### GOVERNMENT OF INDIA MINISTRY OF AYUSH

### LOK SABHA UNSTARRED QUESTION NO. 4091 TO BE ANSWERED ON 24<sup>TH</sup> MARCH, 2023

#### RESEARCH IN AYURVEDIC FIELD

#### † 4091. SHRI SUDARSHAN BHAGAT:

Will the Minister of **AYUSH** be pleased to state:

- (a) whether a huge quantum of research is being done in the Ayurvedic field in the country during last five years;
- (b) if so, the details thereof; and;
- (c) if not, the reasons thereof?

# ANSWER THE MINISTER OF AYUSH (SHRI SARBANANDA SONOWAL)

(a) & (b) Central Council for Research in Ayurvedic Sciences (CCRAS), an Autonomous Organization under Ministry of Ayush is undertaking, co-ordinating, formulating, developing and promoting research on scientific lines in Ayurvedic sciences. The activities are carried out through its 30 Institutes/Centres/Units located all over India and through collaborative studies with various Universities, Hospitals, and Institutes. The Council conducts research in the diverse areas comprising of Clinical Research, Plant Research, Medicinal Drug Standardization & Quality Control: Pharmacological Research and Literary & Fundamental Research to generate tangible evidence. The Council has also completed 68 clinical research projects during last 5 years as per Annex-I.

Institute of Teaching and Research in Ayurveda (ITRA), Jamnagar; National Institute of Ayurveda (NIA), Jaipur and All India Institute of Ayurveda, (AIIA) New Delhi offer postgraduate degree programs in different specialties of Ayurveda. These institutes also offer research degree of PhD. National Institute of Ayurveda has completed 1328 research projects. 451 research projects are ongoing.

The Ministry of Ayush is also running/implementing the Central Sector Scheme namely Ayurgyan Scheme having two components, i.e. (i) Capacity Building & Continuing Medical Education (CME) in Ayush (ii) Research & Innovation in AYUSH from the FY 2021-22. The main aim of the Ayurgyan Scheme is to support Research & Innovation in Ayush by Extra Mural Research and Education by providing academic activities, training, Capacity Building

etc. The scheme is being implemented throughout the country. Under the Scheme, financial assistance is provided to the Organizations/ Institutions for research studies as per the provisions contained in the scheme guidelines, for promotion of Ayush research and to support research & Innovation in Ayush. 85 projects have been sanctioned under the scheme from the FY. 2018-19 to 2022-23 (so far). Details are at Annex-II.

The Ministry is also funding the projects under Centre of Excellence component of Ayurswasthya Yojana for research activities on Ayurveda. 13 projects have been sanctioned from the FY. year 2020-21 to FY. 2022-23 (so far). Details are at Annex -III

(c) Does not arise.

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#### Completed Clinical projects from 2017-18 to 2021-22

