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## Research-based explanation of the benefits of yoga asanas described in hathapradipika

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### Abstract

**Context:** Contemporary science and the fundamental text on hatha yoga such as Hathapradipika, both state that yoga practice has physical, mental, emotional, spiritual, and relationship advantages. While each asana has recommendations for the benefits, a little study has been conducted to determine whether these unique practice approaches influence the benefits on practitioners which were reported in the text.

**Aims:** Our goal was to see the similarities in the practitioner's level of benefits to the benefits mentioned in the textbook mainly Hathapradipika.

**Methods:** We conducted a Review study of yoga practitioners of their benefits and compared them with the textual benefits to check their similarities. For this we reviewed 33 studies to check the benefits of the asanas which are mentioned in Hathapradipika and analysed their similarities with textual benefits.

**Results:** The asanas which are mentioned in Hathapradipika are very beneficial for our body by removing diseases and giving relaxation to body and mind.

**Conclusions:** The very similar benefits are observed by the studies done on the asanas which are mentioned by Swatmaram.

**Keywords:** Yoga, asanas, swatmaram, hathapradipika, physical, mental, emotional, spiritual, relationship

### Introduction

Yoga is practised by many people globally, representing a considerable rise in participation. Yoga is considered to provide numerous benefits, which may account for this growth. Hatha yoga practices are generally included in current yoga asana practice. According to Swatmaram the hatha yoga creates a "balance of the interacting activities and processes of the physical body, mind, and energy," and that, "these practices will at least bring optimal health and tranquility of the mind." (Swatmarama, 2022) [49].

Modern science has recognised the physical, mental, emotional, spiritual, and relationship benefits of hatha yoga. (Park *et al.*, 2016) [27], (Penman *et al.*, 2012) [29], (Ross *et al.*, 2013) [36], (Field, 2011) [16], (Atkinson & Permuth-Levine, 2009) [5]. Several studies have been conducted to demonstrate its benefits at all levels, including physical health (Ross *et al.*, 2013) [36], (Birdee *et al.*, 2017) [11], (Alexander *et al.*, 2013) [3] and in promoting positive lifestyle behaviour (Ross *et al.*, 2012) [35]. Hatha yoga improve muscle strength (Field, 2011) [16], Balance (Chen *et al.*, 2021) [13], Energy (Ross *et al.*, 2013) [36], (Cramer *et al.*, 2016) [14], flexibility (Bucht & Donath, 2019) [12], Sleep (Ross *et al.*, 2013) [36], Spine degeneration (Jeng *et al.*, 2011) [18] and help in maintaining homeostasis of the body (Khoshnaw & Ghadge, 2021) [20]. Yoga has also been proved to reduce anxiety (Szabo *et al.*, 2017) [50], (Field, 2011) [16], stress (Field, 2011) [16], (Cramer *et al.*, 2016) [14], increase the immunity (Field, 2011) [16], (Cramer *et al.*, 2016) [14], executive function (Subramaniam & Bhatt, 2017) [46], emotional state (Cramer *et al.*, 2016) [14], Happiness (Ross *et al.*, 2013) [36] and complete mental health (Zaccari *et al.*, 2020) [54]. Spiritual well-being and a sense of being close to God are two effects of practice (Csala *et al.*, 2021) [15].

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**Table 1:** Benefits of asanas mentioned in Hathapradipika and benefits of these asanas in research papers

