

Enlightenment — The Goal of Yoga and Ayurveda

From Philosophy to Science

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Introduction

The systems of Yoga and Ayurveda invite many fascinating, detailed comparisons, but their ultimate and shared goal — to unfold the full potential of individual life in enlightenment — is often overlooked. This may be because achieving such a state is not considered practical or attainable for the average person today, or is thought to be a philosophical idea. However, new research in the fields of neuroscience, psychology, sociology and medicine offers ways to understand enlightenment and makes realizing this laudable goal of Ayurveda and Yoga a practical possibility today.

Ancient Origins of Modern Mind/Body Medicine

Both Yoga and Ayurveda have been derived from the Vedic Sanskrit tradition of knowledge which is thousands of years old, and both offer highly specific methods to systematically unfold the full potential of mind and body. In Yoga and Ayurveda, body and mind are seen as two sides of the same coin. What balances the body balances the mind and vice versa. More importantly, both systems in their deeper aspects contain knowledge about a unified reality at the foundation of mind and matter. This reality is referred to as *Samhita* in Ayurveda, and is described in Yoga as *Brahman* — totality, the eternal field of pure existence, pure being, pure consciousness. Experience of this

unified reality is called *yoga* (union), and brings profound balance to both mind and body. Both the systems of Yoga and Ayurveda have as their goal to culture life so that it is lived in a permanent state of *yoga* — also referred to as “enlightenment”.

It is interesting to note that the Sanskrit root of the word *yoga* — *yuj* means literally to “yoke”, or to bind together. Thus, *yoga* in its deepest meaning refers to a unified experience of mind, body and environment. Patañjali, in his *Yoga-Sūtras*, indicates where to find that unified experience of *yoga*: *yogaś citta vṛtti nirodhaḥ* (*yoga* is the complete settling of the activity of the mind) (fig. 1).¹ In his classical Ayurvedic text, Caraka defines life as state of *yoga*, *Āyusa* (*life*) means *conjunction of body, senses, mind and Self*.²

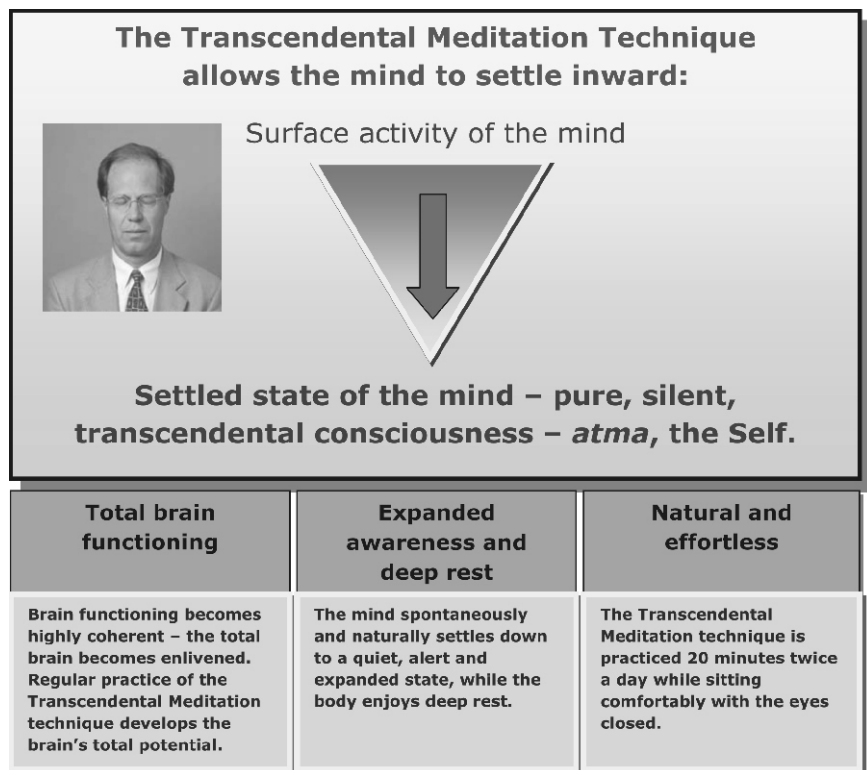


Fig. 1: Settling of the Mind with Transcendental Meditation

The Need of Our Time

In the modern teaching and practice of yoga, which is becoming widespread in the West, this deeper aspect of yoga, which is the subject of the *Yoga-Sūtras* of Patañjali and other Vedic texts, has become minimized or often omitted, especially for beginners, and the practice of physical postures has become the primary focus. In the same way, Ayurveda — a very effective natural healing system — in modern times has had a focus primarily on the material or bodily aspects of health. These aspects include proper diet, lifestyle and daily routine, purification treatments and herbal pre-parations. The depth of Ayurveda, which is, at its core, based on knowledge of consciousness, has been lost over the past centuries, even in India, its country of origin.

