



Mogs for Women
Our speciality is you

THE MUMBAI OBSTETRIC & GYNECOLOGICAL SOCIETY **MOGS MATTERS**

JANUARY 2021

ISSUE 5



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Secretary



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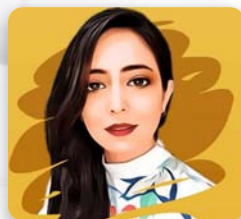
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Dr Shreya Prabhuo



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MANAGING COMMITTEE & YC REPRESENTATIVES 2020-2021



President Message



Dear friends,

Wish you all a healthy, happy and safe New Year.

It gives me great pleasure to bring to you the fifth issue of our innovative and now extremely popular E-newsletter, 'MOGS MATTERS'.

This monthly newsletter brings to you all the latest updates which are relevant to you in your daily practice. This issue is unique as it has been edited and put together by our enthusiastic and energetic Youth council members. The Yuva Leads. Bhavini, Bhumika, Jiteeka, Riddhi, Ritu, Shreya and Shrutika are the editors of this special issue. They have brought in their unique perspective into this newsletter. There is also focus on 'Fit is it" our mantra for the year. All the contributors have made a lot of effort to bring you concise information and creative content and we are thankful to them .

I am sure you enjoyed the unique 'FEM -Fertility enhancement and management conference with IVF worldwide in November, with many International and national experts sharing their experiences. It had a record breaking -delegates from 127 countries who logged in and benefitted from the excellent academics. The former Miss World and famous actress, Lara Dutta gave an inspirational address as chief guest . Free papers were presented on a digital platform and this received an overwhelming response, with posters from Europe also being submitted . I am sure you have benefitted from the many focused webinars we have been doing. I hope the 'Pearls of wisdom' videos which you are receiving regularly are adding to your knowledge. Our digital PG training program-The NA Purandare practical training event which has hundreds of young doctors tuning in, is helping young doctors get ready for exams and clinical practice.

MOGS V Care & share program was started by us to support our frontline workers and the women whose health we look after. In December ,we did a Christmas special to spread cheer and joy to frontline doctors, nurses and pregnant and postpartum patients in government and municipal hospitals. We distributed care packages to all with Christmas candy, caps, masks and nutritious gur-chana to the patients. We need your help and support for this ongoing program . You can donate by online payment on MOGS website or by bank transfer.

I look forward to interacting with you on many different platforms this year-through newsletters, webinars, Facebook events and once the vaccine comes in maybe we can meet in small groups till the situation of the pandemic settles down and we can have larger conferences.

We are starting some interesting competitions this year and will reach out to you with details. Do participate enthusiastically .

Thank you once again for all your support over the years and look forward to a wonderful 2021 at MOGS.

Stay safe ,stay healthy.

Best wishes

Dr Rishma Dhillon Pai

President MOGS.

Editors message

At the Outset, let us wish you all A Very Happy & Healthy New Year 2021.

2020 has been a difficult Year for each one of us. However, we have learned a lot in this year, from taking care of our health to using the digital platform for learning.

Digital Platform has enabled MOGS to reach out not only to its members in Mumbai but also, to the members of other societies and worldwide.

Stress has become a part of everyone's life in this Pandemic. How one responds to stress during this pandemic can depend on the background, social support from family or friends, financial situation, your health and emotional and physical and many other factors. Amongst all this taking care of yourself along with your friends and family takes prime most importance. Focusing on good nutrition, regular intake of micronutrients is very important to fight the cellular aging and other evil effects of the stress is very important not only for those who wish to embark upon their journeys of parenthood but also for one and all.

A quarter of women in the reproductive age group in India are undernourished, with a body mass index (BMI) of less than 18.5 kg/m (Source: NFHS 4 2015-16). Undernourished girls have a greater likelihood of becoming undernourished mothers who in turn have a greater chance of giving birth to low-birth-weight babies, perpetuating an intergenerational cycle.

Fetal stunting is largely caused by the mother's inadequate nutrition before conception and in the first trimester.

Each nutrient and Micronutrient like Iron, Calcium, Folic acid, DHA has role to play in pregnancy. Eating a nutritious and high protein diet and taking regular supplements during pregnancy is linked to good brain development of the fetus and a healthy birth weight, and can reduce the risk of many birth defects, low birth weight, IUGR and even maternal complications like Anemia, Gestational Diabetes, Pregnancy induced Hypertension.

Keeping this in perspective, MOGS MATTERS January 2021 issue, focuses on the Nutrition and The Road to healthy pregnancy. The Youth council members of MOGS, have put in a lot of effort to pen down the importance and role of nutrition, travel diaries, stress buster ideas, puzzles for you.

We would like to sincerely thank Dr Rishma Pai, Dr Anahita Chauhan, and Dr. Rajendra Sankpal for encouraging supporting and guiding us for this MOGS MATTERS. We would also like to thank all the contributors of this issue

Best wishes to the MOGS Family
Stay Safe, Stay Healthy

Thank you
Regards
MOGS Youth Council Leads



Dr Siddesh Iyer

MOGS PAST EVENTS !



Dr Shreya Prabhoo

OUTREACH PROGRAMS

MOGS has had 7 amazing Outreach Programs over 2 months, it started with the "Blood Health Forum" which was held on 31.10.2020, which was attended by 2479 participants the convenors were Dr. Reena Wani and Dr. Madhuri Mehendale. The program had international faculty like Prof. DR. Zulfikar A. Bhuta from Canada, Prof Dr. Wilbur Lam from USA, Dr. Michael Low from Australia and Prof. Michael Zimmermann from Switzerland speak on various aspects of anemia. It was followed by a CME on "Genetic Testing in Obstetric Practice" on the 6.11.2020, the program convenor was Dr Parikshit Tank and was attended by a total of 703 participants . The next CME was on "Molecular Insights In Gynecological Diseases" was held on 12th November 2020 and attended by 670 delegates. Dr Priti Vyas, Dr Anahita Chauhan were conveners and an enlightening talk by Dr. Rishma Dhillon Pai on HPV screening was well appreciated. The next MOGS webinar was held in collaboration with FOGSI on 6.12.2020. Dr. S N Agarwal, Dr. Rajendra Nagarkatti and Dr. Navneet Desai were conveners and it was attended by 292 participants.

MOGS & FOGSI Virtual Workshop on "Safe Abortion & Contraception Cafe" was conducted on 5th December 2020. Guest of Honour was our President FOGSI Dr Alpesh Gandhi. Programme Convenor was Dr Punit Bhojani. The online event was attended by 160 participants. MOGS & AMOGS Outreach Webinar was held on 12th December 2020

Dr. Rajendra Nagarkatti, Dr. Priti Vyas and Dr. Ashok Shukla were conveners and it was very well attended by 219 delegates. MOGS Outreach CME on "Key Issues in Obst & Gyn" was held on 12.1.2020 and attended by 291 participants. Conveners were Dr. Atul Ganatra and Dr. Pratik Tambe.

MOGS Dr N A Purandare Teaching Program

The 5th MOGS Dr N A Purandare Teaching Program in collaboration with H.B.T.M.C and Dr. R.N. Cooper hospital was held on 25th November 2020. Dr. Sneha Shirodkar, Dr. Sujata Dalvi, Dr. Ameya Purandare, Dr.Reena Wani, Dr. Komal Chavan were the conveners. The students and the examiners had a great interactive session which benefitted 225 students who attended the program.

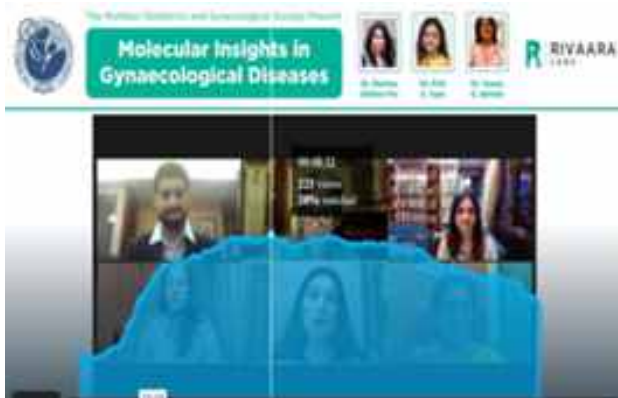
The 6th MOGS Dr N A Purandare Teaching Program was held in collaboration with G.S.M.C and K.E.M Hospital on 11th December 2020. Dr. Niranjn Maydeo, Dr. Sujata Dalvi, Dr. Ameya Purandare and Dr. Aditi Phulpagar were conveners. There were case presentations and OSCE sessions which was attended by 195 students.



“ Blood Health Forum”



“Genetic Testing in Obstetric Practice”



“Molecular Insights In Gynecological Diseases”



MOGS & FOGSI Virtual Workshop on “Safe Abortion & Contraception Cafe”



The 5th MOGS Dr N A Purandare Teaching Program

FEM 3.0

A virtual international conference organized by MOGS and IVF Worldwide was held on 21st and 22nd November 2020. The conference was one of its kind as it had **5800** delegates attending the conference from **over 127 countries**. The scientific program was an academic feast as it had superb topics like PRP, Robotics, Transplant, Risk mitigation, PGT, Fertility Preservation & RPL which were delivered by the judiciously chosen International faculty. The Maharashtra Medical council awarded it 4 credit points and ICOG awarded 8 points. Dr. Rishma Dhillon Pai, our President MOGS and Organizing Chairperson inaugurated the Conference with the Chief Guest Mrs. Lara Dutta Bhupati, Dr Hrishikesh Pai and Dr Nandita Palshetkar. Dr. Rajendra Sankpal, "Guest of Honor" Dr Sadhana Desai, Dr Zeev Shoham, Co-founder IVF worldwide, Dr. Kedar Ganla and Dr. Anahita Chauhan.

The academic session had series of lectures delivered by stalwarts from all over the World on different aspects of ART. There were two panel discussions which delivered crisp messages to the audience.

The amazing national faculty included Dr. Rishma Pai, Dr. Jaydeep Tank, Dr. Narendra Malhotra, Dr. Sunita Tandulwadkar, Dr. Prakash Trivedi, Dr. Sudha Prasad, Dr. Jatin Shah, Dr. Hrishikesh Pai, Dr. Neena Malhotra, Dr. Padmarekha Jirge, Dr. Pratik Tambe, Dr. Sudesh Kamath, Dr. Rohan Palshetkar, Dr. Unnati Mamtara, Dr. Chaitanya Shembekar, Dr. Sunil Jindal, Dr. Jaideep Malhotra, Dr. Kuldeep Jain, Dr. KD Nayar, Dr. Kedar Ganla, Dr. Kundan Ingle, Dr. Anahita Chauhan, Dr. Krishnakumar, Dr. Mugdha Raut, Dr. Raju Sahetya, Dr. Archana Baser, Dr. Nandita Palshetkar, Dr. Ameet Patki and Dr. Kamini Rao. The Foreign faculty were Dr. Anu Chawla (UK), Dr. Tim Child (UK), Dr. Craig Niederberger (USA), Dr. Ranjith Ramasamy (USA), Dr. Peter Schlegel (USA), Dr. Luk Rambauts (Australia), Dr. Nick Macklon (UK), Dr. Edgar Mocano (Ireland), Dr. Richard Kennedy (UK), Dr. Rachel Chin (Malaysia), Dr. Sonia Herraiz (Spain), Dr. Laurel Stadtmauer (USA), Dr. Tommaso Falcone (USA), Dr. Ariel Weissman (Israel), Dr. Dolores Lamb (USA), Dr. Joe Leigh Simpson (USA), Dr. Svetlana Richitsky (USA) and Dr. Catherine Racowsky (France).



Mogs for Women
Our speciality is you



MUMBAI OBSTETRICS & GYNECOLOGICAL SOCIETY

& IVF WORLDWIDE

presents



FERTILITY ENHANCEMENT & MANAGEMENT VIRTUAL CONFERENCE

MAHARASHTRA MEDICAL COUNCIL - 4 POINTS & ICOG - 8 POINTS ALLOTTED

21ST & 22ND NOVEMBER 2020

FOR REGISTRATION

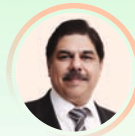
<https://femlive.cme-congresses.com/registration/>



Dr. Rishma Dhillon Pai
Conference Chair FEM 3.0
President MOGS &
Past President FOGSI, ISAR, IAGE
Assistant Treasurer IFFS



Dr. Zeev Shoham
Co Chair FEM 3.0,
Co founder- IVF Worldwide,
Chief of IVF, Kaplan Medical Centre,
Israel



Dr. Hrishikesh Pai
Co Chair FEM 3.0,
President Elect FOGSI 2022,
Past President ISAR, IAGE
Director of Corporate affairs IFFS,



Dr. Nandita Palshetkar
Co Chair FEM 3.0,
President AMOGS
President Elect ISAR,
Past President FOGSI, IAGE, MOGS



Dr. Anahita Chauhan
Organising Secretary FEM 3.0
Secretary, MOGS



Dr. Rajendra Sankpal
Organising Secretary FEM 3.0
Treasurer, MOGS



Dr. Kedar Ganla
Organising Secretary FEM 3.0
Jt. Clinical Secretary, MOGS

21ST NOVEMBER 2020

2.30 pm to 10.15 pm (+5.30 GMT)

02.30 pm – 03:00 pm (+530 GMT)

INAUGURATION



CHIEF GUEST

MS. LARA DUTTA (INDIA)
Indian Actress &
Winner of Miss Universe 2000 Pageant



GUEST OF HONOR

DR. SADHANA DESAI (INDIA)
Past President, FOGSI, ISAR

There was a free paper and poster competition conducted on the virtual platform. 25 entries for the paper presentations and 9 entries for the poster presentations were received. For the **first time in the history of MOGS**, we received foreign entries for the poster competition, in which 3 Greek delegates participated.

