



Office-Principal

Govt. Jagannath Munnalal Choudhary Mahila Mahavidyalaya, Mandla, Madhya Pradesh



Towards Excellence...

Phone/Fax: 07642-252536

Website: <http://www.gjmcgirlscollegemandla.in>

AISHE Code: C-33429

Email: hegjcgcmn@mp.gov.in

College Code: 3502

Report

Title of the Programme: 15 Days Certificate Course on “Balanced Diet and Health”

The 15 Days Certificate Course was begun with the welcome speech by the trainer of the value-added course, Dr. Aradhna Dubey (Associate Professor, Home Science) after that the coordinator of the course Dr. S.N. Khare also shared his view on the significance of the course in the upcoming career as well as daily life of the students. The trainer of the programme Dr. Aradhna Dubey added in her speech that Balanced Diet play vital role in the health and the knowledge of proper diet is compulsory for every person.

The topics discussed thoroughly during the 15 days course were: -

- ✚ Definition of food
- ✚ Function of food
- ✚ Food groups
- ✚ Food Guide pyramid
- ✚ Definition of Nutrition (Good nutrition, Undernutrition and Malnutrition)
- ✚ Definition
- ✚ Types of Nutrients
- ✚ Carbohydrate
- ✚ Protein
- ✚ Fat
- ✚ Vitamins
- ✚ Minerals
- ✚ Water
- ✚ Sources and Functions of Nutrients
- ✚ Symptoms of diseases caused from deficiency of nutrients
- ✚ Definition
- ✚ Principle of Meal Planning
- ✚ Menu- Introduction and Concept
- ✚ Format your Menu Plan

During the certificate course the following areas of ‘Balanced Diet and Health’ were discussed with the students:

According to the World Health Organisation, health is defined as “a state of complete physical, social and mental well- being and not merely the absence of disease or infirmity”.

Good health is more important than being free from disease. Healthy people are more efficient, productive and live longer than unfit people. Important factors that contribute to good health are:

Balanced Diet- To maintain a healthy life, one should take a proper well-balanced diet with plenty of water.

Personal Hygiene- A person should live in a clean environment and must follow good personal hygiene. There should be proper disposal of wastes. Clean surroundings prevent the spread of diseases.

Regular Exercise- Along with good food and hygiene exercise is also very important in maintaining good health. Regular exercise and good sleep help a person to remain fit, stress-free, and active.

Hygiene:

The practices that we follow in our day-to-day lives to maintain good health are known as hygiene. This includes:

- i. **Personal Hygiene**
- ii. **Community Hygiene**

Personal Hygiene- The following practices should be followed every day to remain Healthy:

- Washing hands before and after eating
- Regular toilet habits
- Cleaning teeth
- Bathing on a regular basis
- Wearing clean and comfortable clothes
- Drinking clean water
- Keeping house clean and insect free
- Cooking in clean utensils

Community Hygiene- The environment in which we live plays a very important role in keeping us healthy. The practices to keep our surroundings clean should include:

- Proper disposal of household wastes
- Cleaning of roads and streets
- Keeping house clean
- Covering dustbins
- Spraying insecticides at regular intervals to ward off insects

Disease

Sometimes the human body gets affected due to some environmental, physiological or psychological factors which disturbs the normal functioning of the body organs. This malfunctioning of the human body is called disease. A disease may affect a person not only physically but also emotionally and mentally.

There are Mainly Two Types of Diseases:

- i. **Infectious diseases**
- ii. **Non-infectious diseases**

Common Infectious Diseases-

Infectious diseases are caused by pathogens such as bacteria, fungi, viruses, protozoa, worms, etc. Based on the causative organisms, these can be classified as under:

The pathogens enter the human body through direct contact, contaminated food and water, and through infectious droplets. They multiply in the body and affect the normal functioning of the body.

Viral Diseases

Common Cold:

- Caused by rhinovirus
- Affects nose, bronchioles and respiratory tract
- Mainly lasts for 4-5 days
- Common symptoms include sore throat, nasal congestion, headache and cough
- Spreads by touching infected objects and through droplets during sneezing and coughing.

Hepatitis (Jaundice):

- Caused by virus HAV (Hepatitis A Virus)
- Affects liver
- Common symptoms are high fever, dark yellow urine, loss of appetite, headache, light coloured stool
- Spreads through contaminated water

It can be prevented by taking vaccines, drinking boiled and chlorinated water and maintaining proper hygiene.

