Jyothi Lakshmi A

Senior Scientist, Protein Chemistry and Technology Department CSIR - Central Food technological Research Institute, Mysore, Ph: 0821 2515331, 09342556878 Email: jyothi.lakshmi@cftri.res.in, jyothilakshmia@yahoo.co.in

Academic qualifications

PhD (2001) – Food Science and Nutrition, – University of Mysore (title of PhD thesis-**Determinants of undernutrition in preschool children and impact of intervention programmes**)

Post Doc (2001 - 2004) - University of Mysore - **Processing and utilization of green** leafy vegetables as a source of micronutrients

Honors and merits

- S.G. Srikantaiah Memorial award for securing highest marks in Community Nutrition in MSc
- NN Mohan Memorial award for the best research paper in "Indian Food Packer" 1997
- Best poster award in NSI 2005

Professional experience

Research experience - 14Years in the area of Food Science and Nutrition

- Research Associate 3.3Y as Research associate
- Scientist 11Y

Teaching – MSc Food Science and Nutrition, MSc Food Technology students and Nutrition Biology students

Research guidance – Guided work of 12 MSc students for Dissertation and 9 project assistants, currently guiding work of **4 PhD students**

Membership in scientific organizations

- Nutrition society of India
- Society of Biological Chemists
- Association of Food Scientists and Technologists
- Home Science Association of India

Publications and presentations

• Research papers – 38

- Processes 3
- Papers presented at conferences 50
- Written study material for Diploma and Post graduate courses in the area of Nutrition for Karnataka State Open University

Research projects worked for

- Research Associate Processing and utilization of green leafy vegetables as a source of micronutrients' Council of Scientific and Industrial Research, New Delhi. (Jan. 2001 - March 2004)
- Member Development of functional foods and assessing the bio-availability of micro and macro nutrients (April 2006 – Mar' 2008) – Institute sponsored project
- Member Niche Food Processing Technologies for outreach of cost effective,
 safe, hygienic, nutritious food to the targeted population (April 2008 Mar' 2012)
 SUPRA Institutional project funded by Planning Commission of India.
- Member Functional ingredients of therapeutic value from protein rich products
 (April 2010 Mar' 2012) Institute sponsored project
- Member Influence of processing on dehulling properties, cooking and sensory properties and chemical composition of pulses (Jun'2010 –May'2012) – CNP project sponsored by M/S.Buhler (India) Pvt. Ltd
- Member Growth studies to evaluate the quality of protein product in a rat model (Jul' 2011- Sep' 2011) CNP project sponsored by M/S Elite Natural Pvt. Ltd
- PI (one component) –WELFO Wellness through foods (March 2013 March 2017)
- Member -S and T interventions to combat malnutrition in women and children through food based approaches (March 2013 March 2017)

List of publications

SI no.	Title of article	Name of Journal	National/ Internationa l	Year	Page nos.	Authors in the order of appearance in the article
1.	Effect of Particle Size of Soft Grain Products on the Kinetics of Starch Hydrolysis	Trends in Carbohydrate Research	International	2017	9, 38- 46	Pavan Kumar P, Shyamal Kumar Chandan and Jyothi Lakshmi A
2.	Bioaccessible Iron and	Food	International	2016	233-	S. K. Devaraju,