- 1. Clinical evaluation of Parthadyarishtha (Arjunaristha) and Sarpagandha Vati in the management of Essential Hypertension (Uccha Raktachaap)
- 2. Clinical evaluation of Rudraksha Churna in the management of Essential Hypertension (Uccha Raktachaapa)
- 3. Clinical evaluation of Vyoshadi Guggulu and Panchasama Churna in Amavata (Rheumatoid Arthritis)
- 4. Clinical Evaluation of the Efficacy and Safety of Mamajjaka Ghanavati in Madhumeha (Type 2-Diabetes)
- 5. Clinical Evaluation of Shirodhara with Amalaki Kwath in the Patients of Anxiety Neurosis
- 6. Comparative Observation on changes in Serum Lipid Profile in patients undergoing Snehana with pure Ghee in one group and Mahatiktak ghrita in other group
- 7. Effect of Sankara Sweda with Kolakulatthadi Churna heated in Dhanyamla, Simhanada Guggulu with Rasna Saptak Kashaya in Rheumatoid Arthritis wrt pain and stiffness
- 8. Evaluation of the Effect of Upanaha treatment with Vachadi upanaha churna in Osteoarthritis (OA Knee) wrt pain and stiffness of joints (RFD)
- 9. Evaluation of the effect of Jambeera Pinda Sweda in Cervical Spondylosis w.r.t. Clinical Symptomatology
- 10. Evaluation of changes in serum electrolyte level (na, k etc.) after Virechan karma with Erandataila
- 11. Clinical evaluation of efficacy of Panchtiktaguggulu Ghrita and Brihanmarichadya Taila in the management of Psoriasis w. s. r. to Pathya-apathya
- 12. Clinical evaluation of Goksura churna and Sveta parpati in the Management of Mutrasmari (Urolithiasis)
- 13. Clinical evaluation of efficacy of Khadirarishta and Kanchanara guggulu in the management of Uterine Fibroid An exploratory study
- 14. Clinical evaluation of Punarnava Guggulu and Rasna Saptaka Kashaya in the management of Rheumatoid Arthritis (Amavata)
- 15. A Clinical evaluation of Triphala Guggulu and Kasisadi Taila in the management of Arsha (Haemorrhoids)
- 16. Therapeutic evaluation of Rasnadi Gutika and Chandrakala lepa in Janusandhigata vata (Osteoarthritis)
- 17. Clinical evaluation of Kaishore Guggulu and Madhusnuhi Rasayana in the management of Gout (Vatarakta)
- 18. Clinical evaluation of Abhadya Churna and Muktashukti Bhasma in the management of Osteopenia / Osteoporosis (Asthikshaya)
- 19. Clinical evaluation of Laksha Guggulu and Muktashukti Bhasma in the management of Osteopenia/Osteoporosis
- 20. Clinical Evaluation of Certain Ayurvedic Formulations In The Management of Sthoulya (Obesity)
- 21. Clinical evaluation of Mandura vataka in the management of Pandu (Iron deficiency Anaemia)

- 22. Clinical evaluation of Sukumara Ghritam and Brahmi churnam in the management of Menopausal syndrome
- 23. Clinical evaluation of Kalyanak Ghrita in the management of Cognitive Deficit (Smriti Daurbalya)
- 24. Clinical evaluation of the efficacy of Trayodashanga Guggulu, Maharasnadi Kwatha and Prasarani Taila in the management of Gridhrasi (Sciatica)
- 25. Clinical Evaluation of Rasnadi Kvatha churna (Maha), Trayodashanga Guggulu and Brihatsaindhavadya Taila in the Management of Osteoarthritis of Knee (Janugata Sandhivata)
- 26. Assessment of therapeutic efficacy and safety of Sitopaladi Churna with Madhu in the management of Kasa (Stable Chronic Bronchitis)
- 27. Clinical efficacy of Talisadi Churna in the management of Kasa (Stable Chronic Bronchitis)
- 28. Clinical evaluation of Haridrakhand and Triphala Kwath in the management of chronic Allergic Conjunctivitis (Kaphaja Abhishyanda)
- 29. A Pilot Evaluation of Safety and Efficacy of an Ayurvedic Formulation (AYUSH-64) for accelerating the recovery in cases of Influenza like Illness.
- 30. Clinical evaluation of Panchamrit Lauha Guggulu and Panchgunataila in the management of Cervical Spondylosis (Greevagraha)
- 31. Clinical Evaluation of Ayurvedic formulations in the management of Parikartika (Fissure in Ano)
- 32. Clinical Evaluation of Kantakaryavaleha and Eladi Gutika in the Management of Mild Stable Bronchial Asthma (Tamaka Shwasa)
- 33. Clinical evaluation of AYUSH-PE eye drops in the management of Acute Allergic Conjunctivitis.
- 34. Clinical evaluation of an Ayurvedic formulation in the management of Allergic Rhinitis-a pilot study
- 35. Clinical evaluation of Sapthasaram Kashayam & Saraswatharishtam in the management of Primary Dysmenorrheoa- An Exploratory study
- 36. Clinical Evaluation of Efficacy of Indukanta Ghrita and Trayodashang Guggulu in the Management of Rheumatoid Arthritis vis –a–vis Amavata
- 37. Clinical Evaluation of Eladi Churna and Draksharishta in the management of Kasa (Stable Chronic Bronchitis)
- 38. Clinical evaluation of the efficacy of Pushyanug Churna in the management of Sweta Pradara w.r.t. Bacterial Vaginosis (Leucorrhoea)
- 39. Clinical Study on Efficacy and Safety of an Ayurvedic Formulation Kutajavleha in the management of Grahani Roga
- 40. Clinical evaluation of Svadamshtradi Kashaya and Hajarulayahuda Bhasma in the Management of Mutrashmari (Urolithiasis)
- 41. Clinical evaluation of Drakshasava in the management of Pandu (Iron Deficiency Anaemia)
- 42. Clinical evaluation of Shadbindu Taila Nasya and Chitraka Haritaki in the management of Pinasa (Chronic Rhinosinusitis)
- 43. Clinical evaluation of Pathyadi Kwatha and Anu Taila Nasya in the management of Ardhavabhedaka (Migraine).
- 44. Clinical evaluation of the efficacy of Pushyanuga Churna and Usheerasava in the management of Abnormal Uterine Bleeding.

