

Systematic Yoga

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1 Introduction

In this article, I will attempt to provide a high-level overview of Hatha Yoga and to introduce a plan I have developed for systematic Hatha Yoga practice. These are two separate topics, but it is easier for me to discuss them together. I will examine only the physical components of Hatha Yoga. There are many other important components that are traditionally emphasized in Yoga—diet, self control in many areas, meditation, etc.—I will not address them here. Due to space limitations, I will not expand on the benefits of each practice or on the details of the techniques. Most of what follows should be taken to represent my opinion on the topic and should not be blindly assumed to be true. If it makes sense to you, good. If not, trust your own intuition, your teachers, or refer to the classics, in particular *Yoga Sutras* and *Hatha Yoga Pradipika*.

Hatha Yoga is a collection of techniques, aimed at preparing the body for the higher levels of Yoga. It is only a part of classical Ashtanga (eight-limbed) Yoga as presented by Patanjali in the *Yoga Sutras*, the “bible” of Yoga. Ashtanga yoga consists of eight mutually-dependent parts or “limbs”: (1) Yama (restrictions), (2) Niyama (observances), (3) Asana (posture), (4) Pranayama (breath-control), (5) Pratyahara (withdrawal from the senses), (6) Dharana (concentration), (7) Dhyana (meditation), and (8) Samadhi (or consummation of meditation). All efforts in Yoga are supposed to be directed towards Samadhi.¹

Hatha Yoga arose out of the expansion of steps 3 and 4. Within Ashtanga Yoga, it seems that Asana simply indicated the attainment of a comfortable position for meditation, one that could be maintained for long periods of time with no effort.² In Hatha Yoga, Asana was greatly expanded to include the practice of postures for flexibility, balance, strength, and endurance. Pranayama was also expanded.³ In addition to Asana and Pranayama, two other “sub-steps” were introduced: Cleansing techniques and Mudras and Bandhas, a collection of techniques generally used as aids in breath-control.

¹The first four verses in the *Yoga Sutras* are:

I.1 And now, the discipline of Yoga

I.2 Yoga is the state of being in which the ideational choice-making movement of the mind slows down and comes to a stop.

I.3 Then the seer gets established in his existential identity.

I.4 In all other states of being, identification with the ideational choice-making movement reigns supreme.

A later verse says:

III.3 That alone which radiates the splendour of objectivity in its purity and in which one’s identity is reduced as it were to utter emptiness, is called *Samadhi*.

(P. Y. Deshpande’s translation).

²Patanjali dedicates only three verses to asana:

II.46 A body-posture that results in a steady state of comfort is called *asana*.

II.47 Such a posture [asana] comes through total relaxation of effort and through a state of mind in harmony with the infinite state of repose.

II.48 Establishment in *asana* brings about a state of being in which one remains unaffected by the pairs of opposites.

(P. Y. Deshpande’s translation).

³Patanjali dedicates only five verses to pranayama:

II.49 While established in *asana*, the break in the continuance of incoming and outgoing breath is called *pranayama*.

II.50 It [*pranayama*] is a stillness consequent on a break in the continuity which comes at the end of the incoming and outgoing breath. It is found to have measurable length in space and time-duration; and it becomes prolonged and subtle.

II.51 *Pranayama* which discards its three forms [mentioned in the above sutra] is the fourth form.

II.52 Thereby the veils which cover self-illumination are removed.

II.53 It also helps one’s mind to acquire the necessary capacity for *dharana*.

(P. Y. Deshpande’s translation).

Regardless of its origin and initial objective, Hatha Yoga is an excellent system for general health. You can enjoy many of the benefits of Hatha Yoga even if you do not intend to pursue the higher levels of Yoga.

Random practice of the techniques of Hatha Yoga, without regard as to when and how to apply them is of limited use and potentially dangerous. Caution should be exercised to avoid injury, like in any other physical discipline. It is important to develop the techniques gradually and systematically and to have a clear idea of how to put them together. Many of the more exotic techniques are used only for specific objectives and are unnecessary for attaining excellent health.

For practice and study, I divide the techniques of Hatha Yoga into five physical components: (a) general postures, (b) seated posture, (c) headstand, (d) breath control, and (e) cleansing techniques. To help in the systematic development of these components, I have laid out fifteen levels of increasing difficulty for each of them. The higher levels are shown here for completeness; they should not be attempted without expert guidance. The first five levels are quite sufficient to develop excellent fitness.

2 General Postures

The practice of general postures comes closer than any of the other five components to the better known forms of physical exercise. It is visible, tangible, and often spectacular. Perhaps this is why this component is the one that has been developed the most in the West. Indeed, for many people, general postures are synonymous with Hatha Yoga or even with Yoga in general.

General postures develop four major physical aspects: flexibility, balance, strength, and endurance. Some postures work mostly on just one of these aspects, but many postures combine several of them.

Flexibility is generally developed for all major articulations, but the most important area for flexibility is the hip. The major areas of flexibility are: forward bends (one and two legs), back bends (one and two legs), twists, and femur rotations (rotations of the femur on the hip). They are generally developed in this order.

Balance helps to build up strength, control, and concentration. There are postures for balance on almost any body part that can be used for this purpose, including both feet, one foot, knees, buttocks, shoulders, elbows, forearms, hands, and head. Balance postures are most often combined with forward bends, back bends, or with padmasana (the “lotus” posture).

