

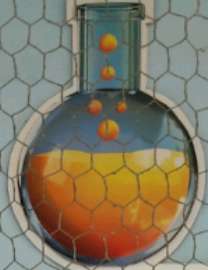
DEPARTMENT

OF

CHEMISTRY

The Chemistry of Food

Food is not just nourishment, it's a complex chemical reaction. The carbohydrates, proteins, fats, vitamins, and minerals that provide energy and maintain health are all chemical compounds. Carbohydrates, proteins, and fats are the main components of food. Carbohydrates are made of carbon, hydrogen, and oxygen. Proteins are made of carbon, hydrogen, oxygen, and nitrogen. Fats are made of carbon, hydrogen, and oxygen. These compounds are broken down in the body to provide energy and build up the body's tissues. The study of the chemistry of food is called food chemistry. It is a branch of chemistry that deals with the chemical composition, properties, and reactions of food. It also deals with the changes that occur in food during cooking, storage, and digestion. Food chemistry is an important part of many fields, including nutrition, food science, and medicine.



CHEM-MYSTERY



NATIONAL NUTRITION WEEK

Junk Food - A Challenge to Good Health

Nutrition is the foundation of good health. Every year, millions of people are challenged by the availability of junk food. Junk food is food that is high in calories, sugar, and fat, but low in nutrients. It is often called 'empty calories' because it provides energy but no essential nutrients. Junk food is a major cause of obesity, heart disease, and other health problems. It is important to choose healthy foods that provide the nutrients your body needs to stay healthy. Healthy foods include fruits, vegetables, whole grains, and lean proteins. Eating a balanced diet and staying active are the best ways to maintain good health.

TRADITIONAL FOOD OF DIMA HASAO

The Dima Hasao region is known for its rich cultural heritage and traditional food. The food is a blend of various ingredients, including rice, meat, and vegetables. The traditional food of Dima Hasao is known for its unique flavor and health benefits. It is a good source of protein and energy. The food is also rich in vitamins and minerals. The traditional food of Dima Hasao is a testament to the region's rich cultural heritage. It is a food that has been passed down from generation to generation. It is a food that is loved by the people of Dima Hasao and is a source of pride for them. The traditional food of Dima Hasao is a part of their identity and is an important part of their culture. It is a food that is worth preserving and promoting.

National Nutrition Week

1-7 Sep

"Eat Right For A Better Life"

HEALTHY TIPS

- Eat more fruits, vegetables, and whole grains.
- Limit your intake of sugar, salt, and fat.
- Drink plenty of water.
- Get regular exercise.
- Avoid smoking and drinking alcohol.
- Get enough sleep.
- Manage stress.
- Visit your doctor regularly.

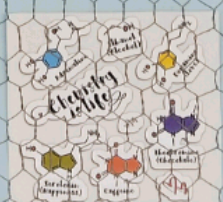
BEYOND THE JUMP, SAY YES TO HEALTH

HEALTHY LIFESTYLE

A healthy lifestyle is one that promotes good health and well-being. It involves eating a healthy diet, getting regular exercise, and managing stress. A healthy lifestyle is important for preventing disease and promoting longevity. It is a lifestyle that is worth striving for. A healthy lifestyle is not just about what you eat and how much you exercise. It is also about how you manage stress and how you get enough sleep. A healthy lifestyle is a holistic approach to health. It is a lifestyle that is based on science and is supported by research. A healthy lifestyle is a lifestyle that is worth living.

A BALANCED DIET

A balanced diet is one that provides the body with all the nutrients it needs to stay healthy. It includes a variety of foods from all food groups. A balanced diet is important for maintaining good health and preventing disease. It is a diet that is worth following. A balanced diet is not just about eating healthy foods. It is also about eating the right amount of food. A balanced diet is a diet that is based on science and is supported by research. A balanced diet is a diet that is worth living.



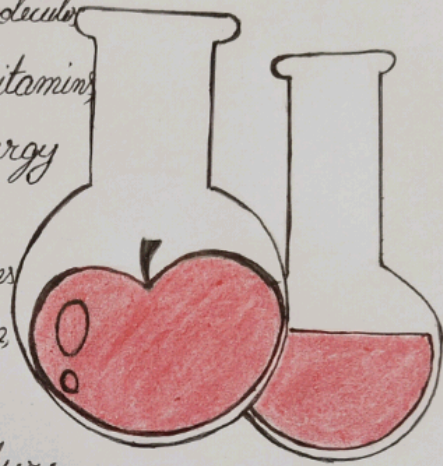




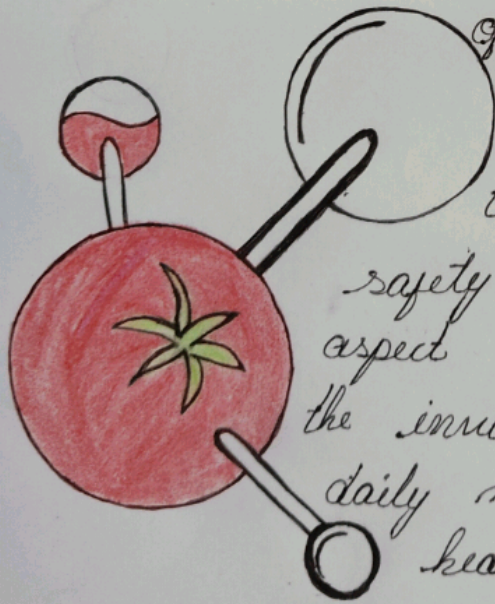
The Chemistry of food

Food is not just nourishment; it is a mixture of biomolecules like carbohydrates, proteins, fats, vitamins and minerals that provide energy and maintain health.

