

# **Contents**

1.	General Introduction	2
2.	Introduction of Ayurveda and Yoga systems	03-04
3.	Concept of Healthy Living in Ayurveda and Yoga	05-09
4.	Common ailments and management through Home remedies.	09-19
5.	Diabetes Mellitus (Madhumeha)	19-20
6.	Prevention and Control of Diabetes Mellitus (Madhumeha) & Common	
	Medicinal Plants with their uses	21-28
7.	Role of ASHA/ANM	29
8.	Yoga Asanas and Pranayamas	30-40



# **General Introduction**

India has a rich tradition of indigenous system of medicines e.g., Ayurveda, Siddha, Unani, Yoga & Naturopathy and local health practices. Many people prefer to access and utilize services available from such providers. ASHA is a woman selected by the community, resident in the community who is trained and supported to function in her own village to improve the health status of the community. ANM who is in-charge of Sub-centre is guiding and supporting the ASHA in enabling the community intervention.

In this context the grass root workers like ASHA/ANM who mobilize the community and facilitate them in health and health related services may be effectively utilized for creating awareness and providing primary AYUSH preventive healthcare for prevention of common ailments including Diabetes and popularizing common Ayurveda and Yoga remedies/practices for the management of such illnesses. ASHA and ANM will be provided brief insight into the basic concepts of prevention and management of common ailments including Diabetes through Ayurveda and Yoga. Few common AYUSH remedies for Primary Health Care for the management of common ailments including Diabetes with locally available medicinal plants and products may also be introduced to them. In fact ASHA can act as a depot holder for few common Ayurveda and home remedies for the early management of such illnesses. She will guide the community to raise medicinal plants/home remedies in the surroundings of their home and kitchens. ASHA is also being trained to provide advice on Do's and Dont's for common ailments including Diabetes Mellitus. She can contribute towards mainstreaming of AYUSH by promoting the various popular remedies for prevailing common ailments in rural communities so that the menace of the Diabetes can be curbed.

Diabetes mellitus, a major lifestyle disease is undoubtedly the most challenging public health problem of 21st century with a worldwide prevalence of 387 million (8.3%) predicted to be 592 million by 2035. 77% of people with diabetes live in low and middle-income countries. India, was home to 61.3 million patients with T2DM in 2011 with predictions of 101.2 million diabetics by 2030. India is second only to China which is home to 92.3 million diabetics.

The training modules of ASHA include common remedies available in Ayurveda and common postures and Pranayamas which is considered to be effective in preventing the onset and management of common ailments including Diabetes Mellitus. This manual willhelp ASHA/ANM to guide people who desire to undergo treatment as per their preference for a particular way of life through Ayurveda and Yoga, and for preventing and controlling the Diabetes Mellitus.

# Introduction of Ayurveda and Yoga systems

In our village from olden days our grandpas and grandmas were using medicinal herbs which they used to collect from the farm or from their residential premises for the treatment of common ailments. The Village 'Vaidyas' also used to provide herbal medicines in various conditions. People approach them for some types of illnesses. Many of such treatments are documented and have scientific rationale behind them. Thousands of years back, our own medical system Ayurveda, and wellness systems like Yoga were developed in the country.

Methods of prevention of illnesses and healing through Ayurveda and yoga are simple, the common remedies are cheap and safe and the drugs are mainly obtained from the nature.

# 1. AYURVEDA

Ayurveda is an ancient science of life since time immemorial. Ayurveda, apart from providing various therapeutic measures for diseases, emphasizes on maintenance, promotion of health and prevention of diseases through diet and lifestyle regimens. As per Ayurveda, life is sustained by a tripoid of mental, physical and spiritual factors constituted by body (*Sharir*), senses (*Indriyas*), mind (*Satwa*) and spirit (*Atma*). The physical world including the human body is derived from the specific combinations of five fundamental entities viz. Akash, Vayu, Teja, Jala and Prithvi which are known as *Panchamahabhutas* and the soul. *Panchamahabhutas* form the *Tridoshas viz. Vata Dosha*, *Pitta Dosha and Kapha Dosha*, *Dhatus* (tissues) and *Malas* (excretory products). *Tridoshas* carry out the physiological activities and are responsible for the integrity of the human body.

Due to the faulty diet and lifestyle normalcy of the *Tridoshas* is disturbed and they aggravate in the body. Vitiated *Tridoshas* disturb the normalcy of *Dhatus* and *Malas* causing their vitiation which manifests as various diseases in the body. Thus the health of an individual depends upon the normalcy of the *Doshas*, *Dhatus* and *Malas*. Health of an individual can be known by following aspects-

- 1. Proper nourishment.
- 2. Proper strength.
- 3. Desire and appetite for intake of food.
- 4. Proper digestion of food ingested at proper time.
- 5. Sleep at proper time.
- 6. Absence of pathological or dreadful dreams.
- 7. Feeling of freshness after waking up in the morning.
- 8. Proper evacuation of faeces, urine, and flatus at the proper time.
- 9. Proper functioning of mental faculties, intelligence and senses in all respect.
- 10. Absence of any kind of pain.

Adopting healthy living ways advocated/ described in Ayurveda such as *Dincharya* (daily lifestyle), *Ritucharya* (seasonal lifestyle) and Sadvritta (code of conduct) etc. a person can remain healthy by maintaining the normalcy of the *Doshas*, *Dhatus* and *Malas*. Following these regimens will help an individual in achieving promotion of health, maintenance of health and prevention from various diseases.

#### 2. YOGA

Yoga is a science as well an art of healthy living physically, mentally, morally and spiritually. It's no way limited by race, age, sex, religion, cast or creed and can be practiced by those who seek an education on better living and those who want to have a more meaningful life.

Yoga system advocates the eight fold path, popularly known as "Ashtanga Yoga" for all-round development of human personality. They are – Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana & Samadhi for increasing the power of concentration, mental purity and steadiness.

The practice of Yama i.e., Ahimsa (not to harm others), Satya (to be truthful), Asteya (not to steal), Brahmacharya (celibacy), Aparigraha (not to possess beyond actual needs) along with the practice of Niyama i.e., Souch (external and internal purification), Santosh (contentment), Tapa (to make right efforts to achieve goals), Swadhyaya (to study authentic texts to acquire correct knowledge), and Ishwar Pranidhan (complete surrender to the divine will) paves way to increase the power of concentration, mental purity and steadiness.

Asanas are special patterns of postures that stabilise the mind and the body through static stretching. Their aim is to establish proper mechanism in the nerve muscle co-ordination and improve the general muscle tone. Two basic principles governing the performance of Asanas are stability and comfort. Every Asana should be performed effortlessly and maintained for a comfortable time. There should be no jerks and the performance of Asana should not lead to undue fatigue.

Pranayama is the science of regulating and gaining control over the prana or breath or life force. Normally, there are 3 components of breathing — Inhalation (Puraka), Exhalation (Rechaka) and Stoppage of breath (Kumbhaka). Maintaining Kumbhaka is the main aim of Pranayama but it should be Kevala Kumbhaka, a natural cessation of breath without any force. Pranayamas help in getting control over the thought processes in the mind as breath acts as a mediator between body and mind. The other benefits of Pranayama along with Kumbhaka are development of deep relaxation, lowered metabolic rate, sense of blissfulness, expansiveness and solitary thought.

According to Yoga, most of the diseases Mental, Psychosomatic and Physical originate in mind through wrong way of thinking, living and eating which is caused by attachment. The basic approach of Yoga is to correct the life style by cultivating a rational positive and spiritual attitude towards all life situations.

In recent times there is a growing awareness among the people about the efficacy and utility of Yoga and Nature Cure in keeping one fit at physical, mental, emotional, social and spiritual planes.



# Concept of Healthy living in Ayurveda and Yoga

Following ways are described in Ayurveda for maintenance of health and treatment of diseases.

- A. Diet and Nutrition.
- B. Regimen of Personal and Social Hygiene: Daily routine (Dinacharya),
  Seasonal regimens (Ritucharya), including basic sanitation and healthy living environment.

Let us describe these one by one:

#### A. Our Diet

Diet plays very important role in our physical and mental health status. Many common health problems can be prevented or treated by consumption of a good diet. Following may be advised to the people in your community-

- ▶ Wash vegetables & fruits properly before cooking.
- ▶ Use boiling, steaming, grilling etc. as methods of cooking.
- ▶ Whole wheat flour (without sieving) may be prepared for making roti. Roti made out of jowar, bajra, ragi, maize (macca) are also having high fibre content. The use of white bread, nan, roomali roti and other maida preparations should be limited.
- ▶ It is desirable to take 50-100 gms/day fibre, when whole grain cereals, pulses and vegetables are consumed daily. It is for our advantage to maintain our traditional cooking and eating patterns.
- ▶ Increase locally available seasonal fruits and green leafy vegetables in the diet.
- ▶ As far as possible eat freshly prepared food. Reheating and refrigerating tends to lose the taste and nourishment.
- ▶ Do eat when you feel hungry i.e don't avoid mealtimes. Develop the habit of taking meals at regular intervals.
- Avoid overeating.
- Avoid eating too fast or too slow. Food eaten hurriedly does not get digested properly, it does not give a sense of fulfilment. On the contrary one tends to eat more.
- ▶ Don't drink too much or too little water since both hamper the digestion.
- ▶ Drinking of luke warm water helps easy passage of motion and urine, enhance digestive power, minimize the diseases related to digestive system and delayed ageing.
- ▶ Don't eat when the mind is unstable because you may eat less or in excess.
- Avoid heavy tasks immediately after meals since the blood circulation is diverted towards the site of action rather than towards digestion of food. It also creates pressure on the heart. After meals don't sleep immediately. But do take rest for a while before resuming your work. Dinner should be taken at least two hours before sleep.
- Avoid fried foods, restrict intake of ghee, oils. Cook the vegetables with minimum oil.
- Reduce salt and sugar intake.
- Avoid intake of aerated drinks (cola), fast/junk food (Chips, burger, samosa, pizza etc.).
- ► Increase intake of milk, butter milk, Lassi, coconut water etc.

- ► Food should be taken after bathing, washing the hands, legs and face and without any disturbance.
- ▶ While taking the food, one should not divert his attention to other things.
- ► After the meals rinse the mouth and hands thoroughly with water.

