

Ordinance Governing
Regulations & Syllabus of
**Fellowship Course in
STHOULYA**
(Obesity Solutions in Ayurveda)
Syllabus/Curriculum
2025-26



Accredited 'A+' Grade by NAAC (3rd Cycle)
Placed in 'A' Category Grade by MoE (GoI)

KLE Academy of Higher Education & Research
(Deemed-to-be-University)

[Declared as Deemed-to-be-University u/s 3 of the UGC Act, 1956 vide Government of India Notification
No. F.9 -19/2000-U.3 (A)]

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VISION

To be an outstanding University of excellence ever in pursuit of newer horizons to build self-reliant global citizens through assured quality educational programmes.

MISSION

- To promote sustainable development of Higher Education consistent with statutory and regulatory requirements.
- To plan and continuously provide necessary infrastructure & learning resources required for Quality education and innovations.
- To stimulate & to extend the frontiers of knowledge, through Faculty Development and Continuing Education Programmes.
- To make research a significant activity involving Staff, Students and Society.
- To promote Industry/Organization, Interaction/Collaborations with Regional / National / International bodies.
- To establish healthy systems for communication among all stakeholders for vision oriented growth.
- To fulfill the National Obligation through Rural Health Mission.

OBJECTIVES

The objectives are to realize the following at KAHER and its Constituent Institutions :

- To implement effectively programmes through creativity and innovation in teaching, learning and evaluation.
- To make existing programmes more career oriented through effective system of review and redesign of curriculum.
- To impart spirit of inquiry and scientific temperament among students through research oriented activities.
- To enhance reading and learning capabilities among faculty and students and inculcate sense of Life Long Learning.
- To promulgate process for effective continuous, objective oriented student performance evaluation.
- To ordinate periodic performance evaluation of the faculty.
- To incorporate themes to build values, civic responsibilities and sense of National Integrity.
- To ensure that the academic, career and personal counseling are in-built into the system of curriculum delivery.
- To strengthen, develop and implement staff students welfare programmes.
- To adopt and implement principles of participation, transparency and accountability in governance of academic and administrative activities.
- To constantly display sensitivity and respond to changing educational, social and community demands.
- To promote Public - Private Partnership.

INSIGNIA



The Emblem of the KAHER is a Philosophical statement in Symbolic.

The Emblem...

A close look at the emblem unveils a pillar, a symbol of the 'KAHER of Excellence' built on strong Values & Principles.

The Palm & the Seven Stars....

The Palm is the palm of the teacher - the hand that acts, promises and guides the students to reach for the Seven Stars...

The Seven Stars signify the 'Saptarishi Dnyanamandal', the Great Bear - a constellation made of seven stars in the sky, each signifying a particular Knowledge Domain. Our culture says: The true objective of human birth is to Master these Knowledge Domains.

The Seven Stars also represent the Saptarishis, the founders of KLE Society whose selfless service and intense desire for 'Dnyana Dasoha' laid the foundation for creating the knowledge kingdom called KLE Society.

Hence another significance of the raised Palm is our tribute to these great Souls for making this KAHER a possibility.

Empowering Professionals...

'Empowering Professionals', the inscription at the base of the Emblem conveys that our Organization with its strength, maturity & wisdom will forever strive to empower the student community to become globally competent professionals. It has been a guiding force for many student generations in the past, and will continue to inspire many forthcoming generations.



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Ref. No. KAHER/2025-26/D-26062522

24th June, 2025

NOTIFICATION

Sub: **Ordinance governing revision in the course curriculum of Fellowship in Ayur-Cardiology under the Faculty of Ayurveda.**

Ref : Minutes of the 58th Academic Council meeting held on 25th March, 2025.

In exercise of the powers conferred under Rule 6 (9) of the Memorandum of Association of the KLE Academy of Higher Education and Research in its **58th Academic Council** meeting held on **25th March, 2025** has approved revision in the curriculum of **Fellowship in Ayur-Cardiology** under the **Faculty of Ayurveda**, applicable to **2025** batch from the academic year **2025-26** onwards.