Cooking triggers chemical reactions - Maillard reaction, caramelization, and protein denaturation - that shape flavour, colour, and texture.



Chemistry also preserves food: salt, sugar, vinegar, and antioxidants prevent spoilage, while awareness of additives ensures safety.



From aroma, flavour, and texture to nutrition and safety, chemistry governs every aspect of the food we eat. It is the invisible key shaping our daily meals and influencing our health.

TRADITIONAL FOOD OF DIMA HASAO

The Dimasa community, one of the oldest indigenous tribes of Assam, is known for its simple yet flavorful cuisine that uses fresh, locally sourced ingredients and traditional cooking methods. Dimasa dishes are often mild in spices but rich in natural flavors, relying on herbs, fermented ingredients, and bamboo shoots for their distinct aroma and taste.

Some of the popular preparations includes: Hajing Hen (a dish made with ginger paste, rice flour for thickening, and often cooked with chicken or greens), Panthao Khari (a stew featuring Panthao (Brinjal) Kari). Some chutneys and side dishes are Laikentha Mudru (a boiled of banana flower and dry fish), Mojokhamau Naplam (a chutney made from fermented fish and heart leaves, a local herb). One of the famous beverages of Dimas Hasao, Tudima (rice wine), a traditional homemade rice wine with a beautiful flavor. It is culturally significant and was awarded a Geographical Indication (GI) tag in 2021. The food of Dimas Hasao is a living taste in nature, tradition and togetherness.

SAFETY



Food safety is the key to good health because the food we eat directly affects our body. Safe food means food that is clean, fresh and free from harmful bacteria, chemicals or dirt. To ensure this, we must follow simple important habits like washing our hands before eating or cooking, keeping the kitchen and utensils clean and

cooking food properly to kill germs. Storing food at the right temperature is equally important to stop spoilage. We should also separate raw and cooked food to avoid cross-contamination and always check expiry dates on packaged food. By practising food safety we can prevent food borne diseases, enjoy nutritious meals and protect our families.

Food Poisoning is one of the most common health problems caused by eating food that is contaminated with harmful bacteria, viruses or chemicals. It usually happens when food is not cooked properly, stored in the wrong way, or handled with dirty hands and utensils. Contaminated water and street food kept in the open are major sources of food poisoning. The symptoms of food poisoning can appear within a few hours of eating unsafe food and often include stomach pain, vomiting, diarrhoea, fever and weakness. In severe cases, it can even lead to dehydration and even hospitalization.

FOOD POISONING



NATIONAL NUTRITION WEEK

Junk Food - A Challenge to Good Health

Nutrition is the foundation of good health.

Every year NATIONAL
NUTRITION DAY

reminds us to eat the right food for a strong body and an active mind. But today, junk food has become serious challenge to this goal.



Chips, pizzas, soft drinks, and other fast foods are tasty but harmful. They are loaded with sugar, salt and unhealthy fats.

While lacking vitamins, minerals, and protein. Eating such food regularly can lead to obesity, diabetes, high blood pressure, weak bones, and even poor mental concentration. Children and teenagers are especially at risk, as junk food harms their growth and energy.



DID YOU KNOW?

- A single packet of chips can contain as much salt as 5 teaspoons
- Soft drinks weaken bones because of excess sugar and acids
- Eating junk food regularly increases the risk of lifestyle diseases at an early stage.

HEALTHY TIPS

- ✓ Eat more fresh fruits and vegetables
- ✓ Drink 7-8 glasses of water daily
- ✓ Replace packaged snacks with nuts or sprouts
- ✓ Avoid sugar drinks, choose fresh juices.



SAY NO TO JUNK,
SAY YES TO HEALTH

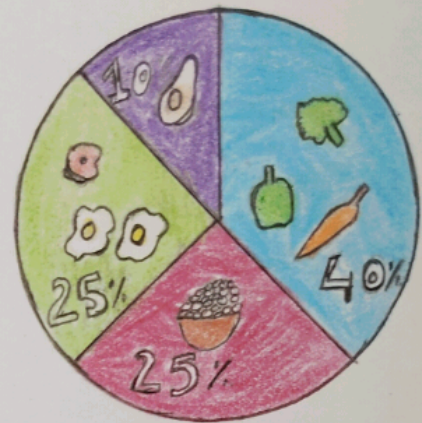


A BALANCED DIET

A diet that contains adequate amounts of all the necessary nutrients required for healthy growth and activity.

What are the nutrients?

- Carbohydrates
- Lipids
- Vitamins
- Water
- Proteins
- Minerals
- Dietary fibres



- Fruits and vegetables
- Protein
- Fibre
- Fats

Principles of Healthy Diet

1.



Adequate

Providing enough essential nutrient to prevent deficiencies and promote health, without excess.

2.



Balanced

In energy intake, and energy sources to promote healthy weight, growth and disease prevention.

3.



Moderate

In consumption of foods, nutrients or other compounds associated with detrimental health effect.

4.



Diverse

Including a wide variety of nutritious foods within and across food groups to favour nutrient adequacy and consumption of other health promoting substances.