RESEARCH PAPER

Decoding Prakriti in Ayurveda: A Holistic Framework for Personalized Health from Conception to Lifespan

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ABSTRACT

Background: Prakriti, a foundational concept in Ayurveda, defines an individual's unique psycho-somatic constitution formed by the predominance of Vata, Pitta, and Kapha doshas at conception. This inherent blueprint influences physical, physiological, and psychological traits, disease susceptibility, and drug responsiveness. This article explores Prakriti's multidimensional nature, integrating insights from genetics, epigenetics, and environmental science, and examines its relevance to modern predictive, preventive, personalized, and participatory (P4) medicine. **Material and Methods:** The study is a comprehensive narrative review based on classical Ayurvedic texts—including Charaka Samhita and Sushruta Samhita—and contemporary scientific literature. It synthesizes information on the prenatal and postnatal determinants of Prakriti, examines the concepts of Prakrita and Vaikrita doshas, and reviews modern interdisciplinary research linking Prakriti types with genomic, biochemical, and phenotypic markers. **Results:** The analysis confirms that Prakriti is a stable, non-pathological constitution determined by genetic factors (Shukra-Shonita), seasonal and temporal influences (Kala), maternal diet and lifestyle (Maturahara-Vihara), and elemental composition (Mahabhuta). Postnatal factors such as geography (Desha), age (Vaya), and individuality (Pratyatmaniyata) act as epigenetic modulators. Contemporary studies demonstrate correlations between Prakriti types and specific genomic markers (e.g., HLA alleles, CYP2C19 polymorphisms), metabolic profiles, and disease predispositions, such as the association of Kapha Prakriti with type 2 diabetes. **Conclusion:** Prakriti represents a sophisticated model of individual constitution that bridges ancient Ayurvedic wisdom with contemporary biomedical science. Its potential in predictive and personalized healthcare is supported by emerging genomic and biochemical evidence. Future interdisciplinary research is recommended to further validate, standardize, and translate Prakriti-based assessments into actionable tools for holistic and individualized health management.

Keywords: Prakriti, Pre-natal factors, Post-natal factors, Genomic expression, Personalized medicine

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INTRODUCTION

Ayurveda is an empirical science based on functional understanding of the body. Prakriti is a unique concept of Ayurveda which constitutes, distinguishes and characterizes a person apart from other in respect of his physical, physiological and psychological make-up, influenced by racial, ethnic or geographical considerations for assessing disease susceptibility and drug responsiveness[1].

Principles of prakriti were incessantly observed and written by Acharyas centuries before which were prevailing since time immemorial. The psycho-somatic constitution (Prakriti) of an individual is determined by Utkata dosha (existing proportion of doshas) at the time of union of shukra (sperm) and shonita (ovum)[2]. Prakriti types are distinct verifiable clusters within a multidimensional space of multiple interrelated phenotypic traits[3] associated with the field of genomics[4], biochemistry, psychology, physiology[5] and therapeutics[6]. Every individual is born with some specific physical and mental peculiarities which are appeared gradually during life time, are referred to as temperament of an individual, which constitutes, characterizes and distinguishes a person apart from another which forms the basis for the development of predictive, preventive, personalised and

participatory (P4) medicine[7] based on each individual's genomic, epigenomic, proteomic, environmental and clinical profile. At initial stage for BAMS students with physics, chemistry and biology background it is difficult to understand the concept of prakriti. In this paper we have explored the several prakriti related outcomes happening in the world for better and in depth understanding of the concept of prakriti.

DEFINITIONS OF PRAKRITI

Acharya Charak has mentioned at the time of conception individuals may have either equal proportions of pitta-vata-kapha, while some are dominated by vata, some by pitta and some by kapha. Individual with equal proportion of Pitta-Vata-Kapha usually do not suffer from disease whereas dominated with either Vata, Pitta or Shleshma are always likely to suffer with disease. Based on the dominancy of doshas, Prakriti of the individual is considered accordingly[8].

