



Dr. N.G.P ARTS AND SCIENCE COLLEGE

An Autonomous Institution Affiliated to Bharathiar University

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COIMBATORE - 641 048.

Newsletter
2015 - 2016

Department of Nutrition and Dietetics

EDITORIAL

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Editors Note:

We take immense pleasure in releasing the News Letter for the academic year 2015-2016. The Department of Nutrition and Dietetics has performed various activities in this academic year with an aim to render nutritional services to the community. Various extension activities were organized to create an awareness on the importance of nutrition among various sectors of people in the community. The students were given opportunities to improve their knowledge about the current trends in this field through various guest lectures, workshops and seminars conducted by the department. They were also motivated to participate in National and International Conferences and Workshops conducted by other institutions.

History of the Department

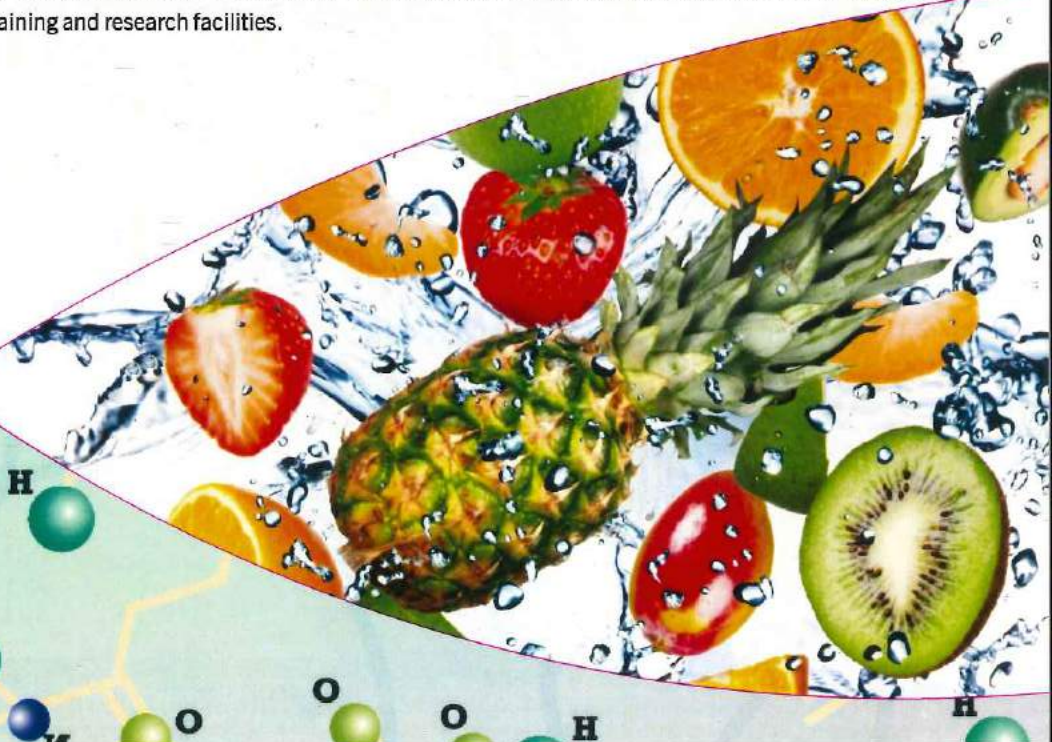
The Department of Nutrition and Dietetics was started in the year 2003 with B. Sc Food Science and Nutrition with well - equipped laboratories. Post graduate course in Food and Nutrition was started in the year 2004. The department also extends the activities of research by offering Master of Philosophy in Food and Nutrition from the year 2005 onwards. The Department has well qualified and experienced faculties.

Vision

To educate and to mould more scholars in the field of Nutrition and Dietetics with its vast scope and versatile applications in the field of study .

Mission

To enhance the overall personality of our students by providing quality education, internship training and research facilities.



Objectives

- ❖ To inculcate healthy lifestyle aspects in the mindset of students and explore them to be good nutritionists.
- ❖ To motivate students in developing highly affordable therapeutic food products.
- ❖ To create awareness and render nutrition service to the community.