According to Ayurveda the diet is one of the most important factors which have direct impact on three Doshas/humors. To keep these Doshas balanced, our diet should contain all Tastes (Rasas) in a balanced way. For healthy person it is advised in Ayurveda to not to fill stomach full, while taking food. Stomach should be divided into three portions and one portion should be filled by food, second by water and third should be kept vacant for movement of Doshas (Humors).

The right quantity of food is decided upon the nature of food substances such as heaviness or lightness and digestive power of the person. Food items like flour products, milk products, sugar cane products, pulses like Urad (*Phascolus mungo*), meat etc. are heavy in nature whereas rice, wheat, pulses like moong dal (green gram) etc. are light in nature and easy to digest.

# Useful food items for daily use

- ► Edibles prepared with cereals like wheat (Gehun/Godhuma) and Barley (Yava)
- ► Condiments prepared from meat of animals of arid/dry land,
- ▶ Jivanti (*Holostemma adakodien*), Radish (Muli), Basal (Vastuka Bathua), Terminalia chebula (Haritaki-Harad) (), Indian gooseberry (Amalaka- Amla), snake gourd (Patola Parval) and green gram (Mudga Moong), Pomegranate- (Dadima/ Anaar) and Rock salt- (Saindha Namak) are desirable for regular use.
- ► Fenugreek (methi) has high fibre content and useful in reducing blood glucose, cholesterol and trigly cerides.
- ► Green vegetables like Bittergourd (karela), Lettuce leaves, Ladies finger (bhindi), Carrot (gajar), Soya Beans, Drumstik, and Jambu (Jamun) seeds are having beneficial effects for people suffering from Diabetes.

However, Curd, Kshara like Kanji (Alkaline preparations), Vinegar, uncooked radish, dried meat, pork, meat of sheep, cow, black gram, bean, tuberous roots, the fibers of lotus (Kamalgutta), sweets prepared by grinding cereals, dried leaves, and molasses are all undesirable for regular use particularly in Diabetes patients.

#### B. Personal and social hygiene

Personal and social hygiene can be maintained by following Dinacharya (daily routine), Ritucharya (seasonal regimens) and Sadvritta (good conduct) which are described as following-

#### 1.Daily routine (Dinacharya) can be summarized as following-

- 1 Wake up early at least 1 hour before sun rise.
- 2 Attending nature's call (Malotsarg) bowels, urination etc. Never suppress nor forcefully void the natural urges Vegavidharan (suppression) can lead to many diseases. For defectaion one should always use toilets and it should not be done in open grounds. After defectaion, the anal area should be cleaned properly with water and hands should be washed properly with soap.
- 3 Care of Teeth Usage of fresh stick of Neem (Azadirachta indica), Khadir (Acacia catechu) etc. can clean teeth, and vanish foul smell.
- 4 Nasal drops (Nasya)— Put two drops of sesame oil/ mustard oil/ghee or Anu Talia (An Ayurvedic medicine if available)— It prevents premature greying of hair, baldness and ensures good sleep.
- Mouth wash (Gandush)— Fill mouth with Triphala decoction or other medicated oils It prevents excess thirst, improves taste and maintains oral hygiene. It is also useful in managing the mouth ulcers and dryness commonly seen in Diabetes patients.

- Oleation (Abhyanga)— application of oil daily e.g. Tila Taila (Seasame oil) Keeps skin soft, improves blood circulation and removes waste. This helps in prevention of numbness of extremities due to Diabetes. Apply Tila (Seasame) oil or any suitable oil on head in sufficient quantity which enhances the strength of head and forehead and makes hair black, long and deep-rooted.
- 7 Exercise (Vyayama)—Exercise should be done till sweat rolls down from neck, forehead etc. Exercising early in the morning can help remove stagnation in the body and can help recharge and rejuvenate your body and mind for a productive day. Regular exercise is an important step for prevention and management of various ailments.
- 8 Hair should be kept properly and should be cut regularly. Similarly, nails should also be kept clear and should be cut regularly.
- 9 Bath (Snana) Take bath half to one hour after exercise Prevents premature greying of hair, baldness, ensures good sleep and physical hygiene.
- 10 Food (Bhojan)— The various aspects as mentioned in the topic diet should be followed.
- 11 Sleep (Nidra)— Keep the environment clean and pleasant. Avoid sleeping in day.— Proper sleep provides health and longevity. Improves complexion and glow. One should take proper sleep every night, which should be between 6-8 hours per night. In summer one can take a small nap during day time also. Too much sleep and too little sleep, both are not good for healthy living. Generally day sleeping is not advisable.

#### 2. Seasonal regimens (Ritucharya)

**Role of seasons in health and diseases-**Ayurveda stresses a lot at the role of seasons on the body and advises that we must change our daily routine depending on the seasons. This is known as Ritucharya. It helps in preserving the health as the season changes.

#### Tips to combat summer heat

There are certain measures that you can take to combat the summer heat and stay cool and comfortable. Follow these guidelines:-

- ▶ Drink plenty of liquids like coconut water, sugarcane juice, buttermilk or atleast 10 glass of water a day.
- ► Eat light food- avoid hot, spicy, oily meals and opt for foods high in water content including fruits, salads, soups and buttermilk.
- ▶ While going out, wear a white handkerchief or use an umbrella to block sunrays.
- ▶ Do outdoor work in the early mornings or late evenings.
- ► Take frequent baths and showers and apply sandal (chandan) paste to body for cooling the body.
- ▶ Wear light coloured, loose-fitting cotton clothes.
- ► Smoking can constrict blood vessels and impair the ability to acclimatize to heat, so quit it.
- Your lunch should consist of boiled rice or roti with watery decoction of pulses or curries with thin gravy. Always end it with buttermilk or curd. Make it a point to drink some fruit juice in the afternoon after lunch. Similarly, the menu of supper should contain enough onions, mint and coriander leaves, in the form of chutney, made salty and sour by adding salt and lemon juice.

# The adverse effects of monsoon and how to combat them

The body is weakened during summer, as it is the period of dehydration. The digestive power is also weakened. It is further weakened during the rains. Hence, it is advisable to take moderate diet during the rainy season.

- Avoid sleeping during the day time.
- ▶ Use clean drinking water ((boiled and cooled).
- ► Avoid too much exercise and moving about in the sun after a spell of rain.
- ▶ Wear light and clean clothes and try to keep the rooms devoid of humidity.

#### How to combat the winter cold

- ▶ During winter, digestive power becomes stronger and it can effectively digest heavy and large quantities of food. To satiate this, take plenty of food. Consume milk, and new cereals as dietary staples.
- ▶ Massaging the skin with mustard oil is good during winter.
- ► Avoid cold foods.
- ► Eat plenty of green vegetables and seasonal fruits.
- ► Cream of milk/ Ghee is good for cracked lips.
- ▶ Honey is a good and valuable natural healer. Apply it over cracked lips after diluting it with double the quantity of water.

# Activities during spring (basant) season

- ▶ During spring season food becomes easily digestible, diluted honey, water boiled with extracts of sandalwood, mango juice, barley, bengal gram (chana) etc can be taken in. It is better to avoid heavy, oily, cold, fatty food & sweet and sour stuff.
- ▶ Massage, exercise, and fomentation can be used.

#### 3. Sadvritta (good conduct) – for conducive social life

- 1. Everybody works for his happiness. Happiness should be shared with others. One should strive to have happiness for all. It is characteristic of our culture.
- 2. One should exercise control on sense organs.
- 3. One should keep handkerchief around the nostrils and mouth while sneezing or yawning to avoid spread of infection.
- 4. One should stop work before one is excessively tired.
- 5. One should avoid addiction to alcohol, tobacco etc.

Hygiene is the most important part of healthy living. One can remain healthy if hygiene is maintained. Selecting the right food are not only choices but also cooking & consuming them in a hygienic way is equally important in preventing many diseases. Adopting hygienic practices and promoting hygiene in the community, schools and workplace prevents innumerable disease.

# **Regular Exercise**

- Make daily exercise a routine.
- Exercise for a minimum period of 30 min. daily, which can be split into intervals.
- ► Form a habit of using stairs.
- ► Include exercise in your routine work, develop a habit of walking e.g. to school, market, friend's house, workplace etc.

# Examples of simple and comfortable exercises

- ▶ Walking, cycling, jogging, swimming, dancing, playing games/sports.
- ▶ Yogasanas, gardening and household, chores-washing, mopping etc.

#### Where should I find the time for exercise

- At home, at work or during leisure.
- Combine shopping, gardening etc. with exercise.
- Take stairs instead of elevator (upto 3 floors).
- Walk to nearby shop rather than drive.

## **Alcohol consumption:**

It is advisable to avoid any alcoholic beverages. If alcohol is consumed in excess, it will cause burning, intoxication, swelling, liver disorders etc.

# Common ailments and management through Home remedies

There are many conditions which can be managed or treated at home upto a certain level. ASHA and other Health workers may teach the community about these conditions and their home remedies. Some of them are mentioned here:

# Conditions related to Upper Respiratory System

# 1. Common Cold (Sardi/ Jukham)

Common Cold is relatively harmless condition. It can occur at any time throughout the year but the most common are in late winter and fall. It is most common in children.

This condition acts as a gateway to many other respiratory problems. It's called the "common cold" because you may feel colder in this ailment, than any other type of illness. However, it should not be neglected.

#### Symptoms of common cold

Some of the common symptoms are listed below:

- ► Running or Blocked Nose.
- ► Sore/ Scratchy throat.
- ► Sneezing.
- ► Fatigue.
- Muscle Aches.
- ► Loss of Appetite.
- Cough.
- ► Headache.
- Mild fever with chills

#### **Common remedies**

- 1. Leaves of holy basil (Tulsi) plant mixed with an equal quantity of dried ginger powder form an excellent substitute for tea during cold and flu. This may be taken by adding milk and sugar three times a day.
- 2. Juice of ginger (Adrak) and holy basil (Tulsi) one-one tea spoon (5 ml.) mixed with one tea spoon (5 ml.) honey, to be taken two-three times a day.