Prakriti is the cause behind everything in human body[9]. Prakriti is an expression of one's own constitution[10]. Prakriti is the originator of human body[11]. Prakriti is a non-pathological humoral status, which remains constant in the individual from conception to death. Prakriti is the main reason behind every intense activity of human body[12]. Prakriti denotes the dosha in the state of un-vitiated form[13]. Prakriti is designated by naturally existing doshas in the germ cells during fertilization[14]. Prakriti is formed in accordance to attributes of predominant dosha at the time of union of sperm and ova. Once formed, prakriti remains constant throughout life. The constitution formed at the time of conception does not naturally harm the individual.

Commentator Arundutta has commented prakriti is the way of body presentation or enumeration of internal and external body features[15]. Prakriti in ayurveda is the expression of a person in context to morphology, physiology, behavior and relation to ecology[16]. Prakriti is the normal inherent nature of an individual which is devoid of any disease[17]. Prakriti is an outcome of prakrita dosha which is individual specific arrangement of union of panchamahabhuta present in paternal and maternal germ cells. Due to the predominance of dosha proportions, an individual exhibit psychosomatic expression called Deha prakriti. At the time of conception, a certain proportion of doshas come in existence due to its own reason which is considered as non-pathogenic state of doshas. This non-pathogenic status of doshas remains constant in every cell from birth till death referred to as prakriti[18]. It is observed that at the time of death, the features related to corresponding prakriti may changes which is considered as aristha lakshana[19]. While designating the prakriti types acharyas have used the term vatala, pittala and shleshmala which signifies the dominancy of vata, pitta and kapha doshas respectively and other doshas are recessive[20]. The basic composition of everything in the cosmos is a distinct combination of panchmahabhutas, similarly every human being has a distinct combination of panchamahabhutas. This leads to unique attributes in their physical, physiological and psychological makeup[21].

PRAKRITA AND VAIKRITA DOSHA

Two set of doshas prakrita and vaikrita are observed. Prakrita doshas directly descend from basic panchamahabhuta and are observed from event of conception i.e. union of sperm and ovum. The physiognomies expressed by prakrita dosha never change. This Prakrita dosha forms the basis of seven types of prakriti. Among individuals the ratio of prakrita dosha is fixed and are the chief decisive directive of future architecture of the individual. Any change in them leads to death or misery and occupy entire living body and by their proportion are responsible for phenotypic and genotypic configuration of an embryo. Since they sustain living body, they are titled dhatavah. As seeds bear the architecture of future plant, prakrita dosha bear architecture of future human.

Vaikrita doshas are produced, during intrauterine life due to assimilation of maternal nutrients. Imbalance in vaikrita dosha of progeny due to inappropriate supplementation can lead to acquired disease. Vaikrita doshas produced in post-natal life are dependent on intake of food and get generated during digestion and assimilation of ingested food. Prakrita and vaikrita doshas always remain inseparable and merged together and are referred as sharira dosha. Vaikrita dosha are flexible and are subjected to season, age, diet and environment of the individual[22].

WHY ARE TWO PEOPLE DIFFERENT AND DISTINCT FROM EACH OTHER

In Ayurveda, the concept of individuality is deeply rooted in the principle of Prakriti, which refers to a person's unique constitution or inherent nature. Every individual is born with a specific dominant Prakriti, determined at the time of conception by the interaction of the Vata, Pitta, Kapha doshas (recombination of chromosomal DNA of sperm and ovum to form zygote). Prakriti is like a genetic blueprint that defines a person's traits. The doshas are derived from the five mahabhuta. The two people are different and distinct from each other due to the permutation and combination of the three fundamental doshas that govern their physical, mental, and emotional characteristics. Each type results in a novel characteristic, making no two individuals exactly alike. While Prakriti is innate and remains constant, but Influence of other post-natal factors like Jati (origin as per social structure, Kula (race), Desha (place), Kala (time and season), Vaya (age), Pratyatmaniyata (individual habits and habitat) determine the variations in the phenotype and physiognomy of a

person. The current classification of human populations is broadly based on ethnicity, geographical location, language or self-reported ancestry. This adds further uniqueness, as the two people with vata dominant Prakriti express differences in their features due to variation in the proportion of vata dosha[23].