INTERNATIONAL FACULTY



Dr. Ariel Weissman (Israel)



Dr. Catherine Racowsky (France)



Dr. Craig Niederberger (USA)



Dr. Anu Chawla (UK)



Dr. Dolores Lamb (USA)



Dr. Edgar Mocano (Ireland)



Dr. Joe Leigh Simpson (USA)



Dr. Laurel Stadtmauer (USA)



Dr. Luca Sabatini (UK)



Dr. Luk Rambauts (Australia)



Dr. Nick Macklon (UK)



Dr. Peter Schlegel (USA)



Dr. Rachel Chin (Malaysia)



Dr. Ranjith Ramasamy (USA)



Dr. Richard Kennedy (UK)



Dr. Sonia Herraiz (Spain)



Dr. Svetlana Richitsky (USA)



Dr. Tim Child (UK)



Dr. Tommaso Falcone (USA)



New Flag of The Mumbai Obstetric & Gynecological Society





MOGS MASTI

Dr Namrita Sheregar

Questions:

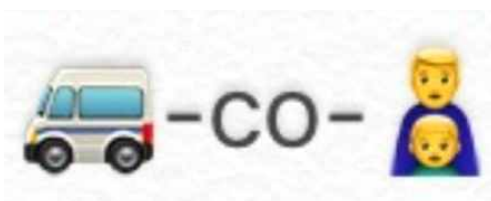
1) What is Rancho's real name in the movie 3 Idiots?



- a) Ranchoddas Shamaldas Chanchad
- b) Phunsukh Wangdu

- c) Viru Shasrabuddhe
- d) Chatur Ramalingam

2) Identify this drug



3) Identify the condition



ANSWERS:

- 1) Phunsukh Wangdu
- 2) Vancomycin
- 3) Conjoined twins



Dr Yogesh Trivedi

IMPACT OF CALCIUM AND DHA IN COGNITIVE DEVELOPMENT OF FOETUS

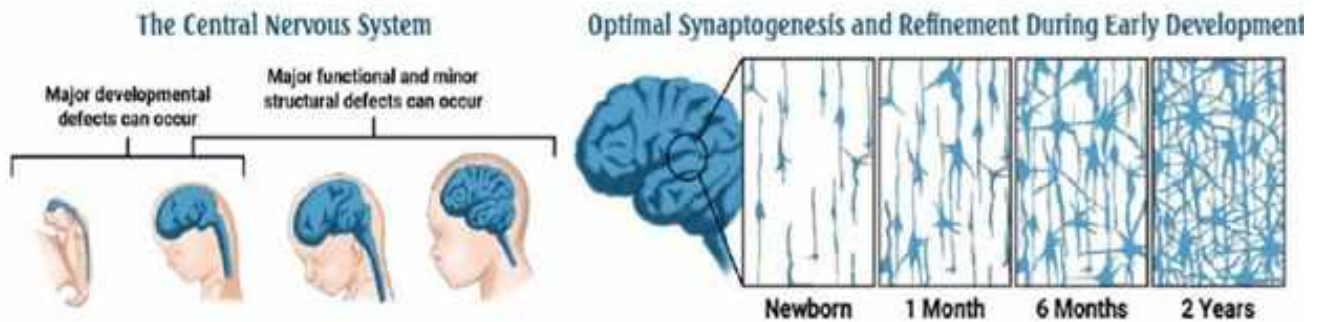


Dr Shruti Thar

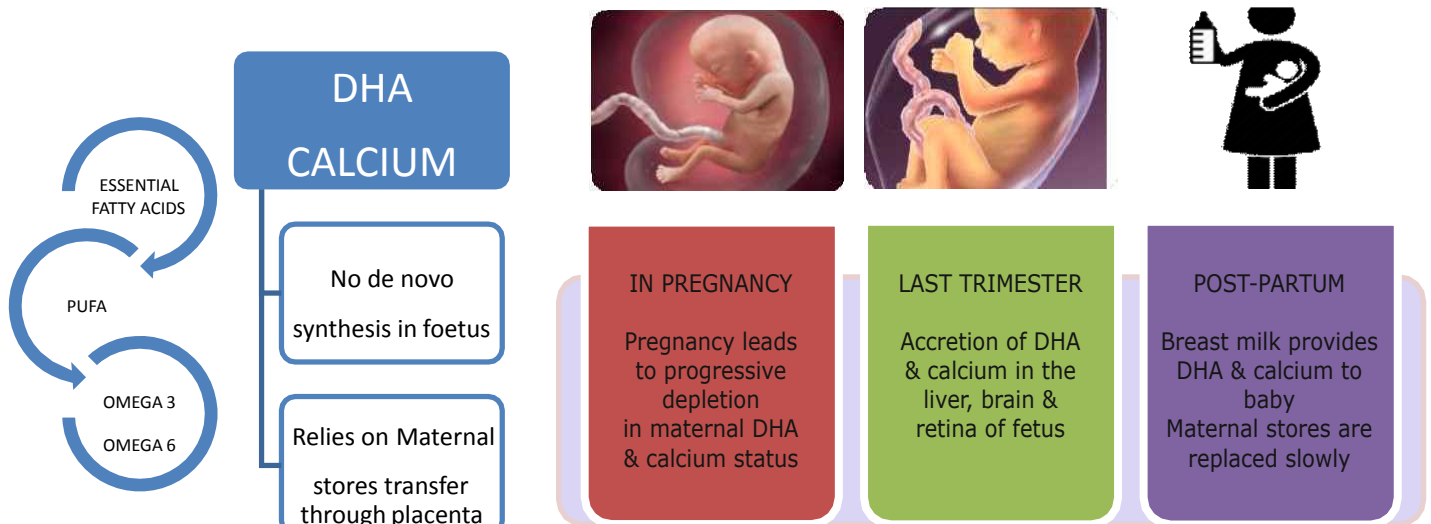
INTRODUCTION:

Neurological development is extremely rapid during the first 1000 days of life

	Day 25	100	140	280	Birth	310	370	640	1000
Maternal Changes and Key Nutrients	1st Trimester +/- Hormone Levels + Metabolic rate + Oxygen Demand + Blood Volume + Nutrient Demands	2nd Trimester + Cardiac Output + Hormone Levels - Insulin Sensitivity	3rd Trimester + Calcium Absorption + Plasma Volume - Sleep	0-3 Months Postpartum - Breastfeeding Support - Postpartum Recovery - Risk of Depression - Changes in Hormones	3-12 Months Postpartum - Caloric Intake - Stress & Lack of Sleep - Back and Head Aches - Restored Muscle Tone & Connective Tissue	12-24 Months Postpartum - Continued Breastfeeding & Nutrition Support - Exercise - Balanced Diet			
	1st Trimester Folate Iodine Vitamin D	2nd Trimester Carotenoids Folate Iron Omega-3	3rd Trimester Calcium Carotenoids Choline Iodine Iron Omega-3 Vitamin D	Postpartum Calcium Choline Folate Iron Omega-3s Vitamin D					



PATHOPHYSIOLOGY OF DHA



DHA accumulation in foetal brain

- In the last three months of pregnancy, there is rapid accumulation of DHA in the eyes & brain
- Fetus accrues up to 70 mg DHA per day during the last trimester



DHA FOR FETAL GROWTH AND DEVELOPMENT

Fetal DHA demand increases exponentially with increasing gestational age

Fetus requires approximately 50 mg/kg/d of omega-3 fatty acids DHA plays an important role:

- Birth Weight & fetal development
- Neural & retinal development
- Central nervous system, improve cognitive and spatial memory development
- Child's pre and postnatal growth
- DHA make up around 30% of brain and 50% of retina's structure
- **DHA is critically important for optimal development of dopaminergic signaling and once the window for development is past deficits are not later reversible.**



DAILY REQUIREMENT AND SOURCES

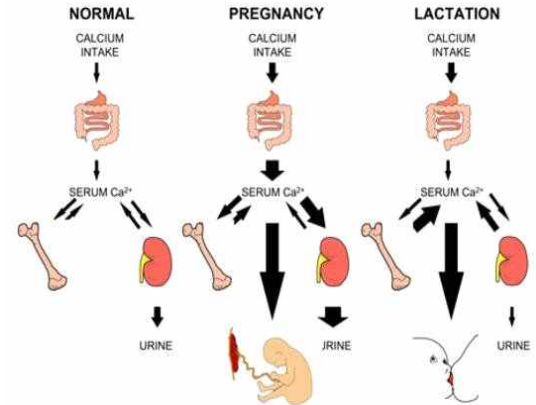
DHA	300mg/day
CALCIUM	1000 mg/day



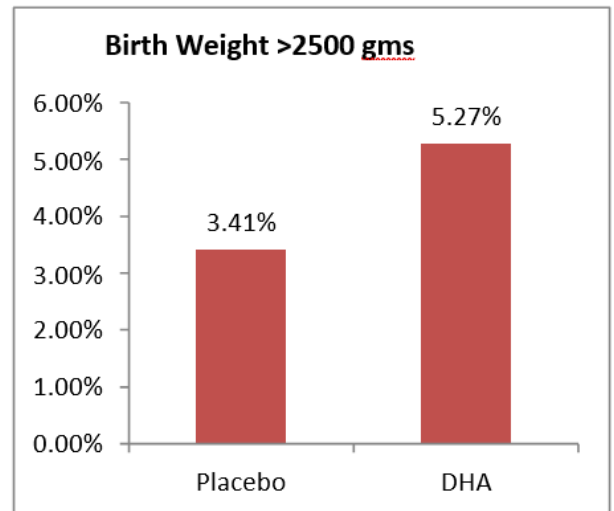
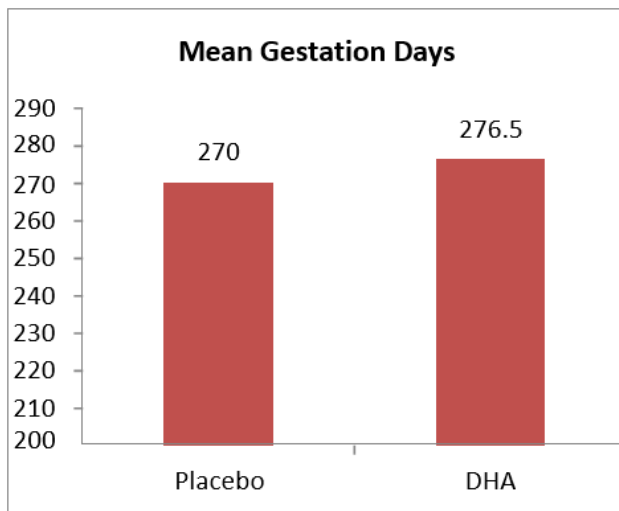
CALCIUM IN PREGNANCY

Calcium plays an important role in

- Foetal Bone development
- Cognitive development of foetus
- Reduces the risk of PIH, Preeclampsia
- Foetal growth and birth weight



Effect of DHA Supplementation



DIAMOND study

- n=244 infants
- dietary supplements during 1st year
- ENHANCED cognitive development

NORWEGIAN study

- maternal DHA levels during pregnancy
- increased problem solving in infants & higher IQ

CONCLUSION

In developing countries like India, with large number of undernourished females in reproductive age group and with limited access to dietary DHA sources, exogenous supplementation of DHA ,especially during pregnancy and lactation is very important for cognitive and acuity visual development of newborn.

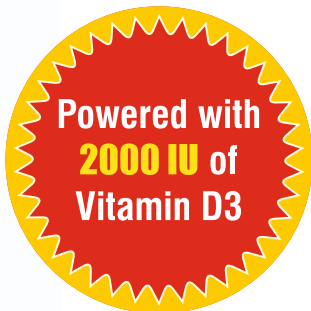
REFERENCES

1. Braarud H.C., et al: Maternal DHA Status during Pregnancy Has a Positive Impact on Infant Problem Solving: A Norwegian Prospective Observation Study: 2018;Apr24. doi: [10.3390/nu10050529](https://doi.org/10.3390/nu10050529)
2. Birch E E, et al: The DIAMOND (DHA Intake And Measurement Of Neural Development) Study: a double-masked, randomized controlled clinical trial of the maturation of infant visual acuity as a function of the dietary level of docosahexaenoic acid: Am J Clin Nutr 2010 Apr;91(4):848-59. doi: 10.3945/ajcn.2009.28557

**From Preconception,
Pregnancy to Lactation**

Shelcal-XT

Calcium carbonate 1250 mg, Vitamin D₃ 2000 IU, Methylcobalamin 1500 mcg,
L-Methyl folate 1000 mcg, Pyridoxal 5 Phosphate 20 mg



The High Potency **Calcium** with **EXTRA**ordinary Power
of **Vitamin D₃** & Active Form of Vitamins





Dr Shreedevi Tanksale

PREGNANCY AND PROTEIN



Dr Tejal Poddar

WHY DO YOU NEED PROTEINS?

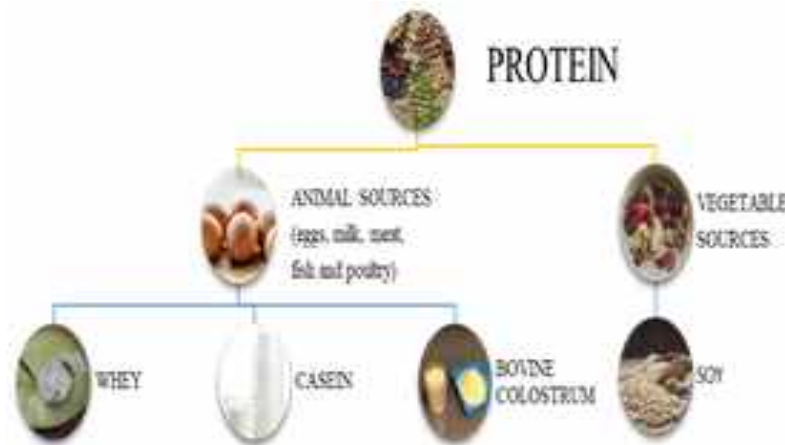
- ∅ Protein forms an essential component of a healthy diet in humans to support both growth and maintenance. ¹
- ∅ The maternal diet must provide sufficient energy and nutrients to meet the mother's usual requirements, as well as the needs of the growing foetus, and enable the mother to lay down stores of nutrients required for fetal development as well as for lactation.
- ∅ During pregnancy there is rapid growth and enormous maternal physiologic changes. Adjustments in protein metabolism occur to support fetal growth and development while maintaining maternal homeostasis and preparing for lactation. ²
- ∅ Protein utilization from foods and deposition as new tissues are energy dependent at stages of absorption, amino acid transport, protein synthesis, and proteolysis. Dietary intake during pregnancy must have sufficient energy and protein to ensure the full-term delivery of a healthy infant.