By Order


Dr. Mrs. Jyoti M. Nagamoti
Director, Academic Affairs


Prof. Dr. M.S. Ganachari
Registrar

To

The Dean,
Faculty of Ayurveda,
KAHER, BELAGAVI.

CC to :

1. The Special Officer to Hon, Vice-Chancellor, KAHER, Belagavi.
2. The Principal, KLE Shri B.M. Kankanwadi Ayurveda Mahavidyala, Belagavi.
3. The Controller of Examinations, KAHER, Belagavi.
4. The Director, Academic Affairs, KAHER, Belagavi.
4. The Director, IQAC, KAHER, Belagavi.

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Preamble

Obesity is a dreadful disorder getting pandemic, threatening the society all over the globe. Till date common man and medical community were not considering obesity as a disease, but were considering it as the status of the body. Unfortunately this dreadful disorder is the hands of non-professional people where different types of unscientific managements and therapies have popped up misleading the common man. Ayurveda since antiquity has mentioned and considered Sthoulya (Obesity) as a disease. Ayurveda has a treasure-trove of scientific information, managements and treatments regarding obesity. It is a high need to develop expert practitioners from the stream of Ayurveda to practice obesity in a scientific manner. Looking towards the prevalence of obesity, it is demand of expertise from the society; it's a great need to develop experts in the branch of obesity through Ayurveda management. In the coming days Ayurveda Obesity management will emerge as a first line management in the society.

KLE Ayurveda Hospital is working in the area of obesity disorders since last 22 years. The organization has developed highly scientific management which has a multi-dimensional approach. The organization is working for Obesity and its co-morbidities at a cellular level where pathology is targeted to manage these diseases. Organisation has also developed a drug development and standardization labs, Hormonal, bio chemistry and microbiology labs for the research purpose in Obesity exclusively through Ayurveda management. It aims to create professionals to manage obesity disorders in a highly scientific manner. Protocols, SOPs, trainings, Laboratory work, counselling and on hand training for doctors will be delivered to the students seeking expertise in the above said area.

Jeevanrekha Obesity Solutions is working in the area of obesity since last 22 years. The organization has developed highly scientific management which has a multi-dimensional approach. The organization is working for Obesity at a cellular level where pathology is targeted to manage obesity as a disease. Till date nearly 45000 plus obese people have undergone the management successfully, and the management is now getting practised all over India and abroad from nearly 85 centres. Organization has developed cloud based software for data management and analysis.

KLE Ayurveda Hospital had MoU with Dr Sabnis's Jeevanrekha Obesity solutions research organisation in terms of academic, clinical and research activities and is running SUMEDA (SU (optimal/good) 'medas' emphasising maintenance of samadhatuavasta in specific to Medodhatu), as the specialty wing is aimed to address the issues of medoja disorders, it is named as SUMEDA.

Unit is working in collaboration with *Dr. Sabnis's Jeevanrekha obesity specialty research hospital, Aurangabad*, the well-known centre which is working in the area of obesity and hyperlipidemic disorders since last 22 years. Sumeda unit managements look for the world class treatment and supervision in the context of Obesity and its co morbidities. Hence during the academic year on par with the taskforce acted rigorously to

meet the needs of the society and originated the Fellowship Course in Sthoulya for Ayurveda Post-graduates. The aim of it is to propagate the strength of Ayurveda and to combat the devastating health issues of the society related to obesity. Accordingly the Institution also carving a future of Ayurveda, by starting "Sumeda" –Obesity solutions in Ayurveda unit wherein various obesity pathologies are treated successfully with structured treatment protocols.

Aim – To create expertise in the area of Obesity through Ayurved faculty and develop and cater Obesity treatment and management as a first line Obesity treatment in society.

Course Learning Objectives:

Upon completion of the course, the student will be able to:

- 1) Define how an individual's genetic make-up and environment contribute to the development of overweight and obesity.
- 2) Explain the metabolic consequences of overweight and obesity in adults and children.
- 3) Describe evidence-based interventions for the prevention and treatment of overweight and obesity in adults and children.
- 4) Translate evidence-based interventions for the prevention and treatment of overweight.
- 5) Diagnose, treat and bring obesity into effective practices in clinical and community settings through Ayurved effectively.