FACTORS DETERMINING PRAKRITI

There are two sets of prakriti determining factors, one set of factors called pre-natal factors[24] influences the prakriti determination before conception and another set of factors called post-natal factor[25] influences the prakriti after birth.

PRENATAL FACTORS FOR DETERMINING PRAKRITI

Shukra-shonita prakriti (sperm and ovum factors)

Sperm and ovum are the progenitors, it carries genetic traits to the off-springs that carry the seeds for the development of particular characteristic. The key features which make the sperm capable for fertilization are whitish, fluid, viscous, sweet, with the odour of honey and resembling oil or honey is considered as shudhha shukra[26]. Any deviation from these characteristics suggests abnormality in the sperm which affects fertilization or influence intra-uterine development of foetus. Acharyas have not explained the features of suddha shonita (ovum). Acharya Charak and Sushruta, both have mentioned shonita is one of the essential components for fertilization and embryo formation. Shonita represents ovum[27]. The haploid set of chromosomes of shukra and shonita carries the genetic traits. These traits are determined by the unique combination of part of the dosha (genetic material) descends from ancestral progenitors. These traits are being transferred from one generation to another in familial tree as per hierarchy. Based on the dominant genetic trait carried in that family, progeny has higher chances of occurrence of that similar phenotypic expressions. Thus, the prakriti of shukra and shonita aids in determination of prakriti of the progeny.

Contemporary Correlation of shukra shonita prakriti

Cell division is a process by which a progenitor cell divides to produce two or more daughter cells. Meiosis occur in germ cells where crossing over occurs between non-sister chromatids of homologous chromosome during pachytene phase. After the completion of meiosis-I two daughter cells are formed with haploid (n=23) number of chromosomes. There are two alleles for each trait, one dominant and another recessive present on the homologous chromosome. After the meiosis-I there may be dominant (XX, Xx) or recessive (xx) alleles present in the germ cells. This dominant allele expresses the dominant character while recessive allele (xx) expresses the recessive character. The fertilization occurs between the haploid cells of female gamete with haploid cells of male gamete. After fertilization the fertilised cell (zygote) contains diploid chromosomes (n=46). This new set of chromosomes remain present in every cell of the progeny.

The father of genetics Gregor Mendel posited a single gene is responsible for determining a single trait or characteristic in an organism, a principle often simplified as "one gene, one character" or "one gene, one trait" theory[28]. Each trait consists of two alleles which segregate during the formation of gametes and one allele from each parent combine during fertilization[29]. These alleles determine the future architecture of human being. Similarly, in Ayurveda the naturally existing dosha present in male and female gamete when combine to form the zygote, determine the prakriti of the individual and physique, physiology and psychology develops accordingly. As alleles determine the future architecture of a human being similarly naturally existing doshas in the germ cells determine prakriti. So, the functional outcomes of alleles and doshas are similar. Thus, naturally existing doshas in the germ cells can be compared with alleles present in the germ cells.