Thus, through whichever method, Yoga or Ayurveda, the aim should be to renew and strengthen the connection between matter and consciousness so that the qualities of consciousness can flow without restriction into the material values of life, and thereby restore and promote ideal health, longevity and quality of life.

Classically, both Ayurveda and Yoga harness natural laws to promote greater coordination between consciousness (*ātmā*, the Self) and its manifest levels of mind, body, senses and environment. Both view consciousness as primary and matter as secondary, and both recommend meditation as a means to culture this coordination. Both systems teach methods to eliminate existing stress and imbalances in mind and body so that the full functioning of consciousness is not obstructed, the refined or subtle life-energy called *prāṇa* can flow freely, and more *ojas*³ is produced. Ayurveda describes *ojas* as the finest material substance produced in the body, a substance that maintains the essential link between consciousness and matter. *Ojas* is said to promote happiness and well-being, and the radiant glow of youthfulness, vitality and health.

Definitions of Health:

More Than the Absence of Disease

According to the World Health Organization, “Health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity”.⁴

In the classical texts of Ayurveda, we find a similar definition of health: *samadoṣa samagniśca samadhātu malakriyā prasannātmendriyamana svastha ityabhidhyate*.⁵ “He whose *doṣas* (dynamic principles of nature) are in balance, whose appetite is good, whose *dhātus* (tissues) are functioning normally, whose *malas* (waste products and elimination) are in balance, and whose Self, mind, and senses remain full of bliss, is called a healthy person.”⁶

Ayurveda places great importance on the role of bliss and inner contentment in the experience of health — a factor that is often neglected in medicine today. Many of the Ayurvedic recommendations are aimed at supporting the production of *ojas* through proper diet and eating habits, daily routines in accordance with the cycles of nature, herbal preparations, etc. But none create the experience of bliss and inner contentment as powerfully as contact of the mind with *ātmā* (universal Self). The Sanskrit word for health is *svastha*, meaning “established in *ātmā*” (the Self), the nature of which is said to be *sat* (eternal), *cit* (consciousness), *ānanda* (bliss). Caraka states, “Complete transcending is best among the sources of health and happiness”.⁷

Sickness, according to Ayurveda, results from *pragyā aparādha* (the mistaken intellect) and *avidyā* (ignorance), meaning ignorance of the underlying unified reality. *Pragyā aparādha* arises due to loss of connection of the mind with the Self (*ātmā*) and gives rise to *avidyā* (ignorance). Thus the undoing of *pragyā aparādha* is requisite for experiencing health and enlightenment.⁸

Both Yoga and Ayurveda agree that the full potential of the human being is life in the state of enlightenment. This state is characterized by the integrated, frictionless functioning of the human

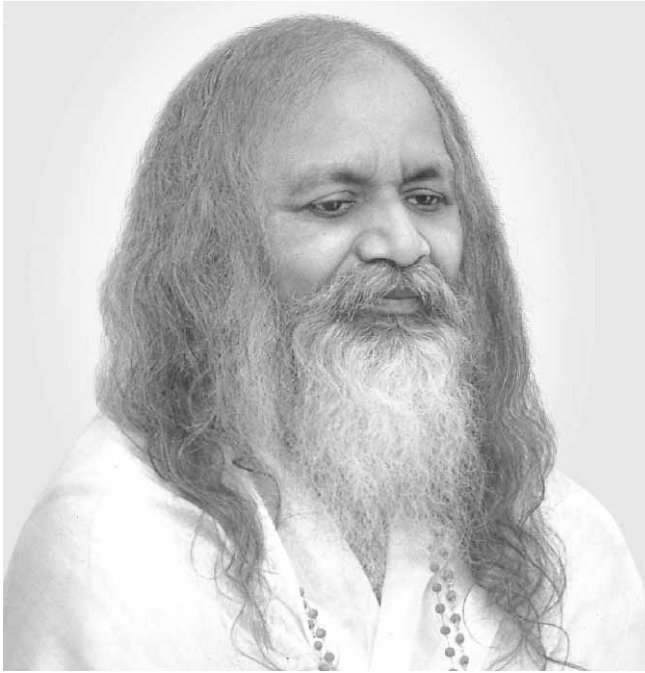


Fig 2: Maharishi Mahesh Yogi
Founder of the Transcendental Meditation program

nervous system, which supports the experience of unity and balance on all levels — Self, mind, senses, body and environment. Thus, the underlying goal of both Ayurveda and Yoga is to eliminate that which obstructs or interferes with the experience of Yoga and promotes enlightenment.