Activities of the Department

- ▶▶ Five Guest Lectures
- ▶▶ One Interdepartmental Competition - Nutrition week
- ▶▶ World Food Day
- ▶▶ One First Aid Workshop
- ▶▶ Career Guidance Program
- ▶▶ Eight Extension activities
- ▶▶ Short Term Training Course for other Disciplinary students

INVITED SPEAKERS :

The department has taken initiatives in enhancing the knowledge of the students by inviting experts from industries and reputed institutions to share their knowledge through their presentations. The department has conducted five guest lectures in this academic year.

- ▶▶ Recent Trends in Anemia by Dr. Aruna Narayanan, Associate Professor, Department of Nutrition, Food Service Management and Dietetics, PSG College of Arts and Science, Coimbatore on 19.06.2015.
- ▶▶ An invited lecture on Oncology Nutrition by Mrs. Cynthia Rajiv, Consultant Oncology Dietitian KMCH, Coimbatore on 26.08.2015.
- ▶▶ Dr. Kamalaveni, Assistant Professor, Women's Studies, Bharathiar University, Coimbatore was the invited speaker and interacted with students on Role of Women in Environmental Protection on 10.09.2015.
- ▶▶ Mr. Vetri Selvan, Program Manager, Urban Develop Project, World Vision Coimbatore, sensitized the students on Role of Nutrition for Every Child on 06.10.2015.
- ▶▶ Mrs. Sasi Priya, Chairman, Choco Garden Coimbatore, interacted and motivated the students on Entrepreneurship Empowerment of Women on 26.02.2016.



Recent Trends in Anemia by
Dr. Aruna Narayanan



Oncology Nutrition by
Mrs. Cynthia Rajiv



Role of Nutrition for Every Child by Mr. Vetri Selvan

NUTRITION WEEK CELEBRATIONS :

In the celebrations of Nutrition Week, the department organized Interdepartmental competitions on four different types of events have been organized on the theme of "Better Nutrition Key to Development" on 29.09.2015 for all UG and PG students of other departments.



WORLD FOOD DAY CELEBRATIONS :

In the eve of World Food Day the department have organized Cooking Competition "Healthy Snacks" on the theme "Social Protection & Agriculture - Breaking the Cycle of Rural Poverty" for all UG and PG students of our department on 01.10.2015.



WORKSHOP :



On 22.02.2015 and 23.02.2015 a Workshop on "FIRST AID" was conducted by St. John Ambulance for our Post Graduate students at our college premises.

CAREER GUIDANCE PROGRAM :

Career Guidance Program on Food Safety Consultant and Auditing by Mr. Sajesh Thippilikkad, Food Safety Consultant, Safe Hand Food Tech Consultants, Dubai, UAE was organized on 2nd July, 2015. He gave a detailed presentation on the applications of food safety in various industries. He specified about the growth of the food processing sector and varied job opportunities sought in various food industries. He also oriented the students regarding the designations they can achieve in placements in the field of food industries both nationally and internationally.



EXTENSION ACTIVITIES:

- ▶ "Breast feeding week celebration" at KMCH an awareness program for prenatal and postnatal mothers on 04.08.2015.
- ▶ One day awareness programme on "Advantages of Breastfeeding" along with ICDS Veerampalayam Village Pregnant and Lactating Mother was organized on August 2015 in ICDS centre Veerampalayam , Coimbatore.
- ▶ On 28.09.2015 an extension activity was organized on "Entrepreneur Development Program" was organized for the Veeriyampalayam residents on fruit and vegetable preservation.
- ▶ On 13.10.2015 an extension activity was done on "Awareness on Traditional Foods - Food Mela" was organized for the ICDS Officers of Coimbatore.



Awareness on Traditional Foods – Food Mela

- ▶ "Personal Hygiene Practices" and "Health Record" for House Keeping Employees was conducted on 07.10.2015 and 12.12.2015, at our college premises .
- ▶ On 19.10.2015 an extension activity on "World Food Day- 24 Hour Famine - 2015" an education program on Food Security through Social Protection for Self Help Groups at Amman Kulam, Coimbatore was enthusiastically organised by the department.



Entrepreneur Development Program



Self Help Groups Education Program on Food Security

- ▶ "Health Record" for First year UG & PG Students of our college was conducted on 11.01.2016 to 13.01.2016 at our college premises.
- ▶ On 08.02.2016 a Community Development Programme "Arockiyamana Unave Sugamana Valzhvu" was conducted for Veeriyampalayam, Karuparayanpalayam and Kalapatti village residents.