Strength is developed by assuming positions where certain muscle groups oppose gravity. Many muscle groups can be developed in this way. Some schools also develop muscles by making them work against each other or by alternating contraction and relaxation of isolated muscles.

Endurance is developed by regular practice. It is different from strength; you might be strong enough to practice each posture separately, but not have the endurance to practice them all in sequence. Ideally, your regular routine should be completed without losing control of the breath. If you have to stop often or you find yourself constantly out of breath, you are pushing yourself too hard. Some schools (for example, Patabhi Jois’s) have carefully worked-out routines which should be completed in a specified number of breaths.

General postures develop the body using essentially no equipment (straps, blocks, or a few other props are sometimes used). Generally, a posture is assumed and then statically maintained for some period of time. This period depends on the style, on the practitioner, and on the posture. Most postures are maintained from 30 seconds to 3 minutes. Postures that mostly emphasize strength can be very strenuous and are often maintained 15 seconds or less. Flexibility postures that require no strength or balance can be maintained for 5 to 10 minutes or even longer. Balance postures are often held for as long as the balance can be maintained (initially for just a few seconds).

There are many different general postures⁴ and many different schools for general-posture practice. They differ in their teaching methods, in the postures they use, in the order in which they practice them, and in how much they emphasize the dynamic part of the posture (getting in and out of it). Many schools emphasize only flexibility and balance.

My development plan emphasizes the other four components more (seated posture, headstand, breath-control, and cleansing techniques) because they are often neglected. For general postures, I provide a rough level layout, some general recommendations (see below), and a specific plan for introducing the Series from the Patabhi Jois school.⁵ There are many advanced teachers for general postures; this is the most accessible area of Hatha Yoga. Follow the advice of a good

⁴Eight million four hundred thousand, according to the *Gheranda Samhita*.

⁵Patabhi Jois calls his school *Ashtanga Yoga*. However, in order to differentiate classical, 8-limbed Yoga, from one particular school that concentrates mostly on the postures, I will use the name *Ashtanga Yoga* here only to refer to all eight parts at once.

teacher from a school you like.

B. K. S. Iyengar has assigned a difficulty level to each of the 200 postures covered in his encyclopedic work, *Light on Yoga*. While not everybody will find all postures equally difficult and while some might disagree with Iyengar’s specific numbers,⁶ they are quite useful to structure a plan for practice. Using his numbers, I have identified a few illustrative postures to cover the main sequences of flexibility (see Table 1) and balance (see Table 2). Strength postures are much more difficult to summarize, and therefore I am not including a table for them here. The postures in Table 1 emphasize flexibility almost exclusively; the postures in Table 2, however, require strength and flexibility in addition to balance. This is characteristic of balance postures; there are few that don’t require strength, and flexibility is often added to them. These two tables should give you an idea of where you stand and what to shoot for in terms of balance and flexibility. Of course, there are many postures that combine flexibility, balance, and strength in different proportions; there is no point in listing them all here.

My general recommendations are: develop all four aspects of general postures evenly (flexibility, balance, strength, and endurance). Develop each of them evenly; for example, do not concentrate on backbends while ignoring forward bends. Within a given area, for example forward bends, there are sequences of postures of increasing difficulty (see Table 1 and Table 2). Do not practice the harder postures within a sequence until you are comfortable with the easier ones. Working on the easier postures of one area will prepare you for the harder ones within that area. Do not push yourself too hard; make sure your practice is enjoyable. Remember, you are practicing to improve your health; pushing yourself too hard greatly increases the chance of injury.

I have developed a plan for introducing the six Patabhi Jois series gradually. Each of them includes postures within a wide range of difficulty. Therefore, I prefer to introduce each series in three stages. At stage A, I introduce approximately half of the postures of a series. At stage B, I introduce most of the remaining half, leaving out some of the most difficult postures. At stage C, I introduce the remaining postures. I have not added, removed, or changed any of the postures, except that a series is only practiced in its entirety at stage C. The Patabhi Jois series have many other details, including the connecting movements, breath, and gazing. I also introduce all this gradually.

These stages overlap: a new series is introduced every two levels. Stages A and B of each series take one level to develop, while stage C takes two. Therefore, at a given level you are practicing stage A or B of one series and stage C of the preceding series. This is my method for introducing them; however, I recommend you follow the advice of your teacher on this matter.

Table 1: General Posture Level Layout for Flexibility⁷

	Forward (1 leg)	Forward (2 legs)	Back (1 leg)	Back (2 legs)	Spinal Twists	Femur Rotations
1		3. Padangustha		5. Matsya		3. Badda Kona
2	5. Janu Sirsha	6. Paschimottana		7. Urdhva Dhanura		
3	10. Krouncha	9. Upavistha Kona			8. A. Matsyendra I	
4	15. EP. Sirsha	14. Supta Kurma			10. Marychya III	
5	16. Bhairava	18. Yoga Nidra			11. Marychya IV	
6	19. Viranchya I			21. Kapota	19. A. Matsyendra II	15. Vamadeva I
7	22. Budda			23. Laghu Vajra	22. A. Matsyendra III	19. Yogadanda
8			28. EPR. Kapota I	31. Chakra Bandha		
9				38. Raja Kapota	38. Matsyendra	32. Mula Bandha
10						39. Kanda
11 to 15			40. EPR. Kapota IV 45. Valakhilya	56. Ganda Bherunda 58. Viparita Salabha 60. Tiriang Mukhottana		

⁶Many students find the postures involving balance or strength harder than Iyengar’s numbers indicate, as compared to flexibility postures. Also, many students find padmasana very difficult and therefore postures related to it also seem underrated. It is not easy to provide a single number to indicate the difficulty of a posture. There are many parameters related to how difficult it is to maintain a certain posture, including perfection of the posture and length. Some postures cover a wide span (they are much easier to do not so well than perfectly) while others cover a very narrow span (they are hard to do at all, but not much harder to do perfectly).