3.	Zinc in Native and Fortified Enzyme Hydrolyzed Casein and Soya Protein Matrices Preparation of Caseinophosphopeptides and Assessing Their Efficacy in Enhancing the Bioaccessibility of Iron and Zinc	Biotechnolog y Journal of Food Science and Technology	International	2015	52,(1 1) 7493 - 7499	Prachi Thatte, Jamuna Prakash & Jyothi A. Lakshmi Divya Prakash and Jyothi Lakshmi A*
4.	Bran: A Stabilized Functional Food with Nutraceuticals and Nutrients	Journal of Food Science and Technology	International	2015	52; (12) 8252 - 8259	Vishwanath S V, Indira T N, Jyothi Lakshmi A , Radha C and Purnima Kaul Tiku
5.	Effect of protein concentration and addition of amino acids on the dialysability of iron and zinc	LWT - Food Science and Technology,	International	2014	59:5 40- 546	Vandana Joshi, Prachi Thatte, Jamuna Prakash and Jyothi Lakshmi A.
6.	Comparison of enhancement in bioaccessible iron and zinc in native and fortified high-phytate oilseed and cereal composites by activating endogenous phytase.	International Journal of Food Science and Technology	International	2012	1613 - 1619	Shilpa K.S. and Jyothi Lakshmi A
7.	Nutritional potential bioaccessibility of minerals and antioxidant properties of niger (Guizotia abyssinicacass.) seed protein	International Journal of Food Science and Technology	International	2012	656- 663.	Prachi Thatte and Jyothi Lakshmi A
8.	Effect of Ingredients on Rheological Nutritional and Quality Characteristics of High Protein, High Fiber and Low Carbohydrate Bread.	Food and Bioprocess Technology	International	2012	2998 - 3006	Farheen Dhinda, Jyothi lakshmi A, Jamuna Prakash and Indrani D.
9.	Effect of barley, banana, soya protein isolate on rheological, microstructural and nutritional characteristics of north indian parotta	Journal of Texture studies	International	2012	246- 256	Shipra Bhargava, Jyothi Lakshmi A. and Indrani D
	Influence of green gram flour (phaseolus aureus) on the rheology, microstructure and quality of cookies.	Journal of Texture studies	International	2012	350- 360	Jyotsna Rajiv, Swetha Lobo, Jyothi lakshmi A and G Venkateswara Rao
11.	Retention of nutrients in green leafy vegetables on dehydration.	Journal of Food Science Technology	International	2012		Sheetal Gupta, Gowri BS, Jyothi Lakshmi A , and Jamuna Prakash

12.	Nutritional potential,	LWT - Food	International	2011	1821	Jyothi lakshmi A
	bioaccessibility of minerals and functionality of watermelon (Citrullus vulgaris) seeds	Science and Technology			1826	and Purnima Kaul
13.	Retention and bioaccessibility of β-carotene from natural and synthetic sources on baking.	Journal of Food Quality	International	2011	403- 412	Prachi Thatte, Indrani D, and Jyothi Lakshmi A
14.	Effect of soya protein on the dialysability of exogenous iron and zinc	Food Chemistry	International	2009	577- 581	Ujwal Hegde, A. Jyothi Lakshmi, C Radha, Ramesh Kumar P and Jamuna Prakash
15.	Iron nutriture of Indian children residing in an urban slum with reference to dietary iron intakes	Research Reach	National	2009	38- 46	Asma Kulsum, Jyothi Lakshmi A. and Jamuna Prakash
	Child care behavioural knowledge of women from an urban slum with reference to health and nutrition	Indian Journal of Nutrition Dietetics	National	2008	264- 275	Asma Kulsum, Jyothi Lakshmi A and Jamuna Prakash
17.	Dietary adequacy of Indian children residing in an urban slum – Analysis of proximal and distal determinants	Ecology of Food and Nutrition	International	2008	161- 177	Asma Kulsum, Jyothi Lakshmi A and Jamuna Prakash
18.	Food intake and energy protein adequacy of children from an urban slum in Mysore, India	Malaysian Journal of Nutrition	International	2008	163- 172	Asma Kulsum, Jyothi Lakshmi A and Jamuna Prakash
19.	Effect of different blanching treatments on ascorbic acid retention in green leafy vegetables	Natural Product Radiance	National	2008	111- 116	Sheetal Gupta, Jyothi Lakshmi A. and Jamuna Prakash
20.	Influence of phytin phosphorous and dietary fibre on <i>invitro</i> iron and calcium bioavailability from rice flakes.	International Journal of Food science and Nutrition	International	2007	637- 643	Suma RC, Sheetal Gupta, Jyothi Lakshmi A , and Jamuna Prakash
21.	Antioxidants in leafy vegetables and their efficacy in preventing lipid peroxidation in heated and stored oils	Foods	International	2007	68- 72	Shymala BN, Sheetal Gupta, Jyothi Lakshmi A, and Jamuna Prakash
22.	Micronutrient deficiencies and morbidity in Indian rural pre school children	Journal of Human Ecology – International	International	2006	143- 150	Jyothi Lakshmi A., Khyrunnisa Begum, G. Saraswathi and Jamuna Prakash
23.	Comparative analysis of influence of promoters and inhibitors on in vitro available iron using two methods	International Journal of Food Sciences and Nutrition	International	2006	559- 569	Jyothi Lakshmi A., Sheetal Gupta, and Jamuna Prakash