Asana	Textbook benefit	Research benefit
Swastikasana (Swatmarama, 2022) [49]	Not mentioned by Swatmaram	Agility and flexibility (D. K. Singh <i>et al.</i> , 2009) [45] Breast cancer (Narahari <i>et al.</i> , 2016) [25]
Gomukhasana (Swatmarama, 2022) [49]	Not mentioned by Swatmaram	Sciatica (Ravindra <i>et al.</i> , n.d.) Fatty liver disease (Panda <i>et al.</i> , 2021) [26] Add in Neck pain (Manda <i>et al.</i> , 2020) [24]
Virasana (Swatmarama, 2022) [49]	Not mentioned by Swatmaram	Energy expenditure and ventilatory responses (Rai & Ram, 1993) [31] Cardiovascular & ventilatory response (Khatoun, 2014) [19]
Dhanurasana (Swatmarama, 2022) [49]	Not mentioned by Swatmaram	Diabetes (Uma <i>et al.</i> , n.d.), (Malhotra <i>et al.</i> , 2005) [23] Heart rate and blood pressure (Ab <i>et al.</i> , 2014) [1] Irritable bowel syndrome (Taneja <i>et al.</i> , 2004) [52] Fasting and Postprandial glycemia and insulinemia (S <i>et al.</i> , 2005) [37] Frozen shoulder (Jadhav & Singh, 2022) [17] Constipation (B. Singh <i>et al.</i> , 2021) [44]
Matsyendrasana	Increase gastric fire i.e., improve Digestion. Destroy all diseases (Swatmarama, 2022) [49]	Neck pain (A. Singh <i>et al.</i> , 2021) [44] Sciatica (Arora <i>et al.</i> , 2019) [4] Diabetes (Tamilselvi, 2020) [51] Fatty liver disease (Panda <i>et al.</i> , 2021) [26]
Paschimottanasana (Swatmarama, 2022) [49]	Stimulate gastric fire i.e., improve digestion. Makes body lean and thin. Remove all diseases (Swatmarama, 2022) [49]	Diabetes mellitus (Patel & Upalanchiwar, n.d.) Obesity (Shukla & Gehlot, 2014) [42] Dysmenorrhea (Sandy <i>et al.</i> , 2020) [39] Hernia (Alagesan <i>et al.</i> , 2012) [2]
Mayurasana (Swatmarama, 2022) [49]	Enlargement of glands Dropsy and other stomach disorders Balance the humours Increase the digestion (Swatmarama, 2022) [49]	Haemorrhoids (B <i>et al.</i> , 2017) [6] Diabetes (Popli <i>et al.</i> , n.d.)
Shavasana (Swatmarama, 2022) [49]	Remove fatigue. Relax mind (Swatmarama, 2022) [49]	Hypertension (Sundar <i>et al.</i> , 1984) [48] Cardiovascular system (Bagga & Gandhi, 1983) [7] Headache (Sethi <i>et al.</i> , 1981) [41] Stress (Bera <i>et al.</i> , 1998) [8], (Kim, 2014) [21] Heartrate and blood pressure (Bhavanani <i>et al.</i> , 2014) [10] Oxygen consumption and respiration (Sarang & Telles, 2006) [40] Multiple sclerosis (Bhargav <i>et al.</i> , 2016) [9]
Siddhasana (Swatmarama, 2022) [49]	Purify nadis (Swatmarama, 2022) [49]	Energy expenditure and ventilatory (Rai <i>et al.</i> , 1994) [32]
Padmasana (Swatmarama, 2022) [49]	Destroy the diseases (Swatmarama, 2022) [49]	Neurocardiogenic syncope (Kong & Winkle, 2015) [22] Muscular efficiency (Salgar <i>et al.</i> , 1975) [38] Dymenoreh (Sumastri <i>et al.</i> , 2022) [47] Dismenorhea (Sandy <i>et al.</i> , 2020) [39]
Bhadrasana (Swatmarama, 2022) [49]	Destroy all diseases (Swatmarama, 2022) [49]	Pain in pregnancy (Rattaya <i>et al.</i> , 2020) [33]

## Discussion

Our research backs up the traditional literature, the Hathapradipika. (Swatmarama, 2022) [49] and the research of others (Penman *et al.*, 2012) [29], (Park *et al.*, 2016) [27] stating that yoga practitioners reap several benefits and enjoying a wide range of advantages. Physical benefits were recorded by the big percentage of respondents, followed by mental and emotional benefits; spiritual benefits were reported by the smallest number of respondents. According to Penman *et al.* (2012) [29], just 19% of their yoga survey respondents started yoga as a spiritual practise, contrast Park *et al.*, 2016 [27] found that nearly half of yoga practitioners cited spirituality as a reason after a long time of continuing to practise yoga, implying that while yoga practitioners may not initially seek spiritual advantages, this may alter over time. Hathapradipika contains 15 types of asanas with including their benefits, Siddhasana helps in cleaning the nadis for free flow of prana by Swatmaram, Rai *et al.*, in 1994 [32] observed that sitting in Siddhasana position resulted in increased minute ventilation, larger tidal volume, increased oxygen consumption, increased CO<sub>2</sub> elimination and increased heart frequency, These