- 3. Powder of black pepper (marich) half tea spoon (2.5 ml.) mixed with jaggery (guda) two times a day.
- 4. Small piece of Ginger (Adraka) fried in ghee, to be taken two times a day.
- 5. One teaspoonful of the powder or paste of turmeric to a cup of milk or fried turmeric powder taken with 1-2 gm of ghee mixed with hot milk thrice a day. This gives immediate relief and help in early recovery.
- 6. Gargle with warm turmeric powder 2-3 times a day to relieve sore throat.
- 7. Drink a glass of hot water mixed with the juice of two lemons and sugar to taste. Take the same at bedtime as it gives relief from nasal catarrh.
- 8. Two to three tea spoon (10-15 ml.) of fresh juice of Amla or half to one tea spoon (2.5-5 gm) powder of the same is ideal to control cold.

#### **Prevention and Self-care**

There are several ways in which you can keep the intensity of condition levels low.

- Inhale steam to relieve a stuffed nose. Add a few drops of eucalyptus oil in a bowl of hot water. Cover your head and the bowl with a towel for few minutes at a time. Be careful that the water is not so hot that the steam burns your face.
- ▶ Strengthen your immune system and keep yourself healthy. Two plants that will help you strengthen your immune system are Amla and Tulsi which may be used.
- ▶ Do not over heat the room. Let the body lose heat naturally.
- ▶ Keep away from others who are infected with cold.
- ► Eat a well balanced diet and get enough rest. Take plenty of hot beverages.

# Care of New Born during coughs & colds to avoid Acute Respiratory Infections

- ▶ Sooth the throat and relieve cough with a home remedy such as lemon with honey, ginger, tulsi, warm water etc.
- ▶ Above mentioned remedies may be used in small doses.

#### 2. Asthma (Dama)

Asthma means difficulty in breathing or breathlessness. The narrowed airways may lead to coughing, wheezing, chest tightness and shortness of breath (dyspnoea), and symptoms often being worse at night.

#### Common remedies.

- 1. Taking Piper longum (pippali) powder along with honey, makes an attack of asthma subside.
- 2. Take the juice of the whole plant of Solanum surattense (chote kateri) two/ three tea spoon (10/15 ml.) as such, or with combination of equal parts of dried ginger, long pepper and black pepper (Trikatu)— 1 gm twice a day.
- 3. You can even take Terminalia bellirica powder (baheda) one tea spoon (5 gm.) with equal honey twice a day.
- 4. Powdered fruit of Terminalia chebula (Harad) one tea spoon (5 gm.) with luke warm water- twice a day.
- 5. Powdered of Terminalia chebula (Harad), Terminalia bellirica (baheda) and Emblica officianalis (Amla) in combination (Triphala) two tea spoon (10 gms.) with luke warm water at bed time.
- 6. Prepare a decoction by boiling equal parts of root of Adhatoda vasica (adoosa), rhizome of turmeric, stem of Tinospora cordifolia (Guduchi/giloy), and the fruit of Solanum surattence (chote kateri). Take this decoction internally, 20-30ml with one gram of powdered black pepper twice a day.
- 7. During an acute attack of asthma, drink some hot water with the juice of one clove of garlic.
- 8. Apply (massage) luke warm mustard oil (sarson tail) mixed with a pinch of Rock salt on chest.

#### Prevention, Diet and other considerations

Avoid foods that can aggravate asthma such as curd, bananas, sugar sweets, black gram, buttermilk, guavas, fried foods, sour substances etc.

- ► Change in weather, exposure to molds, animal dander, grass or tree pollen triggers asthmatic attacks.
- ▶ Wear a scarf around your mouth and nose in cold weather.
- ▶ During an asthma attack, sit up straight and bend forward. Do not lie down. Place a hot towel over the chest. This helps to relax muscles and restore normal breathing.
- ► For an acute asthma attack, try steam inhalation. Add a few drops of eucalyptus oil in a bowl of hot water. Cover your head and the bowl with a towel. Be careful that the water is not so hot that the steam burns your face.
- ▶ Smoking both active and passive should be strictly prohibited.

**Referral criteria:** If dyspnoea continuously increases refer the patient to hospital for further treatment.

#### 3. Cough (Khansi)

#### Symptoms of cough

- 1. Running nose, Sneezing
- 2. Cough
- 3. Sometimes low-grade fever

#### Remedies for Cough

- 1. Keep Glycyrriza piece (liquorice/Mulethi) in mouth in case of dry cough and sucking
- 2. Make decoction of powder of leaves of Adhatoda vasica (Vasa/ adoosa) or fresh leaf juice of vasa mixed with pinch of long pepper (Pippali) and one tea spoon (5 ml.) honey, to be given two times a day.
- 3. Powder of Black pepper (Kali Mirch) with honey not only subside the attack of cough but it also reduces the congestion in chest if used repeatedly.
- 4. Prepare a linctus from Harad, Lavang (cloves), Adraka (ginger), Nagar musta (nut grass)- all in powder form and mixed with honey and lick three to four times daily.
- 5. Warm/hot water sips help to reduce dry cough.
- 6. Honey is good for cough, and is used as a vehicle for medicines.

#### **Some common Ayurvedic medicines**

- 1. One tea spoon (5 gms.) of **Sitopaladi Churna** mixed with honey may be given three times a day in productive cough.
- 2. Lavangadi vati/ Khadiradi vati is also useful. 2 tabs three times a day.

**Referral criteria:** In case cough is present for more than 2-3 weeks; the patient should consult a doctor. The patient may be referred to a doctor if breathlessness or red discolouration of the phlegm is found while coughing.

#### 4. Fever

- 1. Giloya/ Guduchi (Tinospora) kadha:- Take 60 gms of a thumb thick pieces of Giloya. Remove outer thin layer. Add ½ teaspoonful powder of dry ginger. Add 10-12 glasses of water. Boil on slow fire. When three glass full decoction remains, cool it. Give half a glass of freshly made decoction.
- 2. Juice of leaves of holy basil (Tulsi)1-2 tea spoon (5-10 ml.) mixed with half tea spoon (2.5 gm.) black pepper (Kali marich) powder, to be given warm thrice a day.
- 3. One tea spoon (5 gm.) coriander (Dhania) powder mixed with one pinch dry Ginger (Sonth) in one glass of warm water and keep it for overnight, then sieve it in the morning and to be given.
- 4. China grass tea: Tea prepared with China grass is a refreshing decoction for someone suffering from simple fever

**Referral criteria:** If fever is not controlled within 2-3 days and joint pain or shivering appears, consult a Doctor.

#### **Conditions related to Gastro- Intestinal System**

Common diseases of the gastro-intestinal system are primarily caused by the food and water that we take. Therefore, the disorders arising from gastro-intestinal tract should be promptly managed.

# 5. Indigestion

Indigestion is due to diminished function of Agni/digestive fire/enzymes because of intake of improper food. It can also happen due to intake of heavy food, over eating, infected food, untimely intake etc.

#### **Home Remedies**

- 1. If digestive capacity is low simple remedies like 'Trikatu' (combination dried ginger, long pepper and black pepper) and 'Panchakola' (combination of five drugs) Pippali, Pippalimoola, Chavya, Chitraka, Nagara powders **2 gms** twice daily are indicated for use along with warm water before meals.
- 2. Prepare an infusion of Aniseed (Saunf), Ginger (Adrak), Cumin (Jeera) seeds and black pepper (kali mirch) in water by boiling it. These are all digestives. Consume this whenever there is an indigestion problem.
- 3. Dried ginger (Shunthi) powder half tea spoon (2.5 gm.) may be taken twice daily with luke warm water.
- 4. Lime (Nimbu) juice one tea spoon (5 ml.) to be taken three times a day after meal.
- 5. Soak the teaspoonful quantity of Celery seeds (Ajamoda) in a glassful of buttermilk. Keep this for five to six hours. Consuming this mixture helps in relieving the indigestion quickly.
- 6. After a heavy meal, put two to three pieces of clove in the mouth or a piece of garlic and let them remain there till all the juices are extracted. This will help the digestion take place faster.
- 7. Fennel (Saunf) seeds can also be put in the mouth.

#### **Ayurvedic medicine**

1. Lavanbhaskar/ Hingwashtaka churna – 2-3 gms with hot water is useful in indigestion.

#### **Dietary advice for Indigestion**

- 1. Do not consume a heavy diet when having an indigestion problem. Stick to a vegetarian diet, and consume more fibers.
- 2. Fasting for a day will help a lot. On this day of fasting, you may consume liquids like fresh fruit juices.
- **6.** <u>Constipation (Kabja/ Vibandha)</u>: It means failure to evacuate faecal matter from the body, on a regular basis. There are several causes for constipation like (i) habit of suppressing the urge over long periods (ii) absence or non-availability of articles habitually used before defecation, such as drinking coffee or tea (iii) habituated use of laxatives.

#### **Home Remedies:**

- 1. Triphala powder is very popularly used for this condition. It contains three drugs namely Haritaki (Harada), Vibhitaki (Baheda) and Amalaki (Amla). 5gm of this powder (1 tea spoon) should be taken with luke warm water at bed time.
- 2. The best to evacuate in chronic condition is castor oil. The castor oil used should be purified and diluted. The 4-6 tea spoon (20-30 ml.) of this oil is to be taken with warm milk.
- 3. 1 Teaspoonful of Sana leaves (Sanay) in 1 cup of hot milk at bedtime is an easy method to relieve constipation.

#### Diet consideration:

1. Drink a glass of water early in the morning after washing the face and mouth.

- 2. It is a better idea, if you can take a glass of warm milk at bedtime after adding a teaspoonful of ghee to it.
- 3. Beans, dry grains, cabbage, mushrooms and other dry food should be avoided.
- 4. Spices, which balance digestion- asafoetida (Hing), Ginger (Adraka), Cardamom (Elayachi) or Fennel (Saunf), should be taken with food to alleviate and promote the downward movement of gas.
- 5. Try to avoid hot and spicy food and adequate fluids should be taken.
- 6. Eat plenty of fruits and leafy vegetables as Papaya and sugarcane are very effective in relieving constipation.
- 7. Use whole wheat flour and not refined flour.
- 7. <u>Intestinal Worms</u>: Prevalence of Intestinal Parasitic Infection and Skin disorders are significantly high in school going children in rural areas.

Most children with intestinal worm infestation are asymptomatic. In acute stage there will be abdominal pain, diarrhoea and itching at anal region. In chronic cases it is associated with iron deficiency anaemia, weakness and lassitude.