⁷Most of these posture names have been taken from B. K. S. Iyengar’s *Light on Yoga*. The numbers in front of the posture names indicate Iyengar’s difficulty rating. A question mark indicates a posture that is not in *Light on Yoga*. I have excluded splits (Hanumanasana and Sama Konasana) from this table due to the great variability in people’s ability to perform them, generally due to previous training. Also notice that postures with the foot behind the back depend not only on forward-bend flexibility, but also slightly on hip-rotation flexibility.

Table 2: General Posture Level Layout for Balance

	Balance Only	Balance + Forward Bend in Padmasana	Balance + Back Bend
1	1. Vrisksha		
2	4. Sirsha		
3		6. Sirsha+Padma	
4	12. Pincha Mayura	7. Garbha Pinda	
5	10. Handstand		
6		? . Karanda Vasana	
7	10. Goraksa		
8	15. Sayana	? . Handstand+Padma	32. Vrischik I
9			
10			33. Vrischik II
11			52. Sirsha Pada
to			58. Nataraja
15			

3 Seated Posture (Padmasana, Siddhasana, or other)

Attaining a comfortable seated posture is considered very important for meditation. If you are not currently planning to practice meditation, practicing a seated posture may seem pointless. However, the benefits of being able to sit comfortably for a long time extend far beyond meditation. It is said that stillness of the body helps to achieve stillness of the mind. At any rate, it is clear that it is easier to concentrate on whatever you want to concentrate when you are comfortable, and you don't need to shift constantly in your seat. Motionlessness is worth experiencing. Many of us seldom experience a single long moment of conscious motionlessness. We even move frequently when we sleep.

There are several seated postures. The most important are Padmasana (padma = lotus) where each foot goes on top of the opposite thigh and Siddhasana (siddha = perfection), where one foot goes against the perineum and the other one goes between the thigh and the calf of the other leg. Padmasana is the most difficult to master, but also the most important for the higher levels of breath control. Some say that Siddhasana should not be practiced by the non-celibate student for long periods of time.

The classical goal for seated postures is to be able to sit still for about three hours with ease. When this is achieved, it is said that it is possible to sit all day. Half hour is a good intermediate goal. Developing a seated posture takes time and determination. Leg flexibility and strength of the muscles of the back should be developed gradually. At first, it is sufficient to learn to assume the posture. Later, it is important to learn to remain in the posture without motion, for extended periods of time

I recommend regular practice of Padmasana, since being able to do Padmasana well makes it easy to do most of the other seated postures. The initial obstacle is hip-rotation flexibility. This is why I don't introduce Padmasana until the student has achieved a minimum level of proficiency in general postures. However, ability to do Padmasana varies greatly; some people can do it the first time they try, even if they have not practiced any form of Yoga.

At first, simply make repeated attempts to cross your legs into the correct posture, within your general routine. Don't be too forceful. If your legs don't seem to get to where they need to be, continue your practice of general postures and try doing a "half-padmasana" posture (only one foot on top). Once you can assume padmasana and maintain it for 30 seconds, slowly increase the length until you can do it for 2 minutes. At this point, you can start using the posture for your breathing exercises and for your stomach exercises (see Cleansing Techniques). Don't use a seated posture you are still developing for meditation until it is comfortable.

When you can sit in Padmasana for 15 minutes, you should start to develop it outside of your regular routine. Sit in it whenever possible. A common stumbling block is reached when the posture can be maintained for 30 to 40 minutes. Further practice will enable you to go beyond this limit.

Regular practice, not brute force, is the key to success in Padmasana and in most other aspects of Yoga. Don't push yourself too hard. Increase duration gradually, and only after success in the previous duration objective. Don't try to do it for 10 minutes after succeeding once in maintaining it for 5 minutes; shoot first for being able to hold it for 5 minutes almost every time. See Table 3 for level layout.

Table 3: Padmasana and Sirshasana Level Layout

	Total time in minutes	Total motionless time in minutes
1	0.5	
2	2	
3	5	
4	15	
5	30	
6	45	
7	60	
8	90	
9	120	
10	180	
11	180	30
12	180	60
13	180	90
14	180	120
15	180	180

4 Headstand (Sirshasana)

Sirshasana (sirsha = head) stands in between seated postures and general postures. On one hand, it helps to develop introspection and concentration. On the other, it provides many direct physical benefits, most of them as a result of the inverse action of gravity on the body. It is often called the “king” of the general postures. The headstand seems to increase the metabolic rate; allow for a higher caloric intake when you practice regularly for half hour or more.

There is no clear-cut classical goal for headstand duration. There are good reasons to shoot for at least one hour in the long run.⁸ Upper body strength helps in the very initial phases but is not very important for duration. The headstand is mostly a balance exercise.

There are two main arm positions for the headstand. The first one, with the palms of the hands on the floor and the forearms perpendicular to the floor should be used only for the initial stages. The second one, with the fingers interlocked behind the head and the forearms on the floor should be used for durations beyond one or two minutes.