SHORT TERM TRAINING PROGRAM:

Our department conducted a short term training course on "Fruits and Vegetable Preservation" for other discipline students for 3 days from 21.09.2015 to 23.09.2015. Around 54 other discipline students were participated and benefited by this course. This course enlightened their knowledge on preserving seasonal fruits and vegetables without any preservatives and additives.



VALUE ADDED COURSE :

- ▶ Food Safety and Management Systems - The course was conducted by INDOCERT, Kerala from 16.09.2015 to 18.09.2015, for the students of II B.Sc Food Science and Nutrition and III B.Sc Food Science and Nutrition (CA).
- ▶ Modern Trend In food Processing - The course was conducted by Karunya University, Coimbatore from 17.02.2016 to 19.02.2016, for the students of I M.Sc Food and Nutrition .
- ▶ Advanced Food Technology and Processing - The course was conducted by Indian Institute of Crop Processing and Technology, Thanjavur from 27.03.2016 to 29.03.2016, for the students of II M.Sc Food and Nutrition .

ACHIEVEMENTS OF THE DEPARTMENT :

STUDENTS :

- ▶ University Rank Holders :

Undergraduate (2012-2015) - I Rank	: NEELU S.BABU
II Rank	: VARSHA.R
III Rank	: SHILPA JOY
Postgraduate (2013-2015) - I Rank	: BHARGAVI .R
II Rank	: M. SAJNEETHA SUKAPRIYA

Winners of Interdepartmental and Inter Collegiate Events :

- ▶ Susmi Satheeshkumar, Abinaya Arumugam, Faheema Afsin of III B.Sc Food Science and Nutrition won the First Prize in

Adzap and Geetha .S and Bhuvanaskari .D of III B.Sc Food Science and Nutrition won the I prize in Quiz Competition in the commercial Blast conducted by Department of Commerce PA.

- ▶▶ Geetha .S of III B.Sc Food Science and Nutrition was selected to attend the training programme conducted by MSME and ICTACT and her project got selected by Entrepreneurship Development training programme conducted by Government of Tamilnadu.
- ▶▶ The students of III B.Sc Food Science and Nutrition, Susmi Satheshkumar and Dheeraja won the II Prize in Paper Presentation and Faheema won II prize in Essay Writing and Abinaya Arumugam got I Prize in Tamil Poetry in Inter Departmental Competitions conducted by the department of Computer Applications on 21.09.2015.
- ▶▶ Geetha .S, Bhuvanaskari .D Ramya and Priya of III B.Sc Food Science and Nutrition secured the II Prize in Model Competition organized by the Biotechnology Department on 23.09.2015.
- ▶▶ Kavisneha and Sangavi of II B.Sc Food Science and Nutrition got I Prize in Quiz competition organized by the English Department.
- ▶▶ Alisha George and Amrutha K of II B.Sc Food Science and Nutrition got II prize in the competition organized by the department of CDF
- ▶▶ Bharathi .K of II B.Sc Food Science and Nutrition got the III prize in the competition conducted by the Tamil Department .
- ▶▶ Deepa .N, Navya Ganga, Neethu, Megha from II M.Sc Food and Nutrition students presented paper in National Conference conducted by the Department of Food Processing and Technology, at JCT College of Technology, Coimbatore on 24.03.16 .
- ▶▶ Navya Ganga of II M.Sc Food and Nutrition won II prize in paper presentation in the above mentioned conference.
- ▶▶ Rekha and Sathya Priya of II B.Sc Food Science and Nutrition students got I Prize and Subash and Gilbert of II B.Sc Food Science and Nutrition received III Prize in Fireless Cooking at

JCT college of technology, coimbatore on 24.03.16

- ▶▶ Ashwini.P, Arsha Vincent.K, Pavithra.S, Pavithra.G, Swathi.M, Shilpa.S, of II B.Sc Food Science and Nutrition won III prize in group dance, NGP FEST on 15.08.2014.
- ▶▶ Dr.Thavamani D Palaniswami Research Awards-Best Product Award was received by Ms. Bharathi.A, II MSc Food & Nutrition (2013-2015) and Best Project Award was received by Mr. Charles.J.Kunjumon II MSc Food & Nutrition (2013-2015).
- ▶▶ Our post graduate students have attended Twenty Days Entrepreneurship development programme on Processing and value addition of fruits and vegetables in Indian Institute of Crop Processing Technology, Thanjavur from 22.11.2016 to 16.12.2016.

