GOVERNMENT COLLEGE OF EDUCATION
SECTOR 20-D, CHANDIGARH-160020

जिजीविषा

Issue: 2 Vol. 1 A HALF YEARLY NEWSLETTER September 2023

Published By:
Government College of Education
Sector 20 D, Chandigarh,160020
Phone: 0172-2700075 ,2784182
Email id: gcechd@yahoo.co.in
Website: www.gcechd.ac.in

From the Chief Editor's Desk

Dr.(Mrs.) Sapna Nanda
Principal
Government College of Education
Sector- 20 D,Chandigarh

Dear Readers

Welcome to the second issue of our newsletter, published for the 6th Poshan Maah, September 2023 which is "***Suposhit Bharat, Sakshar Bharat, Sashakt Bharat,"*** which translates to "Nutrition-rich India, Educated India, and Empowered India".

This theme underscores the critical interplay between nutrition, education, and empowerment in the country's development.

It signifies the nation's commitment to addressing the pervasive issue of malnutrition and promoting the health and well-being of its citizens. Adequate nutrition is essential for physical and cognitive growth, immune system function, and overall health.

During this year we conducted *'Magic Millets', 'Aahar Kranti'* and various awaeness programmes on Healthy and Poshtik Aahar at our college.

Our goal is to provide valuable insights and information to help our readers make informed decisions about their health and lifestyle. We welcome your feedback, suggestions, and questions, and we will be happy to address them in future issues. We look forward to sharing more with you in the coming issues.

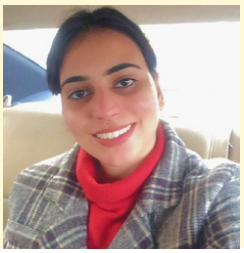
We hope you find this newsletter informative and useful.

Let's work together to promote the benefits of millets and adopt a right nutritious diet for a healthy living.Thank you for joining us on this journey towards better nutrition, health, and wellness.

Best regards

Sapna Nanda

GENETIC DIVERSITY AND BREEDING OF MILLETS



Ms Meghna Duhan

Student: B.Ed, Second Year
Government College of Education
Sec-20, Chandigarh

INTRODUCTION

Millets are a group of small-seeded, hardy cereal crops that have been cultivated for thousands of years, primarily in semi-arid regions of Asia and Africa. These grains, which include pearl millet, finger millet, foxtail millet, and proso millet, have played a crucial role in the food security and nutrition of millions of people. In the recent years, there has been a renewed interest in millets due to their nutritional value, adaptability to adverse growing conditions, and potential to combat food insecurity and malnutrition. This article explores the genetic diversity of millets and the breeding efforts aimed at improving their traits and yields.

Genetic Diversity of Millets

Species Diversity: Millets belong to the Poaceae family and are classified under the subfamily Panicoideae. There are multiple species of millets, each with its unique characteristics. Pearl millet is one of the most widely cultivated species, especially in Africa and India, while finger millet is known for its high nutritional content. Other species include proso millet, foxtail millet, and barnyard millet.

Genetic Variation within Species: Within each species, there is considerable genetic variation. This diversity is vital for breeding programs, as it allows for the selection of traits such as drought tolerance, pest resistance, and improved yield. Genetic diversity in millets has been harnessed through various techniques, including germplasm collection and characterization.

Breeding Millets for Improved Traits

Drought Tolerance: Millets are often grown in arid and semi-arid regions where water scarcity is a significant challenge. Breeding programs aim to develop drought-tolerant varieties by selecting for traits such as deep root systems and reduced water requirements.

Nutritional Enhancement: Finger millet, in particular, is known for its high nutrient content, including iron and calcium. Breeding efforts focus on increasing these nutrients to combat malnutrition, especially in regions where millets are staple foods.

Pest and Disease Resistance: Millets are susceptible to various pests and diseases. Breeding programs have identified genetic markers for resistance and developed resistant varieties, reducing the need for chemical pesticides.

Improved Yield: Increasing millet yields is crucial for food security. Breeding programs work on enhancing the grain size, plant architecture, and grain filling process to improve overall productivity.

Shorter Maturation Period: Developing early-maturing millet varieties is essential in regions with a short growing season. These varieties allow farmers to adapt to changing climate conditions and extend millet cultivation to new areas.

Genetic diversity and breeding efforts in millets are vital for ensuring food security, improving nutrition, and enhancing resilience to climate change. These ancient grains have the potential to play a significant role in global agriculture and nutrition, and ongoing research and breeding programs are key to realizing that potential. By harnessing the genetic diversity within millet species and addressing the challenges faced by millet farmers, we can unlock the full benefits of these nutritious and adaptable crops.

