CURRICULUM VITAE

Name	: SATINATH MUKHOPADHYAY
Date of birth	:10 October 1958
Address	:228A Diamond Harbour Road Kolkata 700 060 India
E-mail ID.	: satinath.mukhopadhyay@gmail.com : satinath.m@yahoo.com

Qualifications:

MBBS, MD (Internal Medicine), DM (Endocrinology), FRCP (London), FAMS (India)

h-index: 42, citations: 18,363

Position and Employment-

Job Title	Employer	From	To
LECTURER	Institute of Postgraduate Medical Education and Research, Kolkata	**2/7/1999**	**22/11/2002**
ASSISTANT PROFESSOR	Institute of Postgraduate Medical Education and Research, Kolkata	**22/11/2002**	**30/3/2005**
ASSOCIATE PROFESSOR	Institute of Postgraduate Medical Education and Research, Kolkata	**30/3/2005**	**1/9/2009**
PROFESSOR	Institute of Postgraduate Medical Education and Research, Kolkata	**1/9/2009**	**Current**

Distinctions & Awards:

1. World-IDF outstanding achievement award, 2020, Mayo Clinic, Rochester, Minnesota, USA.
2. Gold Medal (Best Speaker Award), National Diabetes Congress, 1993
3. Glaxo Medical Quiz contest award, 1992
4. College Merit Scholarship 1981, 1982
5. Honours in 1st MBBS (Part-1), 1978

Experience:

*Over 25 years' experience in patient care, teaching and translational research in a tertiary care teaching institute of repute.
*Trained in statistical methodology organized by Steno Diabetes Centre, Copenhagen, Denmark
*GCP trained researcher
*Certificate course in thyroid ultrasonography, American Endocrine Society

University Examiner:

1. Examiner, DM (Endocrinology), several Universities including AIIMS, New Delhi, CMC, Vellore, SGPGI, Lucknow, etc.
2. Examiner, DNB (Endocrinology)
3. Examiner for PhD: Several Indian Universities and University of Melbourne.

PhD Guide/ Co- guide:

1. Department of Biochemistry, Ballygunge Science College, University of Calcutta
2. Department of Physiology, Ballygunge Science College, University of Calcutta
3. Department of Nutrition, University of Calcutta.
4. West Bengal University of Health Sciences.
5. Jadavpur University
6. Viswa Bharati University

Orations:

Twelve prestigious orations, including JS Bajaj Oration, National Academy of Medical Sciences, India, 2021, PN Shah Oration (2021) and MMS Ahuja Oration (2014), Endocrine Society of India.

On-going Research Projects:

Sl. No.	Title	Sanction No.	Total cost(Rs)	Agency	Year
1.	Effect of treatment of periodontitis on insulin resistance in type 2 diabetes mellitus	ST/P/S&T/9G-18/2016	48,87,600	DST, WB	2018-2021
2.	Diabetic Foot ulcer microbiome Its contribution in Biofilm formation and wound healing in chronic Diabetic Foot ulcers	15(sanc)/BT(budg)/RD-2O/2016	8,00,000	Dept. of Biotechnology, Govt. of West Bengal	2017-2019
3.	Impact of oxidative stress on changes in corneal confocal microscopy, flow cytometry and spectrophotometry	NA	2,39,292	Medical Research Unit I.P.G.M.E.&R	2018-2020

Completed Research Projects:

Sl. No.	Title	Sanction No.	Total cost (Rs)	Agency	Year
1.	Effect of vitamin-D supplementation on changes in systemic inflammatory markers, insulin resistance, 1-hour plasma glucose levels and progression to overt diabetes in patients of pre- diabetes with vitamin-D deficiency: A randomized controlled trial	523/ST/P/S&T/9G-2/2011	26,57,950	WBDST	2013-2016
2.	Neck circumference as a predictor of impaired glucose metabolism, body mass index, cardiovascular risk factor and metabolic syndrome in normal, prediabetic, diabetic population; an observational study.	73/ST/P/S& T/9G-19/2012	18,74,420	WBDST	2013-2016
3.	Identification of molecular links between amyloid precursor protein (APP)and Alzhermer's disease related to biomarkers in an experimental model with SHSY5Y cells	BT/PR768/BRB/ 10/ 933/2011	67 lacs		2014-2017
4.	Role of black tea derived polyphenols on glucose and lipid uptake by PBMC from individuals with glucose intolerance	17(338)/2014/4944	16,52,400	NTRF	2015-2018
5.	Role of Vitamin D–binding protein (VDBP) protein and its polymorphisms in vitamin D deficient Prediabetic Eastern Indian population	NA	1lac	RSS DI, WB chap ter	2017-2018

