

Dr. IMRAN KHAN, ASSOCIATE PROFESSOR (TENURED)

Present address: Department of Human Nutrition, The University of Agriculture Peshawar, Pakistan

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EDUCATION

<u>Degree</u>	<u>Institution</u>	<u>Completion year</u>
PhD (Nutrition & Exercise)	Deakin University, Victoria, Australia	2014
M.Sc. Hons (Human Nutrition)	The University of Agriculture, Peshawar, Pak	2007
B.Sc. Hons (Human Nutrition)	The University of Agriculture, Peshawar, Pak	2005

AWARDS

- Faculty Development Scholarship for PhD studies awarded by HEC, Pakistan
- Research Scholarship for PhD studies awarded by Deakin University Australia
- Publication Scholarship awarded by Deakin University Australia
- Endeavour Research Fellowship awarded by Australian Government

EXPERIENCE

- 2021-Present **Associate Professor (Tenured)**
Department of Human Nutrition, The Uni. of Agriculture Peshawar, Pakistan
Key Responsibilities:
- Teaching and Research
 - Various other administrative duties
- 2014-2020 **Assistant Professor (TTS)**
Department of Human Nutrition, The Uni. of Agriculture Peshawar, Pakistan
Key Responsibilities:
- Teaching and Research
 - Various other administrative duties
- 2008-2014 **Lecturer**
Department of Human Nutrition, The Uni. of Agriculture Peshawar, Pakistan
Key Responsibilities:
- Teaching and Research
 - Various other administrative duties
- 2011-2013 **Teaching Assistant and Lab Demonstrator (casual)**
School of Exercise and Nutrition Sciences, Deakin University, Australia
Key Responsibilities:
- Designing and conducting weekly tutorials and laboratory practicals
 - Marking assignments, exam papers and lab reports
- 2013 **Research Assistant (casual)**
School of Exercise and Nutrition Sciences, Deakin University, Australia
Key Responsibilities:
- Conducting intercept surveys with park users
 - Observing and recording physical activity of park users

2007

Clinical Nutritionist

Paediatrics Unit, Saidu Teaching Hospital, Swat, Pakistan

Key Responsibilities:

- Nutritional management of malnourished children
- Nutritional counselling of pregnant and lactating women

PROFESSIONAL EXPERIENCE

- Three years' experience of conducting clinical studies
- One year experience of conducting food sensory evaluation studies
- Experience in using various analytical software packages such as FoodWorks Xyris, ChemStation, Gen5 and Texture Exponent 32
- Experience in using various laboratory equipments such as HPLC/GC, PCR, Microplate Reader, Spectrophotometer, Texture Analyzer, Colorimeter and Rapid Visco Analyzer
- Experience in using various analytical techniques for the analysis of starch, protein, phenolic compounds and oxidative stress biomarkers (isoprostane, protein carbonyl), Western blotting
- Experience in using Twin Screw Extruder for food products development
- Experience in using various statistical software packages such as SPSS, STATA and Minitab

RESEARCH INTEREST

- Development of functional foods for chronic diseases
- Role of antioxidant nutrients and bioactive compounds in the reduction of oxidative stress and inflammation
- Glycemia, satiety, energy balance/regulation
- Nutrition and sports performance
- Alternative dietary protein sources

COURSES TAUGHT

Undergraduate (BS-Human Nutrition & Dietetics)	Post-graduate (MS-Human Nutrition)	Postgraduate (PhD-Human Nutrition)
Medical Nutrition Therapy I & II	Clinical Nutrition	Nutritional Status Assessment
Principles of Human Nutrition	Nutrition and Chronic Disease	Biochemical Nutrition
Nutrition Through Life Span	Public Health Nutrition	Nutrition Program Management
Exercise and Sports Nutrition	Research Methods in Nutrition	
Functional Foods & Nutraceuticals		
Meal Planning & Management		

COURSES DEVELOPED

- › Clinical Nutrition
- › Functional Foods & Nutraceuticals

RESEARCH STUDENTS SUPERVISION

Degree program	Supervised	Co-supervised	Supervising	Co-supervising
PhD Human Nutrition	3	3	2	6
M.Sc. (Hons) Human Nutrition	34	15	12	14