Kala Garbhashaya Prakriti

Kala refers to time which is continuously changing and acharya Charak has explained, kala and garbhashaya influence the determination of prakriti. Seasonal variations of doshas occur in the form of Sanchaya, Prakopa and Prashamana[30]. During sanchaya kala the quantity of doshas increases in its quantity. During prakopa kala doshas tends to leave their natural location. During shamana kala the doshas come to their homeostatic condition. During sanchaya and prakopa kala the increased quantity of doshas influences the physiological condition of the uterus. The foetus lives and gets its nourishment from the uterus. The proportion of doshas during any one of the seasons affects the uterus and this proportion of doshas acts as utkata doshas and influence the prakriti of foetus. Physiology of gharbhashya changes throughout the month in definite phases in accordance with time in the form of menstrual cycle[31]. Uterine condition in a particular phase only is suitable for conception along with the doshic influences. In accordance with the doshic imbalance, noteworthy influence is imparted on uterus and prakriti formation is influenced by that utkata dosha.

Maturahara-vihara prakriti (dietary and lifestyle habits of mother)

In Ayurveda the utmost importance has been given to the ahara dravyas. Acharya Charak has classified ahara dravyas in 12 classes[32]. Several examples of ahara dravyas are given in a particular class along with the detailed description of their gunas[33]. These gunas in ahara dravyas influence doshas. Acharya Charak has classified the individual's prakriti based on the guna of the doshas. As per the principle of "Sarvada sarvabhavanam

samanyam vriddhikaranam" consumption of guna samanya dravya increases the corresponding guna in the individual[34]. The foetus resides inside the womb of mother till nine months, the dietary regimen followed by mother during gestational period provides nourishment to the foetus. Therefore, the dietary habit of mother during the period of gestation influences the doshas which ultimately influences the prakriti determination of foetus. Acharya Charak has advised special dietary regime prior to garbhadhana (conception) as madhura aushada siddha ghrita-ksheera for male and taila-masha for female in order to achieve a progeny with good physical strength[35]. Cow-ghrita is beneficial for rasa, shukra and ojas and improves voice and complexion[36], Sesame oil has a property of yonivishodhanam i.e. purifies or cleanses the vagina/ uterus[37] and madhura rasa promotes spermatogenesis and masha is excellent aphrodisiac and strength promoting ahaar dravya[38]. Therefore, the dietary regime and lifestyle of mother (Vihara) act as epigenetic factor, altering the expression of doshas without changing the core genetic makeup from conception. During pregnancy, the mother's nutritional intake and activities can aggravate or pacify specific doshas, leading to their effect in the child.

Mahabhutavikara prakriti (Metaphysical and elemental factors)

Acharya Sushruta has explained garbha is the mixture of shukra, shonita, ashta prakriti and shodasha vikara[39]. Ashta prakriti refers to avyakt, mahaan, ahamkara and five tanmatras and shodasha vikara refers to eleven indriyas and five mahabhutas together. Five tanmatras are the progenitors of five mahabhutas. During first month of conception the foetus remains in kalala stage[40] and when garbha manifests it's organs and organelles is referred as sharira[41]. Each mahabhuta performs special function e.g. the vayu mahabhuta divides this cell mass impregnated with life, tejas mahabhuta differentiates the tissues, the apa mahabhuta provides fluidity and prithvi mahabhuta consolidates and foetus continues to develop organs like limbs, tongue, nose, ear, buttocks etc. and now this stage is termed as sharira[42]. Acharya Charak has defined sharir as the site of manifestation of chetana (consciousness) and a union of factors derived from the five mahabhuta in a specific proportion that maintains equilibrium[43]. The specific proportion of mahabhuta controls the physique and physiology of the individuals and thus the prakriti of the individual. The complexion is one of the predictor in determining prakriti. The combination of panchamahabuta manifests the complexion of the embryo. All varna involve tejas (fire) mahabhuta, but dominance of jala leads to fair (gaur) complexion, while tejas and prithvi result in darker (krishna) complexion [44].

Post Natal Factors Influencing Prakriti[45]

Epigenetics refers to the study of changes in the gene expression that occurs without altering the DNA sequence[46]. The post-natal factors variably influence phenotypic expressions of an individual and acts as epigenetic factors. The phenotype-based Ayurveda constitution of a person also depends upon Jati, Kula, Desha, Kala, Vaya and Pratyatmaniyata. Acharya Charak has emphasised about purity or cleanliness for all the post-natal factors[47].

