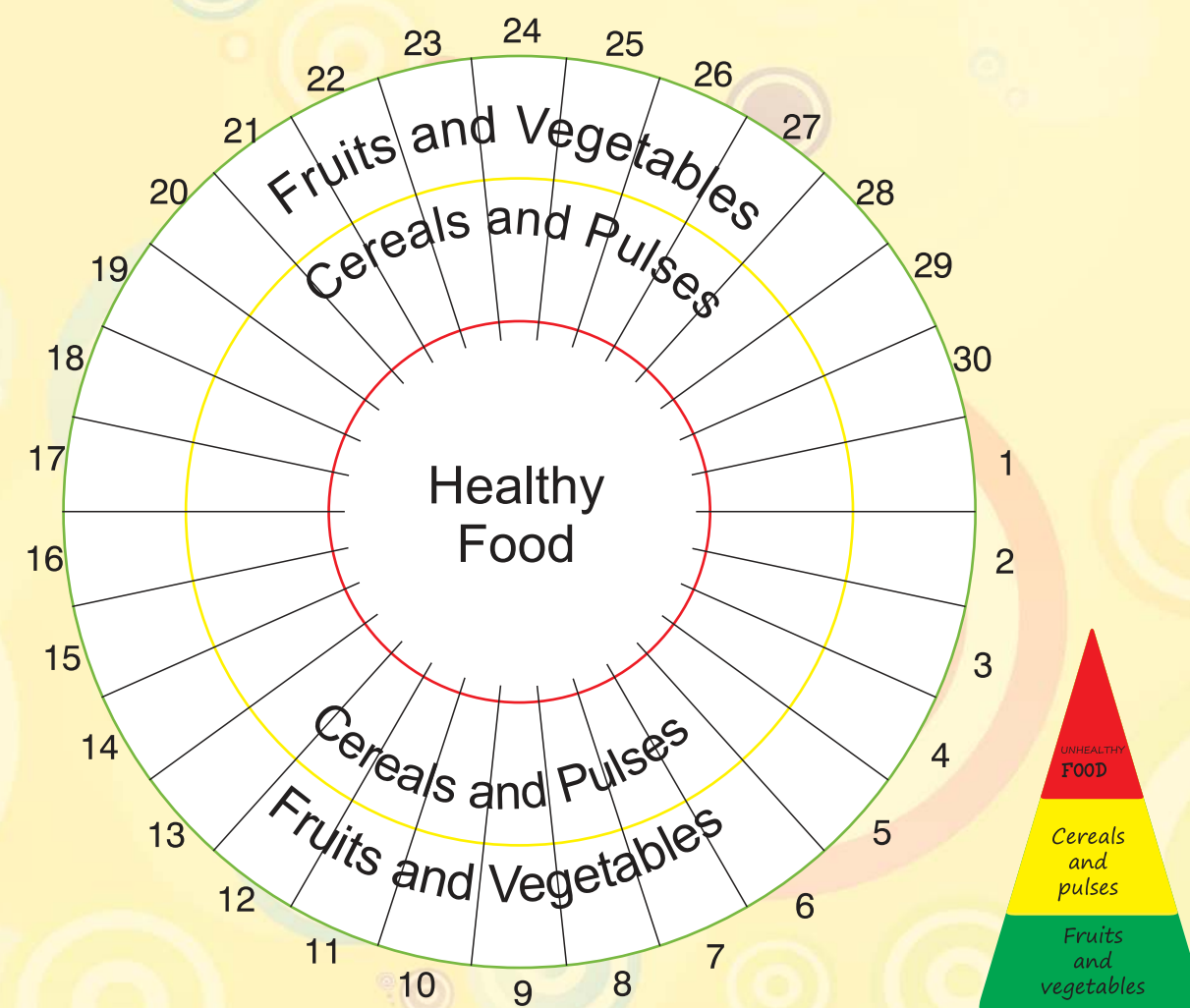
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BATHE	 	 	 	 	 	 	 
CHANGE CLOTHES	 	 	 	 	 	 	 
WASH HANDS	  	  	  	  	  	  	  