AIDS (Acquired Immunodeficiency Syndrome):

- Caused by HIV (Human Immunodeficiency virus)
- Affects the immune system
- Common symptoms are swollen lymph nodes, weight loss, fever, loss of memory, night sweating etc

Methods of transmission include:

- Using Infected Needles
- Unprotected Sexual Contact
- Transfusion of Contaminated Blood
- From Infected Mother to Unborn Child

It can be prevented by avoiding drug abuse, using safe disposable needles, avoiding multiple sex partners, regular medical checkups etc.

2. Bacterial Diseases

a. Typhoid

- Caused by bacterium Salmonella typhi
- Affects the intestines
- Common symptoms are high fever, stomach pain, loss of appetite, headache
- Spreads through contaminated food and water

It can be prevented by taking a vaccine.

b. Cholera

- Caused by bacterium Vibrio cholerae
- Affects the intestines

- Common symptoms are dehydration, vomiting, loss of appetite, muscle cramps, weight loss
- Spreads through contaminated food and water

It can be prevented by taking vaccines, maintaining personal hygiene and good sanitation.

3. Fungal Diseases

- Ringworm
- Caused by fungi *Microsporum* and *Trichophyton*
- Affects skin, nails and scalp
- Common symptoms are itching on skin and scalp, dry scaly lesions on skin, nails and scalp
- Spreads by direct contact with infected objects

It can be prevented by keeping good personal hygiene.

4. Protozoan Diseases

Malaria

- Caused by many species of *Plasmodium*.
- Affects the liver and spleen
- Common symptoms are high fever accompanied with chills, enlargement of liver and spleen, loss of appetite, headache
- Spreads through the bite of female *Anopheles* mosquito that transfers the sporozoites of *Plasmodium* from infected person to a normal person.
- It can be controlled by eradicating mosquitoes, using mosquito nets and repellents.
- Treated by using chloroquine.
- Amoebiasis (Amoebic Dysentery)
- Caused by *Entamoeba histolytica*
- Affects the large intestine
- Common symptoms are stomach pain and cramps, stool with mucus and blood clots, constipation, diarrhoea
- Spreads through contaminated food and water when house flies transmit the parasites from faecal matter of infected people to food.

It can be prevented by drinking clean water, proper disposal of human excreta and covering of cooked food.

5. Helminthic Diseases

Filariasis/Elephantiasis



- Caused by *Wuchereria bancrofti*
- Affects the lymph vessels of legs.
- Common symptoms are inflammation of organs, swollen lower legs, thighs and feet resembling elephant's legs.
- Spread through bite of female *Culex* mosquitoes.
- It can be prevented by avoiding mosquito bites.

Measures to Prevent Infectious Diseases Include:

- Maintaining personal hygiene
- Maintaining public hygiene
- Taking well balanced diet
- Spreading awareness about diseases and drug abuse
- Eradication of disease-causing germs

- Vaccination and immunization programmes

**Govt. J.M.C. Mahila
Mahavidyalaya, Mandla, M.P.**


**Department of Home Science in
collaboration with IQAC
organizes**

**15 Days Skill Based Certificate
Course on “Balanced Diet and
Health”**


Date:
03/10/2018-22/10/2018

Time:
12:00 Hrs-14:00 Hrs

Venue: Seminar Hall
(Room No. 10)



Organizer:
Dr. Aradhna Dubey
Associate Professor
(Home Science)



Coordinator:
Dr. S.N. Khare
IQAC Coordinator



Principal :
Dr. Kalpana Shastri



Immunity

Immunity is a person's ability to fight against diseases.

There are two types of immunity:

Innate Immunity- This is present right from birth. It is non-specific.

It consists of many barriers:

- **Physical Barriers-** This includes skin, lining of respiratory tract, gastro-intestinal lining and lining of urino- genital tracts where the germs are trapped in mucus.
- **Physiological Barriers-** This includes acid in the stomach and lysozymes in saliva.
- **Cellular Barriers-** This includes special cells like lymphocytes, monocytes, macrophages and neutrophils.
- **Cytokine Barriers-** This includes interferons (a group of proteins produced by viral infected cells) which protect the non-infected cells.

Acquired Immunity- This is acquired after birth either by contracting the disease or by vaccination. It is pathogen specific and can be classified into two types:

Active Immunity occurs when antibodies develop in response to antigens developed during natural infection or by vaccination. It stays for a longer period and is time taking.

Passive Immunity occurs when antibodies develop in response to antigens forcibly injected into our bodies. It stays for a short period and is fast in response.