MID DAY MEAL PROGRAMME: POSHAN TO CHILDREN

Ms Navpreet

B.Ed Second year
Government College of Education
Sec-20, Chandigarh

Midday meals play a crucial role in providing nutrition (Poshan) to children, especially in developing countries. Here are some key reasons highlighting the importance of midday meals in ensuring the well-being and proper development of children

Nutrition: Midday meals provide children with a balanced and nutritious meal during the school day. These meals typically include items like rice, lentils, vegetables, and fruits, which are rich in essential nutrients such as protein, carbohydrates, vitamins, and minerals. This nutrition is vital for the physical and cognitive growth of children.

***Health Improvement*:** Proper nutrition helps improve the overall health of children. Malnutrition, which can result from inadequate food intake or poor-quality diets, can lead to various health problems, including stunted growth, weakened immune systems, and cognitive impairments. Midday meals help combat malnutrition and related health issues.

Increased Attendance: Midday meals act as an incentive for children to attend school regularly. Knowing that they will receive a nutritious meal encourages parents to send their children to school regularly, increasing school attendance rates. This, in turn, contributes to higher levels of education and skill development among children.

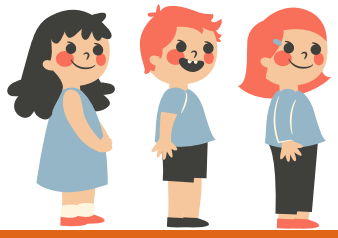
Better Concentration and Learning: Well-nourished children are better able to concentrate and learn in school. Proper nutrition supports cognitive development, which is essential for academic success. Children who receive midday meals are more likely to actively participate in class and perform better in their studies.

Reduction of Hunger and Food Insecurity: For many children, especially those from economically disadvantaged backgrounds, midday meals may be their most reliable source of food. These meals help reduce hunger and food insecurity among school-going children, ensuring they have at least one nutritious meal each day.

Social Equity: Midday meal programs promote social equity by ensuring that children from all socio-economic backgrounds have access to the same level of nutrition. This helps bridge the gap between privileged and underprivileged children, promoting a fair society.

Community Development: Midday meal programs often involve local communities in food preparation and distribution, creating job opportunities and fostering community engagement. This can have positive socio-economic effects in the areas where these programs are implemented.

Long-term Benefits: Providing proper nutrition to children through midday meals can have long-term benefits for society as a whole. Healthy and well-educated children are more likely to become productive and economically self-sufficient adults, reducing the burden on healthcare and social welfare systems.

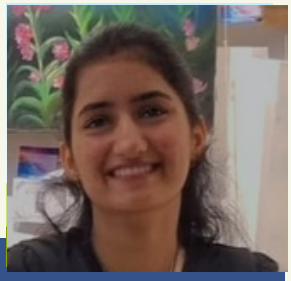


Midday Meals are a vital component of efforts to improve the health, education, and overall well-being of children, particularly in regions where malnutrition and food insecurity are prevalent. These programs not only nourish young minds and bodies but also contribute to the development and prosperity of communities and nations

"THE MAGIC OF MILLETS: A BOON FOR DIABETIC DIETS"

Ms Nandini

B.Ed First Year
Government College of Education
Sec-20, Chandigarh



Introduction

In the recent years, millets have emerged as "magic grains" for individuals with diabetes, they now reflect remarkable nutritional profile and health benefits. These ancient grains have gained popularity as a diabetes-friendly food choice due to their low glycemic index (GI), complex carbohydrates, high fiber content, and nutrient richness. In this article, we will explore why millets are considered a valuable addition to diabetic diets.

Low Glycemic Index (GI)
One of the key reasons millets are highly recommended for individuals with diabetes is their low GI. The glycemic index is a scale that measures how quickly a carbohydrate-containing food raises blood sugar levels. Foods with a high GI cause rapid spikes in blood sugar, while those with a low GI lead to a gradual and steady increase. Millets fall into the low-GI category, making them an excellent choice for maintaining stable blood sugar levels.

Complex Carbohydrates
Millets are rich in complex carbohydrates, which are digested slowly by the body. This slow digestion results in a steady release of energy, preventing sudden spikes in blood sugar after meals. This is particularly beneficial for people with diabetes who need to manage their blood sugar levels effectively.

High Fiber Content
Fiber is a crucial component of a diabetic diet, and millets deliver on this front. These grains are packed with dietary fiber, which has several benefits for diabetes management. Fiber helps slow down the absorption of sugar in the bloodstream, improves insulin sensitivity, and promotes better digestion. It also provides a feeling of fullness, reducing the urge to snack between meals and aiding in weight management—a significant factor for diabetes control.