FACULTY ACHIEVEMENTS:

- ▶▶ Two faculty members DR.Uma Maheswari and DR.Sivasakthi have been conferred Doctoral Degree in the month of December 2015.
- ▶▶ DR.D.Sridevi was nominated as a content writer for two modules on Therapeutic Nutrition under UGC sanctioned an e-PG Pathshala Project for Foods and Nutrition Avinashilingam University for Women, Coimbatore.
- ▶▶ DR.D.Sridevi has been Guest speaker and gave talk on "Nutrition for Every Child" organized by Bishop Appasamy College of Arts and Science, Coimbatore on 15-10-2015.
- ▶▶ DR.D.Sridevi has been Guest speaker in a Nutrition and Health Awareness Program at Government Middle School, Sanganur, Coimbatore organized by Bharathiar University Women Studies Department on 18-02-2016.
- ▶▶ DR.M.Uma Maheswari was a Resource Person in UGC Sponsored National Seminar "Recent Perspectives in Food Technology" on 09.02.2016 at Arul Anandhar College, Karumathur, Madurai.
- ▶▶ Mrs. B. Premagowri was a Resource Person in Gurukulam Kids School, Coimbatore and gave a talk on "Healthy Diet for Pre-School Children" on 13.10.2016.

Placement Details

Batch	Name	Occupation
PG 2013-2015	Charles.J.Kunjumon	Quality Controller, Elite Global Catering Company, Abu Dhabi.
	Bharathi.A	Dietitian, Pink Fitness Centre, Coimbatore.
	A.Loganayaki	Dietitian, Color Fitness Centre, Coimbatore.
	M.Sajeenetha Sukapriya	Dietitian, PSG Hospital, Coimbatore.
	Tara Jacob	Amrita Hospital, Kerala
	S.Ganamoorthy	British Biologicals, Trivandram
	P.Nisha	British Biologicals, Trivandram
	Nicy Johnson	Daya Hospitals, Thrissur
UG - 2012-2015	Veerashwari	Dietitian, Color Fitness Centre, Coimbatore

Training Undergone by Students

- » Bakers Spices, Coimbatore
- » Milma, Wayanad
- » Dinesh Foods Private Limited ,Kannur.
- » United Breweries, Palakkad
- » Elite Group of company, Kerala
- » Nellara, Malappuram
- » Banatone, Trivandrum
- » Modern Bread, Ernakulam

Publications - Faculty

Name of the Faculty	Publications	
	Published in	Number of Publications
DR. D. Sridevi	ISSN-0975-833X and Impact Factor 5.3 ISBN :819077300-3 (2) ISSN 2319-7064 and Impact Factor 4.438 ISSN-2249-555X and Impact Factor 3.6 (2)	6
DR. K. Arulmozhi	ISBN : 2319-7706 and Impact Factor 2.1	1
Mrs. V. Krishnaprabha	ISSN 2348-8069,2(4) and Impact Factor 1.168 (2) ISSN 2348-5221,2(4) and Impact Factor 1.046 ISSN 2319-7064,4(5) and Impact Factor 6.391 ISSN 2347-7008,3(3) and Impact Factor 3.441 ISSN 0975-7066,7(3) and Impact Factor 4.510 ISSN 19570-19573,7(8) and Impact Factor 6.226	7
Mrs.B.Premagowri	ISSN 2277-8179 and Impact Factor 6.391 ISSN 2277-8160 and Impact Factor 3.62	2
DR.S.Siva Sakthi	ISSN 2319 -2399 and Impact Factor 1.823 ISSN 2157 -7110 and Impact Factor 3.4	2

Students Corner

ANTHOCYANIN -BENEFIT FOR HUMAN HEALTH

- » Anthocyanins are water-soluble phytochemicals with a typical red to blue color. Anthocyanins belong to the group of flavonoids, polyphenolic molecules containing 15 carbon atoms and which can be visualized as two benzene rings joined together with a short three carbon chain.
- » It is found in tissues of plants, including leaves, stems, roots, flowers and fruits And occur mainly as glycosides of anthocyanidins such as cyanidin, delphinidin, peonidin, pelargonidin, petunidin and malvidin.
- » Anthocyanins can be found in numerous plants, but high levels are present in acai, blackcurrant, blueberry, bilberry, cherry, red grape and purple corn.