Membership of Scientific Societies:

1. Endocrine Society of India (ESI)
2. American Endocrine Society (The Endo Society)
3. European Association for the study of Diabetes (EASD)
4. International Osteoporosis Foundation (IOF)

5. Indian Society for Bone and Mineral Research (ISBMR) [Member, Executive Committee]
6. Association of Physicians of India (API)
7. Research Society for the Study of Diabetes in India (RSSDI)

Reviewer for more than 10 high impact international journals on diabetes, endocrinology, nutrition and metabolic disorders.

List of Publications:

1. Priyanka Maity,… **Satinath Mukhopadhyay,**… Uttara Chatterjee. Diagnostic and prognostic utility of SF-1 in adrenal cortical tumours. Indian Journal of Pathology and Microbiology, 2021 (In Press).

2. Viswanathan Mohan…, **Satinath Mukhopadhyay**, etal. **Clinical profile of long - term survivors and non-survivors with T1Din India.** Diabetes Technology and Therapeutics. DOI: 10.1089/dia.2021.0284.

3. Viswanathan Mohan, Balaji Bhavadharini, **Satinath Mukhopadhyay**, etal. Diabetes in Pre-independence India: Rediscovering a Forgotten Era. Journal of The Association of Physicians of India, Vol. 69, August 2021.

4. Sanjay K. Bhadada, Manoj Chadha, … **Satinath Mukhopadhyay**, …Ambrish Mithal. The Indian Society for Bone and Mineral Research (ISBMR) position statement for the diagnosis and treatment of osteoporosis in adults. Archives of Osteoporosis (2021) 16:102. https://doi.org/10.1007/s11657-021-00954-1

5. Snehasis Das, **Satinath Mukhopadhyay**, …Sutapa Mukherjee. Increase in PPARγ _inhibitory phosphorylation by Fetuin—A through the activation of Ras-MEK-ERK pathway causes insulin resistance. BBA - Molecular Basis of Disease 1867 (2021) 166050.

6. Ghosh A, Ray S, Garg MK, Chowdhury S, **Mukhopadhyay S**. The role of infrared dermal thermometry in the management of neuropathic diabetic foot ulcers. **Diabetic Medicine**. 2021 Apr;38(4): e14368.

7. Pandey A, Brauer M, Cropper ML, Balakrishnan K, Mathur P, Dey S, Turkgulu B, Kumar GA, Khare M, Beig G, Gupta T, **Mukhopadhyay, S**. *et al*. Health and economic impact of air pollution in the states of India: The Global Burden of Disease Study 2019. **The Lancet Planetary Health**. 2021 Jan 1;5(1): e 25-38.

8. Mondal S, Saha C, Bhattacharyya NP, Mukhopadhyay S. A Quantitative-PCR Based Rapid and Cost-Effective Diagnostic Method for Turner Syndrome and Its Variants. **Journal of the Endocrine Society**. 2020 May 8;4.

9. Murray CJ, Aravkin AY,……. **Mukhopadhyay, S**. *et al* Global burden of 87 risk factors in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. **The Lancet**. 2020 Oct 17;396(10258):1223-49

10. Ashutosh Kumar Arya, PhD, Sanjay Kumar Bhadada, MD, DM, …Satinath Mukhopadhyay,

Sudhaker D. Rao. Differences in Primary Hyperparathyroidism Between Pre- and Postmenopausal Women in India. Endocrine Practice, VOLUME 27, ISSUE 7, P710-715, JULY 01, 2021

11. Roy, A., Maiti, A., Sinha, A……..**Mukhopadhyay, S**. *et al.* Kidney Disease in Type 2 Diabetes Mellitus and Benefits of Sodium-Glucose Cotransporter 2 Inhibitors: A Consensus Statement. ***Diabetes Ther*** **11,** 2791–2827 (2020).