Source: Tools and Trackers–arney’s Fitkids–promoting Healthy Child Development

“**MY FRUIT TRACKER**”

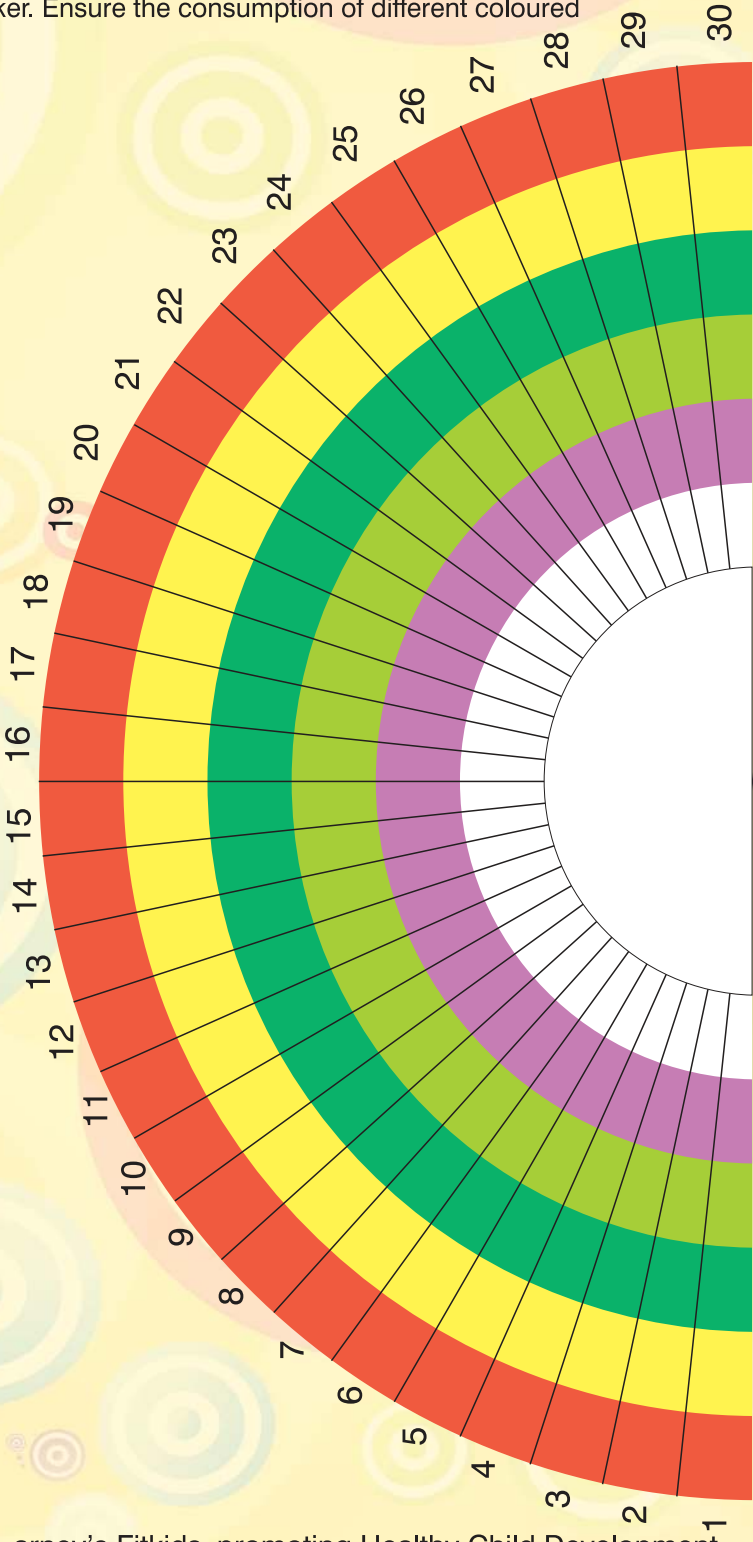
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Source: Tools and Trackers–arney’s Fitkids–promoting Healthy Child Development