Enlightenment: Philosophy or Science?

As was mentioned, this vision of Yoga as a state of perfect balance, health and self-realization, although pointed to in the classical texts of both Yoga and Ayurveda, has remained in the realm of philosophy and is not considered practical today.

Maharishi Mahesh Yogi (fig. 2) introduced the Transcendental Meditation™ technique (TM™) to the West more than 50 years ago, and inspired and guided a comprehensive restoration of Ayurveda (known as Maharishi Ayurveda™) beginning in the early 1980s. He encouraged extensive scientific research to develop objective measurements of the subjective meditative state^{9, 10} and its benefits for health and unfolding one's full potential. Exploring this potential in his book *The Neurophysiology of Enlightenment*,¹¹ Dr. Keith Wallace

develops a scientific basis for understanding higher states of consciousness.

As was mentioned, the attainment of higher states of consciousness has been commonly considered difficult or impractical today, both in the West and in India. The availability of the TM technique and the repeatable, measurable changes it produces in the mind, body and environment, has suggested otherwise. This has inspired a wide range of scientific research on the physiological, psychological and sociological benefits of the regular and systematic experience of transcendental consciousness.

The Mind/Body Connection: Research on TM

To date, over 600 published scientific studies have been conducted at over 200 research institutions and universities worldwide on the benefits of the practice of the TM technique for both individual and collective health.¹² These benefits include changes in metabolic rate (fig. 3), brain wave activity, hormone levels and blood flow to the brain. Some of this research has received national funding. The National Institutes of Health have awarded 24 million dollars over the past 20 years for research on the effects of the TM technique on hypertension and cardiovascular health.¹³ These effects include reduced use of hypertensive medications,¹⁴ reduced blood pressure (typically larger effects than with other procedures),¹⁵ reduced heart failure,¹⁶ reduced thickening of the coronary arteries,¹⁷ reduced risk factors for hypertension, diabetes, and obesity,¹⁸ and increased lifespan.¹⁹

There is evidence, even early on in an individual's regular practice of the TM technique, of significant global health improvement. These health-promoting and disease-preventing effects suggest an integrative process of development in mind and body. Indicators of this development include a more balanced state of the physiology, changes in the EEG-pattern inside and outside of meditation that demonstrate greater coherence in brain function, reduction of all

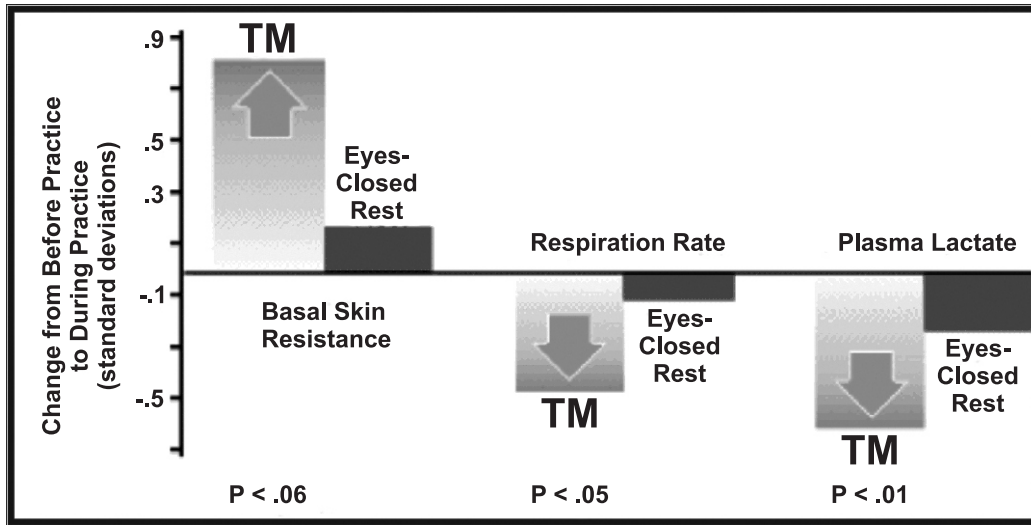


Fig. 3: Physiological differences between Transcendental Meditation and rest, American Psychologist 42: 879-881, 1987.

indicators of stress, rejuvenation (higher DHEAS levels), and improved bodily functions and behavior.