12. Dandona, R., Kumar, G.A., Henry, N.J., ….**Mukhopadhyay, S.**, …Hay, S.I., Sharma, R.S., and Dandona, L. (2020). Subnational mapping of under-5 and neonatal mortality trends in India: the Global Burden of Disease Study 2000–17. **The Lancet**.

13. Subham Basu, Mahesh Barad, Dipika Yadav, Arijit Nandy, Bidisha Mukherjee, Jit Sarkar, Partha Chakrabarti, **Satinath Mukhopadhyay**, Debabrata Biswas. DBC1, P300, HDAC3 and Siah1 coordinately regulate ELL stability and function for expression of its target genes. **PNAS** Mar 2020, 117 (12) 6509-6520

14. The changing patterns of cardiovascular diseases and their risk factors in the states of India: the Global Burden of Disease Study 1990-2016. **Lancet Glob Health**. 2018 Dec;6(12):e1339-e1351.

15. Kyu HH, Abate D…**Mukhopadhyay S**…Zuhlke LJ, Murray CJL.Global, regional, and national disability-adjusted life-years (DALYs) for 359 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. **Lancet.** 2018 Nov 10;392(10159):1859-1922.

16. Balakrishnan K, Dey S,…**Mukhopadhyay S**… Venkatesh S, Dandona L. India State-Level Disease Burden Initiative Air Pollution Collaborators. The impact of air pollution on deaths, disease burden, and life expectancy across the states of India: the Global Burden of Disease Study 2017. **Lancet Planet Health**. 2018 Dec 5. pii: S2542-5196(18)30261-4.

17. Lozano R, Fullman N,…. **Mukhopadhyay S**…Lim SS, Murray CJL. GBD 2017 SDG Collaborators. Measuring progress from 1990 to 2017 and projecting attainment to 2030 of the health-related Sustainable Development Goals for 195 countries and territories: a systematic analysis for the Global Burden of Disease Study 2017. **Lancet**. 2018 Nov 10;392(10159):2091-2138.

18. Murray CJL, Callender CSKH, …**Mukhopadhyay S**… Lopez AD, Lim SS. GBD 2017 Population and Fertility Collaborators. Population and fertility by age and sex for 195 countries and territories, 1950-2017: a systematic analysis for the Global Burden of Disease Study 2017. **Lancet**. 2018 Nov 10;392(10159):1995-2051.

19. Stanaway JD, Afshin A, Gakidou E,…**Mukhopadhyaya S**… Zodpey S, Murray CJL. GBD 2017 Risk Factor Collaborators. Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. **Lancet**. 2018 Nov 10;392(10159):1923-1994.

20. James SL, Abate D,…**Mukhopadhyay S**… Vos T, Murray CJL. GBD 2017 Disease and Injury Incidence and Prevalence Collaborators. Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study

2017. **Lancet**. 2018 Nov 10;392(10159):1789-1858.

21. Roth GA, Abate D,….**Mukhopadhyay S**… Naghavi M, Murray CJL. GBD 2017 Causes of Death Collaborators. Global, regional, and national age-sex-specific mortality for 282 causes of death in 195 countries and territories, 1980-2017: a systematic analysis for the Global Burden of Disease Study 2017. **Lancet**. 2018 Nov 10;392(10159):1736-1788.

22. Dicker D, Nguyen G,…**Mukhopadhyay S**….Gakidou E, Murray CJL. GBD 2017 Mortality Collaborators. Global, regional, and national age-sex-specific mortality and life expectancy, 1950-2017: a systematic analysis for the Global Burden of Disease Study 2017. **Lancet**. 2018 Nov 10;392(10159):1684-1735.

23. Kyu HH, Abate D,..**Mukhopadhyay S….** Zuhlke LJ, Murray CJL. GBD 2017 DALYs and HALE Collaborators. Global, regional, and national disability-adjusted life-years (DALYs) for 359 diseases and injuries and healthy life expectancy (HALE) for 195 countries and territories, 1990-2017: a systematic analysis for the Global Burden of Disease Study 2017. **Lancet**. 2018 Nov 10;392(10159):1859-1922.