#### Home remedies

- 1. Powdered seed of Embelia ribes (Vidang) one tea spoon (5 gm.) mixed with honey and jaggary (guda) to be given twice a day. A suitable purgative should be taken after 24 hours of the intake of medicine.
- 2. Take four tablespoonfuls of the fresh milky juice of unripe papaya fruit (Papita) with one table spoonful of honey and four table spoonful of boiling water. This acts as an effective anti-helmintic in expelling round worms.
- 3. Paste of Moringa (Drumstick tree) leaves may be given empty stomach.
- 4. Take 20-25 gm of jaggery early in the morning. After 30 minutes take 1-2 gm of seeds of Hyoscyamus niger (Khurasani yavani) with cold water. This expels intestinal worms.
- 5. Seeds of Gourd- 200 mg of seeds of bitter gourd (karela) taken daily with buttermilk are also good for intestinal worms.

#### **Auyrvedic Medicines**

- 1. Palashbeej Churna: 3 to 6gm. with hot water.
- 2. Haridrakhand: 3 gms. with warm milk.
- 3. Punarnnavadi Mandur: 500 mg. Tab. 1 each at morning and evening with butter milk in case of anemia.
- 4. Vidangarishta 4-6 (20ml. 30ml.) with water after meals two times a day.

**General Hygiene:** You should ask to maintain proper hygiene such as washing the hands thoroughly before meals and after going to the toilet. Keep fingernails short and clean to avoid infections.

#### **Referral Criteria**

In cases of persisting stomach pain, vomiting and seizures help of a doctor must be taken.

**8.** <u>Acidity & Heartburn</u>: Usually expressed as excessive formation of acid in the stomach due to which patient feels burning sensation.

#### **Home Remedies**

- 1. Take lemon juice, (mixed with a cup of water) and add some rock salt (saindha namak) to taste. This may be taken 1-2 hours prior to taking meals, or lemon may be used with meals. It will also remove constipation which isone of the contributory causes of acidity.
- 2. Acidity, heartburn can be easily treated with by taking lots of fresh radishes (mooli). For taste one may add carrots and tomatoes without salt.

- 3. Drinking fresh juice of radish would also be very helpful to treat acidity.
- 4. Chewing a piece of Terminalia chebula (harada) is an age old remedy.
- 5. Drink coconut water 3-4 times a day.
- 6. A teaspoon of seeds of Ajwain with small amount of salt is good for acidity and gastritis.
- 7. Powdered fruit rindof Embelica officinalis (Amla) one tea spoon (5 ml.) with milk twice daily.
- 8. Terminalia chebula (Harada) juice, 1-2 teaspoon (5-10 ml.) daily after meals is very effective in controlling acidity. The juice can be mixed with an equal amount of Amla juice for better results.
- 9. Take a tiny piece of jaggery (guda) every hour. Just keep it in the mouth and slowly suck it till acidity subsides.
- 10. Take dried blossom of tulsi, rind of the Moringa (drum stick) tree, black pepper (Kali mirch) and long pepper (pippali) in even quantity and grind them to powder form. Take 3 gms of this powder every morning and evening with plain water. All the acidic effect of the body will pass out with urine and sweat.

**General advices**: These conditions are caused by ingestion of heavy, rich, spicy diet with ghee or oil. It can also be triggered by eating food hastily. Those who drink and smoke heavily also suffer from acidity and heartburn, in addition to flatulence, colic and general dyspepsia. Remove the basic factors that are known causes of such disturbances.

# 9. Anorexia or loss of appetite:

In this condition the patient does not have desire to eat.

#### **Home remedies**

- 1. Small pieces of ginger (Adraka) mixed with lime juice and rock salt may be taken before having food.
- 2. Drink boiled rice water (Mand) mixed with little salt before having food.
- 3. Sucking of powdered fruit of Emblica officinalis (Amla) mixed with pinch of salt before food.
- 4. Cut fruit of lemon (Nimbu) into two halves, sprinkle powdered black pepper and salt and then juice to be sucked.

#### **Ayurvedic Medicine:**

Lavan Bhaskar Churna: upto one tea spoon (5 gm.) to be taken with luke warm water twice a day.

#### 10. Stomach ache or Abdominal Colic

Aggravation of wind (Vayu) in abdomen causes pain. Other causes are flatulence, constipation, exposure to cold/damp, hernia, appendicitis, stone etc whose presence confuses the matter but, since symptoms are quite different in each case. If it is due to indigestion or constipation, it is easy to manage at home.

#### **Home Remedies**

- 1. Paste of Asafoetida (hing) may apply around the umbilicus.
- 2. Powdered roasted seed of Bishop's Weed (ajwain) one tea spoon (5gm.) may be taken with warm water.
- 3. Sucking of fried Terminalia chebula (Harada) in Castor oil (Eranda tail) mixed with salt may be taken two times a day.
- 4. Fried Asafoetida (Hing) in Ghee to be taken with Jaggary (guda), twice a day.

#### **Ayurvedic Medicine**

- 1. Hingvashtak churna one tea spoon (5 gm.) with hot water.
- 2. Lasunaadi Vati-2 tablets 3 times daily may also be tried.

Diet advice: Nothing should be given to eat or drink during an attack. But, when the crisis period is over, some

light, liquid diet may be advised. Avoid giving, heavy and, fried foods, spices etc. Encourage the patient to walk and do mild exercises. Drink warm water in intervals.

#### Referral criteria

- 1. When the pain is so severe and the patient is restless with pain.
- 2. Distension in abdomen and vomiting occurs.

#### 11. Diarrhoea

In this condition the patient passes liquid motions frequently sometimes associated with pain and this water loss (dehydration) can be fatal especially in children.

Treatment of diarrhoea is very easy and quite effective. Don't try to stop diarrhoea immediately (loose motions may not stop for 2-3 days if not watery); the principle is to prevent dehydration. Water needs to be restored quickly. Continue feeding. If child is breast feeding, it should continue.

#### **Home Remedies**

- 1. Powder of Pomegranate fruit rind (5-10gms) mixed with honey may be given four times.
- 2. Add a few drops of Pudin Hara or Amritdhara (mint essence or peppermint) to half a cup of water and drink it 3-4 times daily.
- 3. Powder of fruit pulp of Aegle marmalos (bel/bilva) 1 tea spoon (5 gm.) mixed with a glass (100 ml to 250 ml) of butter milk (takra) to be taken three/ four times.
- 4. Qwath of Motha (Mustak) and Kutaj in same quantity may be given two times.
- 5. Juice of Babbul leaves mixed with honey may be given two/ three times.
- 6. Powder of fried cumin (Jiraka) or fruit of long pepper (Pippali) or dried ginger (shunthi) one tea spoon (5 gm.) mixed with 1 litre butter milk (Takra/ Mattha) and divided into 4 equal parts, and each part is to be given at the interval of six hours.
- 7. One teaspoonful of dried mango fruit when taken with butter milk two times a day acts as a good curative for diarrhoea and dysentery.
- 8. Take one raw papaya. Add 3 cups of water into it and boil it for near about 10 minutes. Now strain the mixture and finish the water in one day.

**General precautions:** Give the baby a lot of watery foods like 'Sharbat', coconut water, rice-kanji, light tea etc. which are commonly available, locally accepted liquids also may be given to children.

The person suffering from bloody diarrhoea (dysentery) needs immediate medical help. Treatment often starts with an oral rehydrating solution.

#### 12. Vomiting

Vomiting is a forceful expulsion of the stomach contents. Vomiting is also known as emesis. Vomiting may or may not be accompanied by nausea.

#### Home Remedies

- ▶ Drink coconut water in small amount.
- ► Have a cup of ginger tea.
- ► Lick half tea spoon (5 gm.) powder of (Harada) mixed with honey many times in a day.
- ► Eat a mixture of honey and powder of 2 roasted cardamoms.
- ► Have a glass of chilled lime juice mixed with sugar.
- ▶ Have a mixture of 1 tea spoonful (5 ml.) mint juice, 1 tea spoon (5 ml.) lime juice, 1/2 tea spoon (2.5 ml.) ginger juice and 1 tea spoon (5 ml.) honey.

- Have one tea spoon (5 ml.) onion juice in regular interval.
- Take Laja (parched rice corn) mixed with warm water.

#### 13. Wound Care

If the small cut or abrasion is there.

#### Home remedies

- 1. Application of ice on bleeding wound until the bleeding stops.
- 2. Turmeric (Haldi) in oil is an excellent anti-septic. For abrasions and small cuts, application is enough. Dressing is not required in such cases.
- 3. Aloe is a good wound healer and a natural dressing too. Cut a piece of aloe across its length and of the wound size. Put the raw cut side of aloe and tie it on the wound with cloth. Replace aloe dressing every day.
- 4. Application of Neem oil is a good substitute. For bigger wounds, you may put it on the dressing pad.
- 5. Raw papaya pieces can be an effective dressing. This is especially good for infected wounds.
- 6. You can wash the wounds also with Triphala kadha.

#### 14. Sun stroke

It happens due to excessive sun exposure. Drinking plenty of water and avoiding exposing the body in sunlight is the best solution.

#### Home remedies:

- 1. Panaka/ Panna: Soft drinks prepared with fruit juices, sugar and spices such as trijata (Dalchini, Tej patra, Elaichi) are known as Panaka. Another variety Aam Panak (Pana) is prepared by boiling unripe mango on mild heat and made into a paste. Then add the paste to water 16 times in quantity and then mix Jeerak (cumin seeds), rock salt (Saindhav Namak), black pepper (Kali Mirch), clove (lavanga), cardamom (Ela), and Sugar for taste. It is useful in heat stroke, thirst, burning sensation in body and in indigestion.
- 2. Stem juice of Tinospora cordifolia (Guduchi/ Giloy) 2 tea spoonful (10 ml.) mixed with pinch of sugar and salt to be taken two times a day.
- 3. Diluted curd mixed with lime juice, mint leaves and pinch of salt to be given many times.
- 4. Liquid diet may be taken and use of onion in food may be increased.

# 15. Burn

Exposure to heat or temperature

**Home Remedies:** If burn is not severe:

- 1. Apply fresh juice obtained from Aloe vera (Ghritkumari / Gheekumar) on affected part.
- 2. Apply mixture of linseed oil (Atasi tail) and Honey in equal part.
- 3. Apply mixture of Tila tail and coconut (Nariyal) oil in equal part.

#### 16. Acne / Pimples

It is common among teenagers and adults. Acne is not a physically painful or discomforting condition.

