



Curriculum Vitae

Prof. DR. Mohammad Ayub



DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY
THE UNIVERSITY OF AGRICULTURE,
PESHAWAR

Phone No: 091-9221345, Fax: 9216520

[E-mail: ayub@aup.edu.pk](mailto:ayub@aup.edu.pk)

ayub120@yahoo.com

Curriculum Vitae
(HEC Accredited Supervisor)

Name Dr. Mohammad Ayub
Father Name Mohammad Rafiq Khan
Present Address Department of Food Science and Technology
The University of Agriculture Peshawar, Khyber
Pakhtunkhwa, Pakistan.
Residence House # B/18 Professor Colony, The University of Agriculture
Peshawar.
Permanent Address Village Mani Khel Post Office Suwaryan Tehsil and District
Mardan
Tel. Office +92- 91-9221345
Tel. Res. +92-91-5703206
Mobile -
Fax. +92-91-9216520
E-mail ayub@aup.edu.pk and ayub120@yahoo.com
N.I.C No. 17301-8679892-7
Nationality Pakistani
Marital status Married
Date of birth April 14, 1968

Date of entry into service: 17/7/1996

Present Position: Chairman Department of Food Science and Technology since
March 2018 till date.

- Total Teaching Experience =24 yrs
- Post –PhD Experience = 15 yrs
- Administrative Experience as Chairman of the department = Since 2018
- Research papers published in national and International Journals =
Respectively
- Books Published = 1
- Arranged a National Conference on “**Climate change and its impact on
Agriculture & Livelihood of KP and FATA in 2018 at Pakistan Forest Institute
Peshawar.**”

EDUCATIONAL QUALIFICATIONS:

- 2005** **Doctor of Philosophy (PhD)** CGPA 3.79/4.00. Uni Reg. (89-Agr-U-3465).
Food Science and Technology, The University of Agriculture Peshawar,
Khyber Pakhtunkhwa Pakistan.
- 1995** **Master of Science (Hons)** Food Science and Technology
CGPA 3.78/4.0. **First Class First.**
- 1993** **Bachelors of Science (Hons)** 3.71/4.00 (First Division)
Food Science and Technology
- 1987** **Higher Secondary School Certificate** (First Division)
Federal Board of Intermediate & Secondary Education Islamabad.
- 1984** **Secondary School Certificate (SSC)** ((First Division)
Board of Intermediate and Secondary Education Peshawar

Certificate/ Degree	Year	Reg. No	Marks	Div.	% age	Board/University
S.S.C.	1984	1742	684/850	Ist A+	80.47	Peshawar
H.S.S.C.	1987	39077	717/1100	Ist B	65.2	Federal
B.Sc. (H)	1993	89-Agr- U-3465	3.71/4.00	Ist A	78.72	Agric. Univ. Peshawar
M.Sc. (H)	1995	do	3.78/4.00	Ist A (Distinction)	80.0	Do
PhD	2005	do	3.79/4.00	Ist A	90.0	Do
Research area of specialization in Food Science : Post Harvest Technology						
Ph.D. thesis title: Effect of selected sweeteners (caloric and non caloric) chemical preservatives and antioxidants on the physicochemical and microbial analysis of dehydrated fruits						

- Sep, 1995 to Jul, 1996** Lecturer on contract basis in Department of Food Science & Technology, The University of Agriculture Peshawar, Khyber Pakhtunkhwa, Pakistan.
- Jul, 1996 to Dec, 2004** Lecturer in Department of Food Science & Technology, The University of Agriculture Peshawar, Pakistan.
- Jan, 2005 to Jan, 2009** Assistant Professor in Department of Food Science & Technology, The University of Agric. Peshawar, Pakistan.
- Jan, 2009 to May 2014** Associate Professor in Department of Food Science & Technology, The University of Agriculture Peshawar.
- May 2014 till date** Professor in Department of Food Science & Technology, The University of Agriculture Peshawar.

Other Activities:

- **Technical expert** for (i) Sarhad J. of Agriculture, Agric. Univ. Peshawar, Pakistan, (ii) Pak. J. Scientific & Industrial Research, PCSIR Karachi.
- A member of Board of Advance Studies & Research of The Agric. Uni. Peshawar since September 2013 to Oct. 2015.
- A member of board of study for M.Sc. (H) and Ph.D degrees theses, in the Faculty of Nutrition Sciences (Deptt. Agricultural Chemistry, Human Nutrition) (from 2004 till 2019).
- Dept. Seminar incharge of B.Sc.(H), M.Sc.(H) and PhD (from 2010 – 2018).
- A member of board of Academic Council The University of Agriculture Peshawar.
- Member of Departmental Technical Review Committee (DTRC) of Dept. FST and Human Nutrition The University of Agriculture Peshawar.
- Convener for BOS meeting of Departments Food Sci. & Tech The Univ. of Agric, Peshawar since March 2018 till date.
- Member of the Institutional Scholarship Award Committee (ISAC), Directorate of Financial Assistance and Development The Univ. of Argic. Peshawar.
- Member of HEC National Curriculum Revision Committee of Food Science and Technology.
- Member of Departmental Appointment and Promotion Committee, AUP.
- Subject expert for Provincial Public Service commission/National Test Service (NTS) Graduate Assessment Test (GAT).
- **Technical member** of the project “Development of Onion and tomato pocket area in Bajaur & Mohmand District” from Annual Development Project “Support Value Chain in Agriculture Products through Private Enterprise Development”.
- HEC projects evaluators of National Research Program for Universities (NRPU).

Member of Professional Societies

- Member of Association of All Pakistan Food Scientists and Technologist (AAPFST).
- Member of Agricultural University Teacher Association.

Computer Skill:

Ms Word, Ms Excel, Internet Networking.