24. Tandon, N., Anjana, R.M., Mohan, …..**Mukhopadhyay S**., …Swaminathan, S., and Dandona, L. (2018). The increasing burden of diabetes and variations among the states of India: the Global Burden of Disease Study 1990–2016. The **Lancet Global Health**. December, 2018

25. Collaborators, G.B.D.A. (2018). Alcohol use and burden for 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. **Lancet** (London, England) 392, 1015-1035.

26. Dutta, D., and **Mukhopadhyay S**. (2018). Novel diabetes subgroups. **The Lancet Diabetes & Endocrinology** , p-438,Vol 6, June 2018.

27. Prabhakaran, D., Jeemon, P., Sharma, M., … **Mukhopadhyay, S**.,….. Swaminathan, S., and Dandona, L. (2018). The changing patterns of cardiovascular diseases and their risk factors in the states of India: the Global Burden of Disease Study 1990–2016. The **Lancet Global Health**.

28. Mondal, S.A., Dutta, D., Kumar, M., Singh, P., Basu, M., Selvan, C., and **Mukhopadhyay, S.** (2018). Neck Circumference to Height Ratio is a Reliable Predictor of Liver Stiffness and Nonalcoholic Fatty Liver Disease in Prediabetes. Indian J Endocrinol Metab 22, 347-354.

29. Mukherjee, S., Das, S., Chattopadhyay, D., Sarkar, S., Chatterjee, S.K., Talukdar, D., Mukherjee, S., Majumdar, S.S., **Mukhopadhyay, S**., Chaudhuri, M.K., and Bhattacharya, S. (2018). Attenuation of macrophage accumulation and polarisation in obese diabetic mice by a small molecule significantly improved insulin sensitivity. **Biochem Biophys Res Commun** 501, 771-778.

30. Mukhuty A, Fouzder C, Mukherjee S, Malick C, **Mukhopadhyay S**, Bhattacharya S, Kundu R. Palmitate induced Fetuin-A secretion from pancreatic β-cells adversely affects its function and elicits inflammation. **Biochem Biophys Res Commun**. 2017 Sep 30; 491(4):1118-1124.

31. Mukherjee S, Chattopadhyay M, Bhattacharya S, Dasgupta S, Hussain S, Bharadwaj SK, Talukdar D, Usmani A, Pradhan BS, Majumdar SS, Chattopadhyay P, **Mukhopadhyay S**, Maity TK, Chaudhuri MK, Bhattacharya S. A Small Insulinomimetic Molecule Also

Improves Insulin Sensitivity in Diabetic Mice. **PLoS One**. 2017 Jan 10;12(1):e0169809.

32. Agarwal S, Chattopadhyay M, Mukherjee S, Dasgupta S, **Mukhopadhyay S**, Bhattacharya Fetuin-A downregulates adiponectin through Wnt-PPARγ pathway in lipid induced inflamed adipocyte. **Biochim Biophys Acta**. 2016 Oct 6;1863(1):174-181.

33. Mandala A, Das N, Bhattacharjee S, Mukherjee B, **Mukhopadhyay S**, Roy SS. Thioredoxin interacting protein mediates lipid-induced impairment of glucose uptake in skeletal muscle. **Biochem Biophys Res Commun**. 2016 Oct 28;479(4):933-939.

34. Ghosh AR, Bhattacharya R, Bhattacharya S, Nargis T, Rahaman O, Duttagupta P, Raychaudhuri D, Chen Liu CS, Roy S, Ghosh P, Khanna S, Chaudhuri T, Tantia O, Haak S, Bandyopadhyay S, **Mukhopadhyay S**, Chakrabarti P, Ganguly D. Adipose Recruitment and Activation of Plasmacytoid Dendritic Cells Fuel Metaflammation. **Diabetes**. 2016 Aug 25. pii: db160331.

35. Singha A, Saha S, Bhattacharjee R, Mondal S, Choudhuri S, Biswas D, Das SK, Ghosh S, **Mukhopadhyay S**, Chowdhury S. Deterioration Of Ovarian Function After Total Abdominal Hysterectomy With Preservation Of Ovaries. **Endocrine Pract**. 2016 Aug 19. [Epub ahead of print] PubMed PMID: 27540878.