#### **Home Remedies**

- 1. To treat affected area, make an infusion of Holy basil (Tulsi) leaves. Put two to four tea spoon (5 ml.) of dried basil leaves in a cup of boiling water, steep for 10 minutes, cool and apply.
- 2. Face pack made of orange peel 2gm, red sandal- 1 gm, and multani mitti 5 gm to be applied on the face and washed with luke warm water.

3. Apply the paste of thorn of Silk Cotton tree (Shalmali) on Pimples.

#### DO's

- Expose your body to sun and air. Fresh air and daily exercise are very important.
- ▶ It is advisable to take sufficient sleep and keep your bowels regular.
- ▶ Wash your face twice or thrice a day. However, avoid using soaps that dry your skin.
- ► Keep your bed sheets clean, as dead skin, oil, cosmetics, hair and dirt on the sheets will clog pores of skin further.
- ▶ Apply an ice cube (wrapped in a soft piece of cloth) wherever you spot redness. It not only reduces the redness, it lessens the inflammation and helps the skin to heal.

#### **DONT's**

- 1. Avoid taking too much milk products, nuts, fats, fried and oily foods, chocolate etc.
- 2. Do not pinch the pimple, as it can lead to inflammation. Worse still, squeezing can leave scars on your face.
- 3. Avoid oil-based cosmetics, as they tend to clog the pores on your skin.

# Conditions related to Women/ girls

# 17. Menstrual cramps/Pain (Dysmenorrhoea):-

During menstrual period some women/girls have pain in the lower belly or lower back, sometimes called cramps. It may begin before bleeding or just after it starts.

#### **Home Remedies**

- 1. Garlic is specially recommended; take 5-7 garlic pods per day after removing the outer covering. You can reduce the pungent smell, by taking along with butter milk or lemon juice.
- 2. Extract juice from Kumari or Aloe Vera pulp and take one teaspoonful of it internally.
- 3. Three gms. powder of black tila (sesame), dry ginger (Shunthi) and aloe (ghritakumari) in equal quantity and one gm. jaggery with tepid water twice a day or decoction of above drugs including jaggery in the dose of 10-20 ml. twice a day is indicated for scanty menstruation.

#### Other important things to remember during Menstruation

- 1. Hygienic sanitary pads should be used during menstrual period.
- 2. Some girls prefer to make their own pads out of folded cloths or pads of cotton, these pads must always be clean and dry when worn.
- 3. Pad should be changed frequently as required and disposed off by burning out doors in a large empty container.
- 4. It is important to wash outer genitals well with luke warm water every time while changing the pads.

# Some Do's

- ▶ Do exercise, walk and run
- ▶ Rub your lower belly. This helps the tight muscles to relax.
- ► Fill a bottle or some other container with hot water and place it on your lower belly or lower backor use a thick cloth you have soaked in hot water.
- ▶ Drink tea with ginger.

#### Some Dont's

► Avoid fried food, pulses and sour food items.

Avoid foods that will cause constipation, especially during the last week of menstrual cycle.

#### 18. Anaemia (khoon ki kami)

This the very common condition specially in adolescent girls and women of rural areas in India.

#### **Common Causes of the Anaemia in Adolescent Girls**

- Malnutrition
- Worm infestation
- ► Frequent conception or conception in early ages (Before 18 years of age)
- ► Excess bleeding during menstruation or any other reason like bleeding piles, bloody diarrhoea, accidents etc.

#### **Home Remedies**

- 1. Use of 'Punarnavadi mandura' in a dose of 250mg-500mg with water or buttermilk is indicated for minor and moderate anaemia.
- 2. Anaemia caused due to excessive bleeding during menstruation could be managed by the intake of 'tandulodaka' (rice wash- obtained from red variety of rice) with iron preparations like 'Punarnavadi mandura' 0.5 gm twice daily.
- 3. Indian Pennywort (Mandukparni) fried in ghee is also useful in anaemia.
- 4. Juice of Amla mixed with Honey to be taken 2 tea spoonful (10 ml.) two times a day.
- 5. **Lohasav** 20 ml two times a day after meal with equal quantity of water.

# Do's (dietary considerations)

- 1. Use of green leafy vegetables like spinach (Palak), Hogweed (Punarnava), Drumstick (Sigru) and fruits like Amalaki (Amla), Pomegranate (Anaar), dry grapes (Munakka) etc. in daily diet is important to prevent anaemia. Green leafy vegetables should be prepared in iron pan.
- 2. For enhancing the absorption of iron, one must take whole grams, sprouts, fresh fruits and fresh raw vegetables.

#### Dont's

- 1. Intake of tea, coffee and other preservatives in the food interfere in the absorption of iron, therefore intake of these beverages should be minimized.
- 2. Avoid taking infected foods because it will cause worm infestation leading to anaemia.

#### 19. Leucorrhoea- (Safed Paani)

It is also known as the 'white discharge' or 'Shveta Pradar', due to discharge of white fluid from the vagina. The vaginal flow is foul smelling, viscid (tenacious) and thick that stiffens the linen. This is a serious condition, which if not treated for a long time, may cause other problems. In this condition doctor must be consulted; however some remedies may be used.

#### **Common Remedies**

- 1. Paste of flower of Hibiscus rosa-sinensis (Gudahal) one tea spoon (5 gm.) to be taken empty stomach.
- 2. Powdered root of Amaranthus (Chaulai) or Country Mallow (Bala/Khireti) to be taken with water (rice wash), twice a day.
- 3. Amla churna (Powder) –5 gms in the morning and evening with honey.

4. Soak dry coriander (Dhania) in 125ml water at night and drink the contents, after sieving, for 7-10 days (to be taken in the morning).

**Advice:** Ensure cleanliness of vaginal passage daily.

# Diabetes mellitus madhumeha

Diabetes Mellitus (*Madhumeha*) is a metabolic disease in which the person has high blood glucose over a prolonged period. Ayurveda identified *Madhumeha* as a disease which is very difficult to cure (*Anushangi*). It is described that high calorie diet and sedentary habit are important causative factors Diabetes mellitus.

# I. Types

II. The different types of Diabetes Mellitus and their symptoms/presentations are as follows-

#### **Type-1 Diabetes mellitus**

This type of diabetes is due to destruction of insulin hormone producing cells in the body. The following symptoms are seen:

- 1. This diabetes will require insulin for survival.
- 2. This diabetes usually affects children and young adults.
- 3. The presentation is acute and often mistaken for acute infective illness in children with symptoms of fever, pain abdomen, excessive urination and weight loss.

#### **Type-2 Diabetes mellitus**

This is commonly seen in adults with the following symptoms-

- 1. Excessive urination, excessive hunger and weight loss.
- 2. There may be increase in infections like skin infections, itching in genital organs in women.
- 3. Sometimes there may be no symptom but on blood test for some other illness or screening, high plasma glucose level is found.

#### III. Prodromal symptoms

The onset of diabetes is recognized by the following early symptoms which call for adoption of early preventive measures:

- **Burning** sensation in hands / feet
- Oiliness on face
- Heaviness in body
- **Sweetness** and whitishness of urine.
- Laziness
- Polydipsia (increase of thirst)
- Bad breath
- Plaques on teeth
- Excessive growth of nails
- **Polyurea** (increased frequency of urination) and dirty urine.

These are main early symptoms of *Madhumeha*.

#### IV. Diagnosis

The diagnosis of Diabetes Mellitus depends upon the presentation as mentioned above. However, diagnosis will be made by measurement of the plasma glucose. The following tests are required to be done:

- 1. Blood test to determine plasma glucose level.
- 2. Urine should be examined for glucose, protein, ketone bodies and microscopic examination done for presence of pus cells.

Further, the following tests need to be done to assess target organ involvement and degree of control of diabetes through treatment:

- 1. Glycosylated haemoglobin (HbA1C)- for assessing the degree of control and monitoring treatment.
- 2. Fasting lipid profile (total cholesterol, triglycerides, Low density lipoprotein and high density lipoprotein).
- 3. Serum electrolytes.
- 4. Blood urea and serum creatinine.
- 5. Microalbumin and creatinine clearance.
- 6. Electrocardiography.
- 7. X-ray chest postero- anterior view.
- 8. Fundus examination.

#### V. Complications of Diabetes mellitus

The complications of Diabetes are:

- 1. Involvement of major blood vessels causing heart diseases.
- 2. The involvement of small blood vessels causes diabetic complications in the retina of eyes, kidneys and neurons.
- 3. The patients of diabetes are more prone to infections.

#### VI. Referral Criteria

- 1. Diabetes with pregnancy.
- 2. Diabetes with complications (Diabetic foot, coronary artery disease, diabetic nephropathy, diabetic neuropathy, diabetic retinopathy) and renal failure.
- 3. If not managed by oral Ayurvedic drugs and lifestyle modifications.
- 4. Patients with severe infection, marked weight loss and breathlessness.

# Prevention and control of Diabetes Mellitus & common medicinal plants with their uses

Ayurveda emphasizes on preventive aspects. It laid the concepts of Dinacharya (daily regimen), Ritucharya (seasonal regimen), Sadvaritta (moral conducts) and Achara Rasayana (social conducts) as well as established guidelines for Ahar (dietary regimen) and Vihar (lifestyle) as mentioned in Unit-3. First line of prevention and control as per Ayurveda is Nidan Parivarjan i.e avoidance of the consumption of aetiological factors of the disease. Addiction to the pleasure of sedentary habits (*Asya sukham*), sleep(*Swapna sukham*), soup of the meat of domesticated and aquatic animals and animals inhabiting marshy land (*Gramya- Audak Aanup Mamsa*), freshly harvested food articles (*Navaannapana*), freshly prepared alcoholic drinks, preparation of jaggery (*Guda Vaikrita*) and all *kapha*- aggravating factors are responsible for causation of the disease and hence should be avoided. Accordingly following measures are to be followed-

# I. Do's (Pathya)

- 1. Diet planning: Intake of yava (barley), mudga (green gram), old rice, whole wheat atta, bitter gourd, drum- stick, green leafy vegetables, methi, patola (snake gourd), pumpkin, garlic(Lasuna), Turmeric (Haridra), cucumber, watermelon, buttermilk, triphala, Aloe(kumara) and fruits like Guava, oranges, Indian blackberry (jamun) etc. are beneficial in diabetic patients.
- 2. Dincharya (daily regimen) and ritucharya (seasonal regimen) is to be followed. Timely intake of diet.
- 3. Daily exercise/increase calorie consuming activities (walking, swimming, etc.)
- 4. Reducing stress by Yoga and meditation. Yogasanas such as Paschimottanasan, Halasan etc.
- 5. Restrict and reduce weight.
- 6. Regular use of rasayana drugs like Guduchi, Amalaki, etc.
- 7. Get Blood Sugar checked regularly and if high consult doctor and follow advice. After 40 years, blood sugar should be checked regularly. If person is overweight, the blood sugar level should be checked even before the age of 40 years.
- 8. Take advice of doctor for regular tests e.g. kidney function, eye check up etc.
- 9. Take utmost care of personal hygiene especially of feet and hand.
- 10. Don't stop or change medication on your own or advice of friends.