The traditional notion that pregnant women should “EAT FOR TWO” has been reversed. Pregnant population has received the message to restrict their intake. It is more advisable to maintain an adequate caloric intake by following a healthy diet. The deposition of proteins in maternal and fetal tissue increases gradually during the second, and majority in the third trimester. ³

SUMMARY OF RDA FOR INDIANS – Expert group ICMR 2019-20 ^{4,5}

Pregnant Woman	RDA g/day	Pregnant woman	Protein, g/kg body weight a /day
Second trimester	9	Second trimester	0.9
Third trimester	22	Third trimester	1
Lactation	16	Lactation	1.2

HOW DO YOU GET THESE PROTEINS ?



The pregnant/lactating woman should eat a wide variety of foods to make sure that her own nutritional needs as well as those of her growing foetus are met. There is no particular need to modify the usual dietary pattern. Protein is rarely below recommendations in the diets of vegetarian women.⁶ Someone who desires to get their protein from vegetable sources will need to consume a variety of vegetables, fruits, grains, and legumes to ensure consumption of all essential amino acids.

PLANT PROTEIN	ANIMAL PROTEIN
Sources- Legumes, millets, pulses, vegetables, nuts	Sources- Eggs, meat, poultry, and fish
Incomplete protein-lack some essential amino acids	Complete protein-with all essential amino acids
60-70% absorbable	90% absorbable
95% digestible	85% digestible
Rich in unsaturated fats, fiber, potassium, magnesium and folate	Rich in saturated fats, sodium, potassium, phosphate, zinc and Vitamin B12
Low in calories	High in calories

FOOD GROUPS	FOODS	Protein content/ 100 gm
Pulses and Legumes	Bengalgram, blackgram, greengram, lentil and redgram	22 g
Nuts and Oilseeds	Groundnuts, cashewnuts and almond	23 g
Fish		20 g
Meat and Poultry	Meat, Egg white	22 g 11 g
Milk products	Cheese, Khoa, skimmed milk and whole milk powder	30 g

In addition to the dietary intake of proteins, to complete the RDA of protein in pregnant and lactating mothers' nutritional supplements are added as like – “**insurance cover**”. The nutritional supplement powder is usually added from second trimester throughout pregnancy and post-delivery.

These nutritional supplements contain high quality protein from different sources- whey, soy, casein protein

<u>WHEY</u>	<u>CASEIN</u>	<u>BOVINE COLOSTRUM</u>	<u>SOY</u>
<ul style="list-style-type: none"> • Translucent liquid part of milk that remains following curd removal • Accounts for 20% of bovine milk • Rich in Essential amino acids 	<ul style="list-style-type: none"> • Gives white colour to milk • Forms major 70-80% of milk protein • Rich in Essential amino acids and calcium and phosphorous 	<ul style="list-style-type: none"> • Pre milk liquid secreted by female mammals the first few days following birth • Provides good immunity to breastfed babies 	<ul style="list-style-type: none"> • Most popular vegan source of protein powder • PDCASS score- 0.97 near complete protein

What makes a “quality protein”?

Different scales have been developed which rate and rank proteins based on two criteria: bioavailability and amino acid profile. The Biological Value- BV scale is still in use today, though mostly in promotional material and in the media. The current official scale, used notably by the FDA, is the Protein Digestibility Corrected Amino Acid Score (PDCAAS), which considers not just the bioavailability of a protein but also its amino acid profile.⁷

Food and Agriculture Organization has proposed to replace it with yet another scale: The Digestible Indispensable Amino Acid Score (DIAAS). Protein quality may therefore be judged by its essential amino acid yield per serving.



Only three proteins are considered “Complete” based on their PDCAAS score

ESSENTIAL AMINO ACIDS MILLIGRAMS PER 26 GRAMS		
AMINO ACID	SOY	WHEY
LEUCINE	1546	2609
ISOLEUCINE ^{BCAA}	921	1333
VALINE ^{BCAA}	940	942
METHIONINE	245	443
ARGININE	1428	480
HISTIDINE	489	425
LYSINE	1184	2222
PHENYLALANINE	977	831
TRYPTOPHAN	595	244
TOTALS	9039	10491

PROTEIN	PDCAAS
WHEY	1.0
SOY	1.0
Egg	1.0
Grains & Legumes	1.0
Grains & Vegetables	1.0
Grains, Nuts, & Seeds	1.0
Rice & Peas	1.0
Legumes, Nuts, & Seeds	1.0

SPECIAL NEED DURING LACTATION

Protein requirement is at its highest when lactation reaches its maximum, and the nursing mothers needs about 20–30 g/day of protein over and above her normal requirements.

RECOMMENDATIONS FOR PROTEIN SUPPLEMENT IN PREGNANCY

- ü Protein intake in non-pregnant state is 46 g/d while in pregnancy it is recommended to be increased to 60 g/day.
- ü During lactation, the demand for protein is increases based on the proteins secreted in breast milk.
- ü EPA and DHA intake is very important in pregnancy and lactation. It is helpful in physical development and growth and is widely recognized to impact fetal and infant neurodevelopment.
- ü Nursing mother needs about 20–30 g of protein over and above her normal requirements.
- ü An ideal formulation containing optimum protein intake, adequate micronutrients (various vitamins and minerals) must be considered during pregnancy and lactation.

REFERENCES

1. WHO/ FAO/ UNU (2007) World Health Organization/ Food and Agriculture Organization/ United Nations University, Protein and amino acid requirements in human nutrition; Report of a joint FAO/WHO/UNU Expert Consultation Technical Report Series No 935. WHO, Geneva (2007)
2. King JC. Physiology of pregnancy and nutrient metabolism. Am J Clin Nutr 2000;71(Suppl):1218S–25S.
3. Elango R, Ball RO. Protein and amino acid requirements during pregnancy. Adv Nutr An Int Rev J. 2016;7(4):839S–844S
4. Butte NF, King JC. Energy requirements during pregnancy and lactation. Public Health Nutr 2005;8:1010–27
5. Dietary guidelines for Indians - A manual. National Institute of Nutrition. Indian Council of Medical Research. Available at: <http://ninindia.org/DietaryGuidelinesforNINwebsite.pdf>. Accessed 16 Sept 2019
6. Haddad EH, Berk LS, Kettering JD, Hubbard RW, Peters WR (1999) Dietary intake and biochemical, hematologic, and immune status of vegans compared with nonvegetarians. Am J Clin Nutr 70(Suppl):586S–593S
7. Hoffman J and Flavo M, Protein – Which is Best? [J Sports Sci Med. 2004 Sep; 3\(3\): 118–130.](#)



Unilever

HEALTH SCIENCE

Nutrition for Women Across Life Stages

For Non-Pregnancy



For Pregnancy and Lactation



Mother's Horlicks: Mother's Horlicks is a nutritional beverage to be consumed as a part of daily diet. GI: Glycemic index ^a Added sugar refers to sucrose. Contains naturally occurring sugars.
^b Based on in-vitro GIST method results (<55), data on file. ^c In the V06B Protein and Nutrition Supplement Category by Gynecologist. Source: IQVIA Medical Audit July 2019
Protein Plus: ^d Based on in-vitro GIST method results (<55), data on file. GI is defined as the relation of the incremental area under the blood-glucose response curve (Incremental Area Under Curve, IAUC) of a tested meal containing 50 g of digestible carbohydrates and the average incremental area under blood-glucose response curve of a reference food.^e ^f Blend of 3 good quality proteins (whey, soy, casein).



Dr Pradnya Changade

SUCROSOMIAL IRON – THE NEW KID ON THE BLOCK.