Jatiprasakta (related to a Race/caste/Occupation)

A collection of people that share specific inherited physical characteristics is referred to as a race. Manusmriti acknowledges and justifies the caste system as the basis of order and regularity of society. It clearly recognizes four classes of people (Brahmanas, Kshatriyas, Vaisyas and Sudras), and their respective roles in the preservation of dharma. Acharya Sushruta has classified people into four varnas like Brahmins, Kshatriyas, vaishyas and shudras and further advised who can teach whom[48]. Acharya Charak has mentioned people of Brahmin caste follows more cleanliness (suchita) as compared to other caste[49]. The phenotypical expression of vata prakriti individual born in Brahmin, Kshatriya, Vaishya and Shudra castes have different features. The reason behind these differences is Jati prasakta prakriti.

Kula-Prasakta (related to family/ancestry)

Acharya Sushruta has mentioned hierarchy system of kula during selection of students for induction. Students with uttama kula must be selected for induction[50]. By applying arthapatti tantrayukti it can be said, there may be madhyama and heena kula. Although acharya Charak has not explained that how kula affects the phenotypical expression in the determination of prakriti. The character and behaviour of a family inevitably affects the temperament of its offspring. Regarding selection of students for induction Acharya Sushruta has mentioned the features of students belonging to uttama kula are having good conduct, prowess, cleanliness, manners, humility, energy and vigour, possessing good intellect, steadfastness, good memory and judgement with ability to act according to circumstances, having slender tongue, lips and crown of teeth, straight mouth, eyes and nose and the one endowed with cheerfulness, pleasant speech, good etiquettes and diligence should be inducted for teaching of Ayurveda[51]. As the phenotypical expression of uttama kula is mentioned above, the phenotypical expression of madhyama and heena kula must be different from uttama kula. Every jati has more than hundred gotras (kula). There is gotra discrimination in the same caste. People of specific gotra selects some specific gotras for the purpose of marriage to achieve progeny with good phenotypical expression. This shows that kula has influence on the phenotypical expression of an individual. Kula prasakta prakriti is predictor behind differences in the phenotypical expression of vata prakriti individuals born in brahmin, kshatriya, Vaishya and shudra castes.

Desha-anupatini (related to geo-climatic factors)

Ecological and environmental temperament significantly influences the prakriti of an individual. Acharyas have classified localities into three categories based on flora, fauna, topography and aquatic conditions[52]. These are Anupa desha (wet, marshy, water logged area) dominated by kapha/ vata-kapha dosha, Jangala desha (dry, arid land with scarce water) dominated by vata/ vata-pitta dosha and Sadharana desha (uniformly distributed foliage and water supply) dominated by sama doshas[53]. These topographical regions have impact on physique of the individuals residing there. People residing in Anupa region are delicate and dominated by vata and kapha prakriti. People residing in Jangala region are firm and endowed with strength and dominated with vata and pitta prakiti. People residing in sadharana region are firm, delicate, endowed with strength, complexion and compactness and have mixed qualities or prakritis found in both the countries. Individuals within an ecosystem have prakriti that is in harmony with the prakriti of the surrounding environment. Due to the impact of desha, variations in physique, physiology, psychology and behaviours can be observed. For instance, two monozygotic twins if set aside under different deshas or geo-climatatic conditions such as Africa and Russia are likely to express significant variations in genotype and phenotype. Hence, geographical climate significantly influences their prakriti. The original natives of China and Nepal often shows stunted nasal bridge from birth and such genetic expressions can be identified phenotypically. Tribals residing in isolated geographical regions are observed to have phenotypic features different in comparison to individuals living in common geographical regions. Acharya Charak has pointed out about the people residing between ganga and Yamuna river have pious habit[54].

