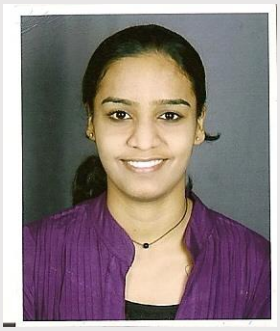

PROFILE

"To achieve a defiant position in an organization that offers pertinent opportunities for personal development and brush up my knowledge, skills, and abilities in the field of **Health & Biotechnology.**

I will try my best to make the organization more advantageous and successful by sincere efforts and hard work."

CONTACT

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DR. NISHA KEMSE

Scientist

EDUCATION

PhD in Biotechnology **from Bharati Vidyapeeth University** (2018).

M. Sc in **Biotechnology** from Bharati Vidyapeeth University. First Class (2011).

B. Sc in **Biotechnology** from University of Pune. First Class (2009)

WORK EXPERIENCE

IRSHA- ICMR-Women Scientist Fellow (10.08.2021- till now)

IRSHA- Consultant (From 6-1-2021- 31.03.2022)

IRSHA- Research Assistant (From 3-6-2017– 30-6-2019)

- Worked as Research Assistant on project entitled "Centre for Advanced Research: Investigating mechanisms leading to preeclampsia"

- Involved in human study related activities like recruitment, counseling, sample collection and placenta processing

RESEARCH PROJECTS & ACADEMIC WORK DETAILS

1. **Research Title: Assessment of Antioxidant and Antiglycation Potential of Selected Nutraceuticals for Prevention of Diabetic Nephropathy.**

   Institute: Rajiv Gandhi Institute of IT and BT, BVU. *M.Sc. Project*

2. **Research Title: Isolation of Thermoduric organisms from cow dung and characterization of their extracellular protease activity qualitatively.**

   Institute: Modern College, Pune University. *B.Sc Project*

LIST OF PUBLICATIONS (Total=15)

1. Nisha Kemse, Sadhana Joshi. Prenatal omega-3 fatty acid supplementation improves cognitive performance in offspring born to dams with gestational diabetes mellitus. **Communicated** to Nutrition Research (2023).

   (Impact Factor=**3.876**)

2. **Kemse N**, Kale A, Chavan-Gautam P, Joshi S. Increased intake of vitamin B_{12}, folate, and omega-3 fatty acids to improve cognitive performance in offspring born to rats with induced hypertension during pregnancy. Food Funct (2018), 9:3872-3883.

   (Impact Factor= **2.89**)

3. **Kemse N**, Sundrani D, Kale A, Joshi S. Maternal Micronutrients, Omega-3 Fatty Acids and Gene Expression of Angiogenic and Inflammatory Markers in Pregnancy Induced Hypertension Rats. Arch Med Res. (2017), 48:414-422.

   (Impact Factor= **2.024**)

4. Tupe RS, **Kemse NG**, Khaire AA, Shaikh SA. Attenuation of glycation-induced multiple protein modifications by Indian antidiabetic plant extracts. Pharm Biol. (2017), 55:68-75.
(Impact Factor= **1.241**)

5. Dangat K, Upadhyay D, Kilari A, Sharma U, **Kemse N**, Mehendale S, Lalwani S, Wagh G, Joshi S, Jagannathan NR. Altered breast milk components in preeclampsia; An in-vitro proton NMR spectroscopy study. Clin Chim Acta. (2016), 463:75-83.
(Impact Factor=**2.926**)

6. **Kemse N**, Kale A, Joshi S. Maternal supplementation of omega-3 fatty acids and micronutrients reduces cardiometabolic variables in pregnancy induced hypertension rats. Life Sci. (2016), 155:85-93.
(Impact Factor = **2.702**)

7. **Nisha G. Kemse**, Anvita A. Kale, Sadhana R. Joshi. Supplementation of maternal omega-3 fatty acids to pregnancy induced hypertension Wistar rats improves IL10 and VEGF levels. Prostaglandins Leukot Essent Fatty Acids. (2016), 104 25–32.
(Impact Factor = **2.437**)

8. Amrita Khaire, Richa Rathod**, Nisha Kemse**, Anvita Kale, Sadhana Joshi. Supplementation with omega-3 fatty acids during gestation and lactation to a vitamin B_{12}-deficient or supplemented diet improves pregnancy outcome and metabolic variables in Wistar rats. Journal of Reproduction, Fertility and Development. (2015), 27:341-350.
(Impact Factor = **2.135**)

9. Rashmi S. Tupe , Neena M. Sankhe, Devyani V. Phatak, Juhi U. Parikh, Amrita A. Khaire, **Nisha G. Kemse** 'Aqueous extract of some indigenous medicinal plants inhibits glycation at multiple

stages and protects erythrocytes from oxidative damage–an in vitro study". Journal of Food Science and Technology. (2015), 52:1911-1923.

