#### Ayurveda Mobile Health Care Project (Scheduled Caste Sub Plan)

The institute conducts outreach clinical research programmes with public health orientation for Scheduled Caste population. SCSP team has reached out to more than 50,000 population and 30,000 patients were treated in selected 36 villages through about 1000 tours from 2015 till December 2021. The following projects have been taken up under this

- 1. Profiling of demographic, health status and non communicable diseases among scheduled caste population in selected states across india- A descriptive, cross sectional epidemiological study.
- 2. A prospective community based study for the evaluation of punarnavadi mandura in anemia (pandu).
- 3. Effectiveness of Ayurveda based diet and lifestyle advocacy on health related quality of life in schedule caste population in india- a community based, cluster randomized controlled study.

### **Drug standardization Research Unit (DSRU)**

The DSRU involves in laying down phytochemical and pharmacopoeial standards for single drugs and compound formulations (plant/animal/ mineral origin), adopting and evaluating the methods of manufacture in Ayurveda and conduct physico-chemical studies for identification of quality and purity of the drugs/their substitutes and adulterants, pharmacognostical studies for correct identification of drugs/ their substitutes and adulterants and laying down modified methods to be adopted for standardization for inclusion in the API and for CCRAS Monograph work as directed by the CCRAS from time to time. The unit completed Pharmacognosy studies of 335 single and polyherbal medicinal formulations, phytochemical evaluation of 284 single medicinal herbs, powder microscopy and thin layer chromatography studies on 39 medicinal formulations, chemical evaluation of 45 medicinal formulations of animal origin and phytochemical analysis of 210 finished products.

### **Survey of Medicinal Plants**

The Survey of Medicinal Plants Unit (SMPU) is involved in conduct of Ethno-Medico-Botanical Survey in forest Divisions. The unit also carries out collection and supply of crude drug material, food grains and vegetables for research purposes, documentation of folklore information, preparation and maintenance of herbarium & museum and identification and authentication of plant materials and Ayurvedic crude drugs. It is acting as a pivot in implementation of various National schemes in promotion of the science. Since inception, 33,798 specimens have been collected during the Survey of different regions not only in Karnataka but also in Andaman Nicobar, Arunachal Pradesh, Tamil Nadu and Madhya Pradesh.





### **Completed Research Projects**

Compendium of cereals and pulses of selected plants

#### **Ongoing Projects**

- 1. Development of compendium of oil seeds of selected plants
- 2. Development of micro forest of medicinal plants by using miyawaki method of plantation
- 3. Establishment of nursery for cultivation, conservation and sustainable utilization of medicinal plants

#### Centre of excellence in Madhumeha (Diabetes)

In recognition of its contribution in patient care and research, the Ministry of AYUSH, Govt. of India has awarded "Centre of excellence (CoE) for research and clinical services in Madhumeha (Diabetes)" to CARI, Bengaluru in the year 2020-21. The main objectives of the scheme are

- 1. Development of comprehensive document on "Ayurvedic guideline for prevention and management of diabetes mellitus"
- 2. Prevention and management of diabetes mellitus with multi-specialty approach
- 3. Validation of Ayurveda approaches for diabetes mellitus
- 4. Validation of Ayurveda dietetics and development of ready to cook/ready to eat food for diabetes
- 5. Technical collaboration with reputed organisations
- 6. Capacity building for Ayurveda research in diabetes
- 7. To obtain NABH
- 8. To introduce e-healthcare initiatives for prevention and management of diabetes
- The Institute is open for any research or academic endeavors by like-minded institutions, hospitals, researchers, academicians, students and the industry.







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गयवेट अनसंधान संस्थान



# **Central Ayurveda Research Institute**

# 12. Uttarahalli Manavarthe Kaval, Uttarahalli (Hobli), Bangalore South (Tg.) Kanakapura Road, Valley School Road, Bengaluru-560109 E-mail:nadri-bengaluru@gov.in /nadri.bengaluru1@gmail.com Ph.: 080-29535034 (Off) / 29635035 (Hosp) Website: www.cari.gov.in / www.ccras.nic.in

Timings: Office: 9.30am to 4.30pm, Hospital: 9.00am to 1.00 pm on all working days











# **CENTRAL AYURVEDA RESEARCH INSTITUTE** Bengaluru

**Centre of excellence for Madhumeha (Diabetes) Central Council for Research in Ayurvedic Sciences** Ministry of AYUSH, Govt. of India



#### Background

Central Ayurveda Research Institute (CARI) Bengaluru established as Regional Research Centre in 1971 was subsequently known as Regional Research Institute, National Dietetics Research Institute and Regional Ayurveda Research Institute for Metabolic Disorders before its upgradation as CARI in 2020. In recognition of its contribution in patient care and research, the Ministry of AYUSH, Govt. of India has awarded "Centre of Excellence for Madhumeha (Diabetes)" to the Institute. It is one of the peripheral pharmacovigilance centers for monitoring and reporting adverse drug reactions and misleading advertisements related to Ayurveda, Siddha & Unani drugs.

The institute has signed MOU for research collaboration with reputed organisations such as IISc Bengaluru, NIMHANS Bengaluru, Bangalore Medical College, ICMR-National Institute of Traditional Medicine, Belagavi, Jawaharlal Nehru Medical College, Belagavi, Sri Devaraj Urs Medical College, Kolar, University of Trans-Disciplinary Health Sciences and Technology, Bengaluru, KLE Ayurveda Mahavidyalaya and Research Centre, Belagavi and SDM College of Ayurveda, Hassan.