PUBLICATIONS

Published

1. Ahmad, J., **Khan, I.**, Blundell, R., Azzopardi, J., & Mahomoodally, M. F. (2020). Stevia rebaudiana Bertoni.: an updated review of its health benefits, industrial applications and safety. *Trends in Food Science & Technology*. (IF: 16.002).
2. **Khan, I.**, Yousif, A., Johnson, S. K., & Gamlath, S. (2015). Acute effect of sorghum flour-containing pasta on plasma total polyphenols, antioxidant capacity and oxidative stress markers in healthy subjects: A randomised controlled trial. *Clinical Nutrition* 34(3), 415-421. (IF: 7.643).
3. **Khan, I.**, Yousif, A., Johnson, S. K., & Gamlath, S. (2013). Effect of sorghum flour addition on resistant starch content, phenolic profile and antioxidant capacity of durum wheat pasta. *Food Research International*, 54(1), 578-586. (IF: 7.425).
4. Ahmad, J., **Khan, I.**, & Blundell, R. (2019). Moringa oleifera and glycemic control: a review of current evidence and possible mechanisms. *Phytotherapy Research*. DOI:10.1002/ptr.6473. (IF: 6.388).
5. **Khan, I.**, Yousif, A., Johnson, S. K., & Gamlath, S. (2014). Effect of sorghum flour addition on in vitro starch digestibility, cooking quality and consumer acceptability of durum wheat pasta. *Journal of Food Science*, 79(8), 1560-67. (IF: 3.693).
6. Ahmad, J., **Khan, I.**, Johnson, S. K., Alam, I., & Din, Z. (2018). Effect of incorporating stevia and moringa in cookies on postprandial glycemia, appetite, palatability and gastrointestinal wellbeing. *Journal of the American College of Nutrition*, 37 (2), 133-139. (IF: 3.571).
7. **Khan, I.**, Shah, S., Ahmad, J., Abdullah, A., & Johnson, S. K. (2017). Effect of incorporating bay leaves in cookies on postprandial glycemia, appetite, palatability and gastrointestinal wellbeing. *Journal of the American College of Nutrition*, 36(7), 514-519. (IF: 3.571).
8. Zheng Feei Ma, Jamil Ahmad, Hongxia Zhang, **Imran Khan** and Shahzad Muhammad. (2019). Evaluation of phytochemical and medicinal properties of moringa (*Moringa oleifera*) as a potential functional food. *South African Journal of Botany*. DOI: <https://doi.org/10.1016/j.sajb.2018.12.002>. (IF: 3.111).
9. Din ud Z, Iqbal K, **Khan I**, Abbas M, Ghaffar F, Iqbal Z, Iqbal M, Iqbal-Rana M, Suleman M, Iqbal H. Tendency Towards Eating Disorders and Associated Sex-specific Risk Factors Among University Students. *Arch Neuropsychiatry* 2019. (IF: 1.339).
10. Zia ud Din, Zafar Iqbal, **Imran Khan**, Mudassar Iqbal, Muhammad Abbas. (2018). Parasitic infections, malnutrition and anemia among preschool children living in rural areas of Peshawar – Pakistan. *Nutricion Hospitalaria*. 35(5),1145-1152. (IF: 1.096).
11. Din, Z., Khan, Z., Iqbal, M., Iqbal, Z., **Khan, I.**, Ahmad, Z., Paracha, P. I. (2019). Dietary patterns, nutritional status and agriculture work performance of small-scale farmers in North West Pakistan. *Progress in Nutrition*, 21S, 359-369. (IF: 0.567).
12. Fazia Ghaffar, Zia Ud Din, **Imran Khan**, Zafar Iqbal, Mudassar Iqbal. (2019). The effect of nutritional intervention and dietary modification on the health status of pediatric acute lymphoblastic leukemia patients. *Progress in Nutrition*. 21, 183-188. (IF: 0.567).
13. **Khan, I.**, Yasmeen, F., Ahmad, J., Johnson, S. K., Abdullah, A., & Din, Z. Developing a meal-planning exchange list for commonly consumed Pakistani dishes. *Progress in Nutrition*. DOI: 10.23751/pn.v%vi%i.6928. (IF: 0.567).
14. Mudassar Iqbal, Rafiq Ullah, Hamida Bibi, Zafar Iqbal, Muhammad Numan, Sadaf Rahim, Zia ud Din, **Imran Khan**, Muhammad Ishfaq. (2017). Mycelial extract of *acremonium* sp.: a potent target specific bio herbicide against *echinocloa crus-galli* and *asphodelus tenuifolius*. *Fresenius Environmental Bulletin*, 27 (3), 1778-1785. (IF: 0.489).

