

Prof Hans Strijdom

Research Record and Outputs

Peer-reviewed journal articles:

1. **Strijdom JG**, Marais BJ, Koeslag JH. Ascorbic acid causes spuriously low blood glucose measurements. *SAMJ* 1993; 83: 64 – 65.
2. Marais E, Genade S, **Strijdom J**, Moolman J, Lochner A. Activation of p38 MAPK induced by a multi-cycle ischaemia preconditioning protocol associated with attenuated p38 MAPK activity during sustained ischaemia and reperfusion. *J Mol Cell Cardiol* 2001; 33: 769 – 778.
3. Marais E, Genade S, **Strijdom H**, Moolman J, Lochner A. P38 MAPK activation triggers pharmacologically-induced beta-adrenergic preconditioning, but not ischaemic preconditioning. *J Mol Cell Cardiol* 2001; 33: 2157 – 2177.
4. **Strijdom H**, Genade S, Lochner A. Nitric oxide synthase (NOS) does not contribute to simulated ischaemic preconditioning in an isolated rat cardiomyocyte model. *Cardiovasc Drugs Ther* 2004; 18(2): 99 – 112.
5. **Strijdom H**, Muller C, Lochner A. Direct intracellular nitric oxide detection in isolated adult cardiomyocytes: flow cytometric analysis using the fluorescent probe, diaminofluorescein. *J Mol Cell Cardiol* 2004; 37(4): 897 – 902.
6. **Strijdom H**, Jacobs S, Hattingh S, Page C, Lochner A. Nitric Oxide production is higher in rat cardiac microvascular endothelial cells than ventricular cardiomyocytes in baseline and hypoxic conditions: A comparative study. *FASEB J.* 2006; 20(2): 314-316.
7. Lampiao F, **Strijdom H**, Du Plessis S. Direct nitric oxide measurement in human spermatozoa: flow cytometric analysis using the fluorescent probe, diaminofluorescein. *International Journal of Andrology* 2006; 29(5): 564 - 567.
8. Esterhuysen J, Van Rooyen J, **Strijdom H**, Bester D, Du Toit E. Proposed mechanism for red palm oil induced cardioprotection in a hyperlipidaemic perfused rat heart model. *Prostaglandins Leukot Essent Fatty Acids* 2006; 75(6):375-84.
9. Lampiao F, **Strijdom H**, Du Plessis SS. Reactive oxygen species measurement in human spermatozoa by flow cytometry using the fluorescent probe, 2',7'-dichlorofluorescein-diacetate (DCFH-DA). *Medical Technology SA* 2006; 20(2): 7-8.
10. Du Toit EF, Smith W, Muller C, **Strijdom H**, Stouthammer B, Woodiwiss AJ, Norton GR, Lochner A. Myocardial susceptibility to ischemic-reperfusion injury in a prediabetic model of dietary-induced obesity. *Am J Physiol Heart Circ Physiol.* 2008 May; 294(5): H2336-43.
11. **Strijdom H**, Friedrich SO, Hattingh S, Chamane N, Lochner A. Hypoxia-induced regulation of nitric oxide synthase in cardiac endothelial cells and myocytes and the role of the PI3-K/PKB pathway. *Mol Cell Biochem* 2009; 321: 23-35.

12. **Strijdom H**, Chamane N, Lochner A. Nitric oxide in the cardiovascular system: A simple molecule with complex actions (Review). *Cardiovasc J Africa* 2009; 20(5): 303 – 310.
13. **Strijdom H**, Lochner A. Cardiac Endothelium: More than just a barrier (Review). *SA Heart* 2009; 6: 174 – 185.
14. Lampiao F, **Strijdom H**, Du Plessis SS. Effects of sperm processing techniques involving centrifugation on nitric oxide, reactive oxygen species generation and sperm function. *The Open Andrology Journal* 2010; 2: 1-5.
15. Veliotos DG, Norton GR, Correia RJ, **Strijdom H**, Badenhorst D, Brooksbank R, Woodiwiss AJ. Impact of Aldosterone Receptor Blockade on the Deleterious Cardiac Effects of Adrenergic Activation in Hypertensive Rats. *J Cardiovasc Pharmacol* 2010; 56: 203-211.
16. Huisamen B, Pêrel SJC, Friedrich SO, **Strijdom H**, Lochner A. AngII receptor antagonism improves nitric oxide production, eNOS and PKB expression in hearts from a rat model of insulin resistance. *Mol Cell Biochem* 2010; 349: 21-31.
17. Mudau M, Genis A, Lochner A, **Strijdom H**. Endothelial Dysfunction – the early predictor of atherosclerosis. *Cardiovasc J Africa* 2012; 23(4): 222-231.
18. **Strijdom H**. Endothelial Dysfunction: are we ready to heed the vasculature's early-warning signal? (Editorial). *Cardiovasc J Africa* 2012; 23(4): 184-185.
19. Kelly-Laubscher R, Burger G, Davies N, Engelbrecht AM, Sliwa K, **Strijdom H**, Hausenloy D, Lecour S. 2nd South Africa – United Kingdom cardiovascular workshop: Highlighting cardiovascular research in South Africa. *Cardiovasc J Africa* 2012; 23(10): 572-573.
20. Chellan N, Joubert E, **Strijdom H**, Roux C, Louw J, Muller CJF. Aqueous extract of unfermented Honeybush (*Cyclopia maculata*) attenuates STZ-induced diabetes and β -cell cytotoxicity. *Planta Medica* 2014; 80: 622-629.
21. Nduhirabandi, F, Huisamen B, **Strijdom H**, Blackhurst D, Lochner A. Short-term melatonin consumption protects the heart of obese rats independent of body weight change and visceral adiposity. *Journal of Pineal Research* 2014; 57(3): 317-332.
22. Espach Y, Lochner A, **Strijdom H**, Huisamen B. ATM protein kinase signaling, type 2 diabetes and cardiovascular disease. *Cardiovascular Drugs and Therapy* 2015; 29(1): 51-58.
23. **Strijdom H**, De Boever P, Nawrot TS, Goswami N. HIV/AIDS: emerging threat to cardiovascular health in sub-Saharan Africa. *S Afr Med J* 2016; 106(6): 537.
24. Truter D, **Strijdom H**, Everson F, Kotzé SH. Mucin secreting cells in the stomach and colon are altered by combination antiretroviral treatment in an obese rat model. *Acta Histochem.* 2017; 119(2): 122-128.