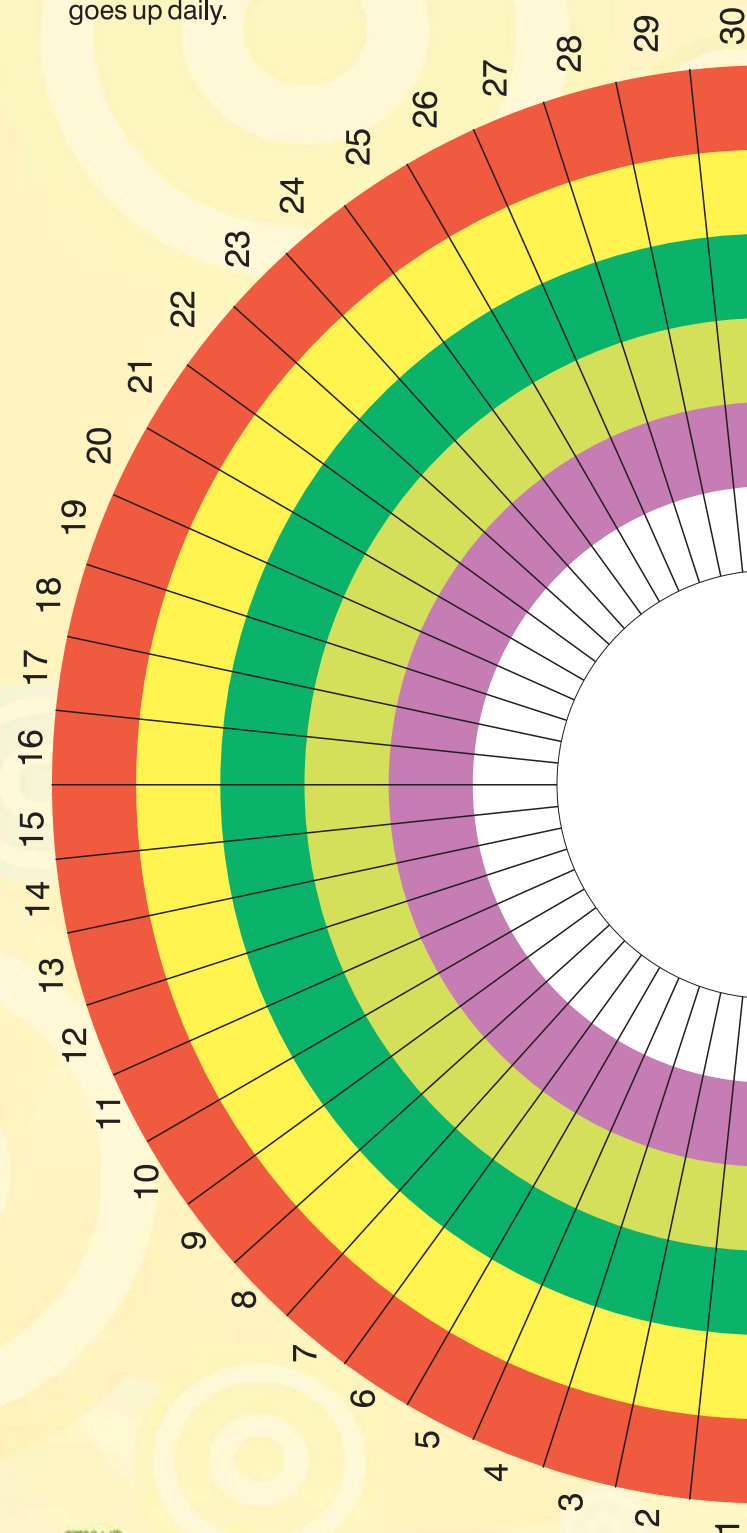
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- Purple : purple cabbage, brinjal, black olives
- White : potato, *arbi*, turnip, lotus stem, cauliflower, raddish, onions

CERTIFICATE OF ACHIEVEMENT

15th October is celebrated as Global Hand Washing Day

Certificate of Achievement

THIS IS TO CERTIFY THAT _____ IS THE

HAND WASHING CHAMP

DATE _____

SIGNATURE _____