KNOWLEDGE

- Interpretation of Ayurveda concepts regarding obesity and metabolic disorders in the light of contemporary medicines.
- Diagnosis of obesity by various parameters.
- Elucidations of diagnostics test in perspective of Obesity.
- Understanding Ayurveda as well as modern pathophysiology of Obesity.
- To apprehend the principles of Obesity treatment
- Identify the cause and pathology in Individual Patient of obesity and metabolic Syndrome.
- Identify the co morbidities of obesity.
- Classify etiology, patho-physiology, principles of diagnosis and management of obesity and its co morbidities.
- Recognise socio-economic, environmental and emotional determinants regarding childhood and adultsobesity.
- Upgrade the knowledge in the area of Dravyaguna, Phyto- chemistry and
- Pharmacology of Ayurved drugs helpful in treating Obesity.

SKILLS

- 1) To develop skills in examining the patient, taking a proper clinical history, perform essential diagnostic procedures and prescribe relevant tests and interpret them so as to conduct diagnosis & staging of disease.
- 2) Identify customized protocols as per the status of Individual health and disease.
- 3) Counselling techniques regarding disease process.
- 4) Effective and strong Dietary counselling
- 5) Online data management of the patients.
- 6) Skills regarding prevention of Obesity.
- 7) Effective treatment protocols for the patients bringing best of the outputs.

ATTITUDE AND COMMUNICATION ABILITIES

- Develop communication skills with patient and his relatives, especially to provide unbiased opinion and to explain various options available in management of the disease.
- Develop doctor patient relationship for better counselling of patients, relatives and friends.
- Develop communication and leadership for mass counselling regarding obesity and metabolic disorder

Regulations of Governing fellowship course in Sthoulya (Obesity solutions in Ayurveda)

1. Eligibility:

A person having post graduate degree in Ayurveda of a recognised University is eligible for admission in fellowship course in Obesity.

2. Intake of the Student:

Four students per year

3. Medium of instructions:

Medium of Instruction shall be English (with a working knowledge of Sanskrit to serve the study)

4. Duration of the Course Study:

The Course of study shall be for a period of 01 year in Hybrid mode.

5. Attendance and Progress:

A minimum of 75% of the attendance in theory and practical separately is required to be eligible for examination, subject to the condition that his/her progress and conduct are counted to be satisfactory by the principal.

Each student shall attend lectures, practicals, clinics, seminars, case presentations, journal review meetings etc. The students shall have to attend the hospital duties as may be assigned to them during the course of study. The students must attend special lectures/demonstrations; seminars and such other activities as may be arranged by the department. Also, the students will have to attend clinics and lectures in Jeevanrekha Ayurved Chikitsalaya, Aurangabad or any other branch of Jeevanrekha Ayurved Chikitsalaya in India.

Student shall maintain a Log Book on a day-to-day basis of his Clinical, Academic and Research work.

6. Course Content / Curriculum

Ayurveda Syllabus points will be covered by departments of Swasthavritta, RogaNidan, Kayachikthsa, Panchakarma, Rasashastra, Dravyagunaetc in accordance to Conventional understanding. Expert lectures regarding obesity will be delivered from Obesity experts time to time through online lecture series and in person as per

the mutual understanding between the two organisation regarding convenient dates and timings. Two months on hand trainings will be organised at Aurangabad for every batch.

Syllabus related to laboratory work, drug development, blood analysis will be conducted during the two months training at Jeevanrekha Obesity solutions Research Centre at Aurangabad.