#### Vision & Mission

To develop scientific evidence on Ayurvedic principles, drugs and therapies by integrating ancient wisdom with modern technology and to bring Ayurveda to the people through innovations related to diagnostics, preventive, promotive as well as treatment methods and also to introduce scientific methods for sustained availability of quality natural resources to translate them into products and processes in synergy with concerned organizations.

#### Mandate

To conduct Clinical Research focusing on metabolic disorders, Ayurveda dietetics, health care services, outreach activities such as tribal health care research, scheduled caste sub plan, medico-ethno-botanical survey, drug standardization and any other assignment of national importance related to Research & Development in Ayurveda.

#### Activities

The Institute has three main divisions.

1. Clinical Research Unit (CRU)

2. Drug Standardization Research Unit (DSRU)

3. Survey of Medicinal Plants Unit (SMPU)

Scientists from varied disciplines work here with a focused aim of scientific validation of Ayurveda. The institute has completed more than 30 research projects, published about 500 scientific articles/ monographs/ book reviews. The scientists of the institute have made about 1000 scientific presentations and received accolades. Sixteen PhD and one DSc degrees have been awarded through Mysore University. Short term training programmes in basics of medicinal plant botany, pharmacognosy and chemistry are organized regularly. The Institute has a reference library, herbarium and a museum. The herbarium is recognized with an acronym "RRCBI" by intellectual body of Netherlands.



CARI hospital is well equipped to provide free consultations by Ayurveda, modern medicine and yoga specialists, Ayurveda medicines, laboratory services, Panchakarma, Marma & Yoga therapies to the public. All these services are free for BPL families and nominal central govt. charges are applicable for others. The campus also has the provision for 28 bedded IPD facility. In addition, risk assessment for diabetes, free consultation for high risk /pre-diabetes / diabetes, integrated healthcare services, life style guidelines, cooking classes, information about medicinal plants and home remedies, patient transportation services, free books/ pamphlets on prevention and management of diabetes are available under the CoE scheme.

#### Clinical Research Unit

In addition to providing health care services, presently there are more than 20 clinical ongoing studies in collaboration with reputed institutions. During the Covid 19 pandemic our warriors have provided services in Karnataka and documented the outcome.



### **Completed Clinical Research Projects**

Diabetes, osteoarthritis, osteopenia / osteoporosis, malnutrition, sciatica, hypertension, haemorrhoids, anxiety neurosis, bronchial asthma, anaemia, vector born/infectious disease, dysmenorrhea, Rasayana in healthy elderly, obesity, quality of life in non-metastatic breast cancer, dengue fever, urolithiasis, allergic conjunctivitis, transcription of Ayurveda/medical palm leaf manuscripts and rare books, Swasthya Rakshana Programme under Swachh Bharat, AYUSH preventive measures in covid-19, systematic review on glaucoma.

#### Ongoing Clinical Research Projects

- 1. A prospective open labeled observational study to document the potential safety issues and prescription trends in selected rasaushadhis in CCRAS-OPD's across India
- 2. An open label clinical trial to evaluate clinical efficacy and safety of Ayush AGT in dandruff
- 3. Clinical evaluation of Vidanga Churna and Vyoshadi Guggulu in the management of medoroga (obesity) under annual action plan 2018-19
- 4. Tribal health care research programme (THCRP)
- 5. Ayurveda mobile health care project- SCSP (Scheduled Caste Sub Plan)
- 6. Randomised placebo controlled, double blind clinical trial to evaluate the effect of Trikatu in subclinical hypothyroidism
- 7. AYUSH hospital management information system (A-HMIS)

### **Collaborative Projects**

- add on therapy to metformin
- kasa, shwasa and jwara
- clinical study
- in healthy humans
- study

## Projects funded by Ministry of AYUSH

17. Centre of excellence in madhumeha (diabetes) 18. National pharmacovigilance program



## **Outreach Programmes Tribal Health Care**

The institute conducts outreach clinical research programmes with public health orientation for tribal population. Tribal Health Care Research Project was initiated in the year 2014 and THCRP team has reached out to 50,000 tribal population and 20,000 patients were treated through house hold survey and medical camps were conducted in 143 villages till December 2021.

8. A randomized placebo controlled prospective phase-2 clinical study of an Ayurvedic coded drug 'AYUSH D' on glycemic control in prediabetic subjects

9. A randomized placebo controlled phase -2 clinical study of an ayurvedic coded drug 'AYUSH D' in the management of type 2-diabetes mellitus as

10. A collaborative double blind double dummy prospective randomized controlled research project on classical Avurveda management versus methotrexate in rheumatoid arthritis (AMRA Study)

ll. Validation and reliability testing of diagnostic methods in Ayurveda in

12. Evaluation of AYUSH GMH in subjects of mild to moderate nonalcoholic fatty liver disease (NAFLD)-a double blind randomized controlled

13. Systems biology approach to delineate molecular signatures of prakriti

14. Ayurveda therapeutic regimen as on add- on to optimized conventional management of Parkinson's disease: an RCT for assessment of clinical, cortical excitability neuro immune and autonomic function parameters

15. Evaluation of hepatoprotective activity of PTK as an add on therapy in the patients of tuberculosis on ATT - a double blind randomized control clinical

16. Evaluating the efficacy of Avurvedic intervention as add on to conventional treatment and explore the interaction of epigenetics, neuro/gut biomarkers and neuro imaging in paediatric ADHD