15. Khan, K., Ullah, i., Khan, N. A., Hashmi, M. S., Islam, Z., & **Khan, I.** (2019). Nutritive value of mulberry (morus alba) leaves for fattening rabbits (oryctolagus cuniculus). *Fresenius Environmental Bulletin*, 28(11 a), 8759-8764. (IF: 0.489).
16. Fahadullah, Zia ud Din, Iftikhar Ahmad, **Imran Khan** and Muhammad Abbas. (2017). Malpractices of milk adulteration with chemicals and its impact on nutritional status of pre-school children in Peshawar Pakistan. *Food Science and Technology*, 5 (2), 50-55.
17. Sadaf Ambreen, Zia ud Din, Zahoor Ahmad, Muhammad Abbas, **Imran Khan.** (2016). Antenatal psychological distress and birth outcomes in a cohort of Pakistani Women. *International Archives of Obstetrics and Gynecology*, 2(4), 20-27.
18. Pooja Longani, Zia ud Din, Muhammad Abbas, Saleem Khan. Iftikhar Alam², Zahoor Ahmad, **Imran Khan.** (2016). Determinants of Dietary Patterns in Minority Women in North West Pakistan. *American Journal of Food Science and Health*, 2(1), 1-6.
19. Bibi Hajira, Zia ud Din, **Imran Khan.** (2016). Knowledge, Attitude and Practices (KAP) of Mothers Regarding Infant Feeding and Its Effect on Child Nutritional Status. *Pakistan Pediatric Journal*, 40 (2), 91-99.
20. Tabassum, F., Khan, A., Alam, I., Ullah, N., Khan, S., **Khan, I.**, Zubair, M., Zafar, M., Qureshi, K., Safdar, M., & Din, Z. U. (2013). Determination of glycemic indices and glycemic loads of various types of cereal foods. *ARPN Journal of Agricultural and Biological Sciences*, 8(6), 493-497.
21. Khan, S., Paracha, P.I., Habib, F., **Khan, I.**, Anjum, R., & Badshah, S. (2012). Effect of dietary counselling on the nutritional status of tuberculosis patients. *Sarhad Journal of Agriculture*, 28(2), 303-307.
22. **Khan, I.**, F. Tabassum, F., & Khan, I. (2008). Glycemic indices and glycemic loads of various types of pulses. *Pakistan Journal of Nutrition*, 7(1), 104-108.
23. Zheng Feei Ma, Jamil Ahmad, **Imran Khan**, Chee Woon Wang, Peiyuan Jiang & Yutong Zhang (2019) Interaction of Phytochemicals from Walnut on Health: An Updated Comprehensive Review of Reported Bioactivities and Medicinal Properties of Walnut, *Journal of Biologically Active Products from Nature*, 9:6, 410-425, DOI: 10.1080/22311866.2019.1709900
24. Bacha, A. A., Din, Z. U., & **Khan, I.** (2022). Effect of Psyllium husk fiber and lifestyle modification on human body insulin resistance. *Nutrition and Metabolic Insights*, 15, 11786388221107797.
25. Ahmed, I., **I. Khan** and Z.U. Din. 2022. Polyphenolic content, antioxidant activity and In vitro starch digestibility of bread incorporated with chamomile and wild thyme. *Sarhad Journal of Agriculture*, 38(3): 918-927.
26. Shah, S., A. Jan, I. Alam, **I. Khan**, S. Bakht and M. Farooq. 2022. Effect of low glycemic breakfast combined with resistance exercise on metabolic indicators in overweight/ obese individuals. *Journal of Innovative Sciences*, 4(x).
27. Hajira, B., **I. Khan** and Z. Din. 2022. Combined effect of sorghum and barley flours incorporation on in-vitro starch digestibility, estimated glycemic index and consumer acceptability of white bread. *Sarhad Journal of Agriculture*, 38(3): 997-1006.
28. Gul, R., **I. Khan, I.** Alam, Z. Uddin and Z. Iqbal. 2021. Development of an innovative tool for assessment of dietary intake in the fasting month of ramadan- a ramadan-specific food frequency questionnaire. *Journal of Innovative Sciences*, 7(2): 206-214.
29. Naqeeb, Huma, Zia ud Din, Sami Siraj, Zafar Iqbal, and **Imran Khan.** "Dietary patterns and risk of breast cancer among women: a case-control study." *Pakistan Journal of Physiology* 17, no. 4 (2021): 35-38.
30. Killpartrick, Adam, Abbas Khan, **Imran Khan**, Murad Zeb, and Cuina Wang. "Clinical Case Study on Orally Administered Whey Protein Microencapsulated DIM in Castrate-resistant Metastatic Prostate." *Nutritional Perspectives: Journal of the Council on Nutrition* 44, no. 3 (2021).
31. Ghaffar F., Shah H., and **Khan I.** (2018). Antimicrobial efficacy, physico- nutritional profile of sesamum indicum l. seed and seed oil indigenous to KPK, Pakistan. *International Journal of Biology, Pharmacy and Allied Sciences*. 7 (4), 592-607.

