

Pranayama - Ratios

“The movement of life force is influenced through inhalation, exhalation and sustained breath” Sutra 2.50 Nischala Joy Devi

Once you feel that you have established steady foundations with basic breathing techniques and your breath is comfortable, subtle and steady you may wish to introduce ratios. It is important that you’ve developed an awareness of your own breath and breathing patterns through the practice of subtle breath awareness, and that you are able to practice the Full Yoga Breath with ease.

The Phases of the Breath

The breath is divided into three phases; the inhale, the exhale and the pause.

Donna Farhi describes these phases beautifully as arising, dissolving, and pausing.

These three phases can be further divided:

Inhale	Pause / stillness after the inhale	Exhale	Pause / stillness after the exhale
Puraka	Antar Kumbhaka (AK)	Rechaka	Bahya Kumbhaka (BK)

Inhale – Puraka

The inhale is generally the stimulating and energising aspect of the breath – there is an increase in heart rate and the sympathetic nervous system is naturally stimulated. Richard Freeman describes the energy of the inhale beautifully as “an upward floating, spreading, branching and flowering pattern. Its home is the core of the heart”. Think about how you use this energy of the inhale in your asana practice; as you inhale you lengthen the spine to create lift in backbends or while in a neutral position as you prepare for subsequent movement.

Exhale - Rechaka

Conversely, the exhale naturally lowers the heart rate and stimulates the parasympathetic nervous system (rest & digest) and is calming, soothing and grounding. When we practice conscious exhalation in pranayama we are developing a conscious invitation to the relaxation response. And in asana the exhale helps us to release and let go.

The Stillness / Pause – Kumbhaka

It’s useful to consider the pause as a stillness – a motionless part of the breath, rather than a holding. When we think about holding or retaining the breath we can unconsciously bring tension into it and if you ‘hold’ the breath for too long it can negate the beneficial aspects of the practice. Consider the Sanskrit word kumbhaka – khumba meaning vessel. So when we dwell in the pause we are providing a container for the breath.

With practice, when you experience the pause or kumbhaka as a stillness, it can feel as if within that stillness the inhale continues to expand and the exhale continues to release, even while there is no movement within the breath.

In 'Yoga as Medicine', Yoga Teacher Sandra Summerfield Kovak suggests that when we practice expanding the pause that we do so with our mind and not our body, and in this way we "avoid the use of muscular force, which is counterproductive in a pranayama practice". Can you try gently embracing and softly holding the pause with your mind, rather than gripping on to the breath with the body?

There are two types of kumbhaka:

Sahita kumbhaka: deliberate extended pause of the breath

Kevala kumbhaka: spontaneous extended pause of the breath

In time you may discover in your pranayama or meditation practice that the stillness quite naturally expands and occurs spontaneously – without any conscious effort on your part. In this space the fluctuations of the mind temporarily cease, the subtle energy of prana is experienced and it is said to be equivalent to samadhi.

Principles of Practice:

- Find your baseline count – a natural duration that's comfortable and not ambitious as this will increase
- The breath should remain smooth, steady and subtle
- You want to feel a sense of ease. Never push the breath.
- Ahimsa (non-harm) lies at the heart of your practice – be kind to yourself
- Never push the breath (this is worth repeating! 😊)
- The exhale is generally the same as, or longer than, the inhale (rather than making the inhale longer than the exhale)
- Begin with exploring samavrtti (equal count) before you move on to more complex ratios
- Gradually grow your ratio as a natural expansion of the breath
- You shouldn't feel the need to take a large gasp of air or to catch the breath. If this happens you may have gone too far with your ratio.
- Extending the pause should be avoided if you have asthma, if you experience tension or dizziness.
- Don't force the pause (you are not a puffer fish!). The pause should not compromise the smooth flow of the subsequent inhale and exhale.



Be mindful with your exploration of ratios. Develop a quality of curiosity and gentle unfolding – much like a bud gradually opening its petals into full bloom – there is no rush and you are not striving to ‘achieve’ a certain ratio (remember vairagya Sutra 1.12, non-attachment).