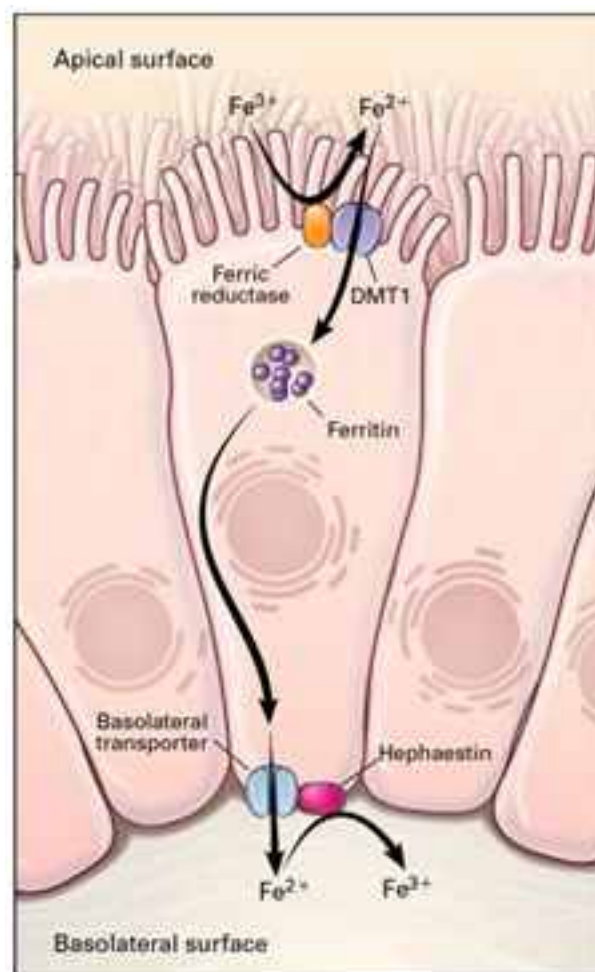


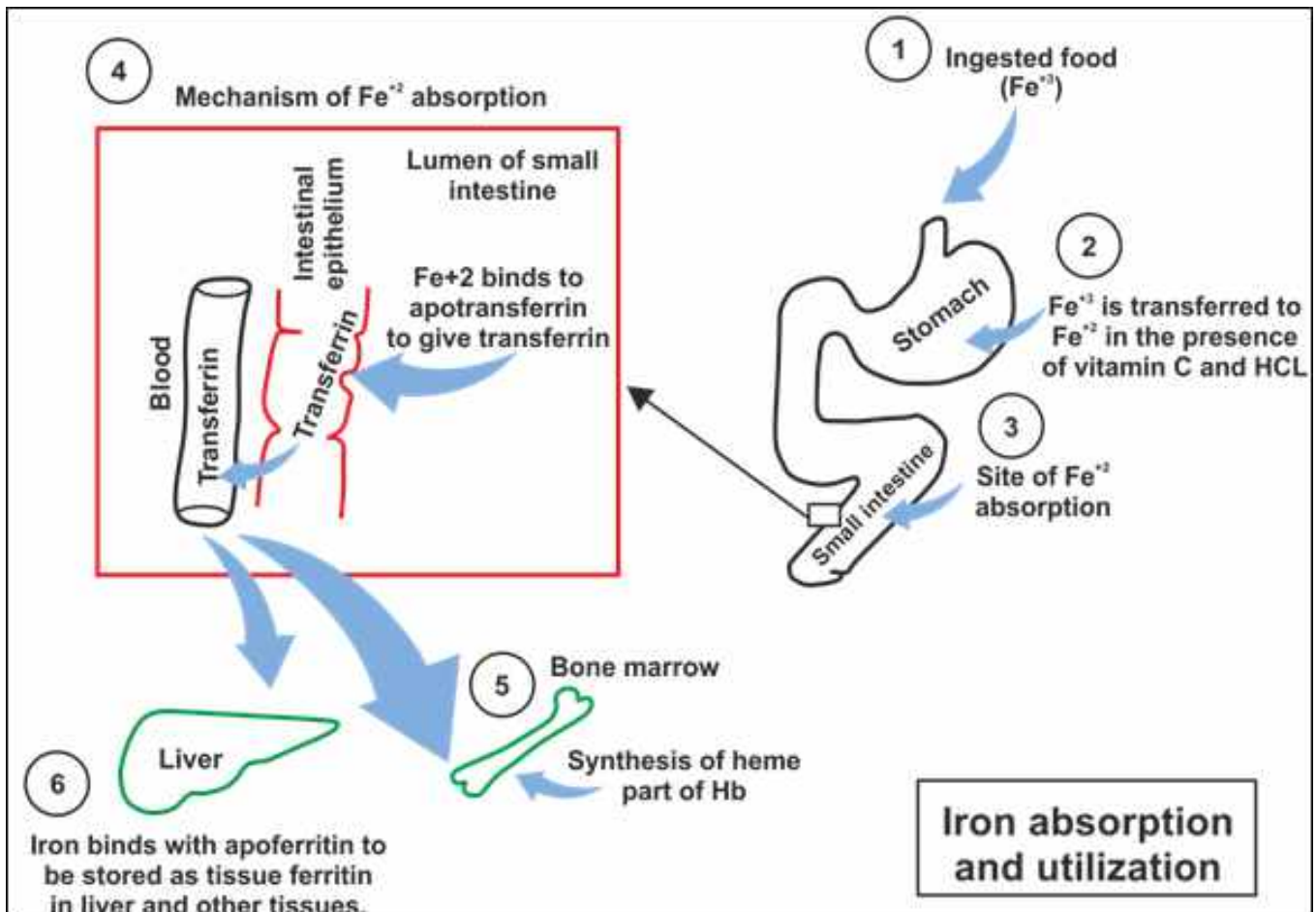
Dr Pranay Desai

Introduction

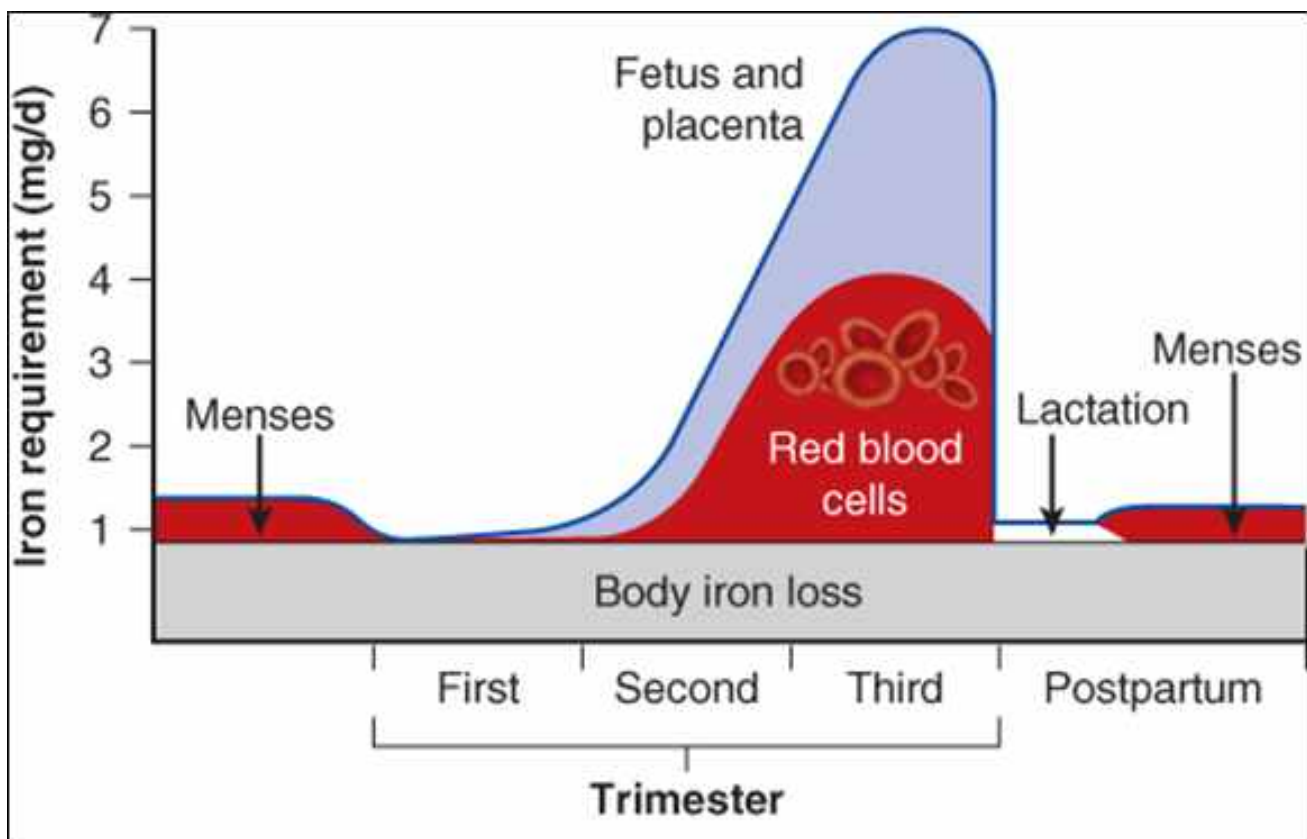
Since decades, iron deficiency has been treated with oral iron given at least once per day, despite significant gastrointestinal side effects in the majority of individuals. Despite various government initiatives to promote iron therapy, iron deficiency Anemia is still one of the top endemic problems in India. Every 1 out of 3 pregnant women in India has Hb < 10 gm%, 20% of maternal deaths are caused by Anemia. Newer iron preparations such as Sucrosomial iron hold the promise and potential to fill in the gaps between conventional iron regimens by causing fewer side effects.

1. Iron Absorption through DMT-1 Pathway and Utilization ⁽¹⁾





1. Estimated daily iron requirements during pregnancy in a 55-kg woman.



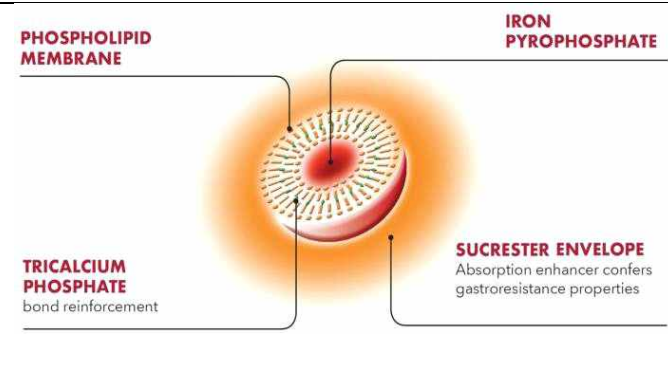
3. Limitations of Conventional Oral Iron Formulations^[3]

Poor Bioavailability (10 – 15%)
Food interactions with phytates, tannins and metals – leading to decreased absorption
Forms Oxidative Free radicals.
Gastro-intestinal side effects - nausea, flatulence, abdominal pain, diarrhoea, constipation, and tarry stools
Poor compliance
Absorption is dependent on DMT-1 pathway and Heparidin

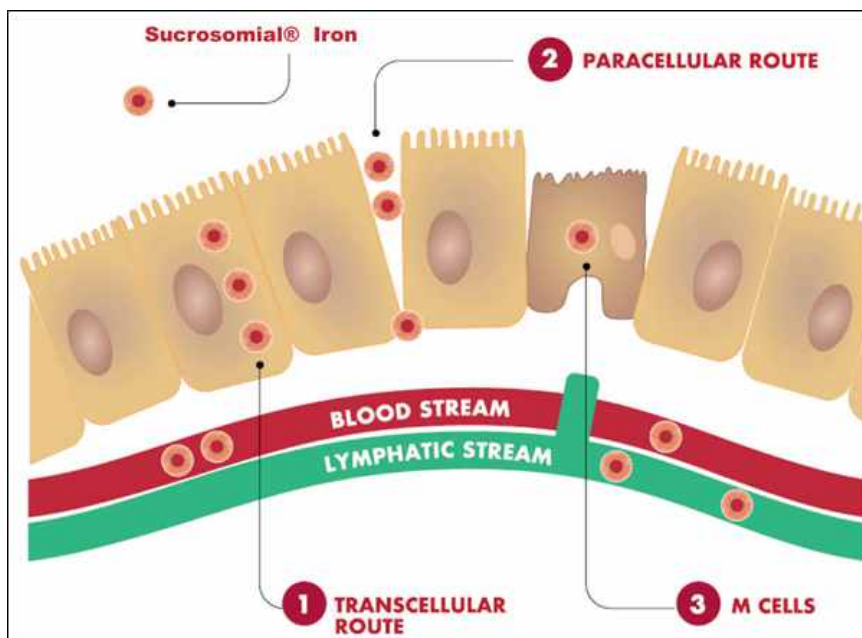
4. Limitations of Intra-venous Iron Formulations

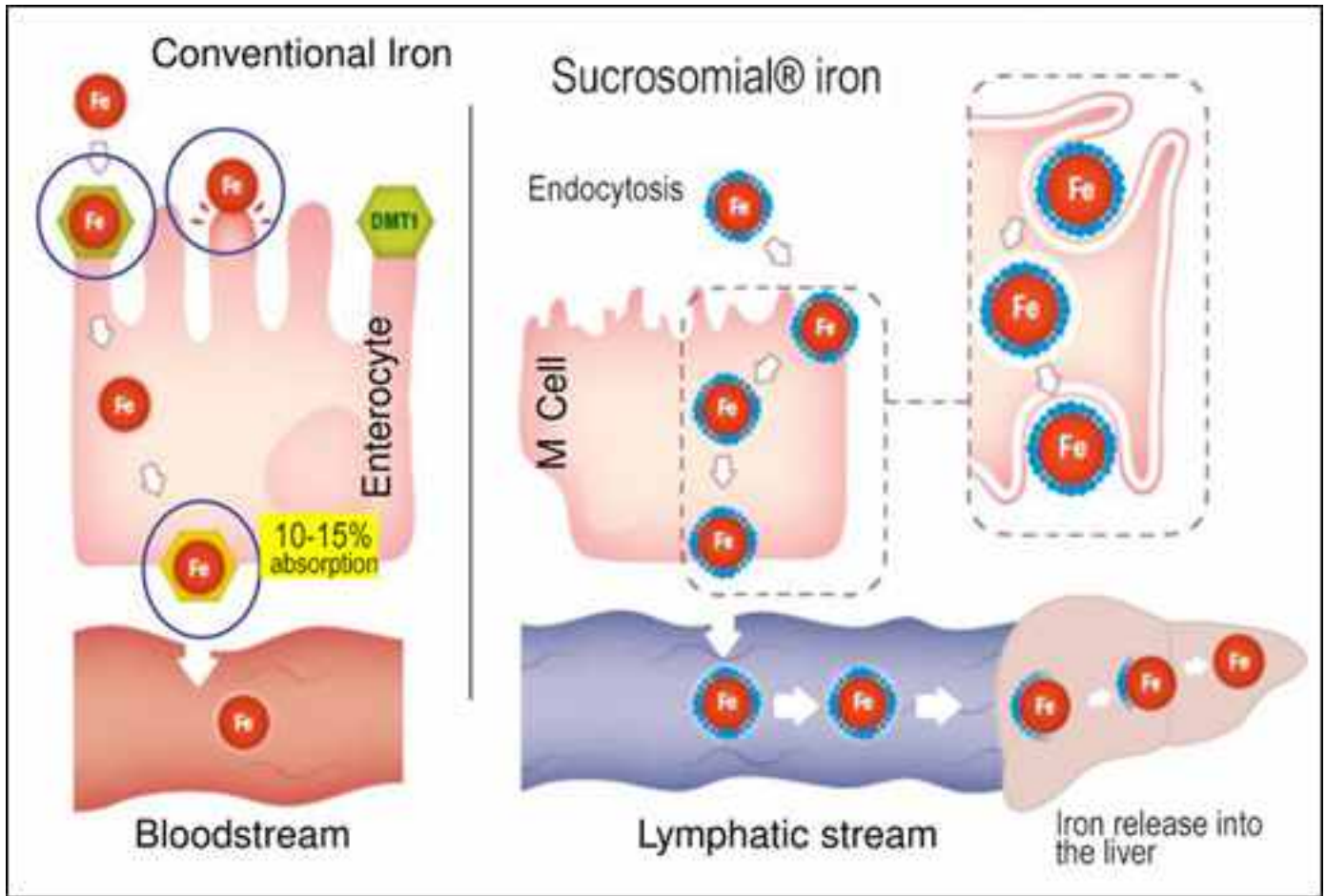
Anaphylactic reactions
Need for IV Access
Need for monitoring
Need for repeated doses in case of IV Iron Sucrose

1. Sucrosomial Iron ⁽⁵⁾

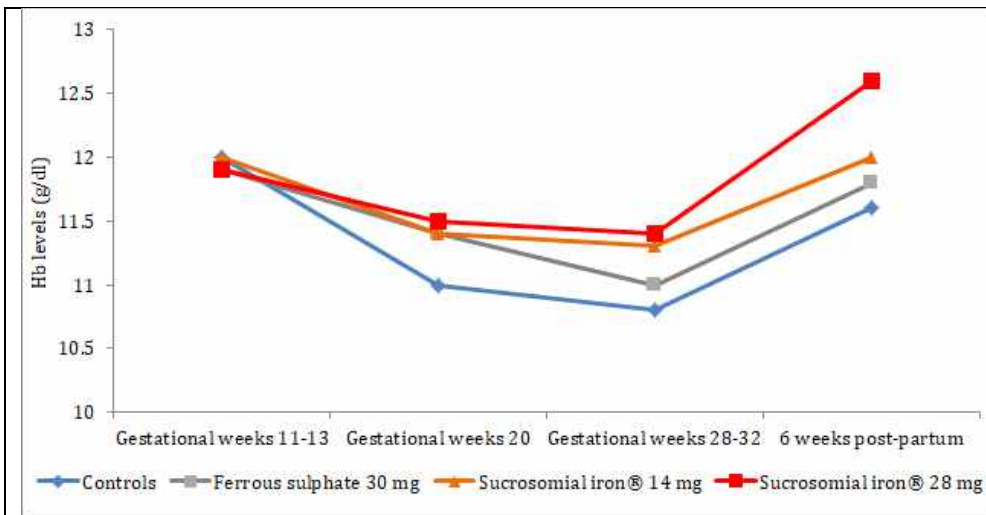
 <p>PHOSPHOLIPID MEMBRANE</p> <p>IRON PYROPHOSPHATE</p> <p>SUCVESTER ENVELOPE Absorption enhancer confers gastroresistance properties</p> <p>TRICALCIUM PHOSPHATE bond reinforcement</p> <p>Structure</p>	<p>Sucrosomial iron (SI) is an innovative oral iron preparation containing a carrier in which ferric pyrophosphate is protected by a phospholipid bilayer membrane and a sucvester matrix. Sucvester is a surfactant derived from the esterification of fatty acids with sucrose (sucrose esters). Further stability and coating are obtained by presence of ingredients like tricalcium phosphate, pre-gelatinized starch, forming the sucrosome.</p>
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6. Absorption of Sucrosomial Iron through M-cells, paracellular and transcellular routes which are independent of DMT-1 pathway and hepcidin ⁽⁴⁾

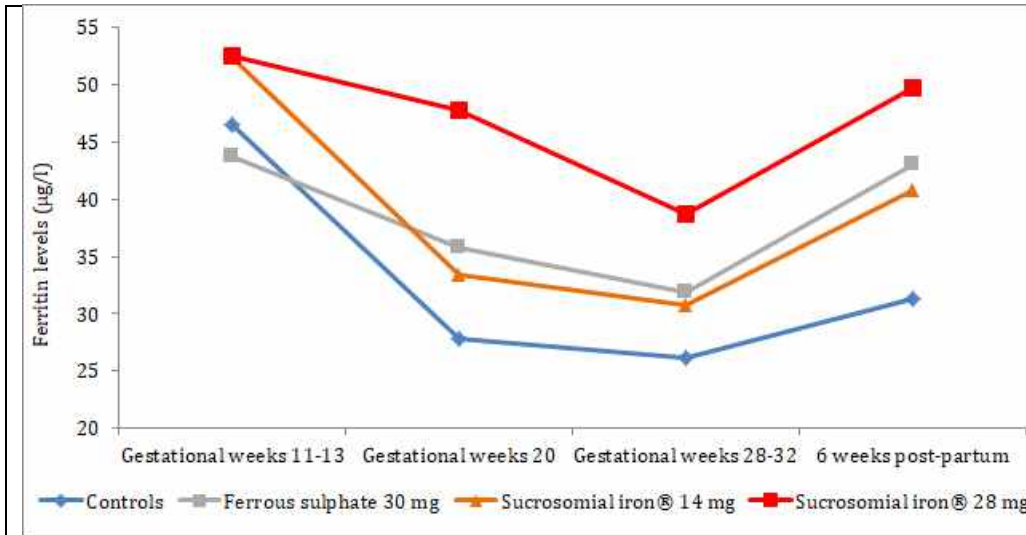




7. Clinical Efficacy of Sucrosomial Iron in comparison with other iron formulations

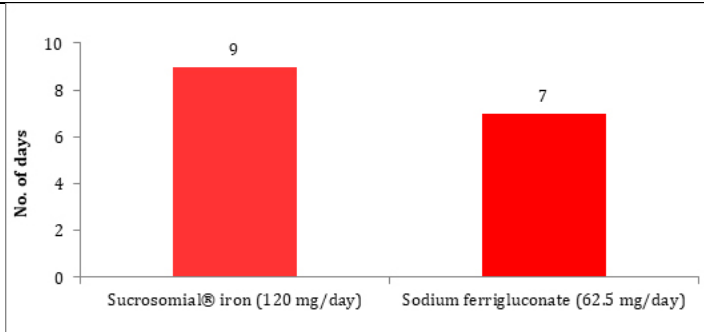


Rise in Hemoglobin level.^[5]
 Sucrosomial iron 28 mg group showed significantly higher Hb levels as compared to controls and ferrous sulphate group at 28 weeks and 6 weeks post-partum.