Health Benefits of Anthocyanins

- » Although anthocyanins are powerful antioxidants in vitro, their real biological activity will be low because of their low stability and poor absorption. Most studies on the potential

health benefits of anthocyanins have been focused on its effect on cardiovascular health, its anti-cancer activity and anti-inflammatory properties.

- » The beneficial biological effects of anthocyanins on cardiovascular health may be driven by their affinity for proteins and their antioxidant activity. Anthocyanins can act on different cells involved in the development of atherosclerosis. Studies have shown that anthocyanins may act as anti-cancer agents by inhibit promotion and progression of tumor cells by stopping the growth of pre-malignant cells, increasing the apoptosis of cancer cells and inhibiting the growth of new blood vessels that nourish tumors.
- » The antiinflammatory action of anthocyanins may be attributed to its direct and strong antioxidant action but also its regulatory effect on the expression of genes involved in the inflammatory response.
- » Anthocyanins may also improve eyesight by other mechanisms.

Anthocyanins have received less attention than other flavonoids, despite their far-reaching effects. Because berries were such a large part of early diets, our ancestors probably ate far more anthocyanins than we do. Some researchers feel that, by comparison, we are deficient in anthocyanins. When people become aware of the antioxidant power of these compounds, perhaps we can remedy that deficiency. In this process, some of our popular foods may become even more enjoyable.

By Swathi Menon, II PG Food Science and Nutrition

POTENTIAL OF CURD AS A FUNCTIONAL FOOD

- ▶ Curds are a dairy product obtained by coagulating milk in a process called curdling. First off all our body needs to have a healthy amount of "good" bacteria in the digestive tract, and many curds are made using active, good bacteria. One of the words we are hearing more of in relation to curd is "probiotics." Probiotic, which literally means "for life," refers to living organisms that can result in a health benefit when eaten in adequate amounts.
- ▶ Fermented foods and beverages possess various nutritional and therapeutic properties. Lactic acid bacteria (LAB) play a major role in determining the positive health effects of fermented milks and related products. The *L. acidophilus* and *Bifidobacteria* spp are known for their use in probiotic dairy foods. Cultured products sold with any claim of health benefits should meet the criteria of suggested minimum number of more than 10 cfu/g at the time of consumption. Yoghurt is redefined as a probiotic carrier food.
- ▶ Other health benefits of fermented milks include prevention of gastrointestinal infections, reduction of serum cholesterol levels and antimutagenic activity. The fermented products are recommended for consumption by lactose intolerant individuals and patients suffering from atherosclerosis
- ▶ Research strongly supports that a diet high in dairy foods, is an effective strategy for preventing and treating hypertension. Calcium, bioactive peptides and yet unidentified components in whole milk may protect from hypertension.
- ▶ Fermented dairy products like yoghurt and curd are probiotic foods. That is they are naturally occurring beneficial bacteria present in gastro-intestinal track as well as in foods. The active cultures in live curd, the probiotics, protect the body from harmful bacteria.
- ▶ Curd drops the rate of infection with an intake of 250 g by increasing gamma interferin, a protein produced by white blood cells assists the immune system in fighting germs. Incidence of dental caries is reduced with the intake of curds. Even lactose intolerant people can digest it.
- ▶ Dairy products enriched with phyto-sterols and sterols or their esters can be viewed as potential novel foods for health promotion in the next few years.

Nutritional Benefits of Yogurt or Dahi (full fat) per 100g (Source: USDA Nutrient Database)

- ▶ Energy: 61 kcal, Carbohydrate: 4.7 g, Sugars: 4.7 g, Protein: 3.5g, Fat: 3.3 g, Vitamin A: 27 g, Riboflavin: 0.14 mg, Calcium: 121 mg.

