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EFFECT OF YOGASANA ON DIGESTIVE SYSTEM

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ABSTRACT

Digestive system is one of the important systems in body as it provides nourishment to all body cells from the external environment. Modern lifestyle has adverse effects on digestive system which results in various digestive issues. *Ayurveda* focuses towards treatment as well as well being. From the different branches of *Ayurveda Yoga* is one of the contributing branch which helps to improve digestive system. Specifically different poses in *Yogasana* found to be more effective against various digestive issue and helps to improve digestive system.

Keywords: Digestive system, Yoga, Yogasana

INTRODUCTION

Yoga is one of the oldest sciences of Indian origin. Yoga is popular exercise trend; an alternative medical therapy; a profound spiritual path; these are different colours of Yoga. Yoga is psycho-somatic spiritual discipline for achieving union and harmony between mind, body and soul; and the ultimate union of individual with the universe.

Etymologically the word *Yoga* is derived from the *Sanskrit* root "*Yujira Yoga*" meaning to unite, to combine or to integrate¹. *Patanjali Ashtang Yoga* consists of eight limbs – *Yama, Niyama, Asana, Pranayama, Pratyakheya, Dharana, Dhyana, and Samadhi*².

From all these *Ashtang Yoga*; chiefly *Yogasana* cause positive effect on digestive system. Through various studies It is observed that

by *Yogasana* peristaltic movements of intestine is increased³. Moreover nutrients are absorbed and desired supply of nutrient is made available to respective parts of the body. Changing life style is one of the leading causes which have adverse effect on digestive system. Dietary changes are responsible for most of digestive disorders. So Yoga can be best the therapy for these over heading problems of digestive system.

AIM - To study the effect of *Yogasana* on digestive system

OBJECTIVES -

1. To study effect of *Yogasana* on digestive system

2. To study use of *Yogasana* to relive various digestive issue.

MATERIAL AND METHODS –

All classical texts available have been reviewed. Database available also studied.

STUDY RATIONALE -

Yogic practices affects physiology of body. It also has great effects on digestive system. But effects of Yogic practices are not explained in detail. So attempt has been made to study effect of *Yoga* on digestive system considering modern reviews.

REVIEW OF LITERATURE:

❖ Digestive System:-

The chief goal of digestive system is to breakdown huge macromolecules (protein, fats, starch) which cannot be absorbed intact into smaller molecules (amino acids, fatty acids, glucose) that can be absorbed easily. It provides nourishment to all body cells from the external environment. Intake, digestion, absorption and assimilation of food, water balance, elimination of the residue and some waste products or poisonous substances are functions of the system⁴. The digestive system is a series of hollow organs joined in a long, twisting tube from mouth to anus. Inside the tube there is lining called mucosa which helps for digestion by producing digestive juices.

The large hollow organs of digestive system contain muscles that enable their walls to move. The movements of organ walls can propel food and liquid and also can mix the contents within each organ. Typical movements of oesophagus, stomach and intestine is called peristalsis. The muscles of organs produce a narrowing and then proels the narrowed portions slowly down. These waves of narrowing push

the food and fluid through hollow organs. Although swallowing is voluntary action, once the food or fluid is swallowed, it becomes involuntary and proceeds under the control of the nerves.

The central nervous system has no direct effect on the digestive functions but the appetite and satiety centres lie in hypothalamus. The emotional balance and behaviour of human being are also controlled by hypothalamic centres. It has been found that even the muscular tone of the smooth muscles of visceral parts is affected due to individual's emotional status, such as rage, abhorrence and annoyance. Thus the digestion is affected by one's thinking style, tense and unsatisfied mind and negative approach. This causes indigestion, acidity, and gastric troubles. If the digestive function is disturbed, health is also affected. Yoga can be useful way to improve digestive disturbances as it gives mental peace, balance and a positive approach.

Digestive Disorders:

Common digestive disorders includes abdominal pain, flatulence, gastritis, diarrhoea, dysentery, anorexia, constipation etc. and other than these includes IBD (Inflammatory Bowel Disease), GERD (Gastroeosophageal Reflux Disease), gastric ulcers, duodenal ulcers, Chron's disease, ulcerative colitis, haemorrhoids etc.