Kala-anupatini (related to time scale)

Acharya Charak has mentioned time has significant influence on the determination of prakriti. Ayurvedic classics has mentioned the division of time from fraction of second (matra) to yuga. Yuga is classified into Kritayuga, Tretayuga, Dwaparayuga and Kaliyuga. Acharya Charak has mentioned that people lived during kritayuga were most pious in conduct, ethics and thoughts. With every yuga there is gradual and successive regression in strength and qualities. The age prevalent in respective yuga, on completion of 100th part of that period of the yuga, the age of the individual will decrease by 1 year[55]. Seasons by its respective predominance of doshas determine sanchaya, prakopa and prashama of doshas which also influences body strength and natural predominance of rasa during that ritus. For instance, individuals born in Shishir and Hemant ritu typically have maximum body strength (uttama sharira bala), moderate in vasanta and sharad, minimal during Varsha and greeshma. So, kala is one of the factors which significantly influences the prakriti.

Vaya-anupatini (Related to age)

Phenotypic expressions of an individual change with age. for instance, Snigdhata in balyavastha decreases with age. Full-fledged phenotypic expression occurs with age. Early and premature greying of hairs in pitta prakriti, (alpa kesha) Scanty hairs in vataj prakriti, Intelligence and voluminous organs in kaphaj prakriti which helps to identify that respective prakriti. There are variances in the doshic predominance in each age group, such as pitta in middle age (madhyamavastha), vata in old age (jirnaavastha) and kapha in childhood (balyavastha)[56]. The colour of the hair is generally blackish during childhood, greyish during adulthood and whitish during old hood. Based on the dominance of doshas during different stages of age, several predictors of prakriti determination waxes and wanes.

Pratyatmaniyata (Individuality)

Pratyatmaniyata means "specific to the individual self" highlighting the uniqueness of the constitution of each individual. It emphasizes the individuality of a person's constitution, which is peculiar, unique and not uniform across all people. Pratyatmaniyata prakriti underscores that each person has a unique psychosomatic makeup and idiosyncratic qualities that governs their health, behaviour and response to environmental factors. The unique permutation and combination of panchamahabhuta is also responsible for variances that is unique in each individual. This unique constitution influences an individual's life encompassing social, economic, spiritual, religious, and cultural dimensions including postnatal development. It significantly influences postnatal factors like physical development, disease susceptibility and responsiveness, mental tendencies, environmental adaptability unique response to stress, cognition and moral inclinations. Pratyatmaniyata highlights that certain health conditions or characteristics are unique to an individual due to specific influences, such as their personal karma, lifestyle, or environmental. The genomic constitution of the offspring is ultimately decided by gene splicing during meiosis-1 during fertilization which results in a unique genome that is completely different from the genomic constitution of both the parents.

DISCUSSION

The exploration of Prakriti in Ayurveda reveals it as a sophisticated and multidimensional construct that integrates genetic, epigenetic, environmental, and metaphysical factors to define an individual's unique constitution. This study reaffirms that Prakriti, established at conception through the permutation and combination of doshas (Vata, Pitta, Kapha), serves as an immutable blueprint for physical, physiological, and psychological traits. Prakriti represents a immutable, non-pathological,

inherent state that remains constant throughout life, providing a stable basis for understanding individual health predispositions. The determinants of Prakriti highlight a complex relationship between pre-natal and post-natal factors. These factors find parallels in modern genetics and embryology, where genetic inheritance, epigenetic modifications, and intrauterine environment jointly influence fetal development. Post-natal factors further modulate phenotypic expression, acting as epigenetic modifiers that adjust constitutional manifestations without altering the underlying genetic code.