Gluten-Free
For individuals with diabetes who also have celiac disease or gluten sensitivity, millets offer a safe alternative. Most millets are naturally gluten-free, making them suitable for those who must avoid gluten-containing grains.

Weight Management
Maintaining a healthy weight is vital for managing diabetes, and millets can be a valuable ally in achieving this goal. Their high fiber content and slow-digesting carbohydrates contribute to a feeling of fullness, helping individuals control their calorie intake and prevent overeating.

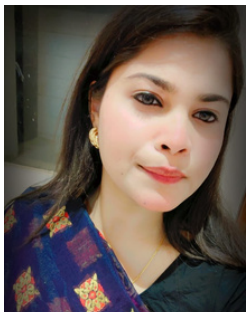
Lower Risk of Cardiovascular Disease
Diabetes often comes with an increased risk of cardiovascular diseases. Millets, with their fiber and low saturated fat content, can contribute to heart health by reducing cholesterol levels and promoting healthy blood vessels.

Incorporating millets into a diabetic diet is a smart choice due to their low GI, complex carbohydrates, high fiber content, and rich nutrient profile. These ancient grains offer numerous health benefits, including better blood sugar control, improved digestion, weight management, and a reduced risk of cardiovascular diseases. Millets may indeed be "magic grains" for diabetics, but their true magic lies in the context of a well-balanced and personalized diabetes management plan.

DEFICIENCIES IN CHILDREN

Ms Navjot Kaur

B.Ed Second Year
Government College of Education
Sector- 20, Chandigarh



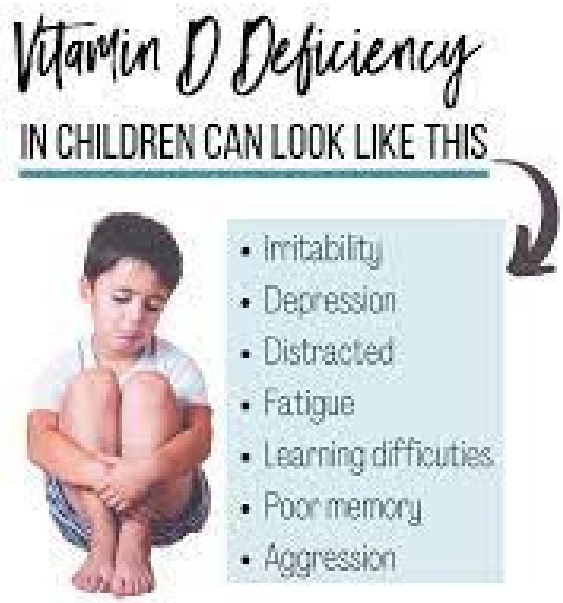
Vitamin D is essential for calcium absorption, which is vital for the development of strong bones and teeth. A deficiency in vitamin D can lead to conditions like rickets, where the bones become weak and brittle. Moreover, vitamin D plays a significant role in the functioning of the immune system, and its insufficiency can increase a child's vulnerability to infections.

Several factors contribute to these deficiencies in children. One key factor is diet. Children with limited access to a diverse range of nutrient-rich foods, such as lean meats, dairy products, green leafy vegetables, and fortified foods, are at greater risk. Additionally, the modern lifestyle characterized by increased screen time and indoor activities has reduced children's exposure to sunlight, which is essential for the synthesis of vitamin D in the skin.

Prevention and management of iron and vitamin D deficiencies in children require a comprehensive approach. Promoting a well-balanced diet that includes iron-rich and vitamin D-rich foods is paramount. For those at risk, dietary supplements may be recommended under medical supervision. Encouraging outdoor play and physical activity to ensure sufficient sunlight exposure is essential for vitamin D synthesis.

Regular check-ups with healthcare providers are crucial for monitoring a child's nutritional status and addressing deficiencies promptly. By prioritizing the nutritional needs of children and taking proactive steps to prevent iron and vitamin D deficiencies, we can ensure that they grow up healthy, strong, and with the best chances for a bright future.

Deficiency of iron and vitamin D in children is a multifaceted health concern that requires our attention. These two vital nutrients play crucial roles in a child's growth, development, and overall well-being. Iron is indispensable for the production of hemoglobin, the protein in red blood cells responsible for carrying oxygen throughout the body. Inadequate iron intake can lead to iron-deficiency anemia in children, characterized by fatigue, weakness, pale skin, and impaired cognitive development. This condition not only affects physical health but also hinders a child's ability to concentrate and perform well in school.