By

Shilpa Joy , II PG Food and Nutrition

The Powerful Benefits of Eggshell Membranes

- ▶ Egg's shell is a natural source of minerals and contains 90% calcium. Calcium is easily absorbed by our body because its chemical composition is almost identical to human's teeth and bones.
- ▶ The eggshell membrane is a rich source of many nutrients like glucosamine, collagen, chondroitin, hyaluronic acid. Additionally, eggshells also contain mineral elements: magnesium, phosphorus, silicon, sodium, potassium, iron, sulfur, aluminum and amino acids, which are known to play an important role in offering relief from joint pain and stiffness as well as connective tissue disorders. There are 27 elements found in the eggshells. The protein of a shell is composed of such essential amino acids as methionine, cysteine, lysine, isoleucine. Thus, properly prepared eggshells are the most balanced natural means to obtain calcium.
- ▶ Osteoarthritis is the most common type of arthritis, affecting approximately 27 million Americans. The researchers found that a supplement of natural eggshell membrane was effective for reducing knee pain and stiffness related to the condition without causing side effects that are known to result from long-term use of traditional treatments, like non-steroidal anti-inflammatory medications.
- ▶ Each of the important compounds within the eggshell membrane is known to offer benefits, including glucosamine, which can reduce joint inflammation while cushioning the joints against impact and assisting in cartilage repair. The hyaluronic acid helps to absorb shock while promoting joint elasticity; chondroitin promotes cartilage elasticity and helps to battle enzymes known to damage the joints. Collagen is a type of protein found in connective tissue.
- ▶ Those that suffer from a joint or connective tissue disorder like neck and back pain, gout and all types of arthritis and fibromyalgia may also find that eggshell membranes are effective for reducing pain associated with these conditions.
- ▶ The membrane can also be used for a number of other conditions, so don't throw that shell out just yet. Instead, peel the membrane off and use it as an aid for healing. It can be used on a cut or scratch by placing the moist side of the membrane over the cut and leaving it there until dry. For additional benefits, spread egg white over the top and place a bandage on top.

- ▶ Eggshells contain the perfect amount of the ideal substances for healing cavities - massive. The composition of eggshells resembles our teeth. Eggshells provide the necessary amount of calcium to remineralize teeth.
- ▶ Eggshells, known for their calcium content (one ½ teaspoon of crushed, powdered eggshells contain about 400 mgs. of elemental, or absorbable, calcium), a mineral responsible mainly for bone health. It is recommended to enter 1.5 to 3 grams of crushed shells a day.

BY

HARSHA VARDHINI . S II PG Food and Nutrition

FACTS ABOUT ICE CREAM

- ▶ Persian Empire invented it, Roman Empire embraced it, Muslim chemists revolutionized it, Renaissance Europe popularized it and modern day industry enabled everyone to experience it. Ice creams seem to have emerged in 17th century.
- ▶ 100gm of ice cream contains 207 calories, 11gm of fat in which 7gm is saturated fat. It takes 12 pounds of milk to make one gallon of ice cream.
- ▶ The perfect temperature for scooping ice cream is between 6° and 10°F.
- ▶ Chocolate ice cream was invented before vanilla ice cream.
- ▶ Some weird flavors of ice cream include Buckwheat ice cream, Beer flavoured ice cream and Parmesan galetto.
- ▶ The largest cone measured 3.08m in height and was achieved by Henning-Olsen Is and Trond L Woien at Norway, on 26 July 2015.
- ▶ "BRAIN FREEZE" occurs when ice cream touches the roof of your mouth, which causes blood vessels in the head to dilate.
- ▶ John Harrison, the official taste-tester for Dreyer's ice cream, has his tongue insured for 1 million dollars.
- ▶ Ice cream can help you to lose weight!!! Having something cold increases the body temperature. As it is a tendency of our body, it has to warm anything cold that enters the body. So, to produce heat body burns calories and fat. So eat ice cream in limit and lose weight.
- ▶ Ice cream can save us from blood clotting. This is done by vitamin K in ice cream.
- ▶ Ice cream is also rich in vitamins A, B, C, D, E. It is also rich in Thiamine and Niacin which are much needed by the body.
- ▶ According to U.S. Department of Agriculture one half cup of vanilla ice cream provides 137K.cal. of energy about twice the amount in one half cup of whole milk.
- ▶ It also has defects because it has high amount of sucrose and

saturated fat which may lead to cardiovascular disease and weight gain if consumed in large quantity.

- ▶ Ice cream may cause problems for certain people because it is dairy-based and contains lactose, a milk sugar. These individuals referred to as lactose intolerance are deficient in lactase the enzyme needed to digest lactose and may experience digestive upset if they consume ice cream.

By

Narayani.S II UG Food Science and Nutrition

POLYCYSTIC OVARY SYNDROME (PCOS)

Polycystic ovary syndrome is a problem in which a woman's hormones are out of balance. It can cause problems with your periods and make it difficult to get pregnant. PCOS also may cause unwanted changes in the way you look. If it is not treated, over time it can lead to serious health problems, such as diabetes and heart disease.