7. Schedule: A total 30 working hours per week which will be distributed as follows

Sl. no	Duration	Mode	Particular	Site	Hours	Total working hour / week	Total hours
1.	2 month	Offline Mode	Clinical Outpatient and Inpatient Department	KLE Ayurveda Hospital Sumeda OPD	4 hours /day	24 hr/week	30x 8week [2months]
				KLE Ayurveda Hospital IPD	Regular Rounds 1 hour/ day	6hr/week	
	2 month	Offline Mode	Outpatient Department	Jeevanrekha Obesity Solution centre, Aurangabad	6 hours /day	36 hr/wk	36x 8 week [2months]
2.	6 months	Online Mode	Academic	Seminar	1 hour/ week	8 hours	8 hrs x 24 week [6 months]
				Journal club	1 hour /week		
				Theory classes	2 hours / week		
				Case discussion	2 hours / week		
				Online lectures	2 hour/week		
3.	2months* *	Examination and Related Particulars					

- Total duration of 10 months – Hybrid Course
- **Last 2 months for Examination and other related activities

8. Subjects taught, Number of lectures/ practical's and demonstrations for various subjects:

No.	Subject	Code	Lectures (hrs.)	Clinics, Practical and Demonstrations(hrs.)
1	MaulikaSiddhaant in Sthulata and SantarpanjanyaVyadhiParichaya. Diagnosis, Co morbidities Interpretation, Diet and Prevention of Obesity	CODE-1	100	200
2	Chikitsa and BheshajaSiddhaant in obesity, Phytochemistry and pharmacology of related Ayurved drugs	CODE-2	100	200

9. Scheme of University Examinations:

a) Examiners Eligibility criteria: Professor/associate professor in Panchakarma and Swastvrita

b) Subjects taught, number of theory papers and marks:

No.	Title of the paper	Code	Marks
1	MaulikaSiddhaant in Sthulata and SantarpanjanyaVyadhiParichaya. Diagnosis, Co-morbidities Interpretation, Diet and Prevention of Obesity	CODE-1	100
2	Chikitsa and BheshajaSiddhaant in obesity, Phytochemistry and pharmacology of related Ayurved drugs	CODE -2	100

b) University practical examination and marks division:

No.	Title of the paper	Code	Marks	Total
1	CODE -3	Practical - a. Long case – 35 marks b. Short case – 15 marks	50	100
		Viva voce	50	

c) University Theory Question Paper Pattern Practical Pattern:

Will comprise of two papers of 100 marks each.

- 1) The First paper will include MaulikaSiddhaant and VyadhiParichaya (Basic principles and Introduction to childhood and adult obesity with Etiopathogenesis) Diagnosis, Co morbidities Interpretation, Diet and Prevention of Obesity
- 2) Second Paper will include Chikitsa and BhesajaSiddhaant, Phytochemistry and pharmacology of related Ayurved drugs (1 Paper Part A and B)

Question papers in English language and of 3-hour duration only

	Subject	Long essay questions			Short essay Questions			Grand total
		No	Marks/ Q's	Total	No	Marks / Q's	Total	
01	MaulikaSiddhaant, SantarpanjanyaVyadhiParichaya Diagnosis, Co morbidities Interpretation Diet and Prevention of Obesity - CODE 01	2	20	40	6	10	60	100
02	Chikitsa and BhesajaSiddhaant in Obesity Management, Phytochemistry and pharmacology of related Ayurved and modern drugs in Obesity management - CODE 2	2	20	40	6	10	60	100
	Total							200

Practical Examination: Case Presentation and Viva Voce.

Particulars	Distribution	Total marks
Case Presentation	LONG CASE (1*25) SHORT CASE (1*10) SPOTTING (5*3=15)	50
Viva Voce		50

d) Criteria for Pass:

- a) Minimum marks to be secured in each theory paper and practical paper are 50% separately.
- b) A candidate failed in or more than one subject in examination shall be eligible to appear in supplementary examination.
- c) In case of student fails to appear in regular examination for cognitive reasons he/she will appear in supplementary exam as a regular student.

e) Declaration of Class:

- a. A candidate obtaining 50% and more but less than 60% of the marks in the grand total aggregate in the first attempt shall be declared to have passed the examination in Second Class.
- b. A successful candidate obtaining 60% marks or more but less than 75% of marks in the aggregate of all the subjects in the first attempt will be declared to have passed the examination in First Class.
- c. Successful candidates obtaining 75% of marks or more in the aggregate of all the subjects in first attempt will be declared to have passed the examination in distinction.
- d. A candidate passing a university examination in more than one attempt shall be placed in Pass class irrespective of the percentage of marks secured by him / her in the examination