* Yogasana:

Traditionally Asana means position of the body which contribute to the steadiness of the body and mind and a sense of well-being. Asana can also be defined as postural pattern, one has to achieve this pattern slowly, maintain for some time steadily and release it again in slow and smooth manner. As Asana is an attitude which is

psycho-physiological in nature most of these patterns are based on the natural postures of various animals, birds or even the symbol like tree, lotus etc. A gradual training is given to whole body and mind through particular neuromuscular mechanism involved in different postural patterns⁵. Asana is that which contributes to stability and comfort. Stability here does not mean the stability of only the posture but it indicates the stillness of body and mind as a whole⁶.

! Effect of *Yogasana* on digestive system-

The health of the human body depends on the healthy condition of internal glands and tissues, through elimination of waste matter fromthe body and the elastic condition of the muscles. Many Asanas give the internal organs a unique massage, forcing them to perform better. The alternate stretching and contractile movements of the Asanas help muscle to retain their tone. In the upside down posture; the sluggishness of the bowel and constipation are cured. The stomach muscle fall into their proper position, helping to flatten and strengthen a protruding belly⁷. The complete elimination of waste product from the body is promoted by Yogasana which not only massage and activate internal muscles for peristaltic activity but also keep internal organ in their proper places in the abdominal cavity; preventing prolapse of stomach, intestine⁸.

Asanas useful for digestive system:-

1) *Padmasana* (*Kamalasana*)(crossed leg position)-

Padmasana is known to improve digestion, since while doing this pose the organ in stomach and abdomen are stimulate to produce enough enzymes to digest all the food you have eaten effectively. Through this asana blood supply to

the legs is decreased and redirected to the abdomen region. This increased flow of blood in the abdomen region is beneficial for the inner organs and improves digestion.

2) Pavanmuktasana (Wind reliving pose)-

It massages the abdomen and digestive organs and it is therefore very effective in increasing peristaltic movements, regulate functioning of abdominal endocrine viscera. By this asana, pressure on the abdomen releases any trapped gases in the intestine and relieves constipation. digestive system is improved. This asana is used as treatment of pain in abdomen, constipation, dyspepsia, flatulence, indigestion and intestinal colic.

3) Bhujangasana (Cobra Pose)-

It gives proper massage to the organs of abdominal region such as stomach, pancreas, liver and gallbladder. It improves blood flow and oxygenation to the digestive system and eliminates waste more effectively. It is helpful in treating of many digestion related condition such as constipation, indigestion, flatulence as well as irritable colon etc.¹²

4) Shavasana (corpse pose)-

The ultimate posture for healing is *Shavasana*. When you are at rest, you will be into your parasympathetic nervous system. This is also known as your "Rest and Digest" response. As you lie still, you are allowing all stresses to melt away and your extremities are towards your digestive organs. This will increases oxygenation to the digestive organ. This also creates the ideal environment for digestion, cleansing and healing.¹³

5) Paschimottasana (seated forward fold)-

It massages the internal organs, especially the digestive organs, relieves digestive problems such as constipation. It is best for stimulation of your abdominal viscera like liver, kidneys and pancreas. It increases the peristalsis of bowels, the vermicular movements of bowel and intestines through which the faecal matter pushed forward. This asana is useful for anorexia, diarrhoea, intestinal colic etc.; but avoided in colitis. 15

6) Trikonasana (Triangle pose)-

It massages and tones all internal organs. It relieves indigestion, acidity, flatulence and helps to improve digestion. It improves appetite and improves the efficacy of digestive system. ^{16,17}

7) Shalbhasana (locust pose)-

It massages and tones up muscle of abdomen and improves digestion by increasing digestive fire. It has beneficial effect on the digestive system curing the most stubborn constipation.¹⁸

8) *Dhanurasana* (bow pose)-

It improves digestion and appetite, cures constipation, improves function of liver, pancreas, small as well as large intestine, and it also strengthens abdominal muscles.¹⁹

9) Ustrasana (camel pose)-

It expands the abdominal region, improving digestion and elimination. It releases *Apana Vayu*; relives indigestion and constipation.²⁰

10) *Vajrasana* (diamond pose) (Thunderbolt pose)-

It is most effective e after meal and aids in proper digestion. When we sit in *Vajrasana*, muscles of both thighs will share weight; therefore circulation of blood in those portions will be reduced. This reduction results in greater proportion of blood reaching stomach, heart and

head. The body above navel will get comparatively excess blood circulation. Therefore working capacity of various glandsconnected to digestion process increases which aids digestive power.²¹

11) *Suptvajrasana* (Reclined Thunderbolt pose)-

It increases the blood pressure in the trunk, especially in the abdominal area, strengthening and rejuvenating the liver the liver, kidney, adrenal gland, spleen and pancreas. It improves digestion helps in constipation and stomach acid balance.²²