(Impact Factor = **1.797**)

10. Rashmi S. Tupe, Neena M. Sankhe, Amrita A. Khaire, **Nisha G. Kemse**, Shamim A. 'Nutraceutical properties of dietary plants extracts: Prevention of diabetic nephropathy through inhibition of glycation and toxicity to erythrocytes and HEK293 cells'. Pharm Biol (2015), 53 :40-50.

(Impact factor = **1.241**)

11. Richa S. Rathod, Amrita A. Khaire, **Nisha G. Kemse**, Anvita A. Kale, Sadhana R. Joshi**.** Maternal Omega-3 Fatty Acid Supplementation on Vitamin B_{12} Rich Diet Improves Brain Omega-3 fatty acids, Neurotrophins and Cognition in the Wistar Rat Offspring. Brain Dev (2014), 36:853-863.

(Impact Factor = **1.544**)

12. **Kemse NG**, Kale AA, Joshi SR. A Combined Supplementation of Omega-3 Fatty Acids and Micronutrients (Folic Acid, Vitamin B_{12}) Reduces Oxidative Stress Markers in a Rat Model of Pregnancy Induced Hypertension. PLoS One. (2014), 18;9(11):e111902.

(Impact Factor = **2.766**)

13. Rashmi S. Tupe, Amrita A. Khaire, **Nisha G. Kemse**, Shamim A. Shaikh. Inhibition of albumin glycation at multiple stages by selected Indian culinary plants extracts. Current Topics in Nutraceutical research (2013), 75-82

(Impact Factor = **0.17**)

14. Tupe, R. S., **Kemse, N. G.** and Khaire, A. A**.** Evaluation of antioxidant potentials and total phenolic contents of selected Indian

herbs powder extracts. International Food Research Journal. (2013), 20; 1053-1063.

(Impact Factor = **0.559**)

15. Rashmi tupe, Amrita Khaire, **Nisha Kemse**, Vaishali Agte. Assessing Antioxidant Potential in 53 Antidiabetic Botanicals and Dietary Agents by Seven Different in vitro Assays. Free radical biology and medicine. 49:S42 (2010) (Conference Proceeding).

(Impact factor = **5.736**)

AWARDS AND PRIZES (5)

- **NSI Prize** for Oral Presentation at 55th Annual Conference of the Nutrition Society of India held at the ICMR-National Institute of Nutrition, Hyderabad, Telangana, India, 25-26 November, 2023.
  "Maternal Omega-3 Fatty Acid Supplementation Improves Brain Neurotrophins and Angiogenic Markers in the offspring Born to Gestational Diabetes Mellitus Mothers"

- **Second prize winner** for the *Best Oral Presentation* at 22nd Annual MRC-SNEHA International Workshop on Developmental Origins of Health and Disease (DOHaD) held at Interactive Research School for Health Affairs (IRSHA), BVDU, Pune, 4-5th Feb, 2023.
  "**Effect of Prenatal Omega-3 Fatty Acid Supplementation on Brain Neurotrophins in Offspring Born to Dams with Gestational Diabetes Mellitus (GDM)**"

- **NSI Prize** for *Best Poster presentation* in the Free Communication session (Experimental Nutrition) held on 22-23 December 2022, at ICMR-NIN, Hyderabad, Telangana.
  Maternal Omega-3 Fatty Acid Supplementation Attenuates Memory Deficits in Offspring Born to Gestational Diabetes Mellitus Mothers: Animal Study

❖ **NSI Prize** for *Best Oral Presentation* at 48th Annual National Conference of the Nutrition Society of India held at the St John's Research Institute, Bangalore on 4th and 5th November 2016.

"Effect of Supplementation of Maternal Micronutrients (Folic Acid, Vitamin B_{12}) And Omega 3 Fatty Acids on The Expression of Genes involved in Angiogenesis and Inflammation in a Pregnancy Induced Hypertension Rat Model"

❖ **Second prize winner** for the *Best Oral Presentation* at ICMR, DST and DBT sponsored 'International conference on food technology: Impact on Nutrition and Health (ICFIN 2013)' held on 23rd-24th Dec 2013

''Effect of N(ω)-nitro-L-arginine methyl ester (L-NAME) Induced Preeclampsia and Micronutrient Supplementation on Pregnancy Outcome using Wistar Rats''

Seminar And Conferences (12)

1. Oral Presentation at 55th Annual Conference of the Nutrition Society of India held at the ICMR-National Institute of Nutrition, Hyderabad, Telangana, INDIA, 25-26th November, 2023.

   "Maternal Omega-3 Fatty Acid Supplementation Improves Brain Neurotrophins and Angiogenic Markers in the offspring Born to Gestational Diabetes Mellitus Mothers"

2. Poster presentation (Oral) 22nd Annual MRC-SNEHA International Workshop on Developmental Origins of Health and Disease (DOHaD) held at Interactive Research School for Health Affairs (IRSHA), BVDU, Pune, 4-5th Feb, 2023.