Submitted

1. Bibi Hajira & **Imran Khan**. Effect of sorghum and barley-containing bread on plasma total polyphenols, antioxidant status and inflammation in healthy subjects. *Journal of Food Science and Technology*. (In review).
2. David Dean, Meike Rombach, Wim De Koning, Frank Vriesekoop and **Imran Khan**. Understanding key factors influencing consumers' willingness to try, buy and pay a price premium for mycoproteins. *Nutrients*. (In review).
3. **Khan, I.**, Yousif, A., Johnson, S. K., & Gamlath, S. Effect of different processing methods on resistant starch content, in vitro starch digestibility, phenolic content and antioxidant capacity of sorghum-containing pasta. *Journal of the Science of Food and Agriculture* (In review).
4. **Khan, I.**, Yousif, A., Johnson, S. K., & Gamlath, S. Effect of sorghum flour-containing pasta on postprandial glycaemia, appetite and energy intake in healthy subjects. *European Journal of Clinical Nutrition* (In review).
5. **Khan, I.**, Afridi M.S., Ahmad, J., Johnson, S. K., Abdullah, A., & Din, Z. Effect of fenugreek and *Nigella sativa* added to white rice on postprandial glycemia, appetite, palatability and gastrointestinal wellbeing. *Brazilian Archives of Biology and Technology* (In review).
6. Zheng Fei Ma, Hongxia Zhang, Jamil Ahmad, **Imran Khan**, Devesh Tewari and Hang Zhou. (2018). The mechanism of action and impact of coffee (caffeine) intake on health and nutrition. *Oxidative Medicine and Cellular Longevity*. (In review).

GRANTS

1. Effect of cookies incorporated with bay leaves on postprandial glycaemia, appetite and palatability. Funding agency = Higher Education Commission (HEC), Pakistan Project No. 21-708/SRGP/R&D/HEC/2014 Total Approved Grant=0.4131million PKR.
2. Nutritional and bioactive compounds evaluation of traditional dishes commonly consumed in KP. Submitted to = Higher education research endowment fund, Higher education department Khyber Pakhtunkhwa Total Budget requested = PKR 1.4792 million
3. Development of palatable functional foods from sorghum and barley: Targeting chronic diseases and food security. Submitted to: Pakistan Science Foundation Total budget requested: PKR 3.782 million
4. Plasma 3-deoxyanthocyanidins as unique polyphenolic biomarkers of whole-grain sorghum intake. Submitted to: International Foundation for Science (IFS). Total budget requested: US\$ 12000