List of publications and students supervised for research activities**Research Publications = 79**

PhD students supervised as chairman supervisory committee = 2

PhD students under supervision as chairman supervisory committee = 3

PhD students supervised as major member = 3

PhD students under supervision as major member = 3

M.Sc.(H) students supervised as chairman supervisory committee for research = 69

M.Sc.(H) students supervised as a major member for research = 41

M.Sc.(H) students supervised as a minor member for research = 16

Training:

- Entrepreneurship Training Course at Agricultural University Peshawar on Sep.1st to Dec. 24th 1992.
- Training course on “The Use of Nuclear and other Advance Techniques in Food and Agricultural Research” at Nuclear Institute of Food and Agriculture, Ternab, Peshawar on Sep.17th to 28th 2001.
- Training of presiding officer at Agricultural University Peshawar held on Dec. 17th 2007.
- Training course on “Understanding the Use of Internet and Up Keeping the Networking System” at Agricultural University Peshawar on Feb. 21st to 23rd 2008.
- Workshop on E-Books of HEC Digital Library at NWFP Agricultural University Peshawar held on March 5th 2008.
- Training course on “The Project Management” at NWFP Agricultural University Peshawar on April 2- 3rd 2010.
- Seminar on “Technological Interventions for Food and Environment Security” at Bara Gali, Abbottabad from 1 to 4th June 2010.
- International symposium on institutional linkages for agriculture development in Pakistan on Dec. 20- 21st 2010.
- Training course on “Project Formulation” held on Feb. 8-9, 2012 at Khyber Pakhtunkhwa Agricultural University, Peshawar organized by PSF.
- Training on “Grain, oil and food processing technology for developing countries” held on Oct. 19th to Nov. 15th 2012 at Zhengzhou Henan the People s Republic of China.
- Conference on prospects and opportunities for agricultural development in Pakistan held on June 25-27, 2013 at Khanispur, Ayubia, Pakistan organized organized by Haripur.
- Conference on “Innovative technologies and sustainable development in agriculture” held on August 19-22, 2014 at Bara Gali, Abbottabad organized by The University of Agriculture Peshawar.
- Training on “Pedagogical training on development of teaching and presentation skills of educators from university of Agriculture Peshawar engaged in delivery of the post graduate diploma course on food safety & controls held on May 7 to 9th , 2015 organized by TRTA II at university of Agriculture Peshawar.

- Training on “Food safety inspection procedures, in situ inspection of food establishments and the use of food inspection kits held on 11 to 13th May 20115 at university of Agriculture Peshawar.
- Training course on “Food Safety- a Collaborative Approach. Jointly organized by PepsiCo Pakistan, KP Food Safety & Halal Authority & PCSIR Peshawar on Oct. 2019.

PUBLICATIONS:

Total Impact factor =13.179

NATIONAL

1. **Ayub, M.**, Khan R., S. Wahab, A. Zeb & J. Muhammad. 1995. Effect of crystalline sweeteners on the water activity and shelf stability of osmotically dehydrated guava. Sarhad J. Agric. 11 (6): 755-761.
2. **Ayub, M.**, Khan, R., S. Wahab, A. Zeb & J. Muhammad. 1996. Influence of various sweeteners and their concentrations during osmosis on the water activity and shelf stability of intermediate moisture guava slices. Sarhad J. Agric.12 (3): 361 – 368.
3. Ilyas, M., J. Khalil, **M. Ayub**, S. Khan & S. Akhtar. 1996. The effect of iron fortification on the quality of fortified bread. Sarhad J. Agric. 12 (2): 63 - 66.
4. Khan, R., S. Wahab, S. Munir, L. S. Wei & **M. Ayub**. 1996. Studies on the Nuclear Magnetic Resonance (NMR) water mobility in different sweeteners and desludged soy sweeteners. Sarhad J. Agric. 12 (3): 355 - 360.
5. Hanif, M., J. Muhammad., B. Hussain, **M. Ayub** & N. A. Alizi. 1996. Acceptability of cow and buffalo flavored milk. Sarhad J. Agric. 12 (4): 463 - 470.
6. Ilyas, M., **M. Ayub** & A. Rasheed. 1998. Proximate composition and nutritive value of soy meat, commercial health food of Pakistan. Sarhad J. Agric. 14 (6): 651-654.
7. Hussain, M. A., **M. Ayub**, Tariq M. & N. Iqbal. 1999. Effect of incubated temperature (37⁰C) on the overall quality of U.H.T. milk. Sarhad J. Agric. 15 (4):363 - 366.
8. Ali, S., **M. Ayub**, A. Zeb & S. Muneer. 1999. Effect of potassium metabisulphite on physicochemical properties of dried persimmon. Sarhad J. Agric. 15 (6): 631 - 634.
9. Imran, A., Khan R. & **M. Ayub**. 2000. Effect of added sugar at various concentrations on the storage stability of guava pulp. Sarhad J. Agric. 16(1): 89 - 93.
10. Ilyas, M., M. Sajid, **M. Ayub** & S. Khan. 2000. Optimization of soaking condition of whole soybean seed for soymilk production. Sarhad J. Agric.16 (1): 101-104.