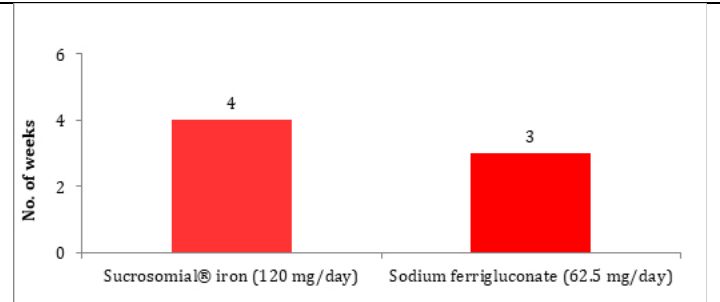


Rise in Ferritin level.^[5]
 Sucrosomial iron 14 mg and 28 mg groups showed higher hemoglobin and ferritin concentrations compared to controls

1. High dose Sucrosomial Iron VS Intravenous Iron – Sodium ferrigluconate: Comparable results^[6]



Time required to raise hemoglobin level by 1g/dl was 9 days in Sucrosomial Iron group while 7 days in IV iron group.



Time required to achieve target hemoglobin level (12g/dl) was 4 weeks in Sucrosomial iron group while 3 weeks in IV iron group.

Summary

Parameters	Sucrosomial Iron	Oral conventional iron	Oral liposomal iron
Effect of gastric acidity on iron release in stomach	No catalytic effect of iron in stomach hence no gastric irritation	Yes. Free iron gets released in stomach. So, it may cause catalytic effect of iron in stomach hence may cause gastric irritation	Yes. Free iron gets released in stomach. So, it may cause catalytic effect of iron in stomach hence may cause gastric irritation
Oxidation and release of free Iron	No.	Yes	Yes
Absorption of iron	Enhanced due to presence of phospholipid bilayer membrane thereby absorption through M-cells, paracellular and transcellular routes independent of DMT-1 pathway and hepcidin. Hence higher bioavailability.	Regular absorption of iron is around 10-15% through DMT-1 pathway. Hence DMT-1 and Hepcidin dependent	Enhanced due to presence of phospholipid bilayer membrane, but absorption & bioavailability is less compared to Sucrosomial iron.

Targeted iron delivery	Yes. Documented to release iron directly into the liver and then iron gets binds with transferrin and it delivers iron to the target tissue (bone marrow, liver etc.)	No. it gets absorbed through the conventional DMT-1 hepcidin dependent iron absorption pathway. Hence, absorption and bioavailability may be compromised.	Yes. Targeted delivery to the liver and bone marrow
Interfering effect of food and other metals on iron absorption	No, because iron never comes in contact with food and metal directly	Yes	No, because iron never comes in contact with food and metal directly
Proven clinical efficacy in anaemia of chronic diseases (CKD, HF, Diabetes, IBD, Cancer etc.)	Yes	Not known	Yes
Rise in Hb and Ferritin level	Documented superior effect to raise ferritin levels than conventional iron salts, liposomal and microencapsulated iron.	Comparatively less efficacious	Higher than conventional iron salts but less than Sucrosomial iron.
Gastrointestinal side effects and metallic taste.	No, hence better compliance	Yes, hence poorer compliance	No, hence better compliance

Conclusion

Sucrosomial Iron appears to be a better molecule in terms of tolerability, bioavailability and clinical efficacy as compared to other salts available. Nevertheless, appropriately sized randomized control trials are needed to confirm the promising results obtained with oral SI supplementation in different clinical settings.

Reference:

1. Ems T, Huecker MR. Biochemistry, Iron Absorption [Internet]. StatPearls. StatPearls Publishing; 2019.
2. Bothwell TH. Iron requirements in pregnancy and strategies to meet them. In: American Journal of Clinical Nutrition. American Society for Nutrition; 2000.
3. Tolkien Z, Stecher L, Mander AP, Pereira DIA, Powell JJ. Ferrous sulfate supplementation causes significant gastrointestinal side-effects in adults: A systematic review and meta-analysis [Internet]. Vol. 10, PLoS ONE. Public Library of Science; 2015.
4. Gómez-Ramírez S, Brilli E, Tarantino G, Muñoz M. Sucrosomial® iron: A new generation iron for improving oral supplementation [Internet]. Vol. 11, Pharmaceuticals. MDPI AG; 2018.
5. Parisi F, Berti C, Mandò C, Martinelli A, Mazzali C, Cetin I. Effects of different regimens of iron prophylaxis on maternal iron status and pregnancy outcome: a randomized control trial. J Matern Neonatal Med. 2017 Aug 3;30(15):1787–92.
6. Barni S. 4 th Mediterranean Multidisciplinary Course on Iron Anemia April 29 th –30 th 2016, Madrid, Spain. Expert Rev Hematol. 2016 Sep 30;9(sup1):1–42.

THE ONLY Sucrosomial® Iron IN INDIA

RARISSET™

Sucrosomial® Iron with L-Methylfolate, L-Lysine & Vitamin B12 Capsules

POWER OF TECHNOLOGY...
TRUTH OF SCIENCE



Hepcidin independent
absorption pathway, deceives
normal route of iron absorption

Higher absorption &
bioavailability of iron

Maximum GI tolerance -
better patient compliance

Rapid Hb rise as effective as
parenteral iron



Dosage:
1 Capsule Daily

Gómez-Ramírez S et al. Pharmaceuticals. 2018;11(97):1-23

In Infertility associated with PCOS

Metital

Metformin 500 mg SR + Myoinositol 600 mg Tablets

Corrects IR... normalizes ovarian function... significantly improves **LIVE BIRTH RATE**

NutriRight™-MOM
Cookies

Healthy Snacking... Anytime... Anywhere...

India's only Nanonized progesterone

POSITOSR 200
300
400

Nanonized Progesterone 100 mg / 200 mg / 300 mg / 400 mg SR Tablets

Improved efficacy... better clinical outcome



Dr Sheetal Sawankar

MICRONUTRIENTS IN INFERTILITY



Dr Mohit Saraogi

INTRODUCTION- Globally incidence of infertility around 10 to 15%.

Over the years the fertility rates have progressively declined making it important to identify modifiable factors such as diet which influence human fertility.

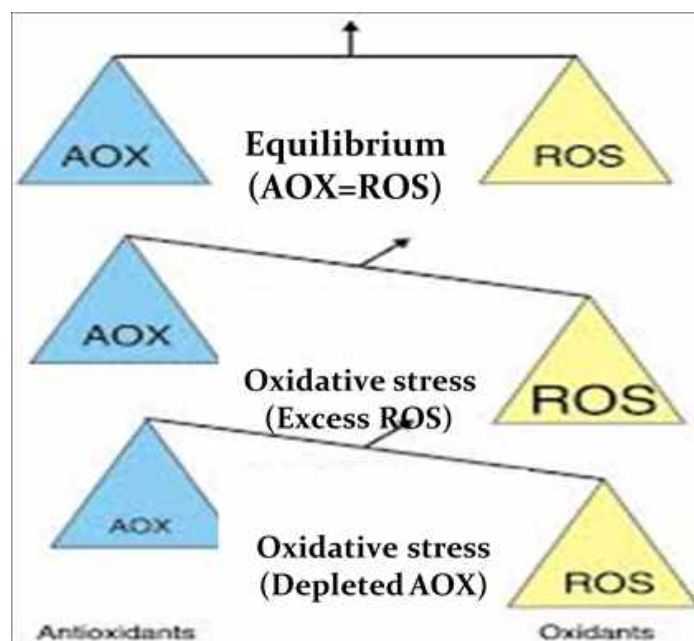
Micronutrients such as vitamins and minerals have an important role in cellular physiology and have a major role to play in fertility.

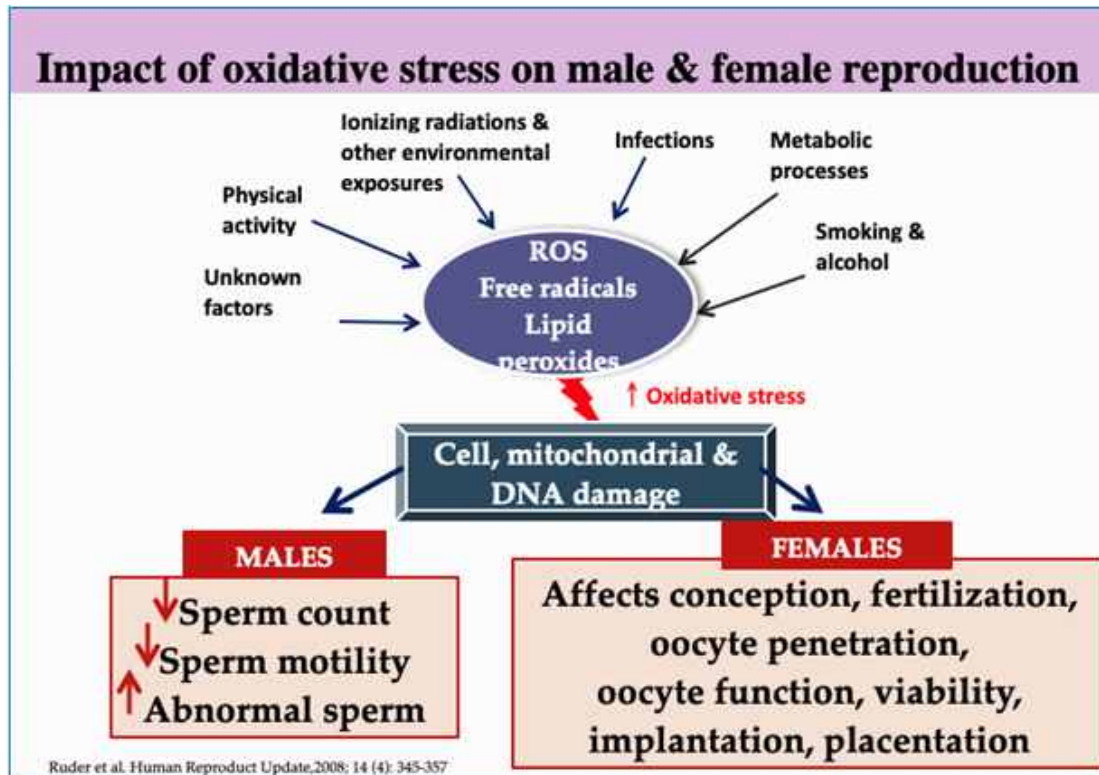
Adequate micronutrient levels are important for oocyte quality, maturation, fertilization & implantation, whereas antioxidants are vital for reducing oxidative stress which has been known to impair fertility.

DEFINITION

Micronutrients are defined as 'essential dietary elements or organic compounds that are required in only small quantities for normal physiologic processes to occur'

Oxidative stress results from an imbalance between pro-oxidants (free radical species) and the body's scavenging ability (antioxidants). It plays a vital role in the pathophysiology of infertility

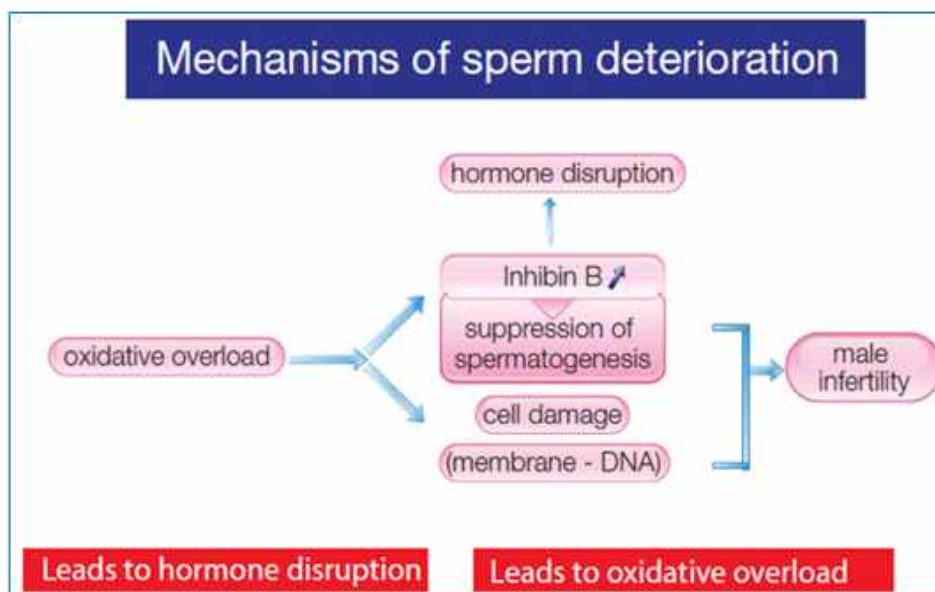




Benefit of micronutrients & antioxidants in infertility

- Significantly reduces lipid peroxidation and maintains cell membrane integrity
- Improves vasomotor function
- Reduces DNA oxidative damage
- Reduces mitochondrial dysfunction

ROLE OF MICRONUTRIENTS IN MALE INFERTILITY Oxidative stress impact on MALE fertility



Elevated levels of ROS in semen is found in up to 40 % of infertile men.