- 45. Clinical evaluation of Jatiphaladya Churna & Chitrakadi Gutika in the management of Grahani
- 46. Clinical evaluation of Panchatikta Ghrita and Gandhakadya Malahara in the management of Vicharchika (Eczema)
- 47. Clinical Evaluation of Chitraka Haritaki and Lavangadi Vati in the management of Kaphaj Kasa (Stable Chronic Bronchitis)
- 48. Clinical evaluation of Agashtya Haritaki Rasayana and Apamarga Kshara in the management of Mild Stable Bronchial Asthma (Tamaka Shwasa)
- 49. Clinical efficacy of Kaishore Guggulu and Balaguduchyadi Taila in the management of Gout (Vatarakta)
- 50. Clinical evaluation of the efficacy of Soubhaya Shunthi Paka and Dashmularishta in Sutika Paricharya (Post Natal Care)
- 51. Clinical evaluation of Drakshavaleha in the management of Pandu (Iron Deficiency Anaemia)
- 52. Clinical evaluation of Shatavari Guda and Ashokarishta in the management of Asrigdara (Abnormal Uterine Bleeding)
- 53. A Prospective open labelled observational study to document the potential safety issues and prescription trends in Selected Rasausadhi's in CCRAS -OPD'S across India.
- 54. Clinical Evaluation of Shirodhara with Amalaki Kwath in the Patients of Anxiety Neurosis
- 55. Comparative Observation on changes in Serum Lipid Profile in patients undergoing Snehana with pure Ghee in one group and Mahatiktak ghrita in other group
- 56. Effect of Sankara Sweda with Kolakulatthadi Churna heated in Dhanyamla, Simhanada Guggulu with Rasna Saptak Kashaya in Rheumatoid Arthritis wrt pain and stiffness
- 57. Evaluation of the Effect of Upanaha treatment with Vachadi upanaha churna in Osteoarthritis (OA Knee) wrt pain and stiffness of joints (RFD)
- 58. Evaluation of the effect of Jambeera Pinda Sweda in Cervical Spondylosis w.r.t. Clinical Symptomatology
- 59. Evaluation of changes in serum electrolyte level (na, k etc.) after Virechan karma with Erandataila
- 60. Observation on Fistula cutting Time with Ksharsutra used in routine patients of Anorectal Fistula (Bhagandara)

### Clinical Collaborative projects during last five year

- 1. Clinical study of 'AYUSH Rasayana A & B' in Elderly subjects with AIIMS, New Delhi & BHU, Varanasi;
- 2. Development of Bio-medical instrumentation for Ksharasutra chamber for preparation of standardized Ksharasutra with IIT, New Delhi
- 3. Validation of Prakriti Assessment Questionnaire/Scale with reputed organizations have been completed
- 4. A Randomized Placebo Controlled Prospective Phase II Clinical Study of an Ayurvedic Coded Drug 'AYUSH-D' on Glycemic control in Pre-Diabetic Subjects

- 5. A Randomized Placebo Controlled Phase II Clinical Study of an Ayurvedic Coded Drug 'AYUSH-D' in the management of Type 2 Diabetes Mellitus as add on Therapy to Metformin
- 6. Multi-centric Collaborative Double Blind study on clinical evaluation of AYUSH-SL in chronic Filarial Lymphoedema in patients receiving mass drug administration
- 7. Controlled Clinical Trial to assess the effectiveness of topical application of C1 herbal oil on superficial external wound and spilt thickness skin graft donor's site for surgical wound healing
- 8. Evaluation of Add on Efficacy & Safety of an Ayurvedic coded Formulation in the management of Dengue Fever & Prevention of its complications –A Double Blind Clinical Study