10. Syllabus

Name of the course: Fellowship in Sthoulya (Obesity solutions in Ayurveda)
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Name of the paper: MaulikaSiddhaant, SantarpanjanyaVyadhi ParichayaDiagnosis, Co morbidities Interpretation Diet and Prevention of Obesity - CODE-1

Duration: Theory: 100 hrs.	Maximum marks: Theory - 100
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Part A Contents (Theory) MaulikaSiddhaant (conceptual and basics)
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Marks – 50	Duration: 50 hrs.
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MaulikaSiddhaant

1. Vedic literature regarding obesity and life style.
2. Classification and types of obesity, General causes of obesity and metabolic disorders, Methods of Diagnosis.
3. Concept of AMA and its perspective through contemporary science.
4. Concept of Agni, Importance of Bhutagni and Dhatwagni in disease process.
5. Understanding Agni in the light of Molecular biology.
6. Understanding Gunas, Understanding stulatainAshtonindityvyadhi. Recognise SantarpanjanyaHetus in modern era. SantarpanjanyaVyadhis and its manifestation.
7. SantarpanjanyaVyadhi and its co relation with metabolic disorders. StulataHetus, types, Samprapti, Symptomatology, co morbidities and complications.
8. Metabolism of Proteins, Carbohydrates and Fats.
9. Evolutionary theories in Obesity, Genetic obesity, Classification of Genetic obesity
10. Disorders and syndromes of Genetic obesity. Impact of Weight on Quality of Life, Moorehead–Ardelt Quality of Life Questionnaire, Weight Related Symptom Measure (WRSW) and Obesity and Weight Loss Quality of Life (OWLQOL).
11. Obesity Related Well-Being, Introduction to hunger assessment. Three Factor Eating Questionnaire. Visual Analog Scales (VAS), Impact of Weight on Quality of Life
12. Patho physiology of obesity and metabolic syndrome

SantarpanjanyaVyadhiParichaya

1. Hormones involved in obesity, Free radical theory and lipid peroxidation in obesity, Inflammation in obesity and metabolic disorders.
2. Hypo thyroidism and its relation with obesity and metabolic syndrome.
3. Obesity and its relation with poly cystic ovarian disorder.
4. Theories with hormonal resistance in Obesity.
5. Gut Microbiota in Obesity.
6. Obesity demographics—income, race, gender
7. Psychological disorders leading to Obesity
8. Drugs inducing obesity.
9. Anatomy and Physiology of Adipocytes. Adipogenesis. White and Brown Adipose tissue. Pathophysiology of adipose tissues in obesity, and how it contributes to the metabolic effects of obesity.
10. Identify, assess, and analyze considerations and factors that contribute to the development of

Part B: Diagnosis, Co- morbidities, Diet and Prevention of Obesity

Marks – 50

Duration: 50hrs.

Diagnosis, Co-morbidities

1. Eating disorders in obesity. Effects of Obesity and its relation with Prameha, Hrudroga, Kushtha and SantarpanjanyaVyadhis.
2. Non-Alcohol fatty liver disease, Obesity induced arthritis, Impact of Obesity on Cardio vascular system.Theories with hormonal resistance in Obesity.
3. Inflammation in obesity and metabolic disorders.
4. Hypo thyroidism and its relation with obesity and metabolic syndrome.
5. Infertility in Obesity. Obesity and its relation with poly cystic ovarian disorder. Obesity and its relation with Diabetes mellitus. Dermatological complications in Obesity. Obesity related Psychological disorders. Sleep Apnoea in Obesity.
6. Anthropometric Tools used for Diagnosing Obesity and their Significance.
7. Body Composition, BMI, Abdominal circumference, Hip Circumference, Skin fold thickness, Bioelectrical impedance analysis (BIA), Bio impedance spectroscopy (BIS), Dilution technique, Total body potassium (TBP), Hydrostatic weighing, Air Displacement Plethysmography (ADP), Dual Energy X-ray Absorptiometry (DEXA), Computerized Tomography (CT) scan, Magnetic Resonance Imaging (MRI), Near-Infrared Interactance (NII), Three-Dimensional Photonic Scanning (3DPS), Quantitative Magnetic Resonance (QMR), Bio chemical and hormonal tests in Obesity.
8. Interpretation of Physical, radiological, bio chemical and hormonal test for the prognosis and treatment of Obesity.