The ecological dimension of Prakriti, particularly the influence of Desha (geography), emphasizes the importance of environmental congruence in health. Ayurvedic classification of regions into Anupa, Jangala, and Sadharana based on doshic dominance illustrates how local ecosystems shape population-level constitutions and disease patterns. This insight is relevant today in the context of environmental health and region-specific medical interventions, highlighting the need to consider ecological factors in personalized healthcare. However, the study of Prakriti faces several limitations. Reliance on classical texts and observational data poses challenges for empirical validation within modern scientific frameworks. The subjective assessment of Prakriti through phenotypic traits may introduce variability, and the influence of numerous external factors complicates standardization. Moreover, integrating Ayurvedic concepts with contemporary medical science requires careful translation and interdisciplinary collaboration. Several interdisciplinary researches have been carried out[57].

There could be a genetic basis for the differences among three major constitutions types (Prakriti) described in Ayurveda. Bhushan P et. Al. (2005) evaluated 76 subjects both for their Prakriti and human leucocyte antigen (HLA) DRB1 types. They observed a significant variation in certain HLA alleles between different Prakriti types, such as the absence of the HLA DRB102 allele in the Vata type and HLA DRB113 in the Kapha type, and a higher frequency of HLA DRB1*10 in the Kapha type[58]. The agni of pitta prakriti individuals are remains in the state of tikshnagni which causes intense metabolic activity, efficient digestion and rapid biochemical transformation. This function is related to the extensive metabolizer (EM) genotype (∗1/∗1, ∗1/∗2, ∗1/∗3) found predominant in Pitta Prakriti (91%). Genotype (∗1/∗3) specific for EM group was present only in Pitta Prakriti[59]. Different Prakriti (body constitution) individuals have different susceptibility for the diseases, and this Prakriti is determined by both genetic and environmental factor. Data provide evidence that a Kapha profile is more susceptible to T2DM among the healthy population. Gupta A et. al. (2018) have found that MTHFR C677T single-nucleotide polymorphisms (SNP) is associated with type 2 diabetes Whereas, MTHFR A1298C is not associated with type 2 diabetes[60]. Several studies have found that there is significant difference in the haematological parameters, lipid profile, hepatic function and BMI among the different prakriti offering a molecular perspective to the ancient phenotypic classification system. Indeed, these findings are interesting and can confirm that the classical knowledge is still presently merit for explanation of phenotypic classification system. Future research should employ rigorous methodologies, including genomic sequencing, longitudinal cohort studies, and machine learning approaches, to quantify Prakriti phenotypes and validate their clinical relevance. Such efforts would strengthen the evidence base and facilitate the integration of Prakriti-based assessments into mainstream healthcare.

CONCLUSION

This article upholds Prakriti as a foundational and scientifically resonant concept within Ayurveda, embodying a holistic understanding of individual constitution shaped by an intricate interaction of genetic, epigenetic, environmental, and metaphysical factors. Prakriti, determined at conception and remaining constant throughout life, serves as a unique psycho-somatic blueprint that governs physical, physiological, and psychological traits. Its classification into distinct constitutional types such as Vatala, Pittala, and Shleshmala provides a structured framework for predicting disease susceptibility, tailoring therapeutic interventions, and promoting preventive healthcare.

Central to its relevance in contemporary science is the emerging evidence linking Prakriti types with distinct genomic and biochemical markers, as demonstrated in studies correlating doshic profiles with gene polymorphisms, metabolic pathways, and phenotypic traits. These genomic insights not only validate the ancient framework but also bridge it with modern personalized medicine, enabling predictive and preventive healthcare strategies tailored to an individual's constitutional predisposition. It emphasizes the importance of individualized health strategies that account for both innate constitution and external influences such as diet, lifestyle, geography and seasonal variations.

However, the full integration of Prakriti into evidence-based practice requires further empirical validation through interdisciplinary research. Future studies should employ advanced methodologies—including genomic analysis, longitudinal clinical trials, and computational phenotyping—to standardize Prakriti assessment and quantify its clinical relevance. Collaborative efforts between Ayurvedic scholars and modern scientists will be

essential to translate this timeless concept into actionable tools for personalized health management.

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