findings imply that Siddhasana is a gentle kind of exercise that may be useful in conditions of poor cardiorespiratory reserves, particularly in persons for whom vigorous exercise is not recommended. Padmasana according to Guru Swatmaram: It destroys all kinds of vyadhi (Diseases) which is proved by many researchers such as (Kong & Winkle, 2015) [22] that padmasana is helpful for the problems of neurocardiogenic syncope. Whereas (Salgar *et al.*, 1975) [38] found that Padmasana is beneficial in increasing Muscular efficiency. (Sumastri *et al.*, 2022) [47] and (Sandy *et al.*, 2020) [39] concluded in their paper that Padmasana helps in the problems of Dysmenorhea. Bhadrasana removes all the diseases in the body; (Rattaya *et al.*, 2020) [33] done a research in which he proved that Bhadrasana pose along with cold compressions help in easing during labour pain. Guru Swatmaram do not mentioned any benefits for few asanas like Swastikasana, Gomukhasana etc. but yet there are some researches which showed many effects over the body and mind from these asanas. (Narahari *et al.*, 2016) [25] showed that Swastikasana and few other asanas helps in the conditions of Breast cancer. (D. K. Singh *et al.* in 2009) [45]

selected few asanas which were Swastikasana, Mayurasana, Matsyendrasana, Paschimottanasana and Gomukhasana to check the effect on flexibility and agility in the body and there was positive effect on these variables. Gomukhasana is one of the most important asanas in the series of asanas. There are many researches which have proved that Gomukhasana helps in the diseases like Fatty liver, Neck pain and Sciatica. (Khatoon, in 2014) <sup>[19]</sup> and (Rai & Ram, 1993) <sup>[31]</sup> proved that Virasana which is also called as warrior pose is one of the best asanas for greater MVV(maximum voluntary ventilation), increased TV(Tidal volume), increased Heart Rate, O<sub>2</sub> consumption and increased CO<sub>2</sub> elimination during Virasana. Through many research which are done by the researchers proves that how much Dhanurasana or the bow pose is helpful in many problems such as Diabetes, Heart rate, blood pressure, Irritable bowel syndrome, Fasting and Postprandial glycemia and insulinemia, Frozen shoulder and Constipation. Swatmaram in Hath Pradipika tells many benefits of Matsyendrasana as in improving Digestion by increasing gastric fire and Destroy all diseases and many other subtle benefits and same benefits were explained by the researchers in their studies. Neck pain, Sciatica, Diabetes, and fatty liver etc were the benefits proved by Arora, Singh, and Panda. Benefits of Paschimottanasana according to Swatmaram are that it Stimulate gastric fire i.e., improve digestion, makes body lean and thin, Remove all diseases. However, (Patel & Upalanchiwar, n.d.), (Shukla & Gehlot, 2014) <sup>[42]</sup>, (Sandy *et al.*, 2020) <sup>[39]</sup> and (Alagesan *et al.*, 2012) <sup>[12]</sup> proves that Obesity, Dysmenorrhea, Hernia, Diabetes mellitus are some benefits of Paschimottanasana. According to Swatmaram, Shavasana removes fatigue from the body and relax mind but the researchers such as Bagga, Sethi, Sunder and many other researchers proved these benefits of Shavasana. Hypertension, Cardiovascular system, Headache, Stress, Heartrate and blood pressure, Oxygen consumption and respiration, Multiple sclerosis are some areas of improvement resulting from Shavasana.

## Conclusion

In Hathapradipika; Swatmaram talks about 15 asanas but he only mentioned the benefits of 7 asanas out of which Siddhasana, Padmasana, Simhasana and Bhadrasana are considered as more helpful in spiritual growth rather than some physical benefits maybe because they comes under meditative postures but the researchers have showed many more physical benefits of these asanas because spiritual dimension is a subtler level and it is not possible to check yet, through the instruments which are available. The benefits which are given by Guru Swatmaram are very similar with benefits which are proved by different researchers, but still much more deep studies required. Mayurasana improve Enlargement of glands, Dropsy and other stomach disorders and as well as Balance the humours and increase the digestion while researchers also claims that it improves the symptoms of Haemorrhoids and Diabetes.

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