# II. Dont's (Apathya)

- 1. Intake of rice, sugar/ sugar products, dairy products like, sweets, ice cream, chocolate, candies, fried foods e.g. poori, parantha, junk food e.g. aerated drinks, pizzas, burgers, and other kinds of fast foods, potatoes, sweet potatoes, fruits with high sugar e.g. grapes, mangoes, banana and processed food etc.
- 2. Sedentary lifestyle
- 3. Sleeping during daytime and excessive sleeping.
- 4. Smoking, Tobacco, Alcohol.
- 5. Injury and immediately consult in case of injuries/ skin infections.

# III. Useful Ayurvedic herbs for diabetes

- 1. The extract (Satwa) of *Giloya* in combination with other herbs like *Triphala*(*Haritaki*, *Bhibhitaki* & *Amalaki*) is beneficial for Diabetes. Svarasa (juice) of *Bilwa* (bael) -15-30 ml, to be taken three times a day.
- 2. Svarasa (juice) of *Guduci* 15-30 ml, to be taken thrice a day
- 3. Powder of *Madhunasini-* 3-6gm, to be taken with warm water thrice a day.
- 4. Powdered flowers of *Palasa*(bastard flower) -10 gm, to be taken with luke warm water thrice a day.
- 5. Powdered seed of *Jambu* is to be taken in 3 to 6 gm dose with water three times a day.
- 6. The chewing of Jamun leaves prevents the conversion of starch into sugar.
- 7. **Bitter Gourd** Juice: Juice of Bitter gourd/Karela (30 ml) may be taken on empty stomach daily in the early morning.
- **8. Methi Seeds** (Fenugreek seeds) are useful to minimize the signs and symptoms of diabetes. Methi powder 3-6 gm with water to be taken two times a day.
- **9. Amla:** The juice of Amla (*Embelica officinalis*) (20 ml) twice a day is good for diabetic patient. The powder of Amla fruit 3-6 gm with warm water may also be taken twice a day.
- **10. Snake gourd**: Decoction of equal part of Patola (snake gourd), Neem and stem of *Guduci* (15 to 30 ml.) be taken thrice a day.
- **11. Darvi** (Daru *Haridra*) decoction along with *Triphala* and Honey is also indicated in Diabetes.
- **12. Vijaysar Churna**: Pterocarpus marsupium bark may be taken in the form of powder 3-5 gm with water twice a day. Also, the vijaysar stem may be kept in water overnight. Drink it in the morning empty stomach.
- 13. Fruit juice of *Amalaki* (Amla) -15-30 ml and juice of rhizome of *Haridra*(turmeric) -15-30 ml to be taken thrice a day.
- 14. Decoction of equal parts of leaves of *Patola* (snake guard) and *Nimba* (neem), fruit rind of *Amalaki* (amla) and stem of *Guduci* (giloy)-15-30 ml to be taken thrice a day.
- 15. Powder stem of *Sariva* (Indian sarsaparilla)- 1 part, *Tejapatra* (Tamalleaf) -1 part and root of *Yastimadhu* (mulethi) 1 part to be taken in 1 gm dose with 50-100 ml water twice a day.

# IV. Some simple home remedies

- ▶ Haldi (turmeric) is a powder of a root. It is widely used in our country in food as spice and as medicine. Its medicinal antiseptic properties have been known for hundreds of years. Haridra juice with Amalki Juice is indicated in Diabetes. Haridra powder 1-3 gm with luke warm water may also be taken two times a day.
- ▶ **Dalchini (Cinnamon powder)**: This is one of the important natural home remedies. First take one litre of drinkable water. Add 3-4 tbsp of cinnamon powder and heat it for 20 minutes. Strain the mixture and made it cool. Drink it every day.
- ▶ **Triphala** is a very useful combination of three fruits: *Aamla*, *Hirda*, and *Beheda*. We can use the *Triphala* powder in constipation. It is useful to reduce obesity and diabetes. Its external application is very useful for healing wounds. *Triphala* powder can applied on skin at the time of bath. Its decoction is useful for gargling in illnesses such as sore throat, stomatitis, and bleeding gums. *Triphala* powder is also used as tooth powder and vision disorders.
- ▶ Oil massage is good for pain in the joints. Medicines may still be necessary for joint pains. Sesame oil or coconut oil is considered good for massage. Massage improves blood circulation in the skin. Head massage with oil helps to overcome sleeplessness.

# V. Common medicinal plants with their uses:

India is home to wealth of biological diversity 140 plant genera being endemic to the country. The curative aspects of plants have been known to Indian from prehistoric times and have now been scientifically validated by mode research. Some such important plants and their uses are given below:-

#### ► HARIDRA – (Curcuma *longa* Linn.)

Synonyms: Sanskrit: Gauri, Kanchani; Hindi: Haldi; English: Turmeric

Habitat: cultivated throughout the warmer parts of India.

Part used: rhizomes (Dried as well as raw)

**Uses:** Haridra is anti-inflammatory, antiseptic, carminative, anthelmintic and used in healing ulcers and wounds, skin diseases and allergic conditions.

# ► GUDUCHI: (Tinospora cordifolia(Wild.).

Synonyms: Sanskrit: Amrita, Amritavalli; Hindi: Giloya, Gulancha; English: Gulancha Tinospora.

**Habitat**: found throughout the tropical regions of India.

Part used: Dried stems

**Uses:** It is used in fever, jaundice, diabetes, chronic diarrhoea and dysentery, rheumatoid arthritis and for promoting longevity.

#### ► HARITAKI : (Terminalia chebula Retz.)

Synonyms: Sanskrit: Abhaya, Pathya, Kayastha; Hindi: Harre, Harar; English: Chebulic Myrobalan.

**Habitat**: found throughout India in deciduous forests on dry slopes upto 900 m especially in Bengal, Tamilnadu, west coast & western ghats elevation.

**Part used :** Mature & immature fruits (Pericarp)

**Uses:** It used as an alternative, digestive, laxative, anti-emetic, anti-tussive and as a rejuvenator.

#### ► NEEM (Azadiracta indicaA. juss)

**Synonyms:** Sanskrit: Nimbaka; Hindi: Neem; English: Margosa, Neem Tree.

**Habitat**: Occurring throughout the country up to an elevation of 900 m.

Part used: dried leaf bark, flowers, seeds & oil

**Uses:** Its leaves, fruits and outer portion of the stem have medicinal property. Leaves are used for skin diseases like eczema, infection. The oil prepared with extract of neem leaves or decoction, crushed leaves is useful in itching and wound healing. It is a great antiseptic and pest-control medicine. Decoction of the outer portion of its stem is also helpful in various diseases.

**Making neem oil:** make 100 ml fresh juice of neem leaves. Add 25 cc sesame oil to this. Slowly boil the mixture under cover. The water part will completely evaporate in half an hour. Cool and filter it. This is neem oil for wound care. Apply this to wounds 2-3 times a day. This heals the wound well. For childbirth injuries, neem water bath is a healing treatment. Crush some leaves of neem and put them in warm bath water. Let the mother sit for fifteen minutes in this bath tub.

#### ► TULSI (Oscimun sanctum Linn.)

Synonyms: Sanskrit: Tulasi, Tulsi; Hindi: Tulsi; English: Indian Basil/ Holy Basil/ Sacred Basil.

Habitat: Found throughout the country.

Part used: Dried whole plant.

Uses: Tulsi is a small herb, but having great medicinal properties. Tulsi leaves are mainly used for some

ailments. They are useful in cough and cold. Give the Tulsi juice with honey. The decoction of Tulsi leaves is also useful for cough. The seeds of Tulsi are cold in nature. Hence the seeds with milk or ghee, are used in heart burn, bleeding from nose, burning feet, bleeding piles, sore mouth etc. Take about a cupful of Tulsi leaves. Soak them in water for five minutes. Then crush them on a stone. Strain in cloth and collect about 20 ml juices (half a cup). This makes 3 doses for one day for an adult in cold and fever illnesses for 3 days. For children the dose could be 10 leaves juice, 2-3 times a day.

# ► KUMARI (Aloe barbadensis Mill.)

Synonyms: Sanskrit: Kumari; Hindi: Gheekuvar; English: Indian Aloe.

**Habitat**: It is a garden plant and found all over in the India. It is hardy plant and stays for years.

Part used: Leaf pulp

**Uses:** In wounds, we can apply aloe as a medicated dressing. Take a piece of aloe about the size of the wound. Cut it into a slice. Clean the wound with water. Apply the aloe slice on it and tie up with a clean cloth bandage. Change the dressings every day. It heals faster. It is very useful in burns. It is useful for liver disorders and women's illnesses like pain in the periods. It is also used for dandruff and growth of hair.

## ► KUTAJA (Holerrhena antidysenterica Wall.)

Synonyms: Sanskrit: Kutaja; Hindi: Kuda, Kudaiya; English: Kurchi, Conessi tree, conessi bark.

**Habitat**: It is a small to medium sized tree, found throughout India, drug collected from 8-12 years old tree during the middle of rainy season (July to September) and again at the end of winter season by hewing and peeling and separated from attached wood.

Part used: stem bark, seeds, leaves

Uses: The bark or cover of the tree-stem is used for medicine. This is a good medicine for loose motions and dysentery. You can simply grind a piece of bark and mix with a spoon of honey and give as medicine. Kadha (Kwatha) is also useful. For this take a 10 gm (2 teaspoon full) of bark powder, add one glass (200 ml) of water and boil till ¼ water remains. For an adult 20 ml kadha (Kawatha) for 3 times a day is useful to stop dysentry.