Diet and Prevention of Obesity

1. Identification and understanding of Guru and laghudravya
2. Satiety and Hunger related to Dietetics.Elaboration of Adhyashan, Atiashan.
3. Explore VirudhaAhara and AbhishyandiAhara in modern era
4. Calorie restriction theory and its effects on weight and metabolic disorder.
5. Fasting and intermittent fasting.
6. Daily Nutritional requirements.
7. Types of diets in Obesity and weight reduction.
8. Functional diets in obesity.
9. Role of food on reward centre and limbic system of brain.
10. Hormones responding to various diets.
11. Effect of food on Gut microbiota and gut hormones.
12. Inflammatory and non-inflammatory diets.
13. Macronutrient composition of the diet
14. Obesity and the Supplemental Nutrition Assistance Program
15. Global trends in diet, physical activity, obesity, and obesity-related comorbidities
16. Effect of physical activity, sedentary behaviour, dietary intake, and eating behaviours contribute to energy balance, weight gain, and obesity

17. Role of nutrigenome and gut microbiome in obesity
18. Prevalence of overweight and obesity and cultural attitudes and biases toward obese persons.
19. Effect of environmental factors influences food intake.
20. Factors that influence the choice of different types of diet for weight loss and how obesity drugs affect either energy intake or energy expenditure.
21. .Develop intervention strategies for the prevention of overweight and obesity.
22. Commonmythsrelatedtothepreventionand/ormanagementofoverweight andobesity.
23. Exploreandevaluatethedietary,exerciseandbehaviouralinterventionsforthemanagementof overweightandobesity.
24. Recipes for weight reduction program.
25. Role of Yoga and Nature cure techniques in preventing pathology

Name of the course: Fellowship in Sthoulya (Obesity solutions in Ayurveda)

Name of the paper: Chikitsa and BhesajaSiddhaant in Obesity Management , Phytochemistry and pharmacology of related Ayurved and modern drugs in Obesity management CODE 2

Duration: Theory: 100

Maximum marks: Theory - 100

Part A Chikitsa and BhesajaSiddhantain Obesity Management

Marks – 50

Duration: 50 hrs.

1. Chikitsa sutra and Management of SantarpanVyadhi and status ofDosha, Dhatu and Mala.
2. Basic principles of Obesity Management in Ayurved.
3. Principles in Obesity Management in Modern medicine.
4. Importance of Dosha, Dushya , Bala, Kaala, Agni, Prakriti, Vaya, SattvaSatmya, Desha, Ahara and stage of diseases in treating Obesity.
5. Classification and types of obesity, General causes of obesity and metabolic disorders, Methods of Diagnosis.
6. Doshapratyanika, Vyadhipratyanika, Ubhayapratynika management in Obesity. Doshopakrama, Chikitsa sutra and Management of SthanantaraDosha (Ashayapakarsha, Anuloma/Pratilomagati of Dosha, Vimargagamaana of Dosha)
7. Knowledge of LinaDosha& its management in obesity and metabolic disorders.
8. Chikitsasutra and Management of Sama-Nirama states in obesity and metabolic disorders..
9. Medasaratva and Medaasaratva and its bio chemical correlation..
10. Roga-AnutpattikaraChikitsa, RogaPrashamanaChikitsa in obesity and Metabolicdisorders.UnderstandingGunas.
11. Detailed description of Dvididhopakrama (Santarpana and Apatarpana)
12. Shadavidhopakrama (Rookshana, Snehana, Swedana, Sthambhana, Langhana and Brimhana).
13. Detailed description of Shodhana, Shamana and NidanaParivarjana.
14. Management of Obesity along with its co morbidities.
15. Long term persistence in hormonal adaptations in weight loss.
16. The defence of body weight
17. Account for various types of obesity treatment and when these can be suitable to use.
- 18. Determining the level of health care for children and adolescents with obesity in different**

ages account for side effects of obesity treatment.