Role of micronutrients in male infertility

COQ10

- Naturally present in spermatozoa, highest concentration found in mitochondria of mid piece
- One of the compounds contributing to total antioxidant buffer capacity of semen
- Performs primary role in ATP production by mitochondria
- Unique structure: greater antioxidant properties
- Slower auto-oxidation rate: Lesser tendency to become free radical
- Well absorbed
- Well tolerated
- Shown to inhibit inflammation

Lycopene

- A powerful lipophilic natural antioxidant with highest concentration found in testes
- Antioxidant activity of lycopene is 100 times greater than vitamin E and 125 times greater than glutathione

L-Carnitine

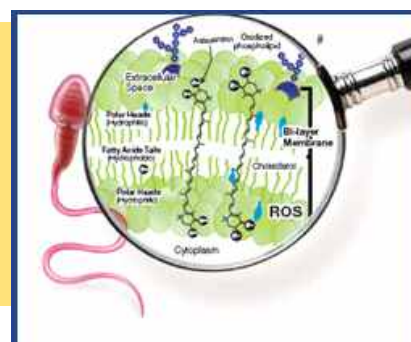
- Epididymal fluid has the highest concentration of carnitine
- Carnitine has some role in sperm maturation as they pass through the epididymis
- It enhances sperm ATP formation and improve the motility
- It acts as an antioxidant and prevent oxidative damage to sperm
- Have a role in sperm protein and phospholipid synthesis
- L-carnitine therapy >> effective in increasing semen quality, especially in groups with lower baseline levels

Zinc

- Zinc is a powerful antioxidant found in the seminal plasma
- It is an immunomodulator which preferably increases TH2 activity and reduces Anti Sperm Antibodies (ASA)
- It significantly reduces ROS

Benefits in Male Infertility

- Corrects hormone disruption
- Significantly decreases Inhibin B
- Corrects oxidative overload
- Reduces Cell membrane & DNA damage



Role of Micronutrients in Female infertility

Scientific studies comparing supplementation with micronutrients in women are scarce, but literature suggests that supplementation with multiple micronutrients has a small but beneficial effect on fertility in healthy and infertile women including increased pregnancy rates and shorter time to conception

- Good nutrition: prerequisite for fertility & childbearing. It is especially important for those deciding to become pregnant at a more advanced age
- Antioxidants have proven to be helpful in . free radical damage to ova, sperm & reproductive organs
- Micronutrients in combinations with vitamin B6, vitamin B12, folic acid, L-arginine have shown to improve female fertility

Ferrous gluconate	Follicular maturation & ovum development Prevents iron deficiency anemia during pregnancy
B vitamins	Prevents HHCY Prevents chances of early pregnancy loss and improves fertility
L-arginine	Produces NO: potent vasodilator Improves ovarian response , endometrial receptivity and pregnancy rate
Selenium	Enzymatic antioxidant: glutathione peroxidase, replenishes Mg levels in the body Deficiency associated with unexplained female infertility
Zinc	Immunomodulatory antioxidant Role in FSH/LH secretion , oocyte maturation, menstrual cycle regulation
Astaxanthin	Extremely powerful antioxidant Oxygen quenching capacity > 550 times of vitamin E Inhibits inflammation
Magnesium	Results in increased levels of RBC-Mg and serum glutathione peroxidase and hence improved fertility rates
Lycopene	Powerful antioxidant: repairs vitamins C and E Has role in follicular development and oocyte maturation
Vitamin E	It improves Endometrial thickness
Total iron intake & Non-Heme Iron	It is associated with low risk of ovulatory infertility
Vitamin D & Folic Acid	Intake results in increased clinical pregnancy rate

Recommended Dosage of Micronutrients

Benefits in Female Infertility

- Improves follicular development and oocyte maturation
- Improves oocyte quality and enhances fertilizability of oocyte
- Protects lipids, DNA and proteins from oxidative damage thereby preventing oxidative harm to developing embryo
- Improves endometrial receptivity

Vit C-1 gm daily
 Vit E- 800 IU daily
 Vit B12-1000 mg daily
 Zinc-120 mg daily
 Carnitine-2.6 gm daily

ADVERSE EFFECT OF MICRONUTRIENTS REPORTED IN COCHRANE ANALYSIS

- Miscarriage: 24 trail reported either a similar or increased rate of miscarriage.
- Multiple pregnancy:
- Gastrointestinal disturbances:
- Ectopic pregnancy
- Ovarian hyperstimulation syndrome (OHSS)
- Preterm birth



³ Showell MG, Mackenzie-Proctor R, Jordan V, Hart RJ. Antioxidants for female subfertility. Cochrane Database Syst Rev. 2017 Jul 28;7:CD007807. doi: 10.1002/14651858.CD007807.pub3. Review.

Micronutrients play an important role in optimizing fertility health, leading to improved conception rates & could provide an effective alternative or adjunctive to conventional treatment

CONCLUSIONS

- Oxidative stress is the unavoidable outcome of modern-day lifestyle. Over the coming decades the production of ROS and its associated decline in fertility rates can be anticipated to increase
- Evidence shows significant benefit of micronutrient and antioxidant supplementation in men and a modest benefit in women as well.
- Also the outcome of IVF cycles associated with micro nutritional supplementation has been better than those with placebo supplementation.

Keeping all these things in mind, all couples suffering from infertility should be offered micro nutritional supplementation wherever possible as an adjuvant to their fertility treatment



TOGETHER LET'S BEAT CERVICAL CANCER

Dr Jiteeka Thakkar

Carcinoma cervix is the second most common gynecological malignancy amongst Indian women aged 25-44 years with an incidence of 3.5% after carcinoma breast (28.6%) India accounts for 17 per cent of deaths occurred due to cancer among women aged between 30 and 69 years. It is estimated that 1 in every 53 women in India will experience cervical cancer, while the probability of the same in developed countries is 1 in 100 . 1/4th of the total burden of cervical cancer is contributed by India.

Cervical cancer tends to occur during midlife. It is most frequently diagnosed in women between the ages of 35 and 44. It rarely affects women under age 20, and more than 15 percent of diagnoses are made in women older than 65.

Cervical cancer is preventable through a vaccine that safeguards against the HPV virus; regular screening, timely diagnosis and therapeutic procedures have proven to be effective. It is found that regular screening and pap smear tests have helped bring forth cases of cervical cancer in the early stages and timely management

The three main screening modalities are human papillomavirus (HPV) testing, cytology (Pap smear) and VIA (Visual inspection by acetic acid).

FOGSI GCPR released in 2018 recommends the use of HPV testing as the best method for cervical cancer screening, alone or in combination with cytology. However, centers with an established cytology program with good quality indicators may continue to do the same. VIA is a test with sensitivity comparable to cytology and suitable for use in low resource settings. Wherever possible, colposcopy should be used to obtain a guided biopsy. However, in its absence, the biopsy can be guided by VIA. In certain low resource settings, small low grade lesions may be considered for screen and treat approach without biopsy confirmation.

Outreach camps , awareness programs , screening in OPD should be encouraged . Community field workers- USHA (Urban Social Health Activist Urban Social Health Activist), ASHA (Accredited Social Health Activist), AWW (Anganwadi workers) or NGO (Non-government organization) workers of selected site can support in and spreading awareness about cancers among community . Local heads in the community like MLC (Member of Legislative Council), religious leaders, or any other influential person may be of help in orienting the community

**Resource-based cervical cancer screening recommendation
(FOGSI GCPR : 2018)**

SETTING	SCREENING TOOLS	TRIAGE TOOLS
Good resource settings	Primary HPV test <i>Or</i> Co-testing (HPV test + Cytology) <i>Or</i> Cytology <i>Or</i> VIA	Cytology +- newer modalities HPV test HPV Genotyping-16/18 Colposcopy and biopsy VIA and biopsy
Limited resource settings	VIA	Colposcopy, if available Biopsy
	Good Resource Settings	Limited Resource Settings
Modalities	HPV testing <ul style="list-style-type: none"> • Primary HPV testing • Co-testing (HPV & cytology) Cytology Colposcopy and biopsy VIA	VIA Colposcopy +- Biopsy
Target Age Group (years)	25 - 65	30 - 65 (N.B.: In postmenopausal women, screening with VIA may not be as effective)
Age to start (years)	Cytology at 25 Primary HPV Testing / Co-testing at 30	VIA at 30
Frequency	Primary HPV Tesng` or Co-tesng` – every 5 years Cytology – every 3 years	Every 5 years (at least 1-3 times in a lifetime)
Age to stop (years)	65 with consistent negative results in last 15 years <ul style="list-style-type: none"> • Women with no prior screening should undergo tests once at 65 years and, if negative, they should exit screening. 	
Follow-up method a. er treatment; interval	HPV testing (preferred) <i>or</i> cytology 12 months	VIA 12 months
Screening in hysterectomized women	Following hysterectomy in which cervix was removed for benign causes : no need for screening, unless there is history of previous cervical intra-epithelial neoplasia <ul style="list-style-type: none"> • Absence of cervix must be confirmed by clinical records or examination • If indications for hysterectomy unclear, screening may be performed at clinician’s discretion 	

Cervical Cancer Vaccines

License to use in India	9 - 45 years
Preferred target age group	9 - 14 years
Number of doses for girls aged < 15 years, not immune-compromised	2 doses
Number of doses for girls aged ≥ 15 years or Immunocompromised	3 doses
Interval	Two doses: At least 6 months, may be up to 12-15 months Three doses: 0,1,6 months (Bivalent) 0,2,6 months (Quadrivalent)
Catch-up vaccination (15-26 years)	3 doses <ul style="list-style-type: none"> Girls/ women who have been sexually active should be counselled regarding reduced efficacy and importance of screening from the age of 25-30 years (Not to be considered in public programs unless resources are available after vaccinating and screening the respective target age groups)
Older age groups (> 26 years)	3 doses <ul style="list-style-type: none"> Women aged > 26 years who have been sexually active should be counselled regarding reduced efficacy in older age group and the importance of screening In limited-resource settings, women in this age group should first invest in screening

Vaccination in Special Situation (FOGSI GCPR : 2018)

HIV positive or immunocompromised girls	Same age recommendation <ul style="list-style-type: none"> Three doses
Interrupted doses	Continue with the remaining doses as per age-based recommendation, vaccination series need not be restarted
Pregnancy and lactation	Not recommended
Victims of sexual abuse	Three doses <ul style="list-style-type: none"> Initiate preferably at the time of examination at health care facility
Women with history of abnormal screening reports	Same age recommendation
Males	Not licensed for use in India at present

Lets all of us come together and pledge today to start the awareness against cancer from our own workplaces . Lets all of us start screening of patients in our OPD setup and fight the cervical cancer in our country .



FESTIVAL OF THE MONTH – LOHRI !

Dr Sarita Channawar

Lohri is a popular Punjabi winter folk festival celebrated primarily in the Punjab region. The significance and legends about the Lohri festival are many and these links the festival to the Punjab region. It is believed by many that the festival commemorates the passing of the winter solstice. Lohri marks the end of winter, and is a traditional welcome of longer days and the sun's journey to the northern hemisphere by Sikhs and Hindus in the Punjab region of the Indian subcontinent. It is observed the night before Makar Sankranti, also known as Maghi, and according to the solar part of the lunisolar Bikrami calendar and typically falls about the same date every year (January 13). There is much folklore about Lohri. Lohri is the celebration of the arrival of longer days after the winter solstice. According to folklore, in ancient times Lohri was celebrated at the end of the traditional month when winter solstice occurs. It celebrates the days getting longer as the sun proceeds on its northward journey. The day after Lohri is celebrated as Maghi Sangrand.

Lohri is an ancient mid winter festival originating in regions near the Himalayan mountains where winter is colder than the rest of the subcontinent. Hindus traditionally lit bonfires in their yards after the weeks of the rabi season cropping work, socialized around the fire, sang and danced together as they marked the end of winter and the onset of longer days. After the night of bonfire celebrations, Hindus would mark Makar Sankranti and go to a sacred water body such as a river or lake to bathe. The ancient significance of the festival is both as a winter crop season celebration and a remembrance of the Sun deity (Surya). Lohri songs mention the Indian Sun god asking for heat and thanking him for his return. Other legends explain the celebration as a folk reverence for fire (Agni) or the goddess of Lohri. In Punjab, the harvest festival Lohri is marked by eating sheaves of roasted corn from the new harvest. The January sugarcane harvest is celebrated in the Lohri festival. Sugarcane products such as gurh and gachak are central to Lohri celebrations, as are nuts which are harvested in January. The other important food item of Lohri is radish which can be harvested between October and January. It is traditional to eat Gajak, Sarson da saag with Makki di roti, radish, ground nuts and jaggery. It is also traditional to eat "til rice" which is made by mixing jaggery, sesame seeds and rice. In some places, this dish is called 'Tricholi'. 'Lohri in Jammu is special because of various additional traditions associated with it like Chajja making and dancing, Hiran Dance, preparing Lohri garlands. Young children prepare a replica of peacock which is known as

Chajja. They carry this Chajja and then go from one house to another house celebrating Lohri. In and around Jammu, special Hiran Dance is performed. Historically, during the 19th century, revenue for winter crops was collected either on Lohri or Maghi. Lohri is celebrated to denote the last of the coldest days of winter. Apart from Punjab, Lohri is also celebrated in Delhi, Haryana and Himachal Pradesh. Lohri has been celebrated in Jammu since Mughal times. The festival is observed as Lal Loi in the Sindhi community. In houses that have recently had a marriage or childbirth, Lohri celebrations will reach a higher pitch of excitement. Punjabis usually have private Lohri celebrations, in their houses. Lohri rituals are performed, with the accompaniment of special Lohri songs.

Singing and dancing form an intrinsic part of the celebrations. People wear their brightest clothes and come to dance the bhangra and gidda to the beat of the dhol. Punjabi songs are sung, and everybody rejoices. Sarson da saag and makki di roti is usually served as the main course at a Lohri dinner. Lohri is a great occasion that holds great importance for farmers. However, people residing in urban areas also celebrate Lohri, as this festival provides the opportunity to interact with family and friends.