25. Westcott C, Genis A, Mthethwa M, Graham R, Van Vuuren D, Huisamen B, **Strijdom H**. Fenofibrate protects against the harmful effects of TNF-alpha. *SA Heart*. 2017; 14: 22-34.
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27. Nduhirabandi F, Huisamen B, **Strijdom H**, Lochner A. Role of melatonin in glucose uptake by cardiomyocytes from insulin resistant wistar rats. *Cardiovasc J Africa*. 2017; 28: 1-9.
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29. Oyeyipo IP, Skosana BT, Everson FP, **Strijdom H** and Du Plessis SS. Highly active antiretroviral therapy alters sperm parameters and testicular antioxidant status in diet-induced obese male Wistar rats. *Toxicol Res*. 2017; 34(1): 1-8.
30. Thomas M, Davis T, Loos B, Sishi B, Huisamen B, **Strijdom H**, Engelbrecht AM. Autophagy is essential for the maintenance of amino acids and ATP levels during acute amino acid starvation in MDAMB231 cells. *Cell Biochem Funct*. 2018; 36: 65-79.
31. Truter D, Chellan N, **Strijdom H**, Webster I, Rawstorne J, Kotzé SH. Histomorphological changes in the pancreas, liver and kidney in male Wistar rats on antiretroviral therapy and melatonin treatment. *Acta Histochem*. 2018; 120(4): 347-355.
32. Everson FP, Genis A, Ogundipe TR, De Boever P, Goswami N, Lochner A, Blackhurst D, **Strijdom H**. Treatment with a fixed dose combination antiretroviral therapy drug containing tenofovir, emtricitabine and efavirenz is associated with cardioprotection in high calorie diet-induced obese rats. *PLoS ONE*. 2018; 13(12): e0208537. <https://doi.org/10.1371/journal.pone.0208537>
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35. Katoto PDMC, Byamungu L, Brand AS, Mokaya J, **Strijdom H**, Goswami N, De Boever P, Nawrot TS, Nemery B. Ambient Air Pollution and Health in Sub-Saharan Africa: Current Evidence, Perspectives and a Call to Action. 2019. *Environ Res.* 2019; 173: 174-188. DOI: 10.1016/j.envres.2019.03.029
36. Everson F, De Boever P, Nawrot TS, Goswami N, Mthethwa M, Webster I, Martens DS, Mashele N, Charania S, Kamau F, **Strijdom H**. Personal NO₂ and volatile organic compounds exposure levels are associated with markers of cardiovascular risk in women in the Cape Town region of South Africa. *Int. J. Environ. Res. Public Health.* 2019; 16(13): 2284. DOI: 10.3390/ijerph16132284.
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41. Fourie CMT, Botha-Le Roux S, Smith W, Schutte AE, Breet Y, Mels CMC, Gafane-Matemane L, Lammertyn L, Uys L, Burger A, Joseph JS, Goswami N, De Boever P, **Strijdom H**. Vascular function and cardiovascular risk in a HIV infected and HIV free cohort of African ancestry: Baseline Profile and Rationale of the Longitudinal EndoAfrica-NWU Study. *BMC Infect. Dis.* 2020; 20: 473. DOI: 10.1186/s12879-020-05173-6.
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46. Swart C, Fourie CMT, De Boever P, Goswami N, Lammertyn L, **Strijdom H**, Kamau F, Botha-Le Roux S. Comparison of endothelial function and cardiometabolic profiles of people living with HIV in two South African regions: the EndoAfrica study. *Cardiovasc J Africa.* 2021; 32: 1-6. DOI: 10.5830/CVJA-2021-026. Epub ahead of print.
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53. Cunningham C, Bolcaen J, Bisio A, Genis A, **Strijdom H**, Vandevoorde C. Recombinant Endostatin as a Potential Radiosensitizer in the Treatment of Non-Small Cell Lung Cancer. *Pharmaceuticals.* 2023; 16: 219.

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