At first, it is easier to balance by using the first arm position, by spreading the weight between the arms and head, and by balancing towards the front of the top of the head. I don’t recommend using a wall to learn to balance. Start by learning to balance with your knees on your elbows and your body as straight as possible. Then, learn to lift both legs together, slowly, while they are still bent. Finally, extend your legs and balance.

Once you can balance comfortably for about one minute, start using the second arm position. To come up, get your feet as close to your head as possible and your trunk straight. Don’t swing your legs. Lift them slowly together, while maintaining your balance. Just as before, first get your thighs up, while your legs are still bent, then extend your legs. With time, learn to balance further back on your head and try to put less and less weight on your arms. Eventually, all weight should be on the top of the head; the arms should be used only to check the balance.⁹ With time, a feeling of weightlessness will be experienced.

Don’t go into a headstand from a standing position or vice versa. Lie down before and after. I prefer to do a long relaxation afterwards, but this is not necessary when you are only practicing headstand for a few minutes. There are a few different but similar postures that help to decompress the cervical vertebrae. One of them should be used after the headstand and before relaxation.

⁸The headstand is not even mentioned as Sirshasana in any of the three Hatha Yoga classics. However, the nomenclature was not well standardized in those times. There are good reasons to believe that the headstand is the posture called *Viparita Karani* in those texts, even though today Viparita Karani is generally used to denote a different posture. The *Hatha Yoga Pradipika* is rather vague on this topic: “The exercise called the Viparita Karani is learnt from the guru’s instructions. If the food be scanty, the fire will burn him at once. Place the head on the ground and the feet up into the sky, for a second the first day, and increase this time daily. After six months, wrinkles and grey hair are not seen. He who practices it daily, even for three hours, conquers death.”

⁹There are many dissenting opinions about where on the head to balance and on whether to put some weight on the arms. I find it more comfortable to put all my weight towards the back of the top of my head. It seems that balancing towards the back of the top of the head results in better alignment of the cervical vertebrae.

The headstand, just as a seated posture, should be developed gradually and systematically. Don't increase the duration until you have been able to maintain your previous duration for at least a month, *almost every time*. When you are practicing for more than five minutes, your breath should be slow and regular. If you are breathing very fast, or sweating profusely, it is time to come down. Two other aspects that are very important for long headstands are alignment and cushioning. If possible, practice in front of a full-length mirror. See Table 3 for level layout.

5 Breath Control

Pranayama (Prana=breath and Yama=control¹⁰) is stillness of breath. Full stillness of the body can not be achieved without stillness of breath. Stillness of posture and breath is said to bring stillness of mind. Therefore, the main aspect of breath control is breath retention.

Advanced Hatha Yoga breathing exercises are quite strenuous and require excellent general health, a well-developed seated posture, a healthy and moderate diet, and strong abdominal muscles.¹¹ Therefore, advanced breath control is traditionally started only after many of the other practices have been mastered. However, many benefits can be gained from the introductory breath-control practices, which do not have such prerequisites.

There are many different breath-control exercises.¹² Except for some specialized exercises, most of them share a few basic techniques. There are four major parts in a controlled-breathing cycle: exhalation (Rechak), retention with empty lungs (Bahya Kumbhak), inhalation (Purak), and retention with full lungs (Antara Kumbhak). Exhalation and inhalation should be mastered first.

Exhalation should always be slow, controlled, and deep. In general, an effort should be made to eliminate as much air as possible from the lungs. (In normal, shallow breathing only a small percentage of the air in the lungs is renewed with each breath.) Inhalation should generally be half as long as the exhalation. It should be deep, filling the lungs from the bottom up. Except for a few special Pranayamas, inhalation and exhalation should always be done through the nose only. *Ujjayi*, one of the forms of Pranayama, is performed by partially closing the glottis during exhalation and inhalation, making them audible. This allows greater awareness and finer control of air-flow evenness. Deep, slow, rhythmical, and attentive breathing is generally taught first, and then *Ujjayi* without retention.

After learning to inhale and exhale correctly, breath-retention is taught. Most teachers start with full-lungs retention (Antara Kumbhak) but some start with empty-lungs retention (Bahya Kumbhak). At first, a short retention can simply be added to the inhale-exhale cycle. Long breath-retention is generally developed with alternate-nostril breathing (Sahita Pranayama) or with bellows breathing (Bhastrika Pranayama). Alternate-nostril breathing consists of inhalation through one nostril, retention, then exhalation through the other nostril. The next cycle starts with inhalation through the nostril used for the last exhalation, retention, and exhalation through the other nostril. This is the most common pattern, although other patterns are sometimes used.

There are three key techniques used during Pranayama, in particular for full-lungs breath-retention: *Jalandhara Bandha* (Chin Lock), *Uddiyana Bandha* (Abdominal Lock), and *Mula Bandha* (Anal or Root Lock). All three help to increase intra-toracic pressure, thereby allowing more oxygen to be taken from the air in the lungs. They are also said to have other important, subtle effects. It takes some time to master them, and there are several auxiliary exercises in Hatha Yoga to develop these three locks.¹³ They must be mastered before attempting long breath-retentions.

Breath retention in advanced Hatha Yoga practice is traditionally developed to at least three minutes, in repetition. Needless to say, this should be done gradually and carefully. Generally, many full breath cycles are practiced at a sitting. Each of these cycles should be of the same length and each of the parts—inhalation, exhalation, and retention—should be of the same length, not compared to each other, but compared to the same part of the previous cycle. You should not hold the breath for as long as you can. Instead, you should work on a particular duration, (for example, 8 seconds for

¹⁰The word *prana* is sometimes used to refer to the breath, and sometimes to refer to a “subtle form of energy” *carried* by the breath. The word *yama* also has several interpretations.