11. **Ayub, M.** & M.B. Khan. 2001. Effect of different light conditions and coloured glass bottles on the retention of quality characteristics of Pomegranate syrup during storage at room temperature. *Sarhad J. Agric.* 17 (4): 629 - 632.
12. **Ayub, M.** & S. Alam. 2002. Effect of crystalline sucrose on water activity and overall acceptability of osmotically dehydrated apple slices. *Sarhad J. Agric.* 18 (1): 99– 105.
13. **Ayub, M.** & A. Zeb. 2002. Inhibition of browning formation in banana puree and banana milk drink. *Sarhad J. Agric.* 18 (4): 455–461.
14. Qazi, I. M., S. Wahab, A. A. Shah, A. Zeb & **M. Ayub**. 2003. Effect of different fermentation time and baking on phytic acid content of whole wheat flour bread. *Asian J. Plant Sci.* 2(8): 597 – 601.
15. **Ayub, M.** & M. Saddiq. 2003. Effect of different types of milk and stabilizers on the chemical composition of quality yoghurt. *Sarhad J. Agric.* 19 (2): 271- 278.
16. **Ayub, M.,** S. Wahab & Y. Durrani. 2003. Effect of water activity (a_w) moisture content and total microbial count on the overall quality of bread. *Inter. J. Agric. & Bio.* 5(3):274 - 278.
17. **Ayub, M.** 2003. Effect of sweeteners on the water activity and shelf stability of osmotically dehydrated persimmon slices. *Sarhad J. Agric.* 19(4):563 - 570.
18. Ullah, J., M. Hamayoun, T. Ahmad, **M. Ayub** & M. Zafarullah. 2003. Effect of light, natural and synthetic antioxidants on stability of edible oil and fats. *Asian J. Plant Sci.* 2 (17-42):1192-1194.
19. **Ayub, M.** 2004. Influence of different types of milk and stabilizer on sensory evaluation and whey separation of yoghurt. *Pakistan J. Sci. & Indus. Res.* 47(5):398-402.
20. **Ayub, M.,** A. Rafiq, S. Wahab & Y. Durrani. 2004. Effect of water activity (a_w), moisture content and microbial activity on the keeping quality of industrial and locally manufactured cookies. *Scientific Khyber.* 17(1): 9-20.
21. **Ayub, M.,** I. M. Qazi & D. Hussain. 2004. Microbial and sensory attributes of osmotically dehydrated guava slices during storage. *Sarhad J. Agric.* 20(4):635-641.
22. **Ayub, M.,** A. Zeb, J. Ullah & M.M.A.K. Khattak. 2005. Effect of various sweeteners on chemical composition of guava slices. *Sarhad J. Agric.* 21(1):131-134.
23. **Ayub, M.,** A. Zeb, J. Ullah & M.M.A.K. Khattak. 2005. Water activity of dehydrated guava slices sweetened with caloric and non caloric sweeteners. *Sci. Tech. & Development.* 24(4): 54 – 59.

24. **Ayub, M.,** A. Zeb, J. Ullah & M.M.A.K. Khattak. 2005. Effect of non nutritive sweeteners, chemical preservatives and antioxidants on microbial and sensory characteristics of dehydrated guava. *J. of Sci. & Tech.* 29(1):63-66.
25. **Ayub, M.,** T. Durrani & A. Zeb. 2005. Effect of sucrose and potassium metabisulphite on the water activity microbial and sensory evaluation of apricot pulp. *Sarhad J. Agric.* 21(4):755-759.
26. Mohammad, A., **M. Ayub** A. Khaliq & Saifullah. 2006. Effect of different concentrations of sucrose on the quality of dehydrated peach slices. *Sarhad J. Agric.* 22(2):327 – 331.
27. Hashmi, M.S., **M. Ayub** A. Zeb & M. M. Hashim S. Alam and A. Riaz. 2006. Effect of chemical preservatives on the physicochemical and nutritional evaluation of mango pulp stored at ambient temperature. *Sarhad J. Agric.* 22(4):685-687.
28. Iman, S., **M. Ayub** M. Abbas & I.M. Qazi. 2006. Analysis of intermediate moisture apple slices during storage. *Sarhad J. Agric.* 22(3):545-549.
29. **Ayub, M.,** A. Rafiq, S. Wahab & Y. Durrani. 2007. Effect of water activity (a_w) moisture content and total microbial count on the overall quality of buns. *Pakistan J. Sci. & Indus. Res.* 50(1):47-50.
30. **Ayub, M.,** T. Durrani A. Zeb & J. Ullah. 2007. Effect of sucrose and potassium metabisulphite on the physicochemical and microbial analysis of apricot pulp. *Pakistan J. Sci. & Indus. Res.* 50(4):251-253.
31. **Ayub, M.,** Q. Ahmad, M. Abbas, I.M. Qazi & I.A. Khattak. 2007. Composition and adulteration analysis of milk samples. *Sarhad J. Agric.* 23(4):1127-1130.
32. Muhammad, A., Y. Durrani, A. Zeb, **M. Ayub** & J. Ullah. 2008. Development of diet jams from apples grown in Swat (NWFP). *Sarhad J. Agric.* 24(3):461-467.
33. Zeb, A. & **M. Ayub.** 2008. Quality evaluation of sun dried apricot preserved with food additives and plastic packing. *Proceeding of Conf. on Response to Challenges of Globalization in Agriculture.* Jul 2-7. : 283- 298.
34. Muhammad, A., Y. Durrani, **M. Ayub** A. Zeb and J. Ullah. 2009. Organoleptic evaluations of diet jam from apple grown in Swat valley. *Sarhad J. Agric.* 25(1):81 – 86.
35. Durrani, Y., A. Zeb, **M. Ayub,** W. Ullah and A. Muhammad. 2011. Sensory evaluation of mango (Chaunsa) pulp preserved with addition of selected chemical preservatives and antioxidant during storage. *Sarhad J. Agric.* 27(3):471-475.