#### ► GUGGULU – (Commiphora wightii (Arn.) Bhandari)

Synonyms: Sanskrit: Devadhupa, Kaushik; Hindi: Dhupa, Guggal; English: Indian Bedellium.

**Habitat**: distributed in arid zones of south- western and parts of Central India particularly Rajasthan and Gujarat.

Part used: oleo-gum resin

**Uses:** Guggulu is a potent anti inflammatory agent and is used in the treatment of lipid disorders, obesity and rheumatism. It is also used an antibacterial and insect repellent.

# ► SALACIA- (Salacia reticulate Wight.)

Synonyms: Sanskrit: Vairi, Ekanayakam, English: Salaretin, Marking nut tree

Habitat: Coastal to evergreen forests. Found in Karnataka, Kerala and Southern Orissa.

Part used: Roots

**Uses:** Used for treatment of diabetes, haemorrhoids gonorrhoea, inflammation, leucorrhoea, leprosy, skin diseases, wounds, ulcers, indigestion, flatulence, colic and spermatorrhoea.

# ► MADHUNAASHINI – (Gymnema sylvestre(Retz.) R. Br.)

**Synonyms**: *Sanskrit*: Madhunaashini ,*Hindi*: Gurmar. **Habitat**: Throughout India, in dry forest upto 600 m

Part used: Whole Plant, Leaves

**Uses:** The fresh leaves when chewed have the remarkable property of paralyzing the sense of taste for sweet and bitter substance for some time. It lowers blood sugar level and is good for the treatment of Diabetes. The herb is useful for stimulating the heart; it increases urine secretion.

# **SOME IMPORTANT MEDICINAL PLANTS**



Tulsi (Ocimum sanctum),



useful part: leaf



Guduchi (Tinospora cordifolia),



useful part: Stem



Haritaki (Terminalia chebula),



useful part: Fruit rind



Neem (Azadirachta indica),



useful part: Leaf, Bark, Fruit



Ghrita Kumari (Aloe vera),



useful part: Leaf juice



Kutaja (Holarrhena antidysenterica),



useful part: Bark, Fruit



Guggulu (Commiphora wightii ),



useful part: oleo resin



Amalaki (Embilica officinalis)



Haridra (Curcuma longa)



Methi (Trigonella foenum-gracium)



(Fenugreek seeds)



Eknayakam (Salacia reticulata)



**Useful Part: Root** 

# ROLE OF ASHA AND OTHER HEALTH WORKERS

- ASHA workers are selected by community, out of residents within the community. They are working on
  voluntary basis, although compensation would be provided to them for specific activities and services.
  Other health workers are also in close proximity to the community so that they can promote the benefits
  of AYUSH Systems effectively.
- 2. Most villages have health and sanitation committee. The committee members including ASHA have responsibility to make and implement village health plans. At the time of making plan they can facilitate incorporate AYUSH initiatives in Village health plan. Apart from this they may bring people together, motivate them to use AYUSH remedies for diabetes as they are available in kitchens and near their houses. Uses of house hold remedies for many ailments including diabetes which can be easily managed by AYUSH systems at house hold level may be encouraged by them.
- 3. AYUSH systems have holistic approach to solve the health related problems and promote healthy & prolonged life. ASHA/ Health workers may aware people to prevent and manage Diabetes with simple remedies.
- 4. Once ASHA/ Health Workers understand the strength of AYUSH systems then they can create awareness in the community for referral to AYUSH doctors/ medicines available in the rural areas.
- 5. ASHA and field level health workers will provide Primary Health Care for minor ailments like diarrhea, constipation, worm infestation, abdominal discomfort with locally available medicinal plants and products. They should be able to provide little advice on Do's and Don'ts for prevention and management of common ailments. She should also able to recognize when to refer the patient to the doctor.
- 6. In every village, the Health & Nutrition Day is being organized by ASHA/ ANM/ AWW on a particular day. The AYUSH common remedies may be distributed for diabetes mellitus. The medicines may be procured from PHCs/ CHCs where AYUSH medicines are available with supervision of AYUSH Medical Officer.
- 7. They will encourage and guide the community for plantation of medicinal plants in their surroundings and use of home remedies available in their homes.

# YOGASANAS AND PRANAYAMAS

#### Preventive and curative Aspect of Yoga system:

YOGA system practiced in India is having a great heritage and long history. It takes care of all the aspects of human personality at the physical, mental, social, spiritual, and emotional levels.

All the systems of medicine at their best aim at curing the disease whereas Yoga aims at preventing the disease and promoting health by reconditioning the psycho-physiological mechanism of the individual along with curing the problems.

There are some practices which cultivate strong immunity in people and make them capable of offering an effective resistance to various environmental pressures and thus, maintain behavioral steadiness and intellectual stability.

#### Some useful Asana/ Kriyas / Pranayam:

The basic approach of Yoga is to correct the life style by cultivating a rational positive and spiritual attitude towards all life situations. These may be practiced by children, elderly, women and adults.

#### 1. ARDHAKATI CHAKRASANA

#### **Technique:**

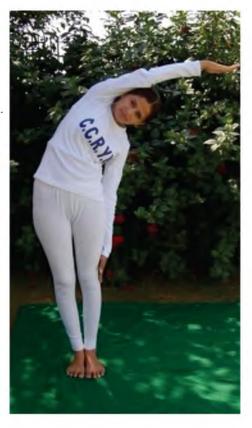
- ▶ Slowly raise the right arm side ways up while inhaling.
- ► At the shoulder level turn the palm upwards.
- ► Continue to raise the arm with deep inhalation vertically until
- ► The upper arm touches the right ear.
- ► Stretch the right side of body completely by stretching the right hand.
- ▶ Bend the trunk slowly to the left while exhaling.
- ► The left palm slides down along the left thigh as far as possible.
- ▶ Do not bend the right elbow or the knees.
- ▶ Maintain with normal breathing.
- ▶ Slowly come back to vertical position while inhaling and stretch
- ► The right arm up. Feel the pull along a straight side of the body.
- ▶ Bring the right arm down while exhaling to Sthiti position.
- ► Come back and relax in Tadasana Sthiti.
- ▶ Repeat on the left side, by bending towards the right side.

#### **Benefits:**

- 1. Reduces fat in waist region.
- 2. Stimulates sides of the body.

# 2. Padahastasana-

- ► Stand erect with legs together.
- ▶ Inhale slowly and raise the arms above the head region.
- ► Stretch up the body from the waist.
- Exhale and bend forward from the lower back until the trunk is parallel to the ground. Stretch out the shoulders at horizontal plane and inhale.



- ▶ While exhaling bend down further until the palm rests on the ground and chin touches the knees.
- ▶ Maintain in this final posture without bending the knees.
- ► Inhale, come up slowly to the vertical position and stretch the arms above the head.
- ► Exhale, drop down the arms.
- ► Relax in Tadasana.

- 1. Increases the spinal flexibility.
- 2. Strengthens the thighs.
- 3. Helps preventing constipation and menstrual problems.
- 4. Improves digestion.
- 5. Enhances blood flow to the head region.

#### Limitations:

Vertigo, severe degree of hypertension, cervical spondylosis and disc prolapse.

# 3. VRIKSHASANA:

Sthiti: Tadasana

# **Technique:**

- ▶ Inhale bend the right leg at the right knee and keep the right sole at the inner side of the left thigh near perineum.
- Exhale again while inhaling raises both the arms above the shoulder level and adopt namaskara mudra.
- Gaze at a single distant object.
- ▶ Maintain in this final posture with normal breathing.
- ▶ While exhaling slowly release the arms and legs.
- ► Relax in Tadasana.
- ► Repeat the same from left side.

# **Benefits:**

- 1. Improves the concentration.
- 2. Very good balancing posture.
- 3. Strengthens the leg muscles.

# 4. Trikonasana-

Sthiti: Tadasana

- ▶ Inhale spread the legs apart by three feet and raises both the hands up to the shoulder level.
- ► Exhale and bend to the right side until the right hand reaches the right foot.
- ► The left arm is straight up and sees that the both shoulders are in same line.
- ► Turn the face up and gaze at the extended left arm.
- ▶ Maintain this final posture with normal breathing.
- ► Slowly while inhaling straightens the body and while exhaling release both the arms and relax.
- Repeat the same from left side.



- 1. Helps in correcting flat foot.
- 2. Strengthens the calf and thigh muscles.
- 3. Increases the flexibility of back.
- 4. Strengthens the back and waist muscles.

#### **Limitations:**

Slip disc, sciatica.

# 5. Vajrasana-

# Technique:

- ► Fold the right leg and bring the right heel under the right buttock.
- ► Sitting on the right heel, fold the left leg and bring the left heel under the left buttock.
- ▶ Sit erect comfortably with the buttocks resting on both the heels and palms resting on the thighs.



#### **Benefits:**

- i. A Meditative posture as we can sit comfortably for a long time with erect spine.
- ii. This strengthens thigh muscles and calf muscles. Those suffering from blood pressure will benefit from this asana. It gives longevity and strengthens the spine.

# 6. PASCHIMOTTANASANA

- ▶ Inhale, raise both the arms sideways at shoulder level parallel to the ground.
- ► Turn the palms facing upwards.
- ► Continue to inhale and raise the arms further up vertically biceps touching the ears and stretch the trunk. Now turn the palm forwards.
- Exhale, bend the trunk forwards from the lower back. Stretch the arms, hands parallel to the ground.





Stimulates the Manipura Chakra and life energy. Increases blood supply in the back. Stretches the muscles of the back and along the back of the legs. Activates kidney and pancreas function and aids in achieving a slim figure.

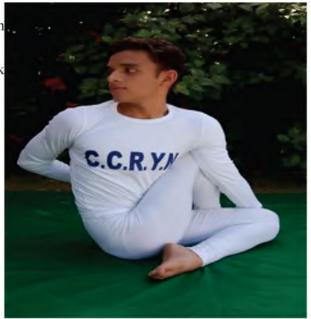
# 7. ARDHA MATSYENDRASANA

# Technique:

- Bend the right leg at the knee.
- ▶ Place the sole of the right foot against the inner side of the left thigh.
- ▶ Keep the right heel about 4 to 5 inches away from the perineum.
- ▶ Bend the left knee and place the left foot on the outer side of the right thigh near the right knee.
- ▶ Do not sit on the heels.
- ► Inhale, raise the right arm up vertically and stretch up the shoulder.
- Exhale, twist the waist to the left and bring the right arm over onto the outer side of the left knee. The left knee acts as a fulcrum for getting maximum twist of the spine. Catch the left big toe with the right hand.
- Now take the left hand behind the back and try to touch the right thigh.
- Look back over the left shoulder keeping the trunk erect.
- ▶ Maintain for about a minute with normal breathing.
- ► Come back to Sthiti.
- ▶ Relax for a while.
- Repeat the same, on the other side.