¹¹*Hatha Yoga Pradipika* says (II.1): “Posture becoming established, a Yogi, master of himself, eating salutary and moderate food, should practice pranayama, as instructed by his guru.” (see also footnote 3).

¹²*Hatha Yoga Pradipika* lists eight types of Pranayama: Surya Bheda, Ujjayi, Sitkari, Sitali, Bhastrika, Bhramari, Murcha, and Plavini. *Gheranda Samhita* also lists eight: Sahita, Surya Bheda, Ujjayi, Sitali, Bhastrika, Bhramari, Murcha, and Kevala. Sahita and Kevala are described in *Hatha Yoga Pradipika*, but not included in the list of eight types. Sahita (alternate nostril breathing) is the traditional introduction to Pranayama, and Kevala is the traditional end-result.

¹³The shoulderstand (*Sarvangasana*) helps to perfect Jalandhara Bandha. Uddiyana Bandha can be perfected by practicing it in repetition (or *Agnisara*) as described in the section on cleansing techniques. Mula Bandha can be perfected by the practice of *Aswini Mudra*, the repeated contraction and relaxation of the anal sphincters.

inhalation, 36 seconds for retention, and 16 seconds for exhalation) for a fixed number of cycles (for example 10). Only when this becomes easy, move on to a higher standard. Exhalation should always be slow, controlled, and deep. If it is not slow and controlled, you are retaining the breath for too long. If it is not deep, inhalation will not renew as much of the air in the lungs, and retention will be harder.

One of the most powerful and important breath-control exercises is *Bhastrika*. Bhastrika consists of two phases. The first phase consists of very rapid breathing with no retention. Exhalation should be active and forceful, while inhalation should be passive. In this phase, exhalation should last no more than half the time of inhalation (in contrast to most other breath-control techniques). The speed should initially be 60 breaths per minutes and can eventually be developed to 120 breaths per minute. Depth should not be sacrificed for speed. The second phase consists of a regular cycle, consisting of a slow inhalation, retention with full lungs, and slow exhalation. This constitutes one cycle. There are many small variations; for example, alternate breathing can be used during the second phase and even during the fast phase. Bhastrika is a very intense and invigorating exercise. The number of rapid breaths and the length of the retention should be increased gradually and carefully.

For retentions beyond three minutes, two additional techniques are needed: Khechari Mudra¹⁴ and the ability to circulate air through the digestive system. I will describe both of them here for completeness, but keep in mind that very few people develop breath control to this extreme. Khechari Mudra requires lengthy preparations: gradually cutting the frenum of the tongue and elongating the tongue. It should be possible, at the very least, to touch the tip of the nose with the tongue. Once the necessary length has been achieved, the tongue can be swallowed and used to close the glottis or it can be directed upwards, behind the soft palate, to control the direction of the breath. Khechari is supposed to have many other beneficial effects. The ability to circulate air through the digestive system is developed with the cleansing exercises. See Table 4 for level layout.

Table 4: Pranayama Level Layout

	Type of Breathing	Total Time (minutes)	Cycles	Cycle Time (seconds)	Inspiration Retention Exhalation	Fast Breathing	Locks (Bhandas)
1	Normal	2	8	15	5—0—10		
2	Ujjayi	5	8	40	8—16—16		
3	Alternate	10	10	56	8—32—16		Jalandhara (initial)
4	Bhastrika	15	10	90	10—40—20	20	Jalandhara
5	Bhastrika	30	12	150	15—60—30	45	add Uddiyana
6	Bhastrika	42	12	210	20—75—40	75	add Mula
7	Bhastrika	48	12	240	20—90—40	90	
8	Bhastrika	60	12	300	20—120—40	120	
9	Bhastrika	60	10	360	20—150—40	150	
10	Bhastrika	56	8	420	20—180—40	180	
11	Bhastrika	56	8	420	20—180—40	180	add Khechari Mudra
12	Bhastrika	64	8	480	20—210—40	210	
13	Bhastrika	72	8	540	20—240—40	240	
14	Bhastrika	80	8	600	20—270—40	270	
15	Bhastrika	88	8	660	20—300—40	300	

¹⁴Many people argue that Khechari Mudra is unnecessary or that the description given in the *Hatha Yoga Pradipika* or the other classics is metaphorical. I disagree with both positions. It is certainly true that the vast majority of people practicing yoga have no need to practice Khechari Mudra, and indeed, even in India, very few “accessible” yogis practice it. However, after reading the classics, it is difficult to believe that the description of Khechari should be taken as a metaphor while the description of the other techniques should be taken literally. This is what *Hatha Yoga Pradipika* says: “The Khechari Mudra is accomplished by thrusting the tongue into the gullet, by turning it over itself, and keeping the eyesight in the middle of the eyebrows. To accomplish this, the tongue is lengthened by cutting the frenum linguae, moving, and pulling it. When it can touch the space between the eyebrows, the Khechari can be accomplished. Taking a sharp, smooth, and clean instrument, of the shape of a cactus leaf, the frenum of the tongue should be cut a little (as much as a hair’s thickness), at a time...” The text goes on and on, providing both the longest description and longest praise for any single technique described there. *Gheranda Samhita* and *Siva Samhita* also provide long descriptions and praise.