36. Sohail, M., **M. Ayub**, I. Ahmad, B. Ali and F. Dad. 2011. Physicochemical and microbiological evaluation of sun dried tomatoes in comparison with fresh tomatoes. Pak. J. Biochem. Molecular Biology. 44(3):106-109.
37. Wisal, S., A. Zeb, **M. Ayub** and Ihsanullah. 2013. Refrigeration storage studies of strawberry juice with TSS of 7.5 and 20.0⁰ brix treated with sodium benzoate and potassium sorbate. Sarhad J. Agric. 29 (3): 433- 439.
38. Muhammad, A. and **M. Ayub**. 2015. Physicochemical analysis of residual water from treated olive fruits (*Olea europaea*). Sarhad J. Agric. 31(3) :159-164.
39. Ali, M., Y. Durrani and **M. Ayub**. 2016. Effect of drying techniques and storage on Mulberry (*Morus alba*) quality. Sarhad J. Agric. 32(2) :80-88.
40. Zeeshan, M. **M. Ayub** and A. Khan. 2016. Preservation through osmotic dehydration. Res. & Reviews: J. of Food and Dairy Tech. 4(4): 1-4.
41. Mehmood, Z., A. Zeb and **M. Ayub**. 2017. Effect of various chemical additives on storage stability of muskmelon Jam at ambient temperature. Sarhad J. Agric. 33(4):573-581.
42. Ullaha, S., A. Khan, **M. Ayub**, I. Ahmed, B. Shamrezb and Mati Ullah Khan. 2017. Influence of carrot pulp fortified with different concentrations of apple pulp on blended jam. Pak. J. Sci. Ind. Res. 60(2) 96-105.
43. Zeeshan¹, M., H. Shah, Y. Durrani, **M. Ayub**, Z. Jan and M. Shah. 2017. A questionnaire based survey on food safety knowledge during food handling and food preparation practices among university students J. of Clinical Nut. & Dietetics. 3(2): 1-8.
44. Akbar, K. and **M. Ayub**. 2018. Effect of storage on the quality of wheat and maize based cookies. 34(3) : 606-615.
45. Muhammad, A., Y., Durrani, I. M., Qazi, **M. Ayub**, M. S. Hashmi and Safiullah. 2018. Whey Neutralization with different concentration of sodium hydroxide and sodium bicarbonate. Sarhad J. Agric. 34(4):1-6.
46. Rani, S., A. Zeb **M. Ayub**. And U. Shahni. 2018. Quality evaluation of mandarine and strawberry mixed fruit juice for total period of 90 days at room temperature. Pure Appl. Biol. 7(1):174-183.
47. Shah, S. M., **M. Ayub**, S. Wahab, A. S. Shah, M. Junaid, S.A. S. A. Shah, S. A. Shah, Uroosa Iram, S. Rani and A. Jalal. 2019. Effect of drying method on composition of oyster mushroom. Scholar Bulletin (online) Scholars Middle East publishers, Dubai, UAE. 591): 9-13.

- 48. Khan, R.U., and M. Ayub. 2020. Effect of different chemical preservatives on the quality attributes of guava Aloe Vera blended pulp at ambient conditions. Sarhad J. Agric. 36(2):411-418.**
- 49. Iqbal, H., M. Ayub, A. Khan, M. Zeeshan, F. N. Shah, S. A. Khan, M. Shah, F. Wahab, H. Noor. 2020. Effect of crude stevia extract and chemical preservatives on the overall quality of sweet orange juice during storage. Int. J. Bioscience. 16(4):310-319.**

INTERNATIONAL:

- 1. Mehmood, Z., A. Zeb, M. Ayub, N. Bibi, A. Badshah & Ihsanullah. 2008. Effect of pasteurization and chemical preservatives on the quality and shelf stability of apple juice. Amer. J. Food Tech. 3(2):147-153.**
- 2. Zeb, A. I. Ullah A. Ahmed K. Ali & M. Ayub. 2009. Grape Juice preservation with benzoate and sorbate. Advances in Food Sci. 31(1):17-21.**
- 3. Ayub, M., J. Ullah, A. Muhammad and A. Zeb. 2010. Evaluation of strawberry juice preserved with chemical preservatives at refrigeration temperature. Int. J. of Nut. & Metabolism. 2(2):27-32.**
- 4. Obaid, J., S.A. Khalil, A.B. Khattak, M. Khan and M. Ayub. 2010. Effect of hot water dipping on the post harvest life of blood red oranges. Advances in Food Sci. 32(2): 82-87.**
- 5. Durrani, Y., M. Ayub, A. Muhammad and A. Ali. 2010. Physicochemical response of apple pulp to chemical preservatives and antioxidant during storage. Food Safety Information Pub. Internet J. of Food Safety. 12 :20-28.**
- 6. Hussain, I., A. Zeb and M. Ayub. 2010. Quality attributes of apple and apricot blend juice preserved with potassium sorbate during storage at low temperature. Food Safety Information Pub. Internet J. of Food Safety.12:80-86.**
- 7. Muhammad, A. M. Ayub, A. Zeb, Y. Durrani, J. Ullah and S.R. Afridi. 2011. Physicochemical analysis of apple pulp from Mashaday variety during storage. Agric. Bio. J. of North Amer. 2(2): 192-196.**
- 8. Khan, A.Z., H. Khan, R. Khan, S. Niger, B. Saeed, H. Gul, Amanulla, S. Wahab, A. Muhammad, M. Ayub, N. Matsue and T. Henmi. 2011. Morphology and yield of soybean grown on allophonic soil as influenced by synthetic zeolite application. Pak. J. Bot. 43(4): 2099-2107. (Impact factor 0.947).**
- 9. Saeed, B., H. Gul, S. Wahab, Y. Durrani, B. Haleema, M. Ayub, A. Muhammad , A. Said, and I. Ahmad. 2011. Effect of phosphorus and potassium on seed production of berseem. African J. Biotech. 10(63): 13769- 13772. (Impact factor 0.565).**