The Escalating Challenge of Anemia in India

The common cause of anemia in the general population is iron deficiency.Anemia is defined by the World Health Organization as a reduction in the proportion of red blood cells or decline in the concentration of hemoglobin level or insufficient oxygen caring capacity to fulfill the physiological demand

Anemia is adversely affecting women of reproductive age and child health which in turn results in increased morbidity and maternal death, and also hamper social-economic growth. Reproductive women are more prone to anemia due to inadequate dietary intake and iron loss during menstruation and pregnancy.

In India more than 15 states belong to the high prevalence (>%55) of anemia among socially backward groups in 2019–21. The anemia prevalence was high (>55%) in all social groups (SC & ST, OBC, general) observed in 7 states in NFHS-3, 4 in NFHS-4 and 11 states in NFHS-5. The overall result reveals that the SC/ST women were more prone to anemia than OBC and general women, and the prevalence rate slightly increased from 2005–06 to 2019–21. Among all variables, economic status dominantly controls the anemia level in all social groups. Anemia prevalence of the poor and poorest group of general women were much worse than the women of richer and richest groups of SC/ST, OBC. The odds of women having anemia were lower among higher educated and urban women as compared to the non educated and rural women, irrespective of social groups. The prevalence of anemia decreases with increased age of women and increases with the number of child bearing. All differences were statistically significant.

Ms Preeti

B.Ed first year
Government College of Education
Sec-20, Chandigarh

The problem of iron deficiency remains a major issue in India, where the majority of the states (eastern, north-eastern and central) suffer from high anemia prevalence rate and it increases over time. Multiple socio-demographic factors ranging from poor economic and educational status, rural residence to higher childbearing of women are responsible for predicting anemia levels among the social groups of women in India. India should improve women's overall nutrition status and their income. Meanwhile, GOI should be more focused on the existing policies related to anemia and on their actual implementation on grassroots level.

Millets Recipe Competition held at Govt College of Education, Chandigarh

Chandigarh: A Millet's Recipe Competition was held today at Government College of Education, Sector 20 in collaboration with MGNCRE. Faculty members, non-teaching staff and students enthusiastically participated in this competition. This event was the second in the series to celebrate the International Year of Millets 2023. The first event which was held earlier included an awareness drive on Aahar Kranti by NGO Nivedita Foundation headed by Dr. Virender Garg, OSD to the Union Health Minister, Govt. of India. Various dishes were prepared by the participants using millets as core ingredients such as foxtail millet, browntop millet, barnyard millet, kodo millet and little millet etc. The judges of the contest were Dr. Vandana Sharma from MCM DAV College, Sector 36; Dr. Sapna Nanda, Principal, Government College of Education, Sector 20; Dr. Ravneet Chawla, Associate Professor, Government College of Education, Sector 20 and Miss. Bharti Goel, Faculty, University Institute of Hotel and Tourism Management, Panjab University, Chandigarh. Judges appreciated the efforts of participants who made delicious recipes using millets.
Among the staff members, the first prize was won by Dr. Balvinder Kaur who prepared sorghum cake and foxtail smoothie. The second prize winners were Dr. Neelam Paul and Ms. Gurmeet Kaur who prepared Barnyard millet dosa, uttapam, khichdi and kheer and also Dr. Anjali Puri who prepared schezwan foxtail millet bowl and millet pudding.

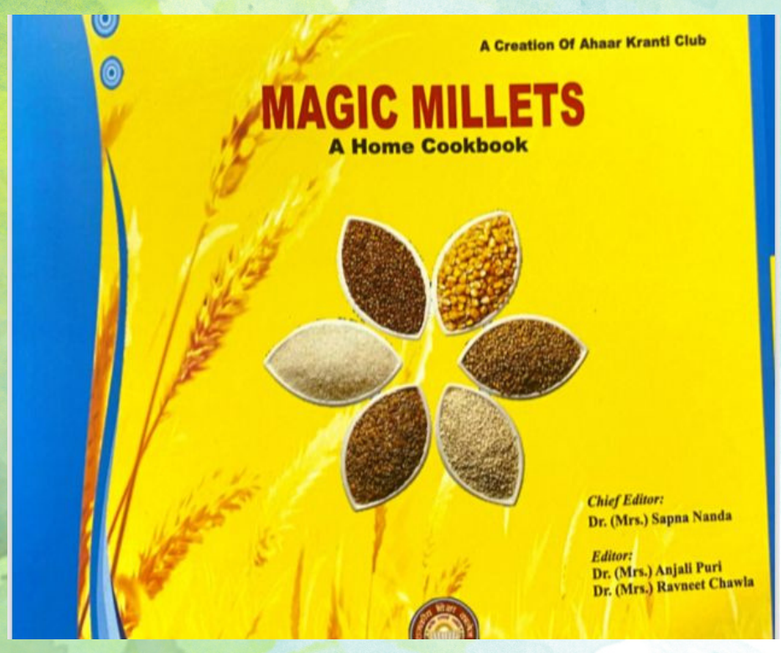
On 3rd October 2023,

During One Day NSS Camp at Government College of Education, Sector 20 D, Chandigarh. Mr Akash Monga of PGDGC sold millets, multigrain flours, and spices at Aahar Kranti Stall.