All of our practices with the breath should be a gentle enquiry with no force – combining the balance of sthira and sukham (effort and ease) with a touch of ahimsa (non-harm). If the breath becomes laboured or you feel tension arising in the body or mind, check whether you are ‘over-efforting’ and either ease back a little or return to the simple flow of your natural breath for a while.

Counting the length of the breath

There are many ways to count the length of the breath. You are looking for a slow, steady count that doesn't feel rushed. For example, when counting the inhale you might count: 1 Om, 2 Om, 3 Om, 4 Om etc etc.

Sometimes the numbers can get in the way, or if you have dyscalculia then trying to count the length of the breath may create tension. Instead you may feel more comfortable using the hands and fingers to measure the breath length. This is described on page 67 in the Heart of Yoga P67, and although this practice is usually used for counting the number of breaths it can easily be adapted to count breath length.

Equally you may be someone who has a strong sense of intuition, and you may feel happiest intuitively feeling the length of the breath.

Or if you find it easier to be led by sound, then the use of a metronome may be helpful - there are many free metronome apps which you could try.

Experiment and find what works best for you.

Ratios

Ratios are displayed as numbers, representing the count/length of each part of the breath:

Inhale : Stillness : Exhale : Stillness

Samavrntti

In the practice of samavrntti, the length of phases of the breath are equal. For example:

4 : 0 : 4 : 0 (equal inhale and exhale)

4 : 4 : 4 : 4 (equal inhale, stillness, exhale, stillness)

This has a balancing effect.

Visamavrntti

Here, the length of the inhale, exhale and pauses are not equal, for example:

4 : 0 : 8 : 0

4 : 4 : 8 : 4

Visamavrtti would generally seek to gradually make the exhale twice as long as the inhale. This is shown in the example practice below:

- a) 4:0:4:0 x 3 rounds
- b) 4:0:6:0 x 3 rounds
- c) 4:0:6:1 x 3 rounds
- d) 4:0:6:2 x 3 rounds
- e) 4:0:4:0 x 3 rounds

Note that in stage (d), the combined length of the exhale (6) plus the stillness of the breath (2) is twice as long as the inhale – emphasising the calming effect.

Always complete your practice by returning gradually (think of this as a counterpose) – in the example above the final 3 rounds (e) return to sama vrtti before returning to the natural breathing pattern.

Variations

You may find that you like the formal structure of sitting formally for a pranayama practice, but if this doesn't yet feel right for you but you do want to explore working with ratios then this can be done in a number of ways.

Lengthening the exhale can be explored through breath and movement – consciously slowing down the movement on the exhale. Similarly you can introduce the pause into your asana practice for example while practicing cat you can notice the pause at the top of the inhale and at the bottom of the exhale – gradually extending these if that feels comfortable.

And if you enjoy chanting then this is a great way to naturally extend the exhale.

Yoga teacher Olga Kable offers a lovely practice which is a simple yet effective way to extend the exhale. Inhale normally between each exhale...

1. Exhale: say mentally "One breath at a time". Repeat 3 – 4 times
2. Exhale: say mentally "One full breath at a time" Repeat 3 – 4 times
3. Exhale: say mentally "One full deep breath at a time" Repeat 3 – 4 times
4. Exhale. Say mentally "One full deep relaxed breath at a time" Repeat 3 – 4 times

As well as subtly extending the exhale, this practice gives the mind an additional focus as you repeat the words, providing an anchor for the mind to return to should it become distracted or wander off.

Taking your practice deeper... You may find that you are drawn to pranayama and feel ready to explore more complex ratios and practices. In this case it would be useful to seek guidance from an experienced teacher who can guide you further in your individual practice.

Remember that there are always choices in yoga – this is your practice and your unique path so choose what's the best fit for you.

Honouring Sources of Inspiration:

Kari Knight, BWY Teacher and Diploma Course Tutor

Helena Del Pino, Yoga Teacher, Yoga Therapist & Mentor - BWY and The Society of Yoga Practitioners

Donna Farhi

Kristine Weber, Subtle Yoga

The Secret Power of Yoga, Nischala Joy Devi

Yoga as Medicine, Dr Timothy McCall

Yoga for Transformation, Gary Krafstow

Prana & Pranayama, Swami Niranjanananda Saraswati

[Olga Kabel's article](#)