10. Saeed, B., Y. Durrani, H. Gul, A. said, S. Wahab, **M. Ayub**, A. Muhammad, B. Haleema and I. Ahmad. 2011. Forage yield of berseem (*Trifolium alexandrium*) as affected by phosphorus and potassium fertilization. African J. Biotech. 10(63): 13815- 13817. **(Impact factor 0.565)**.
11. Hussain, I., A. Zeb and **M. Ayub**. 2011. Evaluation of apricot blend juice with sodium benzoate at refrigeration temperature. World J. Agric. Sci. 7(2): 136-142.
12. Khali, S.A., **M. Ayub**, R. Zamir, M. Sajid, A. Muhammad, F. Wahid and M. Faiq 2012. Influence of post harvest hot water dip treatment on quality of peach fruit (*Prunus Persica L.*) J. of Medicinal Plant Res. 6(1):108-113. **(Impact factor 0.879)**.
13. Durrani, Y., A. Zeb, Ye. Xingqian, **M. Ayub**, W. Tahir, A. Muhammad and S. Wahab. 2012. Influence of storage temperature on physicochemical sensory and nutritional properties of chemically preserved mango pulp. African J. Biotech. 11(13): 3147- 3152. **(Impact factor 0.565)**.
14. Shahnawaz, M., A. Wali, Y. Durrani, **M. Ayub**, A. Muhammad, M. R. Khan and H. Khan. 2012. Refrigerated storage studies of mango seabuckthorn blended pulp with selected preservative and ginger extract. Intercontinental J. of Food and Nut. Sci. 1(1):01-07.
15. Muhammad, A., **M. Ayub**, A. Zeb, S. Wahab, S. Khan and Ihsanullah. 2013. Physicochemical analysis and fatty acid composition of oil extracted from olive fruit grown in Khyber Pakhtunkhwa, Pakistan. Int. J. of Basic & Applied Sci. 13(2): 36-39. **(Impact factor 0.440)**.
16. Khan, M.R., S. Wahab and **M. Ayub**. 2013. Calcium fortification in wheat flour, chicken bone powder, egg shells powder and calcium carbonate. Lambert Academic Pub (LAP). Germany. : 1-91
17. **Ayub, M.**, M. Z. Masud, S. Ullah, S. Wahab, Y. Durrani, J. Ullah, A. Muhammad and S. A. Ali. 2014. Quality evaluation of melon cubes preserved in sweetener solutions. J. of Medicinal Plant Res. 8(13):529-537. **(Impact factor 0.879)**.
18. Muhammad, A., **M. Ayub**, S. Wahab, A. Zeb and S. A. Ali. 2014. Physicochemical analysis and organoleptic evaluation of honey during storage. World J. of Pharmacy and Pharmaceutical Sci. 3(3) : 3569-3574.
19. Khan, M., **M. Ayub**, Y. Durrani, S. Wahab, A. Muhammad, S. A. Ali, A. Shakoora, A. Khan and Z. Rehman. 2014. Effect of sucrose and stabilizer on the overall quality of guava bar. World J. of Pharmacy and Pharmaceutical Sci. 3(5): 130-146.

20. Muhammad, A, Z. Rahman, **M. Ayub**, Y. Durrani, S.A. Ali, A. Tabassum, A. Shakoor, M. Khan and A. Khan. 2014. Inhibitory effect of ginger and turmeric on *Rhizopus stolonifer* growth on bread. J. Food Processing & Tech. 5(5):325. doi: 10.4172/2157-7110.1000325. **(Impact factor 2.53)**.
21. Shakoor, A., **M. Ayub**, S. Wahab, M. Khan, A. Khan and Z. Rehman. 2015. Effect of different level of sucrose glucose mixture on overall quality of guava bar. J. of Food Processing & Tech. 6(98) :1-7. **(Impact factor 2.53)**
22. Zeb, A., N. Amin, S. Shah, **M. Ayub**, A. Khan, M.A. Khan, F.N. Shah, Z. Ali and S.H. Khan. 2015. Post harvest evaluation of strawberry fruit preserved in different concentration of sucrose solution and potash alum stored at ambient temperature. J. of Nut. & Food Sci. :1-8. **(Impact factor 1.14)**
23. Shah, W., A. Khan, A. Zeb, M.A. Khan, F.N. Shah, N. Amin, **M. Ayub**, S. Wahab, A. Muhammad, S.H. Khan, 2015. Quality evaluation and preparation of apple and olive fruit blended jam. Global J. of Medical Res. (L) Nutrition and Food Sci. 15(1) :15-21.
24. Sohail, M., **M. Ayub**, S. A. Khalil, A. Zeb, F. Ullah, S.R. Afridi and R. Ullah. S. Wahab. 2015. Effect of calcium chloride treatment on post harvest quality of peach fruit during cold storage. International Food Res. J. 22(6): 2225-2229.
25. Hussain, I., A. Zeb, **M. Ayub**, S. Khan, Ihsanullah. 2016. Effect of sucrose and antioxidant preservatives on some quality attributes of apricot fruit bars during storage. International J. of Biosciences | IJB |. 8(5):29-38.
26. Khan, M. R. S. Wahab, I. M. Qazi, **M. Ayub**, A. Muhammad, Zahooruddin, M. Faiq, A. K. Tareen, Shahfahad and M. Noor. 2017. Effect of calcium fortification on whole wheat flour based leavened and unleavened breads by utilizing food industrial wastes. Asian J. of Chemistry. 29(2): 423-430.
27. Muhammad, A., **M. Ayub**, Y., Durrani, I. M., Qazi, S., A., Ali, M. S., Hashmi and Saifullah. (2018). Impact of brine, lye solution and water on sensory attributes of olive fruits. Pure Appl. Biol.7(1): 20-25.
28. Jabeen, F., S. Wahab, M. S. Hashmi¹, Z. Mehmood, A. Riaz¹, **M. Ayub** and M. Muneeb. 2019. Liquid stevia extract as a substitute of sucrose in the preparation of guava drink. Fresenius Environmental Bulletin. 28(1): 233-243. **(Impact Factor 0.6)**
29. Khalid, M., M. Muneeb, B. Shamrez, A. Muhammad, **M. Ayub**, Y. Durrani¹ and S. A. Ali. 2019. Preparation and evaluation of strawberry and date blended juice ready to serve drink. Pure Appl. Biol. 8(4): 2228-2237.