Part B: Phytochemistry and pharmacology of related Ayurved and modern drugs in Obesity management

Marks – 50

Duration: 50 hrs.

1. DravyaGuna Karma of herbs, minerals and herbo mineral formulations used for Obesity and metabolic disorders in Ayurved.
2. Pharmacology and Pharmacotherapy with Phyto chemistry of Ayurved drugs used in Management of Obesity and metabolic disorders.
3. Pharmacology and its therapeutics of modern medicine drugs used in Obesity and metabolic syndrome.
4. Pharmacotherapy of anti diabetic drugs used in Obesity and metabolic syndrome.
5. Pharmacotherapy of drugs used in co morbidities of Obesity.
6. Drug interactions of medicines used for metabolic syndrome from modern medicines with Ayurved drugs.
7. Principle of Drug administrations in metabolic syndromes and obesity.
8. Pharmacology and possible mode of actions of Panchakarma Procedures like Snehana, Swedan, Vaman, Virechan, Basti etc.
9. Indications and Contraindications of Ayurved as well as modern drugs.
10. Management of resistant weight loss and obesity.
11. Pharmacotherapy of Obesity and its co morbidities.
12. Tools used for Pre and Post management counselling's.
13. Various formulations used in Management of Obesity.
14. Indication and contraindications of Exercise in Obesity and metabolic syndrome.
15. Importance of Endurance, Flexibility, Yoga, and strengthening exercise in Obesity.
16. On-going weight maintenance programs.
17. Prevention of Weight gain after weight loss.
18. Surgical interventions in massive obesity.
19. Merits and demerits of surgical interventions over medical interventions in obesity.
20. Post weight loss individual and family counselling.
21. Data analysis of outcome of the results with obesity management.

Reference books:

- 1) Agniveshakrita, Charaka-Drudabalapratisamskrita, **CharakaSamhitawith** chakrapanidattavirachita Ayurveda deepikavyakhya, published by ChoukhambhasamskritaSamsthana, Varanasi, 4th edition 1995, sutrasthana 21/21
- 2) Sushruthakrita, **Sushruthasamhitawith**DalhanavirachitaNibandhaSangrahasavyakhya, published by Choukhambhaorientalia, Varanasi, 6th edition 1997, sutrasthana 15/14 page 70, chikitsasthana 24/51
- 3) Vagbhatakrita**AshtangaHridaya** with ArunadattavirachitaSarvangasundaravyakhya and Hemadrivirachita Ayurveda Rasayanavyakhya, published by Krishnadasacademy, Varanasi, 1995, sutrasthana 2/15
- 4) VriddhaVagbhatakrita**AshtangaSangraha**withInduvirachitashashilekhavyakhya, published by Krishnadas academy, Varanasi, 1995, sutrasthana 15/
- 5) Madhavakarakrita**MadhavaNidanawith**Vijayarakshita&SrikantadattavirachitaMadhu kosavyakhya, published by ChoukhambhasamskritaSamsthana, Varanasi, 20th edition 1993, vol II medoroganidana
- 6) Chakrapanidattakrita**Chakradatta** (Chikitsasarasangraha) with ShivadassenvirachitaTatwachandrikavyakhya, Published by Choukhambhaorientalia, Varanasi,
- 7) **Vangasenasamhita** edited by ShankarlalHarishankar, Published by KavirajSrikrishnadas, Bombay,.
- 8) **Yogaratanakarawith**Vidyotini Hindi vyakhya, Published by ChoukhambhasamskritaSamsthana, Varanasi, 6th edition 1997, Medorogachikitsadhikara, uttarardha,
- 9) Bhavamishrakrita**Bhavaprakashanighantue**edited by PanditsriBramha Shankar Mishra, published by ChoukhambhasamskritaSamsthana, Varanasi
- 10) **Raja nighantue**edited by GiridayalaShukla, Published by ChoukhambhasamskritaSamsthana, Varanasi.
- 11) **Basavarajeeyamuttarardha** –Shivakaran Sharma, 1954, Rasayana Pharmacy Bhavan, Chennai.
- 12) **Rasa Ratna Samucchaya** Ambikadatta shastri, 1978, Choukhambha samskrita series, Varanasi.