For example, a five-year retrospective study conducted by Orme-Johnson using Blue Cross Blue Shield data compared health care usage over a wide range of medical categories in a group practicing the TM technique (n = 2000), and a matched control group not practicing TM (n = 160,000). In the TM group, inpatient and outpatient length of treatment was significantly reduced — by 46.8% for children, and by 73.7% for midlife and older adults (age > 40 years) — as compared to controls. The health insurance costs for hospital admissions of the TM group were significantly reduced — 30.6% to 87.3%

lower — in 17 of 18 disease categories than costs for the non-meditating group.²⁰

The TM practice also reduced health care costs. Cost data was obtained for 599 subjects for the period three years prior to starting the practice of TM with the period three years after starting the regular practice of TM. There was a significant pre-to-post intervention decline (- 12.4%) in annual health care costs. In subjects who initially had the highest health care expenses there was an 18% reduction; in the over 50 age-group there was a 19% reduction (fig. 4).²¹

These results are truly unique, in that the treatment was not specific to the condition. That is, among TM

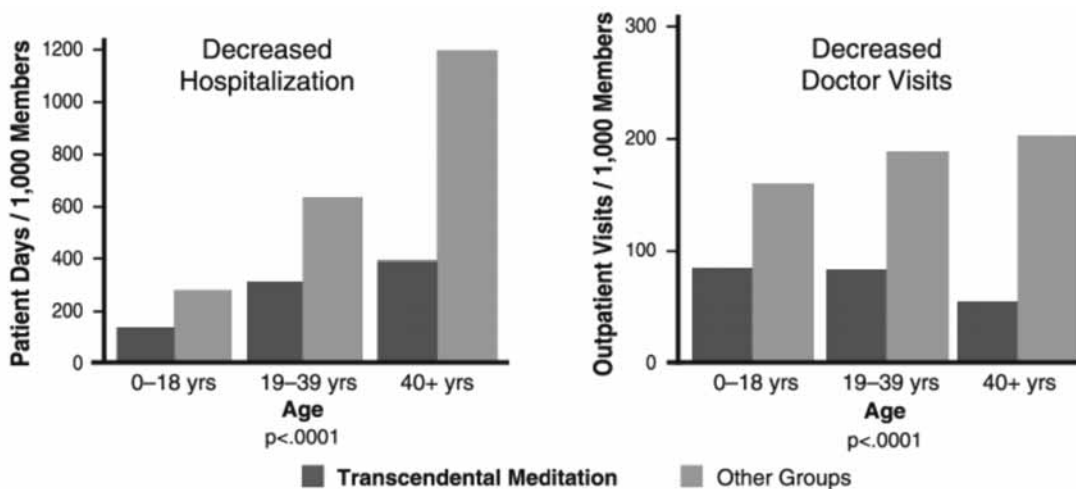


Fig. 4: Effects of Mind on Body: Reduced Health Care Use through Transcendental Meditation

practitioners, the intervention was the same — twice daily sessions of the TM technique. Yet dramatic health-promotion and disease-prevention changes were found for the meditating subjects even though they had a diverse range of medical conditions. That the practice of TM — a mental technique that is associated with the expansion of consciousness — leads to health benefits, supports the theory that consciousness is primary and matter secondary. It also leads to the logical conclusion that attending to the connection between consciousness and its expressed values in the mind and body should be the primary line of therapy in any effort to promote or restore health and balance. Thus a method to systematically experience the completely settled state of the mind should be a primary approach of Ayurveda and Yoga. The experience of transcending on a regular basis establishes a feedback loop, as health and balance are conditions fundamental to enlightenment.

Yoga and the Seven States of Consciousness

Descriptions of and inspiration for achieving higher states of consciousness abound in the Vedic literature, as well as in the great literature of diverse cultures. Descriptions include the experience of pervasive calm, heightened alertness and appreciation, a sense of unity with all things, and a sense of rightness or meaning. Even a momentary glimpse of this unified reality transforms one's life.²² Sustained experience of higher states of consciousness is less common, but as we have seen, is the goal of many of the great Vedic traditions, including Yoga and Ayurveda.

If maintenance and restoration of health is facilitated by reconnecting mind and body with consciousness, then what is the potential for individuals to develop higher states of consciousness and enlightenment through the regular experience of *ātmā* in transcendental consciousness (*samādhi*)?

Most people experience three major states of consciousness that are commonly known as waking, sleep and dream states. Modern science has shown that each state is characterized by a unique set of

physiological correlates and a unique set of cognitive experiences. The mind and body cycle daily through these three states, and this cycling is an essential requirement for maintaining normal health and mental functioning (again showing a link between consciousness and health). The foregoing discussion suggests that there is at least one more fundamental state — transcendental consciousness. A scientific basis for the identification and characterization of a fourth major state of consciousness began with the research of Wallace and others in the early 1970s.^{9, 10} Both theory and practice are discussed below.