# **Benefits and Limitations:**

- 1. Increases the flexibility of the spine.
- 2. Tones up the spinal muscles and nerves.
- 3. Helps in constipation and dyspepsia.



#### 8. PAVANAMUKTASANA

# **Sthiti: Supine posture**

#### Technique:

- Inhale, raise both the legs together slowly by giving a pause at 30°, 60° (without bending the knees) from the ground.
- Continue to inhale and raise the legs further to 90° position.
- Bend both legs at both knee joints.
- Encircle both the knees from both the hands.
- Exhale, raise the head, bend the neck and touch the fore head to the knees.
- Maintain in the final posture with normal breathing.
- Inhale release the head down exhale raise both the legs up to 90° then slowly release both the legs and relax in Shavasana.

#### **Benefits:**

- 1. Relieves Flatulence.
- Relieves constipation.



3. Strengthens the abdominal muscles and reduces fat.

#### 9. Dhanurasana-

- ▶ Bend the both legs at knees.
- ► Catch the feet by the hands by arching the back acutely at the lumbar and dorsal spine.
- ▶ Inhale and pull the legs up keeping the elbows straight and come up to raise the head and the trunk off the ground.
- ► Arch the dorsal spine and neck backwards as far as you can.
- ▶ Maintain the final position with normal breathing for half a minute without holding the breath.
- ▶ While exhaling come back to sthit position.

► Relax in Makarasana.

#### **Benefits:**

- ► Effective in weight loss.
- Improves digestion and appetite.
- ► Helps to cure dyspepsia (obesity), rheumatism and gastrointestinal problems.
- ► Cures constipation.
- ► Improves blood circulation.
- ► Gives flexibility to the back.
- ▶ Strengthens back muscles.
- ▶ Improve the function of liver, pancreas, small intestine and big intestine.
- ► Act as a stress reliever.
- ► Strengthens ankles, thighs, groins, chest, and abdominal organs.
- ► Cure menstruation disorder.
- ► Improve function of kidney and liver.
- ► It improves posture.
- Releases back pain.
- ► Cures respiratory disorder like asthama.
- ► Helpful is stimulating reproductive organs.



▶ Improve function of the pancreas and it is beneficial in diabetes.

# 10. SHALABHASANA

Sthiti: Prone posture

- Make fist of palms and keep them below the thighs.
- Place the chin firmly on the ground.
- Inhale and raise both the legs from the ground.
- Raise and stretch both the legs as far as possible without bending the knees.
- Maintain in the final posture.
- Exhale and release the posture and relax in Makarasana

1. Tones up the back muscles.



- 2. Relieves back pain.
- 3. Strengthens the thigh and calf muscles.
- 4. Relieves constipation.

#### **Limitations:**

• Cardiac problems, Diabetes.

# 11. BHUJANGASANA

Sthiti: Prone posture

#### **Technique:**

- Bend the arms at the elbows and place the palms beside the chest exerting least pressure on the palms.
- Keep the elbows close to the body.
- Inhale and arch the dorsal spine and neck backwards as far as you can.
- Keep the body below the navel in touch with the ground.
- Maintain the final position with normal breathing for one minute with least pressure on the palms.
- While exhaling come back to sthit position.
- Relax in Makarasana.

#### **Benefits:**

- 1. Brings flexibility to the dorsal spine.
- 2. Strengthens the spinal muscles.
- 3. Reduces the abdominal fat.

# Savasana

i) Starting Position: Savasana

ii) Practice:

Bring your awareness to the movements of the abdominal muscles moving up and down as you breathe in and out. Recognize the haphazardness and jerky movement of the abdominal muscles. Do not manipulate the breathing, let it be natural, simply observe the abdominal movement. Count yourself five rounds mentally, one inhalation and one exhalation forming one round.

#### Phase II-Associate with breathing

Synchronize the abdominal movements with the breathing. While inhaling the abdomen bulging up and while exhaling the abdomen-sinking down. Inhale... deeply and exhale... completely. Continue up to five rounds.

# **Relaxation Technique:**

(i) Starting Position:

Sthiti: Savasana.

Gently move your whole body, make yourself comfortable and relax completely.

#### (ii) Practice:

Bring your legs together; join the heels, toes together, palms by the side of the thighs. Keep your face smiling till the end. Gently bring your awareness to the tip of the toes. Stretch the toes, tighten the ankle joints, tighten the calf muscles. Pull up the kneecaps. Tighten the thigh muscles. Compress and squeeze the buttocks. Exhale and suck in the abdomen. Make the fists of the palms and tighten the arms. Inhale and expand the chest. Tighten the shoulders, neck muscles and compress the face. Tighten the whole body from the toes to the head. Tighten..... tighten..... tighten..... tighten..... Release and relax. Legs go apart; arms go apart, palms facing the roof. Assume the most comfortable position; let the whole body sink down. Let all the groups of muscles beautifully relax. Collapse the whole body. Enjoy the relaxation.

# **PRANAYAMA**

#### 1. Surya Anuloma Viloma Pranayama

Sthiti: Vajrasana PRACTICE

- ► Adopt Nasika mudra with your right hand.
- Close the left nostril with the little and ring fingers of Nasika mudra.
- ▶ Inhale and exhale slowly through the right nostril (Surya Nadi) only.
- ▶ Keep the left nostril closed all the time during the practice.
- ▶ One cycle of inhalation and exhalation forms one round.
- Practice nine rounds.

#### 2. Chandra Anuloma Viloma Pranayama

Sthiti: Vajrasana

#### **PRACTICE**

► Adopt Nasika mudra with your right hand.

- ► Close the right nostril with the tip of the thumb.
- ▶ Inhale and exhale slowly through the left nostril (Candra Nadi) only.
- ▶ Keep the right nostril closed all the time during the practice.
- ▶ One cycle of inhalation and exhalation forms one round.
- Practice nine rounds.

#### **Physical**

These Pranayamas help in clearing of the nasal passages. With regular and long practice, flow of breath through each of the nostrils becomes smooth and slow.

# Therapeutic

It is very useful for nasal allergy and Deviated Nasal Septum (DNS). Suryanuloma-Viloma helps in reducing the obesity effectively and Chandranuloma-Viloma helps in increasing weight.

For specific significant improvement, the recommended schedule is to have twenty-seven rounds of this Pranayama four times a day (before breakfast, lunch, dinner and before going to bed). Systematic practice of right or left nostril Pranayama has benefited large number of obese and underweight persons respectively to achieve normal weight.

# 3. Nadishuddhi Pranayama

# Sthiti: Vajrasana

#### **PRACTICE**

- ► Sit in any meditative posture.
- Adopt Nasika mudra.
- ► Close the right nostril with the right thumb and exhale completely through the (left) nostril. Then inhale deeply through the same left nostril.
- ► Close the left nostril with your ring and little finger of the Nasika mudra, release the right nostril. Now exhale slowly and completely through the right nostril.
- ► Inhale deeply through the same (right) nostril. Then close the right nostril and exhale through the left nostril. This is one round of Nadi shuddhi Pranayama.
- ► Repeat nine rounds.

#### **Benefits**

#### Physical

It promotes balance between the two nostrils apart from cleansing the nasal tract. It increases the vitality. Metabolic rate decreases as in case of all other Pranayama pretices. It increases the digestive fire.

#### **Therapeutic**

It lowers the levels of stress and anxiety by harmonising the Prana. It balances the sympathetic and parasympathetic sections of the ANS.

#### 4. Bhramari Pranayama

#### **PRACTICE**

- ► Sit in any meditative or comfortable posture
- Assume Chinmudra
- ▶ Inhale deeply.
- Exhaling, produce a low pitched sound resembling the humming of a female bee.
- Feel the vibrations in the entire head.

► This is one round, Repeat nine rounds.

#### **Benefits**

Relieves stress and tension, reduces anger, anxiety, insomnia and blood pressure. Good for all psychosomatic problems as it reduces the stresses and tension.

#### CLEANSING BREATH (KAPALBHATI KRIYA)

#### Sthiti: Dandasana

- ► Sit in any meditative posture.
- ▶ Keep spine and neck erect perfectly vertical to the ground.
- ► Close the eyes and collapse the shoulders.
- Relax the whole body completely.

#### Practice

- ▶ Practice rapid breathing with active and forceful exhalation and passive inhalation.
- ▶ During each exhalation, exhale out the air by vigorous flapping movements of the abdomen in quick succession at the rate of 60 strokes per minute.
- ▶ Inhale passively by relaxing the abdominal muscles at the end of each exhalation.
- Now observe an automatic suspension of breath. Simultaneously the mind may experience a deep state of silence. Enjoy this state of deep rest and freshness.
- ▶ Wait until the breathing comes back to normal.

#### **Benefits**

#### Physical:

Stimulates the brain cells, brightens the face with regular practice. It balances and strengthens the nervous system. It removes the drowsiness / tamas from the body. It provides a nice massage to all the abdominal organs. People with digestive problems are highly benefited. It cleanses the lungs and also the entire respiratory tract. It is good for asthmatics and for other respiratory disorders.

#### Limitations

Practice of Kapalabhati is to be avoided in case of moderate and severe High Blood Pressure Ischemic Heart Disease, Vertigo, Epilepsy, Hernia, Gastric Ulcer, Slip Disc and Spondylosis. Women during menses and advanced stage of pregnancy should avoid.

# **Dhyana** (Meditation)

It helps for coping with stress, reduces anxiety, heart rhythm, Improved flow of air to the lungs, decreased high blood pressure, depression, irritability and moodiness, Improves comprehensive ability and memory, Enhances emotional stability, Brings happiness and leads to vitality and rejuvenation, Promotes an interdependence between mind, body, and spirit, Creates sense of well being and calm, Dhyan dissolves the ego of a person when the union between a person's own consciousness and the cosmic consciousness happens.