Most women with PCOS have many small cysts grown on their ovaries. That is why it is called polycystic ovary syndrome. In each menstrual cycle, follicles grow on the ovaries. Within those follicles eggs develop, one of which will reach maturity faster than the others and be released into the fallopian tubes. This is known as ovulation. The remaining follicles (sometimes hundreds) will degenerate. In the case of polycystic ovaries, however, the ovaries are much larger than normal, and there are series of undeveloped follicles that appear in clumps, rather like a bunch of grapes. Polycystic ovaries are not particularly troublesome and in many cases they will not even affect your fertility. When the problem starts, however, is when the cysts cause a hormonal imbalance, leading to a series of other symptoms. These symptoms are the difference between suffering from PCOS and from polycystic ovaries.

So a woman can have polycystic ovaries without having PCOS but all women with PCOS will have polycystic ovaries. Early diagnosis and treatment can help control the symptoms and prevent long-term problems.

Hormonal imbalance :

Hormones are chemical messengers that trigger many different processes, including growth and energy production. Often, the job of one hormone is to signal the release of another hormone. For reasons that are not well understood, in PCOS the hormones get out of balance.

The sex hormones get out of balance. Normally, the ovaries make a tiny amount of male sex hormones (androgens). In PCOS, they start making slightly more androgens. This may cause you to stop ovulating, get acne, and grow extra facial and body hair.

The body may have a problem using insulin, called insulin resistance. When the body doesn't use insulin well, blood sugar

levels go up. Over time, this increases your chance of getting diabetes

The cause of PCOS is not fully understood, but genetics may be a factor. PCOS seems to run in families, so your chance of having it is higher if other women in your family have it or have irregular periods or diabetes. PCOS can be passed down from either your mother's or father's side.

Symptoms of PCOS :

Symptoms tend to be mild at first. The most common symptoms are:

Acne, Weight gain and trouble losing weight ,Extra hair on the face and body. Often women get thicker and dark facial hair and more on the chest, belly, and back, thinning hair on the scalp, Irregular periods. Often women with PCOS have fewer than nine periods a year. Some women have no periods, others have very heavy bleeding. Fertility problems. Many women who have PCOS have trouble getting pregnant(infertility)and Depression

Treatment :

Regular exercise, healthy foods and weight control are the key treatment for PCOS. Treatment can reduce unpleasant symptoms and help prevent long-term health problems.

- ▶ Eat heart healthy foods. This includes lots of vegetables, fruits, nuts, beans, and whole grains. It limits foods that are high in saturated fat, such as meat, cheese and fried foods.
- ▶ Most women who have PCOS can benefit from losing weight. Even losing 4.5 kg may help get your hormones in balance and regulate your menstrual cycle.
- ▶ Try to fit in moderate activity. Walking is a great exercise that most people can do.

By **SOWNDARYA III** UG Food Science and Nutrition

PROBLEMS WITH SKIPPING BREAKFAST IN TEENS

Skipping breakfast leads to health and cognitive struggles for teenagers. It leads to the lack of vitamins and minerals in their diets. After a long night of studying followed by an early morning wake-up call and rush to the bus stop, teenagers can often struggle to fit a healthy breakfast into their routine. Though breakfast is important for all family members, it's particularly critical for teenagers who need lots of energy throughout the day to remain alert and support their busy growth.

Several studies, including one published in 2008 issue of the journal "Pediatrics," have confirmed a link between skipping breakfast and higher rates of obesity in teens. When teenagers skip breakfast, they deprive their bodies of all of their nutrients and caloric energy they need to keep their energy up and their heads off their desks. To counteract the effects, most teens resort to snacking, and they reach for high-fat, high-sodium snacks that deliver a quick boost but also pack on pounds.

The desire to lose weight is one of the reasons teens skip breakfast, particularly teenage girls. According to the American Academy of Pediatrics, children who skip breakfast are likely to weight more than children who don't, even when the teens eating breakfast consume more daily calories than those who skip breakfast.

Breakfast delivers much-needed nutrients to your body after you haven't consumed anything in several hours of sleep, and teens who skip breakfast are missing the nutrient boat in a big way. In particular, teens who skip their first meal of the day are more likely to be calcium and iron deficient, according to a 2006 study from the Baylor Colleges of Medicine in Houston.

By

G. Suvetha

II UG Food science and Nutrition



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