12) Matsyasana (Fish pose)-

Most of the abdominal and stomach problems are corrected as intestines and abdominal muscles are stretched and tones. It is good for constipation and bleeding piles. It brings down the accumulated faecal matter to the rectum.²³

13) Janushirshasana (head to knee pose)-

It improves digestive system and helps to heal gastric aliments. By this pose the pressure from heel placed on the nerve which stimulate pancreas to help digestion.²⁴

14) Halasasana (Plow pose)-

It improves the functions of abdominal organs, especially the pancreas is stimulated for the secretion of insulin. The breathing movement of diaphragm helps to massage the abdominal organs. ²⁵It cures pain in abdomen, indigestion, hyperacidity and also useful in diarrhoea but it should be avoided in colitis. ²⁶

15) *Ardhmatsyendrasana* (Sitting half spinal twist)-

It gives compression and strength to the abdominal region, thus facilities massage to ab-

dominal organs; which improves digestion. It works mainly on liver and pancreas.²⁷It is useful in treating indigestion, constipation, anorexia, flatulence etc.²⁸

16) Sarvangasana (Shoulder stand pose)-

Holding yourself in an inverted position reverses the effect of gravity on the digestive organs, helping stimulate the movements of stuck wastes, relieving gas and inducing overall restorative effect on your digestion. It is best to practice this pose before you eat or a few hours after to avoid acid regiva.²⁹ It is helpful in treating indigestion, hyperacidity and colitis etc.³⁰

17) Shirshasana (Head stand pose)-

Handstand increases digestive fire boosting energy and increasing body heat. Internal organs, particularly the intestines are cleansed by reversing the pull of gravity and releasing congested blood in the colon.³¹

18) *Bhadrasana* (Gracious pose) (Butterfly pose)-

By this asana abdominal organs receive good blood circulation and hence it helps to address problems in this area. In this posture internal organ like stomach, liver, pancreas, large and small intestine are get massaged help in removing toxins from the digestive system. ³²

19) *Makarasana* (Crocodile pose)-

By this asana digestive organs especially large intestine get massaged. It is most beneficial in constipation, stomach pain and in dysentery etc.³³

20) Shashaksan (The Moon Yoga pose)-

This asana exercise lower part of abdomen and blood flow to this part increased; which improves digestion. It plays important role in treating disorders of the gastrointestinal tract.³⁴

21) Mayurasana (Peacock pose)-

Mayurasana tones the entire digestive system and revitalizes the internal organs including stomach, liver, intestine, pancreas, kidneys and spleen. It makes digestive fire so strong that one can digest any type of food, reducing the production of toxins in the intestines due to undigested food. It also alleviates constipation.³⁵ It is also useful in pain in abdomen, anorexia, dysentery, flatulence, indigestion etc.³⁶

22) Utkatasana (Chair pose)-

Utkatasana helps with the gastric, problems and digestion difficulties. It stimulates and activates digestion.³⁷

23) *Padahastasana*:- (Hand under foot pose)

It is forward bend *Yogasana*. It is considered as best *Yoga* poses for beginners as it requires considerable flexibility in the back, abdomen and legs. It improves digestive disorder as it gives stretch on abdominal viscera and increases blood flow. It also helps to tone abdominal organ.

24) *Mandukasana* :- (Frog pose)

This Yogasana resembles as frog hence named as *Mandukasana*. It improves functioning of digestive and excretory systems which stretches and massages abdominal organs. It is also in important metabolic disorder such as diabetes mellitus.

DISCUSSION

Yoga is a developing alternative medical therapy in modern lifestyle. Yoga is helpful in management of psychic and physical disorders. Digestive disorders are the most irritable and leads disturbed lifestyle. Changing lifestyle, dietary changes, mental stress are one of the leading causes which have adverse effect on diges-

tive system. So, *Yoga* can be the therapy for these over heading problems of digestive system. Chief goal of digestive system is to breakdown huge macromolecules into smaller molecules. It provides nourishment to body and performs different body functions. *Yogasana* is the position of the body which contribute to steadiness of body and mind. Position and movements carried in *Yogasana* help digestive system to improve power and working capacity. Different *Yogasanas* which are described works on digestive system with effectiveness of their positions.

CONCLUSION

Yogasana helps to improve mental status of individual and postures in Yogasana directly helps digestion process which helps to improve digestive system and so indirectly get rid from digestive disorders. Yogasana works with the effectiveness of their positions. So, different kinds of Yogasanas have different effects on digestive system.

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