

Centre of Excellence in Ayurveda for Diabetes and Metabolic Disorders opens at Indian Institute of Science, Bengaluru

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Centre of Excellence will collaborate with leading institutions in India with expertise in Ayurveda, diabetes, and medical research



Prime Minister Narendra Modi recently launched a Centre of Excellence (CoE) in Ayurveda for Diabetes and Metabolic Disorders at the Indian Institute of Science (IISc), Bengaluru.

The Centre of Excellence will collaborate with leading institutions in India with expertise in Ayurveda, diabetes, and medical research. These partnerships will facilitate interdisciplinary research, knowledge sharing, and the translation of research findings into real-world clinical practice.

As a part of this CoE, a randomised active comparator controlled clinical trial will be conducted, with a longitudinal study over two years, to assess the efficacy of two new Ayurvedic formulations (Mustadi Ghana Vati and Varadi Ghana Vati) in prediabetes and Type II diabetes. The enrolment of subjects has just begun, after completing due processes of ethics committee approval, registration of study on the Clinical Trial Registry of India (CTRI), and constitution of the Data Safety Monitoring Board (DSMB).

In conjunction with the clinical trials, systematic in vitro (cell lines and animal models) and in vivo (blood samples of participants) studies will be pursued to understand the cellular and molecular mechanisms of protein glycation and oxidation (through mass spectroscopy), the role of different adipose tissues (brown, white, beige), and response to therapy. In addition, finger printing of Ayurvedic formulations and identification of potential active molecule/species will also be assessed through exhaustive chemical analysis.

The CoE is led by PI Navakanta Bhat, Professor at the Centre for Nano Science and Engineering (CeNSE), IISc, and co-PI Sona Rajakumari, Assistant Professor, Department of Developmental Biology and Genetics (DBG). "The CoE aligns very well with the future vision of establishing a very strong programme of integrative medicine at the IISc post graduate medical school. This study builds on our prior work on albumin glycation and oxidation," says Bhat.

“This would perhaps be the first such comprehensive study on the interplay between Ayurvedic therapy and reprogramming of adipose tissue function,” adds Rajakumari.