6 Cleansing

Hatha Yoga includes a group of techniques for external and internal cleansing called *kriyas* or *shatkarma* as a group. Some of them are simply the ancient equivalent to widespread contemporary practices, such as brushing the teeth or cleaning the ears. Some correspond to similar, but not equivalent, common Western practices such as enemas. Others have no equivalent in our culture.

Some cleansing techniques may be shocking to the neophyte. This is generally because of lack of knowledge about their purpose, the proper techniques, and how they fit together. The most exotic techniques should generally only be practiced at the higher levels. Some people argue that cleansing techniques should be practiced only by sick people or only under special circumstances.¹⁵ I disagree with this view; I think most people can benefit from practicing some cleansing techniques.

Our current culture greatly emphasizes external cleansing. Many of us shower daily and brush our teeth several times a day. However, external cleansing is not enough for excellent health. This is why internal cleansing techniques were developed in Hatha Yoga. Once you become proficient with some of these techniques, you will wonder how you ever got by without them. Just like showering, they are not strictly necessary and just like showering, it might be difficult to attribute very specific health benefits to them. However, just like showering, they help to create a sense of freshness and well-being that is difficult to describe to those who don't practice them. Some claim that these techniques are "unnatural"; showering is "unnatural" too.

The male body has three large cavities connected to the outside: the respiratory system, the digestive system, and the urinary system. The female body has one more: the reproductive system (which does not include a large cavity in the male). Most sickness-causing agents enter the body through the skin or through one of these cavities. Hatha Yoga cleansing techniques concentrate on these cavities, in particular on the respiratory and digestive system. Cleansing is generally done with water, air, a string, or a cloth, as appropriate.

The lungs can not be easily cleaned with water, a string, or a cloth. Therefore, air must be used. The main technique for cleansing the whole respiratory system is controlled hyperventilation. Hyperventilation followed by breath-retention is called *Bhastrika* and has been covered under breath control. Hyperventilation without breath-retention is called *Kapalabhati*.¹⁶ The nose is cleaned with water or a string in the various varieties of *Neti*. The easiest, *Jala Neti*, consists of absorbing slightly salty water (in osmotic equilibrium with the body) through the nose and letting it out through the mouth. The inverse technique, taking water into the mouth and letting it out through the nose is much more difficult to master. Another technique, *Sutra Neti*, consists in inserting a slightly waxed string or thin plastic catheter into one nostril, catching it at the back of the throat with the fingers, and carefully pulling it back and forth to loosen any solid residue. All these techniques help to develop good, but not perfect, resistance to the common cold.

There is a considerable variety of techniques for cleansing the digestive system. This is in part because the digestive system opens to the outside at two distinct locations, allowing cleansing from either end (mouth *or* anus) or cleansing from end to end (mouth *to* anus). Many of these techniques rely on the ability to create a partial intra-abdominal vacuum to enable suction of water or air. There are two exercises to produce this partial vacuum: *Uddiyana* and *Nauli*. These exercises are fundamental to many of the cleansing techniques, extremely important in Yoga in general, and also beneficial on their own. Therefore, they should be learned and mastered early. A large part of the development of the cleansing techniques is the development of strength and endurance in *Uddiyana* and *Nauli*.

Uddiyana is the easiest and should be learned first. It consists in pulling the abdomen in and up to create a large space under the ribs. This is done by emptying the lungs, then performing a "mock inspiration." It should be possible, at the very least, to place two full fists in the space so created. Once this is possible, *Uddiyana* should be practiced in repetition (this is called *Agnisara Dhauti*). Empty the lungs, pull the abdomen in, then relax it, then pull it back in, and repeat several times until you are ready to inhale. This is one cycle. The number of cycles and the number of repetitions in each cycle should be gradually increased. Initially, it is easier to do the exercise standing, with the knees and the trunk slightly bent and the hands on the knees. Eventually, it can be done in *padmasana*. The exercise is considered to be mastered when a total of 1,500 repetitions can be done in one sitting. (This is usually done as 30 cycles of 50 repetitions each, and it takes 20 to 30 minutes.) *Uddiyana* does not exercise the stomach muscles, which stay relaxed throughout the whole practice. It is essentially an exercise of the diaphragm and other respiratory muscles.

Once *Uddiyana* can be done comfortably, *Nauli* should be learned. *Nauli* consists in the isolation and contraction of the

¹⁵ *Hatha Yoga Pradipika* says: "if there is excess of fat or phlegm in the body, the six kriyas should be performed first. But others, not suffering from the excess of these, should not perform them."

¹⁶ Some teachers claim that there are other differences between *Bhastrika* and *Kapalabhati* beyond breath retention for the former. Since the classics are fairly vague on this topic, there is no definitive answer.

two recti abdomini, the large muscles that can give the abdomen a “washboard” look. To perform Nauli, you must first do Uddiyana, and while the abdomen is retracted, you should strive to identify and contract the recti abdomini. This is much easier said than done; it takes many attempts to “find” the muscles. When they can be contracted while still in Uddiyana, only the center will stick out while the sides will still be hollow. Once this is possible, Nauli should be practiced in repetition, just like Uddiyana. When many repetitions can be done comfortably, you should learn first to contract only one of the recti abdomini. Then, you should learn to do “rotations,” consisting of contraction of one recti, then both, then the other, then relaxation (all the while maintaining Uddiyana). Finally, isolation of the two external obliques should be learned and added to the “rotations.” The exercise is considered to be mastered, like Uddiyana, when 1,500 rotations can be done in one sitting. (First 750 from left to right, then 750 from right to left.)