### Ayurveda Research projects under erstwhile EMR scheme in Financial Year 2018-19

Alzheimer disease"  2 "Validation of safety, Efficacy and Quality and Preparation of Drug	Parkinson and		
	"Potential anti-oxidant effect of selected Ayurvedic herbs in Parkinson and Alzheimer disease"		
kashyam"	"Validation of safety, Efficacy and Quality and Preparation of Drug Master File of Classical Ayurvedic Formulation Vasaguduchyadi Kashayam and Katakakhadioradi kashyam"		
3 "Cytotoxic, antitumor and anti-angiogenesis evaluation of Cow Uribased medicinal plant extract against Ehrlich ascites cells bearing mo	"Cytotoxic, antitumor and anti-angiogenesis evaluation of Cow Urine (Go-mutra) based medicinal plant extract against Ehrlich ascites cells bearing mouse"		
4 "The neuroprotective effect of herbal extracts derived from Allium ceretinal ganglion cells (RGC) damage"	"The neuroprotective effect of herbal extracts derived from Allium cepa in mouse of retinal ganglion cells (RGC) damage"		
	"An experimental approach towards Bone marrow and microenvironment in Leukemia by using Ashwagandha (withania somifera) and Bhringaraj (Eclipta alba):		
6 "A Randomized Controlled Trial to assess the efficacy of Gut Th Chikitsa) for managing Dysbiosis in children with Autism"	"A Randomized Controlled Trial to assess the efficacy of Gut Therapy (Koshta Chikitsa) for managing Dysbiosis in children with Autism"		
7 "Evaluation of Novel Pharmacological Agents in Arjuna and Tulsi in Pulmonary Artery Hypertension in Rats"	"Evaluation of Novel Pharmacological Agents in Arjuna and Tulsi in Experimental Pulmonary Artery Hypertension in Rats"		
	"Antimicrobial Efficacy and Mechanisms of Herbal Extracts Fractions (Traditional Herbal Tooth Powder Formula) on Biofilm Forming Cariogenic Microorganisms"		
pathological variables in patients of Diabetic Nephropathy stage	"Prospective parallel group open label study to assess the changes in clinic-pathological variables in patients of Diabetic Nephropathy stage III receiving Ayurvedic Treatment Regimen (ATR) versus those not receiving Ayurvedic Treatment Regimen (ATR)"		
10 "A Randomized Open Label Controlled Prospective Phase II Clir HaridraChurna on Glycemic control in Pre-diabetic subjects"	nical Study of		
	The neuroprotective effect of herbal extracts derived from Allium cepa in mouse of		
12 "Evaluation of Role of Withania somnifera and Celastras punicula Models of Alcohol Addiction"			
	"Anti-migratory role of black seed extract (thymoquinone) nanoparticle in triple negative breast cancer cells: Evaluation of Molecular mechanisms via miRNA axis"		
"Preclinical studies on Triphala for its Possible effects in treatment of complications of Diabetes"	"Preclinical studies on Triphala for its Possible effects in treatment of Microvascular complications of Diabetes"		
"To study the antitumour potential of Pashaanbhela, Punarnava, G Badra on the human urothelial cell carcinoma (UCC) cell lines"	"To study the antitumour potential of Pashaanbhela, Punarnava, Gokshura, and Badra on the human urothelial cell carcinoma (UCC) cell lines"		
16 "Effect of Classical Ayurvedic management in PCOS"	"Effect of Classical Ayurvedic management in PCOS"		
17 "Effect of Indian Almond and sweet almond in diabetes induced ne cataract in rats"	phropathy and		
18 "Evaluation of Antiviral Activity of Medicinal Plant Extracts Again Virus"	"Evaluation of Antiviral Activity of Medicinal Plant Extracts Against Influenza A Virus"		