TRAVELOGUES

Compiled by Dr Riddhi Desai

*The most beautiful in the world is,
of course, the world itself."*
-Wallace Stevens

2020 was a year less travelled. We missed out on enjoying the outdoors. To beat the blues, we have our young travellers reminisce and share their travel stories and breath-taking photos with us, giving us some goals for this new year. When we'll make it to these spots is yet unknown, but we are holding on to hope for a brighter year of travel ahead. Meanwhile, sit back, relax and soak in these picturesque views and dream away!



Beauty and its Beasts



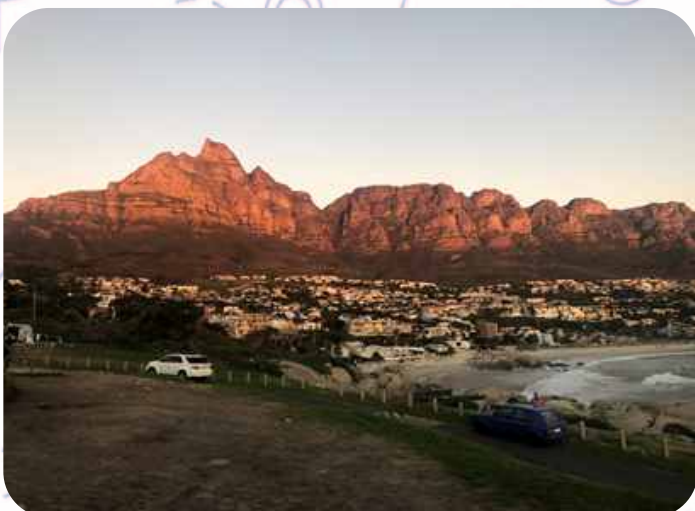
-Dr Namrata Rajput

South Africa takes its own share of the African beauty sitting at the pinnacle on the southernmost part of the continent. South Africa has everything. It can boast its beasts in the open at the BottlierSkope

game reserve in George to the picturesque Knysna, that withholds a thrilling exit to the sea at Knysna heads, opening to an incredible aquatic world of whales, sharks and dolphins.



One can experience the world's best wine at Spier and witness the magnificent Ostriches at Oudtshoorn, the Ostrich Capital of the world. Last but not the least, what's South Africa if you didn't visit the Cape Canopy on the Funicular Ride, the Table Mountains on the 360 degrees Cabin Car and the Boulders Beach - Africa's home to the Jackass Penguins.





Must visit sights include, the Cape of Good Hope, the enthralling waves at Brenton by the Bay, surfers at the Muizenberg beach and there are more and more of it. Not to forget the wonderful culture and awesome hospitality that South Africa offers, the lunches and dinners are not mere meals but feasts.





ALPS ARE CALLING !



-Dr Katha Desai

Switzerland, a place that oozes fairytale charm with its snow-capped mountains, emerald valleys, crystal clear lakes and lots of cheese and chocolate.

Having self-driven across this country, I have comprehended that no matter where you look in Switzerland, you will always be in awe of its pristine beauty





While visiting popular tourist destinations is a must, the true appeal of the country lies in offbeat encounters like hiking on an uncharted trail, boating on a desolate lake amidst the mountains,

strolling along the by-lanes of cities with medieval architecture, or an excursion discovering rustic beauty of the quaint little villages that are straight out of a story book.





I can now fathom Bollywood's infatuation with this landlocked mountainous country. However crazy it may seem, but hopping onto a moving train, re-enacting the iconic DDLJ scene will never get passé in Switzerland.





-Dr Bhumika Kotecha Mundhe , Dr Rana Choudhary, Dr Shruti Thar



Give Your Stress Wings
& Let It Fly Away

-Terri Guillemets



Paint pouring Art

Pour it out: Benefits of turning stress into art
Finding an emotional release like **painting** allows a person's mind to relax and let go of all the problems that contribute to a high **stress** level. Let's make an attempt to learn it !

Instructions:

Step 1: Mix glue, water, and liquid paint into a squeeze bottle. Fill the bottle about 1/4 with glue, then add a few splashes of water, then fill the rest of the bottle with any colour of paint. Repeat for each colour. Shake the bottle well.

Step 2: Squeeze alternating layers of each paint colour into your paint cup. For example, first add some blue, then red, then yellow, then pink. You can choose any colour combinations you'd like.

Step 3: Place your canvas over the top of the paint cup, then flip the cup upside down and remove it from the canvas so the colours pour onto the canvas. Tilt the canvas slowly and watch the colours cover the surface.

Step 4: Let your canvas dry. It may take 24 hours for the paint to completely dry

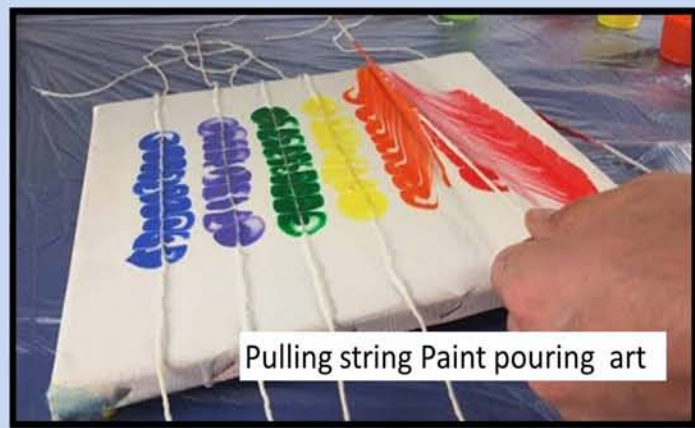


Tips

- 1.The colour you squeeze into the paint cup first will be the most dominant on your canvas.
- 2.The paint dries very matte – it will not be shiny. You can coat it with a layer of Mod Podge after it is dry to give it a shiny look.
4. There are a number of other ways to exhibit this art in your way, a few of them are given below.
- 3.Paint pouring kits are easily available through online shopping websites like amazon, flip kart etc.

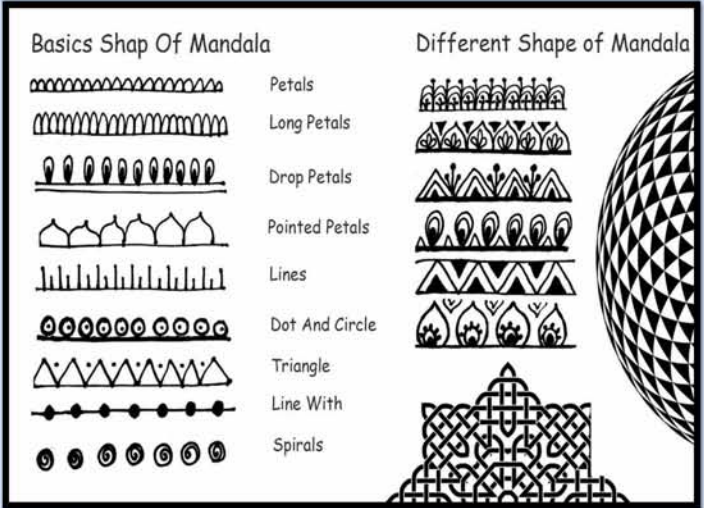


Other Methods of Paint Pouring



Mandala Art

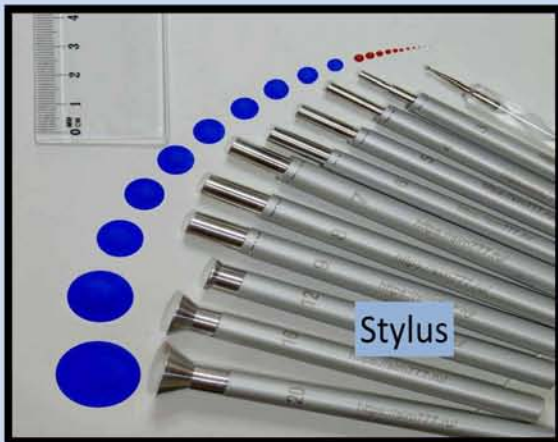
What is Mandala Art?
Mandalas, meaning "circles" in Sanskrit, are sacred symbols that are used for meditation, prayer, healing and art therapy. Mandalas have been shown in clinical studies to boost the immune system, reduce stress and pain, lower blood pressure, promote sleep and ease depression. Besides, it doesn't need much except for paper and pencil





Dot Mandala Art

What is Dot Mandala Art?
Dot painting originated from aboriginal Australia and a mandala in Sanskrit means a circle representing the universe. Here, you get to blend both these art forms in a therapeutic fashion. The stylus along with beautiful vibrant colours are used for this kind of art are easily available via online shopping and art shops too



How to make a basic Mandala

1. Add the first layer via the **Four Point Anchor System**. (#10 and #3 dot used)
2. Second layer:

 - Use a dotter one size bigger (#4 dot used)
 - Place the dot between the first layer of dots. Make sure it is lined up with the centre point of the Mandala.
3. Continue to add all the dots in the second layer.
4. Third Layer:

 - Use a dotter one size bigger (#5 dot used)
 - Place the dot between the second layer of dots. Make sure it is lined up with the centre point of the Mandala.
 - You will notice that a curved pattern is occurring. Make sure you line up the curves too.
5. Continue each layer, with each dot size getting one size bigger.



This dot mandala art can be done on **mugs, crockery, gardening pots and rocks** which can be used as papers weights or in your garden



Succulent Gardening

Whether you like gardening or not, but when it comes to stress-relieving being with nature works for each one of us. From going to our favorite vacation spots to going for a walk in the nearby park, nature has a way of making our anxieties disappear.

If you get stressed way too often, planting a few stress relieving indoor plants may be a great idea. Even taking up gardening as a hobby is known to relieve anxiety.

Check them out and pick one for your home!

Instructions for Open Terrarium

Step 1. Fill your glass container with an inch or two of decorative rocks, depending on the size of container.

Step 2. Add activated charcoal on top of the rocks.

Step 3. Next add moss, which you can purchase in any local nursery or online.

Step 4. Potting soil follows in your layering process.

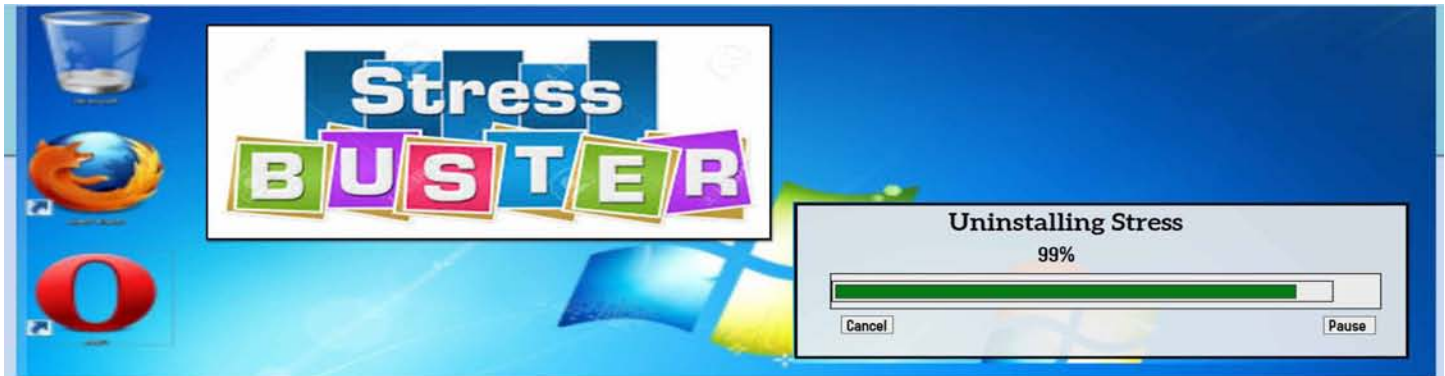
Step 5. Place a small plant like money plant, fit onia

Step 6. U can decorate the top with pebbles.

Tips

1. These plants do not need much water
2. Keep them in indirect sunlight.





Aromatherapy and Essential Oils

It is a well proven and accepted fact now that aromatherapy can alter brain waves and behaviour. It can reduce the perception of stress, increase contentment, and decrease levels of cortisol, the "stress hormone."

Aromatherapy candles, bath products including soaps, essential oils, and other products are now widely used and have been touted as effective in relieving stress and promoting healthy living. With lot of focus on sustainability and organic products, a few of these do it yourself (DIY) projects are fun and chemical-free and let us have some quality family time!

Lemons, peel, 5
+
Coconut oil, 1 cup

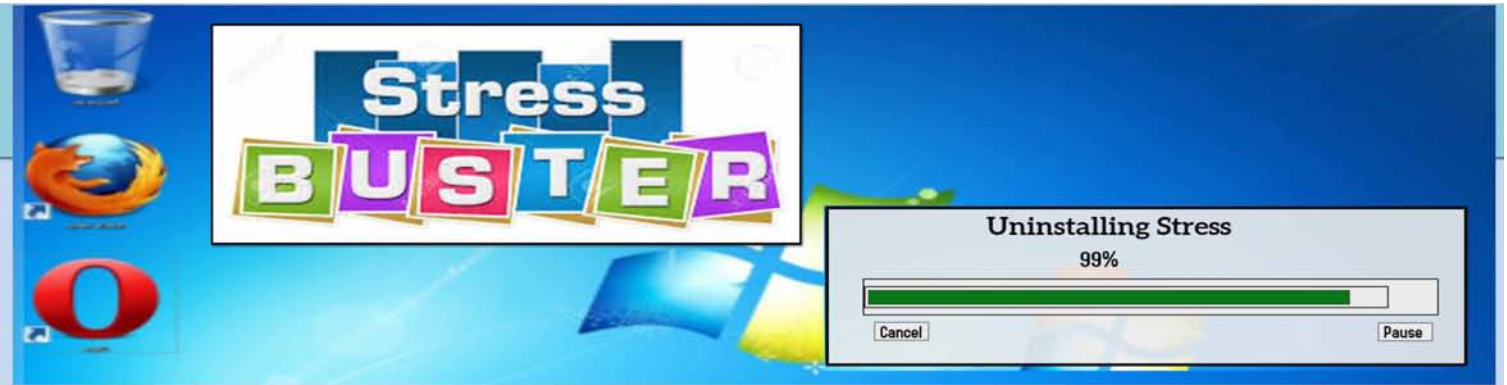
- ▶ Double boil mixture for 3 hours on low heat.
- ▶ Strain oil in a bottle.
- ▶ Store in a cool, dark place.