30. Muneeb, M. M. Ayub, S.B. Khan, A. Sohail, F. Gabeen, M.A. Khan, Amjad Khan, K. Prince, A. Khan and I. Ahmad. 2020. Quality assessment of cottage cheese available in Peshawar, Pakistan. Pak. J. of Zoology. :1-5:

List of M.Sc. (H) Students Supervised in their Research

As Chairman Supervisory Committee:

1. Mr. Malik Mazhar Hussain. 1998. Quality comparison of different brands of UHT milk as fresh and incubated at 37⁰C.
2. Mr. Shahid Sohail Khan. April 1999. Preparation and control of browning in banana puree and banana milk drink.
3. Mr. Amir Rafiq. 2002. Relationship between water activity (a_w), moisture content and total microbial count in bread, bun and cookies.
4. Ms. Tehmina Durrani. Oct., 2003. Effect of various concentration of sucrose and chemical preservative of potassium metabisulphite on the water activity and overall storage stability of apricot pulp stored in bulk at ambient temperature.
5. Mr. Majid Sohail. Dec. 2004. Effect of different preservatives and packaging material on the overall quality of mango pulp.
6. Mr. Safiullah Mar. 2007. Effect of different chemical preservatives and antioxidants on the overall quality of peach pulp stored at ambient temperature.
7. Ms. Shaista Masroor. May 2007. Influence of different chemical preservatives on the overall quality of jaman syrup.
8. Mr. Quasid Ahmad. 2008. Quality evaluation of carrot and Kinnow juice blend during storage.
9. Mr. Noor Ullah. 2009. Effect of irradiation and packaging materials on overall quality of meal ready to eat (MRE) prepared from Bitter gourds.
10. Mr. Rehman Ullah Khan. 2009. Effect of different chemical preservatives on storage stability of ready to serve peach drinks.
11. Mr. Kashif Akbar 2009. Sweetened bread fortification with citrus peel powder.
12. Mr. Jawad Ahmad. 2009. Effect of hot water dipping on the post harvest life of blood red oranges (*Citrus sincensis*).
13. Mr. Lal Zaman. 2010. Effect of hot water treatment on the shelf life of Peach fruit.
14. Mr. Naeem Aslam. 2010. Effect of chemical stabilizers on the overall quality of butter stored at refrigeration.

15. Mr. Qayum Ur Rehman. 2010. Effect of chemical preservatives and pasteurization on the overall quality of orange and pomegranate blend juice.
16. Mr. Ishtiaq Ahmad. 2010. Effect of different chemical preservatives and pasteurization on the quality of pomegranate juice during storage.
17. Mr. Adnan Niaz. 2010. Effect of hot water dipping on the storage behavior of Chaunsa (white) mango.
18. Mr. Jamal Abdul Nasir. 2010. Preservation of grape juice by addition of chemical preservatives.
19. Mr. Qazi Saddam Naseer. 2010. Development and storage stability evaluation of ready to serve orange lemonade drink.
20. Ms. Samina Inayat. 2010. Development of diet apricot jam.
21. Mr. Muhammad Sohail. 2011. Effect of calcium chloride treatment on post harvest quality of peach fruit.
22. Mr. Ajmal. 2012. Evaluation of storage stability of grape jam with different sweeteners.
23. Mr. Nabeel Anjum. 2012. Preparation of low energy biscuits with supplementation of dietary fibers.
24. Mr. Syed Awais Ali. 2012. Assessment of aflatoxins in commercially available wheat flour samples in Peshawar city.
25. Mr. Ahmad Zia. 2012. Quality evaluation of melon cubes preserved in sweeteners solutions.
26. Ms. Sonia Shams. 2012. Effect of chemical preservatives and stabilizers on the quality of pulpy grape juice.
27. Muhammad Shakirullah. 2012. Influence of chemical preservatives and antioxidant on storage stability of peach squash.
28. Ms. Muniza Akhtar. 2012. Quality evaluation of intermediate moisture (IM) pumpkin (Cucurbita).
29. Ms. Nuzhat Ihsan. 2013. Effect of selective food preservatives on overall quality of tomato garlic pastes.
30. Ms. Marriam Ali. 2013. Storage study of tomato ginger pastes.
31. Mr. Hayatullah. 2013. Quality evaluation of whole mandarin juice during storage.
32. Ms. Ashbala Shakoor. 2014. Effect of different level of sucrose glucose mixture and guar gum on the overall quality of guava leather.
33. Mr. Majid Khan. 2014. Effect of sucrose and stabilizers on overall quality of guava bar.

34. Mr. Khalid Khan. 2014. Study of different calcium salts for enhancing post harvest storage life of peach (*Prunus Persica*).
35. Mr. Zia-Ur-Rehman. 2014. Inhibitory effect of ginger and turmeric on *Rhizopus stolonifer* growth on bread.
36. M. Abbas Khan. 2014. Effect of glucose, sucrose and stabilizers on overall quality of intermediate moisture persimmon leather.
37. Ms. Nazish Irshad. 2015. To study the effect of various chemical preservatives on the overall quality of cottage cheese.
38. Ms. Gul-e-Sosum. 2015. Microbial and quality analysis of intermediate moisture apple bar prepared from apple wastes.
39. Ms. Huma Syed. 2015. Preparation of intermediate moisture apple bar using apple pomace (wastes)
40. Ms. Afsheena Gillani. 2015. Microbial and storage study of cottage cheese.
41. Mr. Sharmat Ullah. 2015. Preparation and evaluation of carrot and apple pulp blended jam.
42. Ms. Basharat Saddiq. 2014. Effect of different chemical preservatives on overall quality of guava and dates blended ready to serve drink
43. M. Ghufuran Khalil. 2016. Storage study of ready to serve carrot and blood red orange juice.
44. Mr. Nasratullah. 2016. Quality evaluation of whole red blood oranges during storage.
45. Ms. Nagina Qayyum. 2016.
46. M. Yasir. 2016. Effect of hot water dipping on the storage behavior o apricots (*Prunus armeniaca*).
47. Mr. Rab Nawaz. 2016. Quality evaluation of developed ready to serve peach drink.
48. Ms. Ruqqya Nawaz. 2016. Quality evaluation of sweetened pear slices preserved in sweeteners solutions.
49. Mr. Syed Masood Shah. 2017. Effect of osmo dehydration on the physicochemical and sensory properties of intermediate moisture lychee slices.
50. Mr. Haroon Shah. 2017. Development of diet plum jam.
51. Mr. Nawab Ali. 2018. Effect of different coatings on the quality of blood red oranges at room temperature.
52. Mr. Imran. 2018. Quality evaluation of intermediate moisture blended fruit leather prepared from guava and chickoo fruit
53. Mr. Muneeb. 2018. Quality assessment of cottage cheese available in Peshawar.