36. **Mukhopadhyay S**, Bhattacharya S. Plasma fetuin-A triggers inflammatory changes in macrophages and adipocytes by acting as an adaptor protein between NEFA and TLR-4. **Diabetologia**. 2016 Apr;59(4):859-60. **Impact factor: 7.113.**

37. Bhattacharjee S, Das N, Mandala A, **Mukhopadhyay S**, Roy SS. Fenofibrate Reverses Palmitate Induced Impairment in Glucose Uptake in Skeletal Muscle Cells by Preventing Cytosolic Ceramide Accumulation. **Cell Physiol Biochem.** 2015;37(4):1315-28.

38. Basu M, Bhattacharya R, Ray U, **Mukhopadhyay S**, Chatterjee U, Roy SS. Invasion of ovarian cancer cells is induced byPITX2-mediated activation of TGF-β and Activin-A. **Mol Cancer**. 2015 Aug 23; 14:162.

39. Mrittika Chattopadhyay, Vineet Kumar Khemka, Gargi Chatterjee, Anirban Ganguly, **Satinath Mukhopadhyay**, Sasanka Chakrabarti. Enhanced ROS production and oxidative damage in subcutaneous white adipose tissue mitochondria in obese and type 2 diabetes subjects. **Mol Cell Biochem** (2015) 399:95–103.

40. Shivaprasad K, Kumar M, Dutta D, Sinha B, Mondal SA, Maisnam I, **Mukhopadhyay S**, Chowdhury S. Increased Soluble TNF Receptor-1 and Glutathione Peroxidase may Predict Carotid Intima Media Thickness in Females with Cushing's Syndrome. **Endocr Pract**. 2014 Nov 4:1-22. [Epub ahead of print].

41. Dutta D, Maisnam I, Selvan C, Ghosh S, **Mukhopadhyay S**, Chowdhury S. Role of parathyroid hormone estimation in needle washing of parathyroid aspiration biopsy in localising 99mTc-sestamibinegative primary hyperparathyroidism: a series of seventeen patients: Our experience. **Clin Otolaryngol.** 2014 Jun;39 (3):183-8.

42. Dutta D, Maisnam I, Shrivastava A, Sinha A, Ghosh S, Mukhopadhyay P, **Mukhopadhyay S**, Chowdhury S. Serum vitamin-D predicts insulin resistance in individuals with prediabetes. **Indian J Med Res.** 2013 Dec;138 (6):853-60.

43. **Mukhopadhyay S**, Mondal SA, Kumar M, Dutta D. Pro-inflammatory and anti-inflammatory attributes of fetuin-A: a novel hepatokine: modulating cardiovascular and glycemic outcomes in metabolic syndrome. Endocr Pract. 2014 Nov 4:1-18.

44. RH Jani, V Pai, P Jha, G Jariwala, **S Mukhopadhyay**, A Bhansali, S Joshi, A Multicenter, Prospective, Randomized, Double-Blind Study to Evaluate the safety and efficacy of Saroglitazar 2 and 4 mg Compared with Placebo in Type 2 Diabetes Mellitus Patients Having Hypertriglyceridemia not controlled with Atorvastatin Therapy (PRESS VI) **Diabetes technology & therapeutics.** 2014; 16 (2), 63-71.

45. D Dutta, SA Mondal, S Choudhuri, I Maisnam, S Chowdhury, **S Mukhopadhyay**, AHH Reza, B Bhattacharya. Vitamin-D supplementation in prediabetes reduced progression to type 2 diabetes and was associated with decreased insulin resistance and systemic inflammation: An open label randomized prospective study from Eastern India. **Diabetes research and clinical practice**, 2014; Mar; 103(3):18-23.

46. D Meher, D Dutta, S Ghosh, P Mukhopadhyay, S Chowdhury, **S Mukhopadhyay**.Effect of a mixed meal on plasma lipids, insulin resistance and systemic inflammation in non- obese Indian adults with normal glucose tolerance and treatment naïve type-2 diabetes, **Diabetes research and clinical practice.** 2014; Apr;104(1):97-102.

