

Curriculum Vitae

Name and address

Dr. Ramaprasad T.R

Scientist, Dept of Biochemistry, CSIR-CFTRI, Mysore-570 020

ramaprasad@cftri.res.in

ramaprasadi1@gmail.com

Academic Qualification

Sl. No	Degree	Year	Subject	University
1	B.Sc	1997	Biochemistry, Botany, Microbiology	Univ of Mysore
2	M.Sc	1999	Biotechnology	Univ of Bangalore
3	PhD	2005	Biochemistry	Univ of Mysore

Current academic interest

Research on dietary implications of fatty acids have reached conclusive stage with clear knowledge from which now dieticians may be able to formulate specific fat based diet for desired effect. However, due to versatility of dietary oils and fats available in nature and also type of bioactive minor components that are embedded make them unique in terms of its physiological effects. Many times, the biochemical parameters that are crucial to be regulated to counter life style diseases are significantly modulated by minor components rather than the fatty acids itself. In my laboratory, we are currently working on elucidating the synergy that may exist between the active minor components of dietary oils with major fatty acids in terms of regulating the complications of diseases mainly arthritis and dyslipidemia. Though arthritis, a major degenerative inflammatory diseases can be controlled with anti-inflammatory drugs, the damage done by it are permanent and cause life-time disability. Similarly, dyslipidemia harmfully modulate the risk factors including cholesterol homeostasis and there by glycemic control. In addition, maternal dyslipidemia may cause a long lasting effect on developing foetus during pregnancy and hence result in metabolic mis-programming leading to future complications during childhood. My group is working on understanding the mechanisms (lipid inflammatory mediated gene regulation) in the above mentioned complications in experimental animal models.

Externally funded project details

1. Project title: "Bioactive lipids for the modulation of inflammation in rat model of arthritis "Funded by DBT, New Delhi 2013-2016 (Completed) Role: PI
2. Project title: "Health promoting food & feed from micro-algal n-3 FAs, pigments & bio-active peptides produced on food industry side streams" Funded by DBT, New Delhi 2015-2018 (Ongoing) Role: PI
3. Project title: "Endocrine disruption activity study from the contents of 'PET' bottles" Funded by DBT, New Delhi 2017-2019 (Ongoing) Role: Member

Overall research publications in last five years

1. Poorna Chandra Rao Y, Sugasini D, Ramaprasad TR and Lokesh BR. Minor Constituents in Rice Bran Oil and Sesame Oil Play a Significant Role in Modulating Lipid Homeostasis and Inflammatory Markers in Rats. J Med Food. 2017; 20 (7), 1–11
2. Yashaswini PS, Sadashivaiah B, Ramaprasad TR and Singh SA. In vivo modulation of LPS induced leukotriene generation and oxidative stress by sesame lignans. J. Nutritional Biochemistry. 2016;41, 151-157.

3. Nayana V Yadav, Sadashivaiah, Breetha R, Pooja A, Lokesh BR and Ramaprasad TR. Sesame oil and rice bran oil ameliorates adjuvant-induced arthritis in rats: Distinguishing the role of minor components and fatty acids. *Lipids*. 2016: 51(12), 1385-1395.
4. Breetha R, Sadashivaiah B, Ramaprasad TR. Dietary omega-3 but not omega-6 fatty acids down-regulate maternal dyslipidemia induced oxidative stress: A three generation study in rats. *Biochemical and Biophysical Research Communications*. 2016: 477, 887-894.
5. Mamatha BS, Nidhi B, Arunkumar R, Ramaprasad TR and Baskaran V. Dietary components affect the plasma and tissue levels of lutein in aged rats with lutein deficiency – A repeated gavage and dietary study. *J. Food Science*. 2015: 80(10), H2322-H2330.
6. Nidhi B, Sharavana G, Ramaprasad TR and Baskaran V. Lutein derived fragments exhibit higher antioxidant and anti-inflammatory properties than lutein in lipopolysaccharide induced inflammation in rats. *Food and Function*. 2015: 6(2), 450-460.
7. Nidhi B, Ramaprasad TR, Baskaran V. Dietary fatty acid determines the intestinal absorption of lutein in lutein deficient mice. *Food Research International*. 2014: 64, 256-263.
8. Tang J, Du Y, Lee CA, Talahalli R, Eells JT, Kern TS. Low-intensity far-red light inhibits early lesions that contribute to diabetic retinopathy: in vivo and in vitro. *Invest Ophthalmol Vis Sci*. 2013: 54(5), 3681-3690.
9. Talahalli R, Zarini S, Tang J, Li G, Murphy R, Kern TS, Gubitosi-Klug RA. Leukocytes regulate retinal capillary degeneration in the diabetic mouse via generation of leukotrienes. *J Leukocyte Biology*. 2013: 93(1), 135-43.