Several decades ago, Maharishi Mahesh Yogi introduced the concept of seven states of consciousness. These include the three states known by modern science — waking, sleeping and dreaming, plus a fourth state — transcendental consciousness (*samādhi*). Three additional higher states are described that represent integrated stages of experience and perception which naturally result from the alternation of the 4th state (transcendental consciousness or *samādhi*) with the three commonly experienced states of waking, sleeping and dreaming (Table 1).

Although higher states of consciousness can be found individually defined and described in different passages in the Vedic literature, the organization of these into a coherent sequence reflecting developmental stages of the process of gaining enlightenment, and a theoretical basis for this idea, is the modern-day contribution of Maharishi Mahesh Yogi.²³

Transcendental consciousness (the 4th state) is available in a systematic repeatable way with the practice of the Transcendental Meditation technique. The 5th, 6th and 7th states of consciousness develop naturally as a result of the regular alternation of the experience of transcendental consciousness with waking, sleeping and dreaming states.²⁵

As mentioned, there are now scientifically measurable, well-defined correlates for the 4th major state of consciousness (transcendental conscious-

**Table 1: Seven States of Consciousness
in Maharishi Mahesh Yogi's Vedic Science and Technology**

Modern name	Vedic name	Description of experience and perception in this state of consciousness
Sleeping consciousness	<i>suṣṭi cetanā</i>	Mind and body resting and rejuvenating in preparation for activity. An important part of the daily cycle for health maintenance. No experience of objects of perception, and no experience of one's self.
Dreaming consciousness	<i>svapna cetanā</i>	Mind and body rejuvenating in preparation for activity. Important for balanced mental and physical health. The validity of subjective experience and perception of objects requires evaluation outside of the dream state.
Waking consciousness	<i>jāgrat cetanā</i>	Mind and body are engaged in activity. Objects of perception and one's self are experienced as bound in space and time. The essential absolute nature of the object and the subject (self) are unknown, thus waking state is also referred to as a state of <i>avidyā</i> (or ignorance).
Transcendental consciousness	<i>tūrya cetanā</i>	This is the state described by Patañjali as the complete settling of the mind, also known as pure consciousness or samādhi. In this state, the mind transcends the activity of thought and sense perception, and identifies with the silent, non-changing, unified level of atma — universal Self (samādhi). Described as a self-referral state of “restful alertness”.
Cosmic consciousness	<i>tūryātīta cetanā</i>	In this state, the inner unbounded awareness experienced during the 4 th state (or temporary samādhi) becomes permanent, and is lived along with the three changing states of consciousness — waking, sleeping and dreaming. This is described as the state of “self-realization”; however, perception of objects remains bound in space and time.
Refined or glorified cosmic consciousness	<i>bhagvad cetanā</i>	As one continues to live in the 5 th state, a refinement of perception takes place and one begins to evaluate the deeper, more unified level of the objects of perception, and perceives the finest relative level of creation.
Unity consciousness	<i>brāhmī cetanā</i>	With time, one perceives both one's inner self and the outer objects of perception to be essentially unbounded transcendental wholeness, and the highest yoga is attained — the unity of subject and object, self and non-self, consciousness and matter. This 7 th state is expressed by the <i>mahāvākyas</i> (Vedic Sanskrit aphorisms) from the Upaniṣads: <i>ayam ātma brahma</i> — “this Self is Brahman”; <i>tat tvam asi</i> — “that thou art”; and <i>sarvam khalvidam brahma</i> — “all this verily is Brahman”. ²⁴

ness), a state of “restful alertness” which corresponds to samādhi. Similar research is being undertaken to identify objective parameters for the 5th, 6th and 7th states of consciousness in individuals who report sustained subjective experience compatible with the description of higher states from the Vedic traditional texts. These include a study of patterns of EEG coherence, power and contingent negative variation, which characterize the integration of transcendental and waking states,²⁶ psychological and physiological characteristics of a proposed object-referral/self-referral continuum of self-awareness,²⁷ and electrophysiological correlates of higher states of consciousness during sleep in long-term practitioners of the TM program.²⁸

Conclusion: Invitation to Create a Disease-Free Society

These pioneering and ongoing research efforts address a timely need to develop a scientific basis for the understanding of higher states of consciousness as outlined in the Vedic literature and in the work of Maharishi Mahesh Yogi in the last half century. We hope this scientific exploration will continue, and will validate the full potential of human life in perfect health and enlightenment — the basis for the creation of a disease-free society, and the common and highest goal of both traditions of Yoga and Ayurveda.

Endnotes

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