Vaccines- A vaccine is an antigen (weakened form of germ) which when injected/ swallowed causes the body to resist the disease. It does not cause the disease but helps the body to fight the disease when it is attacked by the germs. There are vaccines available against diseases such as polio, diphtheria, tuberculosis, measles, hepatitis, small-pox, tetanus etc.

Allergy- Some antigens present in the environment can cause hypersensitive reactions in the immune system.

Such substances are called allergens. Examples include dust mites, pollen grains, animal fur etc.

Common symptoms are rashes, sneezing, runny nose, difficulty in breathing etc.

Antihistamines are used generally to relieve symptoms of allergy.

Health

According to scientists, health is a condition of total bodily and mental well-being. A healthy person is one who is mentally and physically fit. Hygiene refers to behaviours or habits that promote excellent health and a clean environment.

Every day, we eat a variety of meals. Food is required by all living creatures. Plants and animals both require nourishment in order to flourish. Plants produce their own food, whereas animals rely on the sustenance of others. We all start the day with a healthy breakfast and then eat at least two additional large meals-lunch and dinner.

Source of Food:

Plants and animals provide most of the food we consume. We consume several portions of the plant as food. We consume the leaves of certain plants, such as spinach, the seeds of some plants, such as corn, the blooms of other plants, such as broccoli, the stems of some plants, such as potatoes, and the roots of some plants, such as carrots. Animal goods include eggs, milk, and milk products such as butter, ghee, and so on. We also consume the meat of animals such as chicken, fish, and goats. Thus, food may be classified into five categories depending on its utility to our bodies. These foods offer energy, help to grow our bodies, protect them from sickness, and keep us healthy and strong.

Food Components:

The five categories or components of food are as follows:

- i. Carbohydrates
- ii. Fats
- iii. Proteins
- iv. Vitamins
- v. Minerals

Carbohydrates:

- ✚ Carbohydrates are sometimes referred to as energy-producing foods.
- ✚ We require energy to do daily activities such as jogging, walking, cycling, and so on.
- ✚ Carbohydrate-rich foods include potatoes, bananas, corn, sugar, cereals, and so forth.

Fats:

- ✚ Fats, like carbs, are considered energy-giving foods. Excess carbs are converted and stored as fat in our bodies.
- ✚ Meat, ghee, vegetable oil, milk, butter, cheese, and dried fruits are high in fat.
- ✚ Although fatty meals are required for the body, an excess of these foods leads to weight problems such as obesity, which leads to cardiac difficulties.

Proteins:

Protein-rich diets are those that aid in the growth and repair of our bodies' muscles and tissues. This is one of the most vital dietary categories. It helps to strengthen muscles and heal damaged tissues in our bodies.

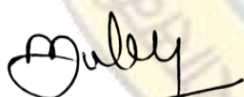
Protein-rich foods include milk, poultry, eggs, fish, soya beans, and so on.

Following are the steps to Improve Hygiene-

- Take a bath every day. When we play or sweat, dust particles adhere to our skin. These dust particles attract bacteria that cause sickness. Bathing on a daily basis keeps harmful bacteria at bay.
- Before and after each meal, wash your hands. When we play, germs from the earth and mud are transmitted to our hands and can enter our bodies, causing sickness.
- Take care of our teeth by brushing twice a day and flossing on a regular basis to eliminate food particles that have been trapped or caught between our teeth and are difficult to remove.
- Regularly trim your nails.
- Maintain clean, lice-free hair.
- Maintain excellent eye and ear health. Avoid reading in low-light situations, and cleanse your eyes with cold water on a frequent basis.
- Always keep our surroundings clean. Garbage should be disposed of in bins, and water should not be collected in drums or buckets since it serves as a breeding ground for mosquitoes.

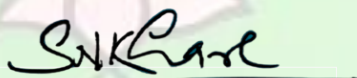
The certificate course was wrapped up after distribution of the course completion certificates by Dr. S.N. Khare (Coordinator, IQAC) among the enrolled students.

The number of enrolled as well as the benefitted students was 94.



Trainer:

Dr. Aradhna Dubey
Associate Professor
(Department of Home Science)



Organizer:

Dr. S.N. Khare
Coordinator, IQAC



Principal:

Govt. Jagannath Muralidhar Choudhary
Mahila Mahavidyalaya, Mandla (M.P.)
Govt. J.M.C. Mahila
Mahavidyalaya,
Mandla, M.P.