	24.	<i>In vitro</i> bioavailability of	Journal of	International	2006	2147	Sheetal Gupta,
	- ''	calcium and iron from	Science of			-	Jyothi Lakshmi A.,
		selected green leafy	Food and			2152	and Jamuna Prakash
		vegetables	Agriculture				
25		Effect of processed	Malaysian	International	2006	189-	Jyothi Lakshmi A.,
		beverages on dialysable iron	Journal of			199	Sheetal Gupta, and
		from rice based meals in	Nutrition				Jamuna Prakash
		comparison with fresh fruits					
26		Influence of nutrition and	Malasyian	International	2005	121-	Jyothi lakshmi A,
		environment on morbidity	Journal of			132	Khyrunnisa Begum,
		profile of Indian preschool	Nutrition				Saraswathi G and
		children					Jamuna prakash
27		Food beliefs and dietary	Science and	National	2005	311-	Jyothi Lakshmi A,
		practices of traditional	Culture			316	Khyrunnisa Begum,
		Rural households near					Saraswathi G and
		Mysore. Science and Culture					Jamuna Prakash
28		Leafy vegetable extracts -	Innovative	International	2005	239-	Shymala BN,
		antioxidant activity and	Food science			245	Sheetal Gupta,
		effect on storage stability of	and Emerging				Jyothi Lakshmi A,
		heated oils	Technologies				and Jamuna Prakash
29		Analysis of nutrient and	LWT, Food	International	2005	339-	Sheetal Gupta,
		antinutrient content of	Science and			345	Jyothi Lakshmi A,
		underutilized greenleafy	Technology				Manjunath M.N. and
20		vegetables	T 1 C	T 1	2005	20	Jamuna Prakash
30		Dietary Adequacy of Rural	Journal of	International	2005	39-	Jyothi Lakshmi A,
		Preschool Children:	Tropical			44	Khyrunnisa Begum, Saraswathi G and
		influencing factors	Pediatrics				Jamuna Prakash
31		Physico-chemical and	Journal of	International	2004	459-	Kaveri GV, Sheetal
31		Sensory attributes of wheat	Food Quality	International	2004	470	Gupta, Jyothi
		based papads incorporated	1 ood Quanty			470	Lakshmi A, and
		with greenleafy vegetables					Jamuna Prakash
		with greemeary vegetables					Jamana Trakasn
32		Impact of interventions on	Research	National	2004	23-	Jyothi Lakshmi A,
		nutritional status of				35	Khyrunnisa Begum,
		preschool children					Saraswathi G and
		•					Jamuna Prakash
33.		Maternal characteristics and	Indian Journal	National	2004	31-	Jyothi Lakshmi A
		nutritional and health status	of Nutrition			37	and Jamuna Prakash
		of preschool children.	and Dietetics				
34.		Iron bioavailability of	Food	International	2004	61-	Mamatha kumari,
		greenleafy vegetables	Chemistry			62	Sheetal Gupta,
		cooked in different utensils					Jyothi Lakshmi A,
							and Jamuna Prakash
35.		Sensory attributes of	Food and	National	2004	61-	Sheetal Gupta,
		chapathis incorporated with	Beverage			62	Jyothi Lakshmi A,
		differently dried greenleafy	World				and Jamuna Prakash
		vegetables					
2.5		X 7	Y 1 2	** .* · ·	2002	4.5	T /10 T 7 7 7 1 1 1
36.		Nutritional status of	Journal of	National	2003	45-	Jyothi Lakshmi A,
		preschool children:	Family			56	Khyrunnisa Begum,
		mediating factors	Welfare				Saraswathi G and
27		Dravalance of access	Indian In1	Notice 1	2001	100	Jamuna Prakash
37.		Prevalence of anemia in	Indian Journal	National	2001	182-	Jyothi Lakshmi A,

	Indian preschool children:	of Nutrition			190	Khyrunnisa Begum,
	Analysis of associative	and Dietetics				Saraswathi G and
	factors					Jamuna Prakash
38.	Studies on sensory quality	Indian Food	National	1997	22-	Jyothi Lakshmi A
	and household storage of	Packer			38	and Jamuna Prakash
	rice bran incorporated					
	chutney powders					

List of process filed

- A process for the preparation of β- carotene and mineral fortified buns. Jyothi lakshmi A., A.G. Appu Rao, Indrani D, Soumya C and Venkateswara Rao G. Filed in 2009
- 2. A process for the preparation of stabilized edible rice bran. Purnima Kaul Tiku, **Jyothi lakshmi A**., Indira T.N., Radha C, AG. Appu Rao Filed in 2010.
- 3. Sridevi A Singh, Indira TN, Appu Rao AG, Venkatesh Murthy, **Jyothi Lakshmi A,** Govindaraju K, Maya Prakash, Indiramma D and Gopal C. Process for the preparation of sesame based nutritious supplement.