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*Curriculum Vitae*

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**Abdelmoneim K. A. Ali, Ph.D**

Food Science Department  
College of Agriculture  
South Valley University Qena, 83523 Egypt  
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**PROFESSIONAL HISTORY**

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**Assistant Professor**, December 2011 - present

Food Science Department, College of Agriculture, South Valley University, Qena, 83528 Egypt  
Teaching, 50% - Research, 50%

**Teaching assistant** (1999-2006), Food Science Department, South Valley University, Egypt

**Research assistant** (2006-2011), Food Science Department, **University of Wisconsin-Madison, USA**

**EDUCATION**

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**Ph.D. Dairy Science Microbiology** 2011

Joint Supervision between **University of Wisconsin Madison**, Food Science Department, USA and Dairy Science Department, Assiut University, Egypt.

**M.S. Dairy Science and Technology** 2004

Dairy science and Technology, College of Agriculture, Assiut University, Egypt.

**B.S. Dairy Science and Technology** 1998

Dairy science and Technology, College of Agriculture, Assiut University, Egypt.

**AWARDS AND RESEARCH GRANTS**

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**Ph.D scholarship**, Joint program from Egyptian government to study in USA, 2006-2009.

**Research assistant, UW-Madison, USA, 2009-2010**

**Post-doctor scholar, UW-Madison, USA, 2011-2013**

**South Valley University research award** (10000 EGP) international Scientific publications 2014, 2016, 2019

**Co-PI of Ph.D project grant**, Food Science Department, UW-Madison, USA 2007-2010

'Characterizing Stress Responses of Bifidobacteria strains of industrial importance'

**Postdoctoral projects and research grants:**

**PI of Ph.D project grant**, Center of Dairy Research, UW-Madison, USA 2011-2013

'Determining the quality parameters of non-fat dry milk currently produced'

**Co-PI of Ph.D project grant**, Center of Dairy Research, UW-Madison, USA 2011-2013

'Low-fat cheddar cheese made using microparticulated whey proteins: Effect on yield and cheese quality'

**Research grant** (20,000 EGP), South Valley University, Egypt 2015.

**Research grant** (80,000 EGP), South Valley University, Egypt 2016.

## **RESEARCH EXPERIENCE**

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More than 10 years research and experience in dairy microbiology involving:

- Isolation and identification of lactic acid bacteria from dairy products.
- Optimization of fermentation media, process, and formulation of bifidobacteria and lactic acid bacteria starter culture for improving cell growth and yield.
- Growing bifidobacteria and lactic acid bacteria and performing 2L lab scale media and fermented milk products
- Designing and conducting experiments for investigation of stress resistance in bifidobacteria to acid and salt.
- Microarray analysis for characterizing stress responses in bifidobacteria
- Developing a protocol for isolating of good quality and quantity RNA from bifidobacteria
- Quality analysis of RNA isolated from bifidobacteria using Agilent Bioanalyzer
- Physical and chemical properties, functionality and microbiological and contaminant content. Low, medium and high heat milk powder (NFDM/SMP)
- Cheese yield and cheese quality factors including composition, proteolysis, rheological and sensory properties (Low-fat Cheddar Cheese).

### **Work experience**

**Assistant professor** (50% research and 50%teaching ) 2014 to present at College of Agriculture, Food science and technology Department, South Valley University, Egypt.

**Ongoing research** 2014- present, South Valley University, Egypt.

- Physicochemical and sensory properties of yoghurt supplemented with green banana flour
- The use of lactic acid bacteria for obtaining useful products from lactose-rich dairy by-products
- Using aloea vera extract in the production of some dairy products

**Post doctor Research Associate** 2011 to 2014 at CALS/Dairy Research Center, University of Wisconsin Madison Conducting research on cheese/dairy ingredient analysis and functionality testing.

- The project evaluated both domestic and internationally produced nonfat dry milk (NFDM) and skim milk powder (SMP). Evaluated properties included physical and chemical properties, functionality and microbiological and contaminant content. Low, medium and high heat NFDM/SMP that was not agglomerated or instantized and was approximately 6 to 9 month old was the target product.
- The objective of the study was to investigate the impact of using three different levels of microparticulated whey proteins (MWP) in low-fat Cheddar manufacture on cheese yield and cheese quality factors including composition, proteolysis, rheological and sensory properties which helped to determine the appropriate level of MWP that can be used during low-fat Cheddar manufacture to increase yield and improve texture of the cheeses without affecting the quality of the cheeses.