54. Mr. Amjad Khan. 2018. Influence of Salicylic acid and ethanol on persimmon astringency during storage.
55. Mr. Huzafa Iqbal. 2018. Effect of crude extract and chemical preservatives on the overall quality of sweet orange juice during storage.
56. Mr. Zafar Alam. 2018. Quality assessment of peach-plum blended leather.
57. Mr. Zeeshan. 2018. Effect of Osmo-Dehydrating agents on the quality of dried plum slices
58. Ms. Jeena Khan. 2019. Preparation and quality evaluation of non-caloric plum squash.
59. Muhammad Hamid. Comparative analysis of peach nectar prepared from five selected varieties grown in district swat.
60. Ms. Faryal Mahek. 2019. Preparation and quality evaluation of apricot diet squash.
61. Ajmal Khan. 2019. Effect of sucrose and glucose solutions during storage on the overall quality of pineapple cubes.
62. Mr. Waqar Ullah. 2019. Quality evaluation of low caloric pineapple squash treated with different chemical preservatives.
63. Mr. Fazal Mahmood. 2019. Quality evolution of apple and pear blended juice during storage
64. Mr. Imran. 2019. Quality evaluation of strawberry jam with addition of ginger extract.
65. Mr. M. Amjed. 2020. Evaluation of strawberry and carrot blended ready to serve juice.
66. Mr. Hafeez Ahmed. 2020. Evaluation of low caloric apple squash using sucralose.
67. Mr. Imad Ali. 2020. Preparation and quality evaluation of sucralose based guava squash.
68. Ms. Mahnoor Arshad. 2020. Influence of selected preservative on the overall quality of mint and leamon blended ready to serve drink.

As Major member:

69. Mr. Sibghat Ullah. 1999. Effect of various nutritive sweeteners at different concentrations on water activity and shelf stability of osmotically dehydrated persimmon slices.
70. Mr. Mohammad Bilal Khan. April 1999. Effect of different light conditions and coloured glass bottles on the retention of quality characteristics of Pomegranate syrup during storage at room temperature.
71. Mr. Imran Ahmad. 1999. Effect of added sugar at various concentration and chemical preservative on the water activity and shelf stability of guava pulp stored in bulk.

72. Mr. Sultan Aman Shah. April 1999. Effect of different food additives and various coloured polyethylene packages on quality of sun dried apricot stored at room temperature.
73. Mr. Naveed Iqbal. April 1999. Influence of different types of milk and stabilizers on whey separation and quality of yoghurt.
74. Mr. Sartaj Ai Bakhan. Feb. 1999. Effect of potassium metabisulfite on tannin content, nutritional microbial and organoleptic evaluation of sun dried persimmon.
75. Ms. Sabeen Naz Gilani. 2002. Varietals suitability and storage stability of mango squash.
76. Ms Rozinza Naz. June 2002. Fruit flavoured soymilk.
77. Ms. Ghazala. October 2003. Evaluation of strawberry juice preserved with sodium benzoate and potassium sorbate stored at refrigeration temperature
78. Zahid Mhmood. 2003. Studies on the combined effect of heat and chemical preservatives of sorbate and benzoate on the quality of apple juice stored at ambient temperature.
79. Mr. Imtiaz Ahmed. Feb. 2005. Quality analysis of individual and blended juices of apricot and apple fruits grown in Azad Jammu & Kashmir.
80. Mr. Shakoor Wisal. Feb. 2007. Preparation and storage study of strawberry beverage.
81. Mr. Kamal Hussain Mar. 2007. Quality evaluation of drinking water of district Ghizer (Northern Areas).
82. Mr. Maqsood Hussain. Sep. 2007. Analysis of minerals and vitamins in sea buckthorn (*hippophae rhamnoids*) pulp collected from ghizer and skardu districts of northern areas.
83. Miss Sumera Yasmin. 2009. Preparation and storage study of sea buckthorn fruit jam formulated with various sweeteners.
84. Ms. Saiqa Bibi. 2009. Effect of calcium fortification on the overall quality of whole wheat flour leavened and unleavened bread.
85. Mr. Asad Ali. 2009. Effect of chemical preservation of apple pulp during storage.
86. Mr. Shahid Ali. 2010. Effect of benzoate and sorbate on the shelf life of orange barley drink.
87. Mustafa Mehmood. 2010. Preservation of strawberry syrup with benzoate and sorbate.
88. Mr. Adeel Noman. 2010. Effect of selected chemical preservatives on nutritional contents and browning control of lemon curd.
89. Ms. Sumayya Rani. 2010. Quality evaluation of Kinnow and Strawberry blended juice.
90. Mr. Najeebullah. 2010. Preservation of persimmon slices in sucrose solutions.
91. Mr. Waseef Ullah Khan. 2010. Mango pulp preservation with addition of ascorbic acid and selected chemical preservatives.