DIY Essential Oils

Few tips in making your own essential oils at home

- Use a neutral non fragrant oil- coconut oil works best.
 - Essential oils can be made with any ingredient easily available at home like lemon or rose or lemongrass or jasmine or orange peels.
 - Always store in a cool dry place, away from direct sunlight- it increases its shelf life.
 - Essential oils have many benefits and can be used as body massage oil, room diffuser, in soaps and fragrant candle making.
- Enjoy the soothing, calming effect and a meditative vibe!





Here is your mandala designGo for it !

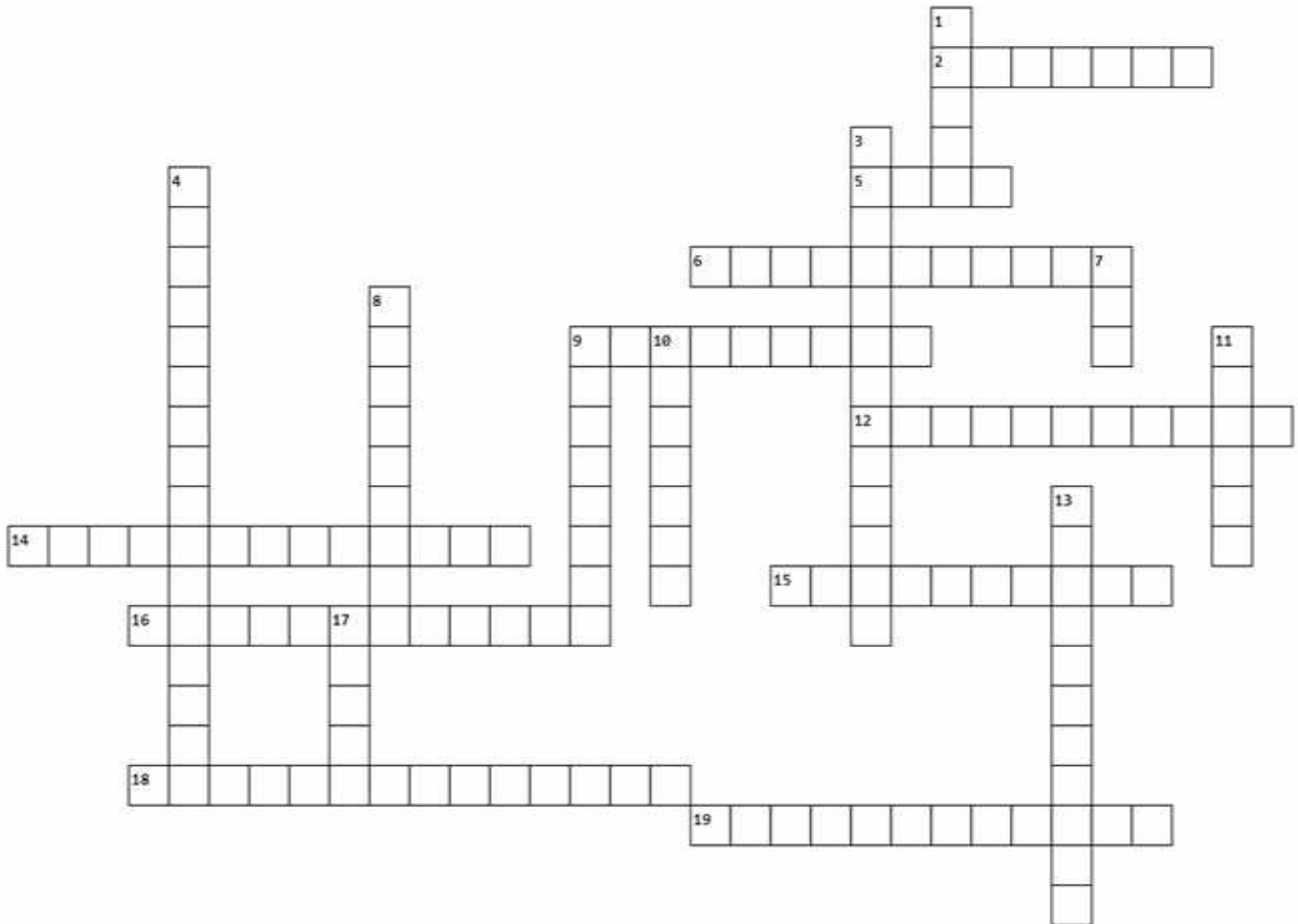




MIND BENDERS

CROSSWORD

Dr Pradnya Supe



cross

- 2. Sage femme in Frenc
- 5. Newborns first food
- 6. Joyous meeting of the “x” and “y” occurs here!!!
- 9. An obstetrician's bread and butter
- 12. We are a -----logy...dealing with little beings!
- 14. Body is normal but the head is little...what condition am I ??
- 15. Baby's first steps... but in utero!!
- 16. Swelling everywhere...Toxemia...now known as _____
- 18. Fancy name for uterine rupture!
- 19. A woman who decides to take the risk of pregnancy again and again!

Down

- 1. Another word for “micro”
- 3. Aspiration of baby cushion of fluid in utero!
- 4. I am used to visualize the pelvis from outside...who am I??
- 7. Naegele's rule is my predecessor...what am I?
- 8. Birth...for the first time...
- 9. Afterbirth is thy name
- 10. Pregnancy on the wall....I'm not in the uterus after all...guess who am I?
- 11. The union of the yin and the yang in the embryonic stage



Answers

cross

- 2. MIDWIFE
- 5. MILK
- 6. UTERINE TUBE
- 9. PREGNANCY
- 12. NEONATOLOGY
- 14. MICROCEPHALY
- 15. QUICKENING
- 16. PRE-ECLAMPSIA
- 18. HYSTERORRHESIS
- 19. MULTIGRAVIDA

Down

- 1. SMALL
- 3. AMNIOCENTESIS
- 4. PELVIC SONOGRAPHY
- 7. EDD
- 8. PRIMIPARA
- 9. PLACENTA
- 10. ECTOPIC
- 11. ZYGOTE
- 13. SPINA BIFIDA
- 17. LABOR



QUIZ

Dr Kinjal Mehta

Rules:

- 1) Rearrange the alphabets to get the answer of the clue given.
- 2) The alphabets marked in red will form the final answer.

- Father of modern gynaecology?

M I S S

- Technique commonly used for second stage caesarean section?

D H A N W A R P A T

- Who discovered obstetric forceps?

B E R C H L E N A M

- Non steroidal, non hormonal once a week OCP?

M A N C H E R O C N T

- Name of the maneuver, where mother supports herself on her hands and knees to resolve shoulder dystocia ?

A S K I N G

- Bluish discoloration of skin around umbilicus. Seen in ruptured ectopic pregnancy?

L E C U L N

- Congenital disorder characterised by uterus didelphys, unilateral obstructed hemivagina and ipsilateral renal agenesis, all being secondary to mesonephric duct-induced Mullerian anomalies.

LER Y H N – R E N E R W – L I C H D E R W U N (SYNDROME)

First test tube baby in India?

ANSWERS

- SIMS
- PATWARDHAN
- CHAMBERLEN
- CENTCHROMAN
- GASKIN MANEUVER
- CULLEN SIGN
- HERLYN - WERNER- WUNDERLICH SYNDROME

KANUPRIYA AGARWAL

MOGS UPCOMING EVENTS



Mumbai Obstetrics and Gynaecological Society

Mogs for Women

Our speciality is you



RISHMA DHILLON PAI
President MOGS



ANAHITA CHAUHAN
Secretary MOGS



RAJENDRA SANKPAL
Treasurer MOGS

MOGS - NA PURANDARE TEACHING PROGRAM

WEBINAR BY JAGJIVAN RAM RAILWAY HOSPITAL, MUMBAI FRIDAY, JANUARY 22, 2021
BETWEEN 5 TO 8.30 PM







FOGSI-ICOG National Conference on (NCD) Non Communicable Diseases in Obgyn

(In Association with Mumbai Obstetrics and Gynecological Society)

PREVENTION,
PREDICTION AND
PRACTICES IN
NON-COMMUNICABLE
DISEASES

SAVE THE DATE

5th 6th 7th FEBRUARY 2021



Dr. Alpesh Gandhi
President, FOGSI



Dr. Mandakini Megh
Chairperson, ICOG



Dr. Rishma Pai
President, MOGS

Submit Abstracts on : <https://tinyurl.com/icogncdabstracts>

Registration Link : <http://fogsi.onference.live/icogncd>



MOGS V CARE AND SHARE PROGRAM

REPORT OF ACTIVITIES IN DECEMBER 2020

Dr Anahita Chauhan

The MOGS V Care and Share Program is continuing its efforts in helping frontline workers and patients during the COVID pandemic. We received excellent feedback from Heads of Department of various teaching hospitals, who informed us that our previous care packages have been greatly appreciated by all doctors and patients. Also, most of the basic PPE and other equipment are now available. However, residents and junior doctors miss the small caring touches, especially during festival times. Hence, we focused on spreading cheer and goodwill and ending this difficult year on a positive note.

Our major activity in previous months has been the distribution of essential equipment, and taking care of the health, immunity and nutrition of patients and resident doctors and lecturers who are in the front line. In the month of December our main focus was on procurement and distribution of care packages to patients, doctors, nursing and labor staff in all the major public and private hospitals. We distributed more than 1000 bags. This activity was managed entirely through our own funds and we spent approximately Rs.1,10,000/-.

- Distribution of care packages to patients
 - o 250 packages were distributed to patients in select teaching hospitals
 - o These packages contained handmade cotton mask, jaggery, roasted chana, biscuits, and a letter from MOGS in Marathi encouraging patients to stay safe
- Distribution of 487 care packages to resident doctors and Lecturers
 - o We distributed care packages to residents and lecturers in all the major public and teaching hospitals - KEM, Sion, Nair, JJ, Cooper, Wadia, Bombay Hospital, Somaiya and DY Patil
 - o We also distributed to SMO and residents in peripheral hospitals - KB Bhabha Bandra, KB Bhabha Kurla, VN Desai Santacruz, KBDA Kandivali
 - o For the first time we included select private teaching hospitals also - LH Hiranandani, Lilavati, Bhatia and Saifee hospitals
 - o A colorful bag filled with handmade cotton mask, sweet and savory goodies (candy, marshmallows, chips, kurkure, etc), Xmas hat/ headband and a letter from MOGS
- Distribution of 208 surplus bags
 - o These were distributed in select institutes to patients and nursing and labor staff serving in the Obgyn department at the discretion of the HOD/ senior faculty
 - o A handmade cotton mask, colorful bag filled with sweet and savory goodies, Xmas hat/ headband and a letter from MOGS
- Distribution of token of appreciation to 80 senior faculty
 - o A small token of appreciation was given to Professors and Associate Professors/ Honorary Consultants - a colorful bag with Christmas plum cake, a handmade cotton mask, and a letter from MOGS

We supported artisans by ordering cotton masks from Dastkari Haat in Delhi, which showcases the work of artisans from all over India.

This activity was conceptualized and executed by Dr. Rishma Dhillon Pai and Dr. Anahita Chauhan. Packing was done by our office staff, and distribution was done in coordination with representatives from the various hospitals.

Report prepared on 03.01.2021 by Anahita Chauhan



Dr M J Jassawala and Dr Deepali Kale with Patients at WADIA Hospital



Dr Lalita Mayadeo and her team at V N Desai Hospital, Santracruz



V care and share at Sion Hospital



Dr Shailesh Kore and Dr Ganesh Shinde at Nair Hospital



RMOs at Saifee Hospital





Dr Gaurav Desai with Nursing and and Labor staff at K B Bhabha Hospital , Bandra



Dr Sriram Gopal and residents at D Y Patil Hospital ,Navi Mumbai



Dr Reena Wani with patients and staff at R N Cooper Hospital.



Residents at Somaiya Hospital

MOGS *V*Care & Share

MOGS extends a helping hand to our frontline healthcare workers & patients.
Support our efforts - **DONATE GENEROUSLY**

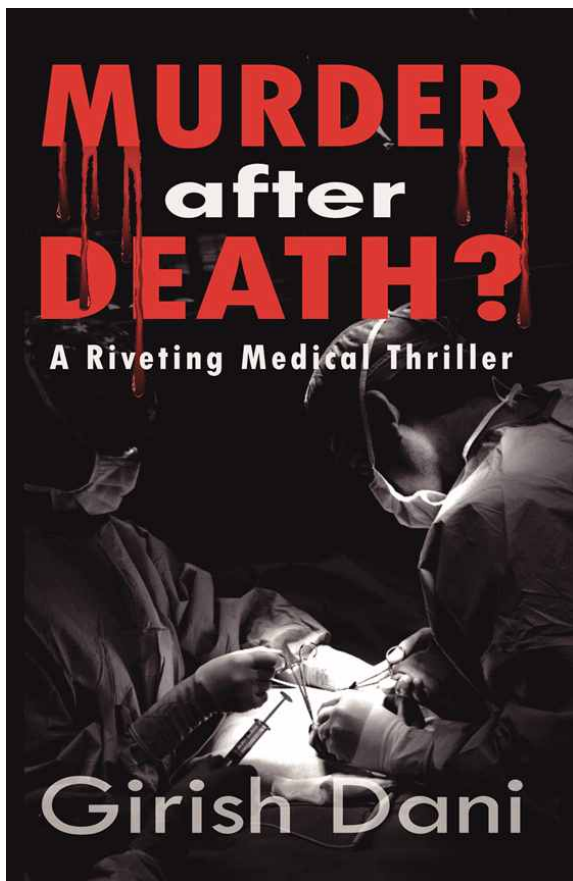
NEFT Details of MOGS	
Name as per Bank Account	The Mumbai Obstetric & Gynecological Society
Bank Account No	24480100012858
Bank Name	BANK OF BARODA
Bank Branch	JACOB CIRCLE BRANCH, Mumbai 400 011
MICR Code	400012092
RTGS/NEFT/IFSC Code	BARB0JACOBC
Gstcertificate	27AAATT4562C1ZL
Pan card	AAATT4562C
SAC CODE	998599

Online payment gateway on MOGS website www.mogsonline.org

ACHIVEMENT BY MEMBERS



Dr Rajeshri Katke received the Mumbai Acheivers Award 2020



Dr Girish Dani published a Medical Fiction Thriller named. " Murder after Death " on November 2020