**Fellow /Assistant Researcher** (2006–2009) at the University of Wisconsin Madison and Assuit University , Egypt

- Developing technique for genetic transformation of *Bifidobacterium lactis* and *Lactobacillus casei*.
- Investigating the growth characteristics of different species/strains of bifidobacteria during fermentations.
- Examining the resistance of different species/strains of bifidobacteria (*Bifidobacterium animalis* ssp. *lactis* and *Bifidobacterium longum*, *Bifidobacterium adaloescentis*) to acid and salt.
- Designing and conducting experiments for investigation of stress responses of bifidobacteria to acid on the molecular level using microarrays.

**Researcher Assistant** (1999 – 2006) at College of Agriculture, Food science Department, South Valley University, Egypt.

- Chemical and microbiological analysis of dairy products
- Manufacturing of dairy products such as cheese and fermented milks.
- Chemical analysis of dairy products including determination of moisture, fat, protein, ash and salt.

## **TEACHING EXPERIENCE**

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**Teaching assistant**, Food Science, department, South Valley University, Egypt

- Introduction to Food Science, undergraduate- level course, Spring semester
- Dairy Technology, advanced-level course, Fall semester.

**Instructor** (2014- present), Food Science, Department, South Valley University, Egypt

- Introduction to Food Science, undergraduate- level course, Spring semester
- Dairy Technology, advanced-level course, Fall semester.

## **Monitoring experience**

- **Under graduate student. Food Science, University of Wsconsin-Madison, USA 2007**  
"Growth study on Bifidobacteria"
- **Msc Student in Dairy Technology. Food Science Department, South Valley University, Egypt 2015-** "Studies on quality of dried milk powders traded in Egyptian market"
- **Ph.D student in Microbiology. Botany Department-South Valley University 2017**  
"The use of lactic acid bacteria for obtaining useful products from lactose-rich dairy by-products"
- **Msc Student in Dairy Technology. Food Science Department, South Cannel University 2017 :** "Using aloe vera extract in the production of some dairy products"

## **PROFESSIONAL ACTIVITY**

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### **Organization membership**

- American Dairy Science Association 2008- 2013
- Egyptian Society of Dairy Science and Technology 2010- present

### **Workshops and short courses participation**

- **Dairy HACCP training**, Wisconsin Center for Dairy Research (CDR) and UW-Madison, Food Science Department, May 9, 2012

- **The Wisconsin Cheese Technology Short Course**, CDR and UW-Madison, October 8-10, 2012
- **Dairy Ingredient Applications**, CDR and UW-Madison, October 15-16, 2013
- **The Dairy Ingredient Manufacturing**, CDR and UW-Madison, October 16-17, 2012
- **Ice Cream Makers**, CDR and UW-Madison, December 29, 2012
- **Milk Pasteurizer and process control school**, UW-Madison, Food Science Department, WI Department of Agriculture, Trade and Consumer Protection, January 8-9, 2013
- **Process Cheese**, CDR and UW-Madison, February 21-22, 2012
- **Cheese Grading**, CDR and UW-Madison, 2013
- **Cultured Dairy Products**, CDR and UW-Madison, September, 2013

### **Conference oral and poster Presentations**

- 3th International Conference on Agriculture and Food Chemistry. Rome, Italy, July, 2018
- Egyptian symposium in Dairy Sci. and Techn. Egyptian society of Dairy Science 2017. Giza, Egypt
- 6<sup>th</sup> International Conf. Food science and sustainability. 2016. Sharm Elshekh, Egypt.
- Egyptian symposium in Dairy Sci. and Techn. Egyptian society of Dairy Science 2016. Giza, Egypt
- ADSA-ASAS Annual Meeting, July 8-12, 2013. Indianapolis, Indiana, USA
- International Dairy federation, 2012, Madison, Wisconsin, USA
- ADSA-ASAS Annual Meeting, July 8-12, 2013. Indianapolis, Indiana, USA.
- 11<sup>th</sup> Egyptian Conf. Dairy Sci. and Techn. 2010. Cairo, Egypt.
- 9th International Symposium on Lactic Acid Bacteria: Health, Evolution, and Systems Biology. August 31-September 4, 2008, Egmond aan Zee, The Netherlands.
- The annual meeting of the American Dairy Science Association. July, 2008 Indianapolis, IN. USA.

### **LANGUAGES and COMPUTER SKILLS**

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- Arabic: native language
- English: excellent speaking, reading, listening, and writing
- Microsoft Word, Excel and Power Point, managing citation using Endnote, statistical analysis using SAS

### **PUBLICATIONS**

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**Abdalla, A. K** and Ahmed, Z.F.R. 2019. Physiochemical and sensory of yoghurt supplemented with unripe banana flour. Accepted in Egyptian J. Dairy Sci.