Both of these exercises are excellent for general health. Nauli helps to develop strong abdominal muscles. 200 to 500 repetitions of each is quite satisfactory for general health. Uddiyana and much more so, central Nauli, create a partial intra-abdominal vacuum that is essential for some of the techniques described below. Nauli rotations, by acting on the transverse colon, help to circulate water or air up or down the digestive system.

By developing good control of the anal sphincters¹⁷ it is possible to open the anus while performing Nauli. When this is done while squatting in water, water will be absorbed into the rectum due to the partial vacuum produced by Nauli. (A bathtub is ideal for this, but a small basin is enough when the technique is well developed.) This technique is called *Jala Basti* and the result is similar to an enema but deeper and more thorough. After absorbing water in this manner, the water can be distributed higher throughout the colon by using a few left-to-right Nauli rotations. Afterwards, the remaining water can be discharged by using right-to-left Nauli rotations. A similar process, but without water, results in air cleansing (*Shtala Basti*). Basti should generally be practiced not to induce defecation, although it can certainly help in that, but to clean the colon. It is best practiced after defecation.

The other end of the digestive system can be cleansed in a similar manner. Swallowing several glasses of salty water, then vomiting it out cleanses the stomach and is called *Vamana Dhauti*. Nauli can be used to introduce large amounts of air into the stomach which can then be expelled through the mouth. The esophagus can also be cleansed by swallowing a long gauze (while keeping one end firmly outside!), then pulling it out. This is known as *Vastra Dhauti*.

The most powerful techniques for digestive-system cleansing consist in circulating water and air (separately), from the mouth to the anus. Circulating water, surprisingly, can be done by almost anybody in good health the first time. It is known as *Varisara Dhauti* or *Shank Prankshalana*. No solid food should be taken for at least 12 hours and ideally for 24 or 36 hours before performing the technique. Also, it is much better to wait until after a bowel movement before starting. The exercise consists of drinking of tepid, salty water alternated with a series of movements that help the water to move through. After half-hour to a few hours, and after drinking half a gallon to one gallon of water, the water will start to pour out. The exercise should be continued until the water comes out relatively clean.

When Nauli has been mastered, it is possible to perform Varisara Dhauti by using only right-to-left Nauli rotations. It is much more efficient and faster to do it this way, and generally takes only 20 to 45 minutes. It is also possible to eliminate much more of the remaining water with Nauli. Once this has been mastered, circulating air (*Vatasara Dhauti*) can be learned. The technique is similar, except that air should be brought into the stomach by the use of Nauli. After learning to perform both of these techniques, Varisara and Vatasara separately, they should be practiced one after the other (water first, air second). All of the techniques described in this paragraph should only be attempted at the advanced levels, after perfecting Nauli. It generally takes 2,000 to 3,000 Nauli rotations to perform both.

Neti, Nauli, Uddiyana, and Basti can be profitably practiced daily. The other techniques should be performed weekly, biweekly, or monthly. Varisara may be practiced less frequently. See Table 5 for level layout. There are several other cleansing techniques of secondary value, including techniques for the ears, tongue, sinuses, etc.

¹⁷Control of the anal sphincters is gained through the practice of *Aswini Mudra*, which consists of repeated contractions of the anus.

Table 5: Cleansing Level Layout

	Uddiyana	Nauli			Cleansing		
		Central	Lateral	Rotations	Water	Air	Other
1	200				Neti		Aswini
2	200	200					
3	200	200	200		Jala Basti ¹⁸		
4	200	200	200	200	Jala Basti ¹⁹		
5	200	200	200	400	Jala Basti ²⁰		
6	400	200		600		Sthala Basti	Sutra Neti
7	600	200		600	Vamana Dhauti	Vastra Dhauti	
8	600	200		800	Varisara		
9	800	200		800		Sthala Basti ²¹	
10	1000			1000	Varisara ²²		
11	1000			1000		Air into stomach	
12	1000			1000		Vatasara	
13	1000			1000		Vajroli A ²³	
14	1000			1000		Vajroli B ²⁴	
15	1000			1000		Vajroli C ²⁵	

7 Practice Plan

For each of the five components, I have designed 15 levels of progressively higher difficulty. Level 1 is accessible to most people in reasonably good health. Levels 2 and 3 provide an excellent workout for general health. Level 5 is already quite intense. Level 15 implies more or less the mastery of the physical part. Beyond level 15 (and perhaps a lot earlier) it is time to move on to other things. Hatha Yoga is only a tool for preparing the body for higher practices.

It is not at all essential to reach the higher levels. They are shown here mostly for reference, so that you can get an idea of what is involved in advanced Hatha Yoga practice at the physical level. Completing level 2 or 3 is enough for most people. Those with strong motivation and high interest in Hatha Yoga should strive for completing level 5. Beyond level 5, the development of other areas of Yoga, in particular, diet, becomes very important. Higher levels should, in general, not be attempted without personal, expert guidance.

Each of the first five levels is broken down into twelve lessons. The first two lessons of each level cover progressively deeper aspects of the relaxation posture (Savasana) and of the details of the practice of general postures. Lessons 3 to 9, introduce general postures, a few at a time. Lesson 10 teaches progressively deeper aspects of seated posture and headstand. Lesson 11 teaches progressively deeper aspects of breath control and lesson 12 teaches progressively deeper aspects of cleansing techniques.