Ayurveda Research projects under erstwhile EMR scheme in Financial Year 2019-20

Sl. No.	Title of the project		
1	"Evaluation of the effect of Triphala and Trimad for their effect on adipocyte biology and lipid metabolism"		
2	"Evaluation of radio protective potential of medicinally important Indian bamboo plants in cancer"		
3	"Evaluation of Ashtangahridayokta Brihatyadigana for their efficacy in preclinical model of Acute Renal Failure in Rats'"		
4	"Toxicity evaluation of Ayurvedic herbo-metallic preparations"		
5	"An experimental approach towards Bone marrow and microenvironment in Leukemia by using Ashwagandha (Withania somifera) and Bhringaraj (Eclipta alba): Two candidate inhibitors of Hedgehog and NF-kB pathways"		
6	"Search for novel Anti-cataract agents: phytochemical and pharmacological investigation of unexplored medicinal plants of Chhattisgarh state"		
7	"Effect of Ayurveda Nootropics on Cognitive Function in breast cancer patients on adjuvant chemotherapy: A randomized controlled trial"		
8	"Evaluation of the heavy metals content in market samples of plant raw drugs used in Ayurveda"		
9	"Safety Evaluation of two Important Herbo-Mineral Formulations (Gandhaka Rasayana and MahavatVidhwansan Rasa) used in Ayurvedic practice"		
10	"Effect of oral administration of Kalyankaghritamin pediatric spastic cerebral palsy"		
11	Experimental and Clinical Studies on Nagapheny (Opuntia elatior mill) an anukta dravya (extra pharmocopial drug with special reference to its haematinic activity		
12	Evaluation of 'Trifala' as an anti-diabetic drug in human type II diabetes mellitus and diabetic complications		
13	Cytotoxic, antitumor and anti-angiogenesis evaluation of Cow urine (Go-mutra) based medicinal plant extract against Ehrlich ascites cells bearing mouse		
14	Evaluation of Antiviral Activity of Medicinal Plant Extracts Against Influenza A Virus		
15	An Experimental & Clinical studies to evaluate the Anti-osteoporotic effect of Panchtikta Ghrita		

## Ayurveda Research projects under erstwhile EMR scheme in Financial Year 2020-21

Sl. No.	Title of the project	
1	Evaluation of radio protective potential of medicinally important Indian bamboo plants in cancer	
2	Anti-migratory role of black seed extract (thymoquinone) nanoparticle in triple negative breast cancer (TNBC) cells: Evaluation of Molecular mechanism via miRNA axis	
3	Prospective parallel group open label study to assess the changes in clinic-pathological variables in patients of Diabetic Nephropathy stage III receiving Ayurvedic Treatment Regimen (ATR) versus those not receiving Ayurvedic Treatment Regimen (ATR)	
4	A Randomized Open Label Controlled Prospective Phase II Clinical Study of HaridraChurna on Glycemic control in Pre-diabetic subjects	

5	Potential anti-oxidant effect of selected Ayurvedic herbs in Parkinson and		
	Alzheimer disease		
6	An Experimental & Clinical studies to evaluate the Anti-osteoporotic effect of		
	Panchtikta Ghrita		
7	The mechanism of Action of Certain Ayurvedic Medicinal Plants on Alzheimer's		
	by Dipeptidyl Peptidase-4 Inhibition Using Herbs		
8	Evaluation of the effect of Patrapottali sveda and Thailadhara externally and		
	Panchatiktaka Ksheera and ghruta internally in the management of Sandhivata		
	(Osteo arthritis-knee)"		
9	Preclinical Studies on Triphala for its Possible Effects in Treatment of		
	Microvascular Complications of Diabetes		
10	Immuno-modulatory effects, protease inhibitory activity and spectroscopic		
	characterization of select ayurvedic prophylactics and formulations: In vitro		
	studies for novel SARS CoV infections		
11	To study the antitumour potential of Pashaanbhela, Punarnava, Gokshura, and		
	Badra on the human urothelial cell carcinoma (UCC) cell lines		
12	Toxicity evaluation of Ayurvedic herbo-metallic preparations		
13	Evaluation of the heavy metals content in market samples of plant raw drugs used		
	in Ayurveda		
14	Development and validation of fermentation based immune-modulatory AYUSH		
	kwath formulation		
15	Evaluation of the heavy metals content in market samples of plant raw drugs used		
	in Ayurveda		
16	Experimental and clinical studies on Nagapheni (Opuntiaelatior Mill.) an		
	anuktadravya (extra-pharmacological drug), with special reference to its		
	Haematinic activity		
17	A retrospective review of COVID-19 related clinical outcomes following the		
	introduction of the National Clinical Management Protocol (NCMP) on Ayurveda		
	and Yoga and other Ayurveda interventions for COVID-19		