**Abdalla, A. K** and Ahmed, Z.F.R. 2018. Oxidative stress in probiotic bacteria with special reference to bifidobacteria (Review). Egyptian J. Dairy Sci. 46 (1):1-9.

- Abdalla, A. K.** Smith, and J. Lucey. 2017. Bulk density and flowability of nonfat dry milk and skim milk powder. *Egyptian J. Dairy Sci.* 45 (1):17-24.
- Abdalla, A. K.** Smith, and J. Lucey. 2017. Physical Properties of Nonfat Dry Milk and Skim Milk Powder. *Inter. J. Dairy Sci.* 12 (2):149-154.
- Abdalla, A. K.** Smith, and J. Lucey. 2017. Sensory Evaluation of Nonfat Dry Milk and Skim Milk Powder. *Inter. J. Dairy Sci.* 12 (3):190-196.
- Stankey, J. A., **A. K Abdalla**, Y. Lu, S. Lucey, J. J. Jaeggi, B. Mikkelsen. 2017. Low -fat Cheddar cheese made using microparticulated whey proteins: Effect on yield and cheese quality. *Inter. J. Dairy Technol.*, 70 (4):481-491.
- Abdalla, A. K.** Smith, and J. Lucey. 2016. Physicochemical properties of nonfat dry milk and skim milk powder. *Egyptian J. Dairy Sci.* 2016 , 44(2): 109-116.
- Abdalla, A., K.** Smith, and J. Lucey. 2016. Chemical composition and microbiological quality of non fat dry milk and skim milk powder produced in the United States. *Egyptian J. Dairy Sci.*, 44(2):99-108.
- Abdalla, A. K.**, M.A. Mohran, J.L. Steele and A.A. Abdel-Khair. 2013. Intrinsic Resistance and Stress Responses to Acid and Sodium Chloride in *Bifidobacterium adolescentis* ATTC 15703. *Egyptian J. Dairy Sci.*, 41(1): 39- 44.
- Oberg, T. S., J. L. Steele, S. C. Ingham, V.V. Smeianov, E. P. Briczinski, **A. Abdalla**, and J. R. Broadbent. 2011. Intrinsic and inducible resistance to hydrogen peroxide in *Bifidobacterium* species. *J. Ind. Microbiol. Biotechnol.* 38:1947–1953.
- Abdalla, A. K.** 2010. Growth and osmotic stress in bifidobacteria strains of industrial importance. *Egyptian J. Dairy Sci.* 38(1):553-564.

#### **Abstracts and conference presentations**

- Abdalla, K. A. Physicochemical properties of nonfat dry milk and skim milk powder 2016. *J. Food nutri. Population Health.* 2: 55.
- Abdalla, K.A. and others. Microbiological quality of nonfat dry milk and skim milk powder produced in the United States. The 2013 Joint ADSA-ASAS Annual Meeting, July 8-12, 2013. Indianapolis, Indiana. *J. Dairy Sci.* 96(E-Suppl. 1):[101].
- Abdalla, K.A. and others. Physicochemical characteristics of nonfat dry milk and skim milk powder produced in the United States. The 2013 Joint ADSA-ASAS Annual Meeting, July 8-12, 2013. Indianapolis, Indiana. *J. Dairy Sci.* 96(E-Suppl. 1):[456].
- Abdalla, K.A. and others. Growth and osmotic stress in bifidobacteria strains of industrial importance. 11<sup>th</sup> Egyptian Conf. Dairy Sci. and Techn.(2010).Cairo, Egypt.
- Steele, J., A.K. Abdalla, M.A. Mohran, S.C. Ingham, T.S. Oberg, and J.R. Broadbent. 2008. Intrinsic resistance and stress responses in bifidobacteria. presentation presentation for the 9th International Symposium on Lactic Acid Bacteria: Health, Evolution, and Systems Biology. August 31-September 4, Egmond aan Zee, The Netherlands.
- Abdalla, K.A and others. Characterizing Stress Responses of Bifidobacteria strains of industrial importance. The 2008 Joint ADSA-ASAS Annual Meeting, July 7-11, 2008. Indianapolis, Indiana.

#### **Thesis**

Ph.D. Thesis: Characterizing Stress Responses of Bifidobacteria Strains of Industrial Importance as Influenced by Genetic Diversity (2011).

M.S. Thesis: Chemical and microbiological studies on some homemade dairy products (2004).