RESEARCH THESIS/DISSERTATION

1. Health potential of sorghum-containing pasta: *In vitro* and clinical studies. Submitted to the School of Exercise and Nutrition Sciences, Deakin University Victoria Australia in fulfilment of the requirements for the degree of Doctor of Philosophy (Nutrition & Exercise), March, 2014.
2. Determination of glycemic indices and glycemic loads of various types of pulses. Submitted to the Department of Human Nutrition, KPK Agricultural University Peshawar Pakistan in partial fulfilment of the requirements for the degree of Master of Science-Hons (Human Nutrition), July, 2007.
3. Effect of Kalonji (*Nigella Sativa*) on human health (Review Paper). Submitted to the Department of Human Nutrition KPK Agricultural University Peshawar Pakistan in partial fulfilment of the requirements for the degree of Bachelor of Science-Hons (Human Nutrition), December, 2004.

CONFERENCES/SYMPOSIA PARTICIPATED

- 2105 6th Annual Public Health Conference. Universal Health Coverage: Issues & Challenges in Pakistan. (11th -12th December, 2015). Health Services Academy Islamabad, Pakistan.
- 2017 Postprandial Glycaemic and appetite responses to cookies following incorporation of stevia and moringa leaf powder "1st International Growth and Development Conference". (16th -18th March, 2017). Roda Al Bustan Dubai UAE.
- 2012 9th Annual HDR Symposium "Research That Makes a Difference" (9th November, 2012) Deakin University, Australia (oral presentation).

- 2011 International Conference “Functional Foods: Nutritional and Health Implications” (16th-17th November, 2011) University Putra, Malaysia (oral presentation).
- 2011 8th Annual HDR Symposium “Promoting Health: Innovation in Food, Nutrition, Exercise and Sport Research” (26th October, 2011) Deakin University, Australia (oral presentation).
- 2011 HDR Symposium “Research in Food and Nutrition (Show and Tell)” (21th June, 2011) School of Public Health, Curtin University, Australia (oral presentation).
- 2010 7th Annual HDR Symposium “Promoting Health, Preventing Disease and Improving Human performance” (18th November, 2010) Deakin University, Australia (oral presentation).

INTERNATIONAL COLLABORATIONS

1. Research collaboration with Dr. Stuart Johnson, School of Public Health, Curtin University Australia.
2. Research collaboration with Dr. Frank Vriesekoop, Department of Food Technology and Innovation Harper Adams University, UK (Project: Alternative dietary protein sources)
3. Research collaboration with Dr. Eresha Mendis, Department of Food Science and Technology, Peradeniya Srilanka.

MEMBERSHIPS

- Nutrition Society of Australia
- Nutrition Society of Pakistan
- International Union for Nutritional Sciences (IUNS), task force for Climate and Nutrition

SERVICES

1. Member, Selection Board, Women University Mardan, Pakistan.
2. Member, Board of Studies in Human Nutrition & Dietetics, Bacha Khan University, Pakistan.
3. Clinical Placement Coordinator, BS Human Nutrition & Dietetics Program, Department of Human Nutrition, The University Agriculture Peshawar, Pakistan.
4. Focal person (Quality Enhancement Cell) for the department of Human Nutrition, The University Agriculture Peshawar, Pakistan.
5. In-charge Seminars & Presentations in the department of Human Nutrition, The University Agriculture Peshawar, Pakistan.
6. In-charge Research of the department of Human Nutrition, The University Agriculture Peshawar, Pakistan.
7. Member, HEC-National Curriculum Revision Committee (NCRC), to develop Curriculum of Human Nutrition & Dietetics.
8. Member, National Agriculture Education Accreditation Council for the evaluation of Human Nutrition & Dietetics Program in Pakistan
9. HEC approved PhD supervisor (Clinical Nutrition)
10. AIOU approved tutor

SERVICES FOR PEER REVIEW JOURNALS

- Referee, Journal of Cereal Science
- Referee, Food Research International
- Referee, British Journal of Nutrition
- Associate Editor, Journal of Nutrition, Food Research and Technology

REFERENCES

1. Dr. Shirani Gamlath
Lecturer, School of Exercise & Nutrition Sciences, Deakin University, Melbourne, Australia
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Phone: +61392517267
2. Dr. Stuart Johnson
Associate Professor, School of Public Health, Curtin University, Perth, Australia
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Phone: +6189266 9486
3. Dr. Saleem Khan
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