92. Ms. Maryam Liaqat. 2010. Studies on low caloric seabuckthorn mango blended squash.
93. Mr. Shahzad Khan. 2011. Shelf life study of mango slices preserved in sucrose solution of different concentration.
94. Mr. Rafiullah Khan. 2012. The overall quality of whole wheat bread (leavened and un leavened) under the impact of calcium fortification.
95. Mr. Shah Mohammad. 2012. Quality evaluation of pomegranate and strawberry blended juice.
96. Ms. Hinna Shaukat. 2012. Effect of dehydration on overall quality of okra.
97. Mr. Imtiaz Hussain. 2013. Effect of sun drying and sodium benzoate on the growth of fungus in dehydrated tomatoes.
98. Mr. M. Waqas. 2014. Effect of calcium salts on the overall post harvest storage quality of Apricot fruit (*Prunus armeniaca L.*).
99. Mr. Rahmul Aziz. 2014. Effect of selected calcium salts on enhancing post harvest storage life of fresh plum fruits (*Prunus domestica L.*) in refrigerated condition.
100. Mr. M. Siraj. 2013. Effect of sun drying and potassium sorbate on the overall quality and microbial inhibition of sun dried tomato slices.
101. Mr. Ubaid Ullah Anwar. 2014. Effect of potassium metabisulphite and brining on the overall quality and microbial inhibition of food born fungal species on tomato.
102. Mr. Kashif Ahmed Khan. 2014. Selected chemical preservatives inhibiting effect on fungal in tomato pulp and its preservation.
103. Mr. Murtaza Ali. 2014. Effect of drying techniques and storage on mulberry fruit (*morus alba*). Qamar Liaqat. 2015. Effect of different chemical preservatives on preservation of pear nectar.
104. Mr. Shoaib ahmad. 2015. Effect of different chemical preservatives on overall quality of peach (*Prunus persica*) Nectar.
105. Mr. Kashif Nadeem. 2015. Development and quality evaluation of orange marmalade fortified with ginger.
106. Mr. Muhammad Kaleem. 2016. Effect of sucrose and honey on the overall quality of strawberry leather.
107. Mr. Alif Khan. 2016. Development and storage study of apricot nectar.
108. Mr. Mohsin Khalid. 2017. Preparation and evaluation of strawberry and date blended juice ready to serve drink.
109. Mr. M. Yaseen. 2020. Quality evaluation of ready to drink guava drink with added moringa leaves extract.

110. Ms. Zerwish Khan. 2020. Influence of corn starch on the quality of pear jam.

As Member (Minor Field) Deptt. Agricultural Chemistry:

1. Mr. Farman Alam. (April, 2010). Fatty acid profile, nutritional and antinutritional factors of brassica cultivars grown in Khyber Pakhtunkhwa.
2. Ms. Zainab Siddiqui. (May, 2008). Effect of traditional cooking on protein, minerals and phytic acid content in different cultivars of chickpea (*cicer arietinum*).
3. Mr. Ahmad Zubair. 2008. Fatty acid profile and aflatoxin contamination of walnuts.
4. Mr. Mohammad Arif. (May, 2008). Evaluation of oil seeds for potential nutrients.
5. Mr. Ehsan Ali. 2008. Aflatoxin contamination and mineral profile of almond seeds.
6. Ms. Saira Kausar (May, 2009). Effect of soaking and germination on nutritional and antinutritional factors of millet (*pennisetum glaucum*) cultivar.
7. Ms. Mehreen Naushad. 2010. Effect of storage on physicochemical characteristics and minerals profile of different onion cultivars grown in Khyber Pakhtunkhwa.
8. Mr. Mohammad Irfan. (Dec, 2010). Heavy metals contamination of various brands of soft drinks available in local market of Peshawar.
9. Ms. Asma Iqbal. (May, 2009). Biochemical and microbiological studies on storage stability of commonly available wheat (*Triticum aestivum*) cultivars.
10. Ms. Ubairah. (June, 2011). Effect of the water activity and storage time on physicochemical characteristics of chickpea.
11. Mr. Ibrar Ullah. (August, 2011). Effect of lead applications on physicochemical properties of tomato (*lycopersicon esculentum L.*).
12. Mr. Nasiruddin. (August, 2008). Evaluation of wild vegetables for their potential nutrients, collected from Palosi Maghdarzai.
13. Mr. Khaista Nawab. (March, 2011). Physicochemical properties of wild fruits available in Khar Valley of Malakand Hills.
14. Mr. Ikram Ullah. (April, 2010). Biochemical constituents of Fenugreek (*Trigonella foenum-graecum*) as affected by regional differences.
15. Mr. Farhan Naz Khan. (April, 2010). Effect of traditional home cooking methods on the nutritional status of two potato varieties.
16. Ms. Shabnam Shahzadi. 2005. Assessment of nutritional and other risk factors associated with hypertensive subjects (40-60 years) in Muzaffarabad city. (Deptt. Human Nutrition)

As Chairman Supervisory Committee for Ph. D students

1. Mr. Ali Muhammad. Dec. 2015. Development and quality analysis of various types of blended products from guava and olive fruits pulp.
2. Mr. Kashif Akbar. 2019. Value addition of wheat and maiz based cookies with the addition of milk thistle (*Silybum marianum*) seeds.
3. Mr. Shah Alam. 2018. Impact of nitrogen deastringency and drying techniques on the quality of selected persimmon cultivars during storage.
4. Mr. Rehman Ullah Khan. 2020. Development and quality evaluation of different products prepared from guava and alovera blended pulp.
5. Ms. Saira Nisar. 2015-18. Enrolled in 10th semester.

As member (Major Filed) for Ph. D students

1. Mr. Yasser Durrani. (2012). Storage studies of value added mango blends with seabuckthorn fruit pulp.
2. Mr. Shakoor Wisal. 2013. Effect of different concentration of additives on strawberry juice.
3. Mr. Ijlal Hussain. 2014. Development and quality analysis of intermediate moisture apricot fruit bars.
4. Mr. Zahid Mehmood. 2017. Effect of food additives and storage on the overall quality of various products prepared from muskmelon (*Cucumis melo*).
5. Mr. Abdul Sattar Shah. 2017. Prospective investigation of hurdle technology to combat post harvest losses of peach.
6. Ms. Ayesha Riaz. 2018. Development and quality evaluation of wheat flour biscuits enriched with Moringa leaves powder.
7. Saifullah. 2019. Characterization of wheat varieties grown in Khyber Pakhtunkhwa for noodles preparation.
8. M. Ilyas. 2013-16. Enrolled in 12th Semester.
9. Mr. Ghulam Muhuydin. Enrolled in 8th Semester