   "**Effect of Prenatal Omega-3 Fatty Acid Supplementation on Brain Neurotrophins in Offspring Born to Dams with Gestational Diabetes Mellitus (GDM)**"

3. Poster presentation (Poster) 54th Annual National Conference of the Nutrition Society of India held at ICMR-NIN, Hyderabad, Telangana on 22-23rd December 2022.
   "**Maternal Omega-3 Fatty Acid Supplementation Attenuates Memory Deficits in Offspring Born to Gestational Diabetes Mellitus Mothers: Animal Study**"

4. Poster presentation (Oral) 48th Annual National Conference of the Nutrition Society of India held at the St John's Research Institute, Bangalore on 4th-5th November 2016
   "**Effect Of Supplementation of Maternal Micronutrients (Folic Acid, Vitamin B_{12}) and Omega 3 Fatty Acids on The Expression of Genes Involved in Angiogenesis and Inflammation in A Pregnancy Induced Hypertension Rat Model"**

5. Poster presentation (Oral) 47th Annual Conference of the Nutrition Society of India (NSI) held at National Institute of Nutrition, Hyderabad on 9th-10th Oct 2015
   "Maternal Omega-3 Fatty Acids Supplementation Improves IL10 and VEGF Levels in Pregnancy Induced Hypertension Wistar Rats"

6. Poster presentation (Oral) in 46th Annual National Conference of Nutrition Society of India held at Ludhiana on 7th -8th Nov 2014
   "Combined Supplementation of Maternal Micronutrients (Vitamin B_{12}, Folic Acid) and Omega-3 Fatty Acids Improves Cognitive Performance in the Offspring Born to Dams with Preeclampsia"

7. International conference on food technology: Impact on Nutrition and Health (ICFIN 2013)' held on 23rd-24th Dec 2013

"**Effect of N(ω)-nitro-L-arginine methyl ester (L-NAME) Induced Preeclampsia and Micronutrient Supplementation on Pregnancy Outcome using Wistar Rats"**

8. Poster presentation in National Conference of Nutrition Society India (NSI) held at Hyderabad, Nov-2013.
   "**Beneficial effects of omega-3 fatty acid supplementation in reducing oxidative stress induced by vitamin B_{12} deficiency in wistar rats''**

9. Poster presentation in SNEHA (Society for the Natal Effects on Health in Adults) Conference at Maisur in February 2013
   "Placental levels of matrix metalloproteinase-2, -3 and tissue inhibitors of metalloproteinases – 1, -2 in preterm pregnancy''

10. Poster presentation (Oral) in 44th National Conference of Nutrition Society of India (NSI) at Tirupati in November 2012

    "Reduced maternal and cord nerve growth factor levels in preterm deliveries''

11. Poster presentation (Oral) in 43rd National Conference of Nutrition Society of India (NSI) at Hyderabad in November 2011
    "Systematic evaluation of 25 Indian Antidiabetic herbs for their ability to inhibit nonenzymatic glycation''

12. Poster Presentation in 42nd National Conference of Nutrition Society of India (NSI) at Mumbai in November, 2010
    "**Antioxidant activities in 17 spices and 9 antidiabetic dietary ingredients"**

Research Training

- International Course in Nutrition Research Methods in Nutrition (Bangalore Boston Nutrition Collaborative) St. John's Institute, Bangalore, 2014
- Training of NMR Spectroscopy at AIIMS (All India Institute for Medical Sciences) in January 2013
- Serum Institute of India Ltd. Pune, 2011

M.Sc. Supervision

- **Ms. Vaishnavi Chivate:** Reproductive performance and liver fatty acid profile in gestational diabetes mellites (GDM) – An animal study (June 2022).
- **Ms. Anjali Sanjay Pawar:** Placental Oxidative Stress Markers in Gestational Diabetes Mellitus (GDM) Women (May 2023).
- **Ms. Pranali Vijay Jagtap:** Placental Oxidative Stress Markers in Gestational Diabetes Mellitus (GDM) Women (May 2023).

References

- ***Dr. S. R. Joshi***

  Scientist 'G', Nutritional Medicine, Interactive Research School for Health for Health Affairs, Bharati Vidyapeeth University, Pune-46.
  Email- srjoshi62@gmail.com Contact No. 8007945167

- ***Dr. R. S. Tupe***

  Associate Professor at Symbiosis School of Biological Sciences, (SSBS), Symbiosis International (Deemed University) (SIU).
  Email- rashmitupe@gmail.com Contact No.9922263074

Languages Known

English | Marathi | Hindi

(Speak & write)

Declaration

I, NISHA KEMSE, hereby declare that all the information provided above is true and valid to the best of my knowledge and belief and in case of any discrepancy, I shall be liable for that and the authority has the right to cancel my resume.

Place: Pune
Date: 28/05/2024

Yours Sincerely,

Dr. Nisha G. Kemse