Initially, the student is encouraged to practice about twice weekly. Each session does not generally include a new lesson. New lessons are taught only when the student demonstrates correct execution of what has been taught at the previous lessons (within his or her current physical limitations). All five components do not have to be necessarily developed simultaneously, but at least for the first few levels it is best to do so. An overall level is considered complete only when all five components have been mastered at that level. It generally takes between half a year and two years to complete a level (higher levels might take longer). A reasonable pace is one lesson per month. This might seem slow, but in fact it is a good pace if maintained over a few years. To reach level 5 in five years is not bad at all. There is no point in rushing at the beginning only to get “stuck” later on.

All five components are initially taught within the twice-weekly session. At levels 3 and above, the student is encouraged to start a brief daily morning practice. This morning practice should initially include cleansing techniques and be very brief. Later, breath control and with it the practice of a seated posture should be added. Finally, the daily practice of

¹⁸With the assistance of a tube

¹⁹With the assistance of fingers

²⁰Without tube or fingers

²¹With greater depth

²²Using nauli only

²³Insertion of catheter

²⁴Aspiration of water with catheter

²⁵Aspiration of water without catheter

headstand should be added.

One of the most important things for learning anything is to have the correct gradient of difficulty. If the exercise is too easy, it seems pointless. If it is too hard, it is too difficult to follow and not enjoyable. Yoga practice should be enjoyable. Some people might find an explicit level layout unappealing, because it might make Yoga look like a competitive sport. However, the competitive aspect exists in people's minds independently of an explicit level layout. Obviously, the advantage of having levels is not that you can look down at those who are practicing at lower levels, but so that you have a more clear idea of what to practice and what to strive for.

Components and levels are only one part of the picture. For long-term practice, one of the most important things is to harness the desire to practice. If you yield to it too far, you will get burned-out; if you don't exercise it, you will get bored. A long-term view and regular and systematic practice are essential. Being able to see far ahead (by knowing what to expect at the next few levels) helps to administer your efforts. My plan specifies clear standards for level completion. This helps to be realistic and thorough.

8 For Further Reading

To learn more about the Patabhi Jois Series I recommend the Yoga Journal article *Power Yoga* by Anne Cushman, the booklet included with the videotape *Yoga with Richard Freeman* (by Richard Freeman), and Lino Miele's book *Ashtanga Yoga*.

For an excellent introduction to the main techniques of Hatha Yoga, I highly recommend Andre Van Lysebeth's *Yoga Self Taught* and *Pranayama* (both out of print). He provides an excellent, in-depth introduction suitable for beginning and intermediate students. He has published at least two more Hatha Yoga books, which unfortunately have not been translated into English (they were all originally written in French); they are not as important as *Yoga Self Taught* and *Pranayama*. For an encyclopedic overview of 200 postures, see B. K. S. Iyengar's *Light on Yoga*.

For an outstanding coverage of the long-term practice of an advanced yogi, read Theos Bernard's *Hatha Yoga* (adapted, I think, from his Ph.D. thesis at Columbia University) and *Heaven Lies Within Us*. These are, by far, the best books on advanced Hatha Yoga practice I have found. The first one describes most of the important techniques in detail (including Khechari Mudra), and the second one describes his personal experiences in developing the techniques. Theos Bernard's books are also out of print. His books, as well as Van Lysebeth's, are well worth an extended search. The best way to find them is to ask for an interlibrary loan at your local library.

The Ashtanga Yoga classic is *Yoga Sutras* written by Patanjali about 500 years BC. There are many translations, interpretations, and commentaries on this text. The most important commentary was written by Vyasa, a long time ago. Some translations include the original Sanskrit of Patanjali's text, its Latin transliteration, its word-by-word translation, its complete translation, Vyasa's commentary (sometimes in various translation steps), and finally, the translator's commentary. If possible, read more than one translation and be careful to separate the original text, from Vyasa's commentary (if present) and from the translator's commentary.

The three classics for Hatha Yoga are: *Hatha Yoga Pradipika* by Svātāmarama (this is considered the main Hatha Yoga reference), *Gheranda Samhita* by Gheranda, and *Siva Samhita* (I don't know who the author is). There are not as many translations of these books as of *Yoga Sutras*, but if possible it is worth checking out more than one translation.

9 Conclusion

I wrote this article in part to repay a debt to Theos Bernard. His books have provided me invaluable information about advanced practice. Theos seems to have completed level 15 on all five components, perhaps with the exception of general postures. I am grateful that he decided to write about some of the advanced practices, rather than completely withhold that information. His example encouraged me to do the same. Unfortunately, it seems that he was killed in Tibet in 1940's or 1950's. If you have any information about him, surviving relatives, coworkers, etc., please let me know. Also, if you know of anybody who has completed level 15, in particular on breath control, please let me know.

Several people have helped me in the preparation of this article. Their suggestions have substantially improved this article. Among them, Pablo Ronchi and Rosemary Rooks have been particularly helpful. Pablo translated this article into Spanish, and in the process found many small and not-so-small errors. Rosemary read many drafts of this article and provided valuable feedback.

10 About Alan Nash

Alan is a software architect and a student of logic and mathematics who has been practicing and studying Hatha Yoga intensively for a long time. He is interested in the process of learning in general. He has founded an educational software company (which produced *Master the SAT*) and has coauthored *The Elements of C Programming Style* (McGraw-Hill, 1992) and *The Best of BYTE* (McGraw-Hill, 1993). He can be reached via email at anash@san.rr.com.