- 13) **Introduction to Kaya chikitsa** by K. Dwarakanath, Published by Choukhambhaorientalia, Varanasi.
- 14) **Digestion and Metabolism in Ayurveda** by C. Dwarakanath Published by Baidyanath Publication, Calcutta.
- 15) **Concept of Agni in Ayurveda** by C. Dwarakanath Published by Baidyanath Publication, Calcutta.
- 16) **Nidana Chikitsa Hastamalaka** by Ranajith Roy Desai, Published by Baidyanath Ayurveda Bhavan, Nagapur.
- 17) **Dravya Guna Vignana** by P.V.Sharma Published by Choukhambhaorientalia, Varanasi.
- 18) **Manier-williams A Sanskrit English Dictionary**, Published by Sundarlal Jain,
- 19) **Researches in Ayurveda** by M.S.Beghal, Published by Mridu Ayurvedic publication and sales, Jamnagar.
- 20) **Indian Materia Medica** by K.M.Nadakarni, Published by Popular Prakashan, Bombay, 2nd edition.
- 21) **Ayurveda Encyclopedia** by Swami Sadashiva Thirtha, Published by Indian book center, Delhi.
- 22) **Kaya chikitsa** by Shivacharana Dhyani Published by Ayurveda and Tibba academy, vol II.
- 23) **Vaidya Pandita Hariprapanajivirachita Rasayogasara** Published by Krishanadas academy, Varanasi.
- 24) **Park's Text Book of Preventive and Social Medicine** by K.Park, 16th edition, 2000, Published by Banarsidas Bhanot, Jabalpur,.
- 25) **Text Book of Preventive and Social Medicine** by MC Gupta & BK Mahajan, 3rd edition, 2003, Published by Jaypee Bros New Delhi.
- 26) **Review in Community Medicine** by V.V.R.Seshu Babu, 2nd edition 1996, Paras Medical Books, Hyderabad.
- 27) **Principles of Community Medicine** by Dr.B.Sridhar Rao, 3rd edition, 2002, Published by AITBS publishers and distributors, Delhi.
- 28) **Social and Preventive Medicine** by Yash Pal Bedi, 15th edition, published by Atma Ram and sons, Delhi.
- 29) **Principles of anatomy and Physiology** by GJ Tortora and SR Grabowski, 9th edition, 2000, published by John Wiley and Sons INC..

- 30) **Physiology** by Berne, Levy, Koeppen& Stanton, 5th edition, 2004, published by Missouri, page 946.
- 31) **API Text Book of Medicine** edited by G S Sainani& co.6th edition 1999. Published by Association of Physicians of India, Bombay,.
- 32) Harrison's **Principles of Internal Medicine**, edited by Braunwald,15th edition, 2001, published by Mcgrawhill Medical publishing division New Delhi, page.
- 33) Davidson's **Principles and Practice of Medicine**, edited by Cristopher R W Ewards 17th edition, 1995, published by ELBS with Churchill livingstone,
- 34) Robbins **Pathologic Basis of Disease**, by Cotran, Kumar & Robins, 5th edition, 1994, Published by W.B.Sounders& co. Bangalore,
- 35) **Clinical Medicine** by Praveen Kumar & Clark, 4th edition, 1999, Published by W.B.Sounders,
- 36) Oxford**Clinical Dietetics & Nutrition** by F.P.Antia& Philip Abraham, 4th edition, 2002, published by oxford university press, .
- 37) **Nutrition- A health promotion approach** Geoffrey P webb, 2nd edition, London.
- 38) **Grey's Anatomy** editedby Henry Gray, Peter L Williams, Laurence Bannister, 38th edition, 1995, Churchill livingstone, New York.
- 39) **Advanced Textbook on Food and Nutrition** by Swaminathan M, The Bangalore Printing and Publications.