Dr.S Dahiya, Director, SCERT Chandigarh graced the the event with his presence.


NIVEDITA TRUST PRESENTS
अनुकामा
Celebrating Womanhood
AAHAR KRANTI
Guest of Honour
Sh. Banveer Singh
Kshetra Pracharak RSS
Guest of Honour
Sh. Santosh Kumar Taneja
Eminent Social Thinker and Reformist
Chief Guest
Mrs. Mallika Nadda
Chairperson, Special Olympics
Guest of Honour
Hon'ble Mrs. Justice Sabina
Acting Chief Justice (Retd.), Himachal Pradesh
Guest of Honour
Dr. Vinod N. Indurkar
Chairman, Centre for Cultural Resources and Training
TRIDENT GROUP
April 29, 2023


OWLEDGE OF PAST
STRENGTH OF FUTURE
Ingredients:
SAMAK RICE, AND A LOT OF VEGGIES


A Creation Of Ahaar Kranti Club
MAGIC MILLETS
A Home Cookbook
Chief Editor:
Dr. (Mrs.) Sapna Nanda
Editor:
Dr. (Mrs.) Anjali Puri
Dr. (Mrs.) Ravneet Chawla


LADDU
IN
DIFFERENT
SHAPES


जिजीविषा
(जीने की चाह)
Issue: 1 Vol. 1
A Half Yearly News Letter
March 2023
Editorial Board
Patron
Dr.(Mrs.) Sapna Nanda
Principal
Government College of Education
Sector - 20 D,Chandigarh
Chief Editor
Dr.(Mrs.) Sapna Nanda
Convenor
Club Wholesome
Department of Home Science
Government College of Education
Sector - 20 D,Chandigarh
Co-Editor
Ms Meghna Duhan
Pupil Teacher
B.Ed 2nd Semester
Government College of Education
Sector - 20 D,Chandigarh
Editorial Members
Ms Renu
Pupil Teacher
B.Ed 2nd Semester
Ms Navjot Kaur
Pupil Teacher
B.Ed 2nd Semester
Ms Simran Gondwal
Pupil Teacher
B.Ed 2nd Semester
Ms Navpreet
Pupil Teacher
B.Ed 2nd Semester
Ms Lata
Pupil Teacher
B.Ed 4th Semester
Ms Raveena Gill
Pupil Teacher
B.Ed 4th Semester
Ms Komal Maurya
Pupil Teacher
B.Ed 4th Semester
Ms Kamini
Pupil Teacher
B.Ed 4th Semester
Published By:
Government College of Education
Sector 20 D, Chandigarh,160020
Phone: 0172-2700075, 2784182
Email id: gcechd@yahoo.co.in
Website: www.gcechd.ac.in
From the Chief Editor's Desk
Dr.(Mrs.) Sapna Nanda
Principal
Government College of Education
Sector- 20 D,Chandigarh
Dear Readers
Welcome to the first issue of our newsletter, published in the International Year of Millets 2023! This year presents an excellent opportunity to raise awareness about the benefits of consuming millets and promoting their cultivation.
As we all know, proper nutrition, exercise, and a positive outlook are essential for good health and happiness. The food we eat not only fuels our bodies but also has a significant impact on our overall well-being.
In this issue, we will focus on various aspects of health, nutrition, and wellness. Additionally it will provide you with the most up-to-date information and practical tips on how to maintain optimal health and wellness. We hope you find this newsletter informative and useful.
Our goal is to provide valuable insights and information to help our readers make informed decisions about their health and lifestyle. We welcome your feedback, suggestions, and questions, and we will be happy to address them in future issues. We look forward to sharing more with you in the coming issues.
Let's work together to promote the benefits of millets and make this International Year of Millets a success! Thank you for joining us on this journey towards better nutrition, health, and wellness.
Best regards
Sapna Nanda


INDIA ON A PLATTER:
A MILLET-FUELED
CULINARY
ADVENTURE


WELCOMES YOU ALL
TO THE
INTERNATIONAL WOMEN'S DAY 2023
CELEBRATION