## Ayurveda Research projects under erstwhile EMR scheme in Financial Year 2020-21 (Covid projects)

S.No.	Title of the project		
1	Evaluation of Immuno-Modulatory Potential of Selected Ayurvedic Formulations in High Risk Quarantined Subjects and Frontline Healthcare Workers in Covid-19 Care Centre		
2	An Open-labelled black box clinical study to investigate efficacy of add on personalized Ayurveda intervention in comparison to stand alone treatment based on ICMR guidelines		
3	To evaluate the efficacy of Mahasudarshan Ghan Vati and Vyaghradi Kwath in the management of patients with Covid-19 A pilot study		
4	Pre-Clinical efficacy (Immune modulatory) and Safety (Regulatory Toxicology) evaluation of AYUSH formulation 'AyushKwath'		

5	Clinical trial to evaluate prophylactic action of Twakadi Herbal Tea in Police professionals working in Covid-19 pandemic
6	Effect of Malla Chandrodaya & Ashtadashangghan vati in Patients with mild to moderate Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) infections: A Propective Observational Study
7	Randomized comparative clinical trial to assess the efficacy of Pippali Rasayana and Nagaradi Kashaya Ghana Vati combination as an adjuvant tratment with ICMR directed therapy in Covid-19 positive mildly symptomatic cases
8	An Open-labelled black box clinical study to investigate efficacy of add on personalized Ayurveda intervention in comparison to stand alone treatment based n ICMR guidelines
9	Pre-Exposure, Ayurveda Prophylaxis for SARS-Coronavirus-2 in Healthcare Workers: A Pragmatic, Risk Stratified, Randomized Clinical Trial
10	Study of Swarna Amalaki as an Immunomodulatory in COVID 19 patients
11	"An interventional, single arm study to observe and assess the effectiveness of 'Vyaghradi Kashaya Tab' in preventing the progression of severity in asymptomatic, mild to moderate COVID-19 cases
12	A Trial of Shirashadi Kasai in Adults Hospitalized with Moderate to Severe Covid-19
13	A Clinical Evaluation of Efficacy of Ayurvedic treatment regimen as an Add-on therapy with Modern Medicine in COVID-19 A Randomized, Multi-centre, single Blind, Prospective Clinical Study
14	A single arm prospective study to evaluate the efficacy and safety of Shatyadi Kashaya and Vasavaleha combination to combat the progression of asymptomatic and mild to moderate cases of Covid-19 in to severe category

## Ayurveda Research projects under erstwhile EMR scheme in Financial Year 2021-22

Sl.	Title of the project	
No.		
1	Evaluation of AshtangahridayoktaBrihatyadigana for their efficacy in preclinical model	
	of Acute Renal Failure in Rats'	
2	Clinical effect of Ayurvedic Formulation (Withania somnifera, Tinospora cordifolia,	
	Moringa oleifera, Adhatoda vasica, Piper longum, Glycyrrhiza glabra, Ocimum sanctum	
	and Curcuma longa) in COVID-19 patients	
3	Antimicrobial Efficacy and Mechanisms of Herbal Extracts Fractions (Traditional Herbal	
	Tooth Powder Formula) on Biofilm Forming Cariogenic Microorganisms	
4	Repurposing of Classical Ayurvedic Formulations For Their Anti-Viral Effects on SARS	
	Cov-2 Protease: A Pre-clinical In Vitro Screening Approach	
5	Effect of Ayurveda Nootropics on Cognitive Function in breast cancer patients on	
	adjuvant chemotherapy: A randomized controlled trial	

An open label controlled clinical study to evaluate the efficacyof - Sudarshana churna, Yastimadhu churna and Amritharista as add on therapy to standard care in Mild symptomatic positive COVID-19 patients.