47. D Dutta, M Kumar, S Ghosh, **S Mukhopadhyay**, S Chowdhury. Pituitary hormone deficiency due to racemose Neurocysticercosis, **The Lancet Diabetes & Endocrinology** 2013; 1 (2), e13.

48. P Chatterjee, S Seal, S Mukherjee, R Kundu, **S Mukhopadhyay**, S Ray, S Bhattacharya. Adipocyte fetuin-a contributes to macrophage migration into adipose tissue and polarization of macrophages. **Journal of Biological Chemistry** 2013; 288 (39), 28324-28330.

49. D Dutta, S Choudhuri, SA Mondal, I Maisnam, AHH Reza, S Ghosh, **S Mukhopadhyay**. Tumor necrosis factor alpha− 238G/A (rs 361525) gene polymorphism predicts progression to type-2 diabetes in an Eastern Indian population with prediabetes. **Diabetes research and clinical practice.** 2013; Mar;99(3):e37-41.

50. S Choudhuri, D Dutta, IH Chowdhury, B Mitra, A Sen, LK Mandal, **S Mukhopadhyay**, B bhattarcharya. Association of hyperglycemia mediated increased advanced glycation and erythrocyte antioxidant enzyme activity in different stages of diabetic retinopathy. **Diabetes research and clinical practice**. 2013 Jun;100(3):376-84.

51. D Pal, S Dasgupta, R Kundu, S Maitra, G Das, **S Mukhopadhyay**, S Ray, S Bhattacharya. Fetuin-A acts as an endogenous ligand of TLR4 to promote lipid-induced insulin resistance. **Nature Medicine** 2012; 18 (8), 1279-1285. **Impact Factor: 22.864.**

52. M Chattopadhyay, I GuhaThakurta, P Behera, KR Ranjan, M Khanna, **S Mukhopadhyay**, S Chakrabarti. Mitochondrial bioenergetics is not impaired in nonobese subjects with type 2 diabetes mellitus. **Metabolism** 2011; 60 (12), 1702-1710.

53. S Dasgupta, S Bhattacharya, A Biswas, S Majumdar, **S Mukhopadhyay**, S Bhattacharya. NF-kappaB mediates lipid-induced fetuin-A expression in hepatocytes that impairs adipocyte function effecting insulin resistance. **Biochem**. J 2011; 429, 451-462.

54. P Ghosh, S K Saha, S Bhattacharya, S Bhattacharya, **S Mukhopadhyay**, S S Roy.

Tachykinin family genes and their receptors are differentially expressed in hypothyroid ovary and pituitary. **Cellular Physiology and Biochemistry** 2007; 20:357-368.

BOOKS, MONOGRAPHS

1. Chitra Selvan, **Satinath Mukhopadhyay.** Harnessing gut friendly microbiome to combat metabolic syndrome. In: Microbiome, Immunity, Digestive Health and Nutrition. Debasis Bagchi and Burnard Downs. Elsevier, 2021 (In Press).

2. **Satinath Mukhopadhyay**, Bidisha Mukherjee. In: Metal toxicology Encyclopedia: Differential impact of organic Vanadium compounds on human health. CRC Press, Taylor & Francis, USA 2020.

3. Lipid induced insulin resistance: molecular mechanisms and clinical implications. **Satinath Mukhopadhyay***, Deep Dutta and Dipyaman Ganguly. In: Nutritional and therapeutic interventions for diabetes and metabolic syndrome. Siba P. Raychaudhuri, Smriti K. Raychaudhuri, Debasis Bagchi (eds). CRC Press/ Taylor & Francis, USA-2018.

4. Psoriasis and Diabetes: An unholy alliance. **Satinath Mukhopadhyay***, Deep Dutta and Dipyaman Ganguly. In: Psoriasis and Psoriatic arthritis. Siba P. Raychaudhuri, Smriti K. Raychaudhuri, Debasis Bagchi (eds). CRC Press/ Taylor & Francis group, USA-2018. pp: 45-52.

5. **S Mukhopadhyay** et. al. Consensus Statement from the International Workshop on Types of Diabetes Peculiar to the Tropics, 17–19 October 1995, in Cuttack, India**.** In: JJ Hoet, BB Tripathy. **Acta Diabetologica** 1996; 33 (1), 62-64.