## Ayurveda Research projects under Research and Innovation in AYUSH component in Financial Year 2021-22

Sl.	Title of the project
No.	
1	Pre-Clinical efficacy (immune modulatory) and salary (Regulatory Toxicology) evaluation of Ayush formulation 'AyushKwath
2	Prospective parallel group open label study to assess the changes in clinic-pathological variables in patients of Diabetic Nephropathy stage III receiving Ayurvedic Treatment Regimen (ATR) versus those not receiving Ayurvedic Treatment Regimen (ATR)
3	A Randomized Open Label Controlled Prospective Phase II Clinical Study of HaridraChurna on Glycemic control in Pre-diabetic subjects
4	A Randomized Controlled Trial to assess the efficacy of Gut Therapy (Koshta Chikitsa) for managing Dysbiosis in children with Autism
5	Clinical Evaluation of Ayurveda based Integrative Management of Diabetic Retinopathy
6	An experimental approach towards Bone marrow and microenvironment in Leukemia by using Ashwagandha (Withania somifera) and Bhringaraj (Eclipta alba): Two candidate inhibitors of Hedgehog and NF-kB pathways
7	Evaluation of Role of Withania somnifera and Celastras paniculatus in Animal Models of Alcohol Addiction
8	Evaluation of the effect of Triphala and Trimad for their effect on adipocyte biology and lipid metabolism
9	Preclinical Studies on Triphala for its Possible Effects in Treatment of Microvascular Complications of Diabetes

## Ayurveda Research projects under Research and Innovation in AYUSH component in Financial Year 2022-23

Sl.	Title of the project
No.	
1	Effect of Classical Ayurvedic management in PCOS
2	Experimental and clinical studies on Nagapheni (Opuntiaelatior Mill.) an anuktadravya (extra-pharmacological drug), with special reference to its Haematinic activity
3	Toxicity evaluation of Ayurvedicherbo-metallic preparations
4	Randomized Controlled Trial on effect of Indigenous Cows Ghrita and Jatyadi Ghrita on wound healing
5	Effect of oral administration of Kalyankaghritam in pediatric spastic cerebral palsy
6	Effect of ghee from indigenous cow milk on cognition and neuro-protection against Alzheimer's disease

## List of projects under CoE component of Ayurswasthya Yojana for research activities on Ayurveda

S.No.	Name of the organisation	Name of the project
FY – 20	020-2021	
1.	Institute of Teaching and Research in Ayurveda (ITRA), Jamnagar (previous name Gujarat Ayurved University)	Center of Excellence in Gastrointestinal disorders
2.	Interdisciplinary School of Health Sciences, Pune	Pre-clinical study on development of therapeutic adjuvants based on Ayurveda
3.	CIMR, AIIMS, New Delhi	Centre of Excellence for Yoga & Ayurveda
4.	Central Ayurveda Research Institute, Bengaluru (Formerly Regional Research Institute for Metabolic Disorders), Jayanagar, Bengaluru	Centre of excellence in Research and Clinical services for Madhumeha (Diabetes mellitus)
5.	CSIR- Institute of Genomics & Integrative Biology (IGIB)	Centre of excellence for Applied Development of Ayurveda Prakriti and Genomics
FY 202	1-22	
1.	Indian Institute of Technology, Jodhpur	Centre of Excellence in AYURTech for Integrative Precision Health and Medicine.
2.	Institute of Liver and Biliary Sciences (ILBS), New Delhi	Effects of Indian Foods and Ayurvedic drugs on healthy and diseased Liver.
3.	Arya Vaidya Sala (AVS), Kottakkal, Malappuram, Kerala	Setting up CoE in Cancer Research - Arya Vaidya Sala, Kottakkal.
4.	Banaras Hindu University	For establishing National Resource Centre on Ksharsutra Therapy, Department of Shalya Tantra, Institute of Medical Sciences / National Referral Centre for Teaching, Research, Training and referral patients care on Ksharsutra.
FY 202	2-23	
1.	CIMR, AIIMS, New Delhi	Centre of Excellence for Yoga & Ayurveda
2.	National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore	Centre of Excellence in AYUSH Research under Ayurswasthya Yojana.

3.	Central Ayurveda Research Institute,	Centre of excellence in Research and Clinical
	Bengaluru (Formerly Regional Research	services for Madhumeha (Diabetes mellitus)
	Institute for Metabolic Disorders),	
	Jayanagar, Bengaluru	
4.	Institute of Liver and Biliary Sciences (ILBS), New Delhi	Effects of Indian Foods and Ayurvedic drugs on healthy and diseased Liver.

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