AYURVEDA PRAKRITI CHARACTERISTICS OF SPORTSPERSON BASED ON CHARAK SAMHITA

A Dissertation

Submitted in partial fulfilment of the requirement for the degree of

Master of Physical Education

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DEDICATED TO

This research is dedicated to my parents,

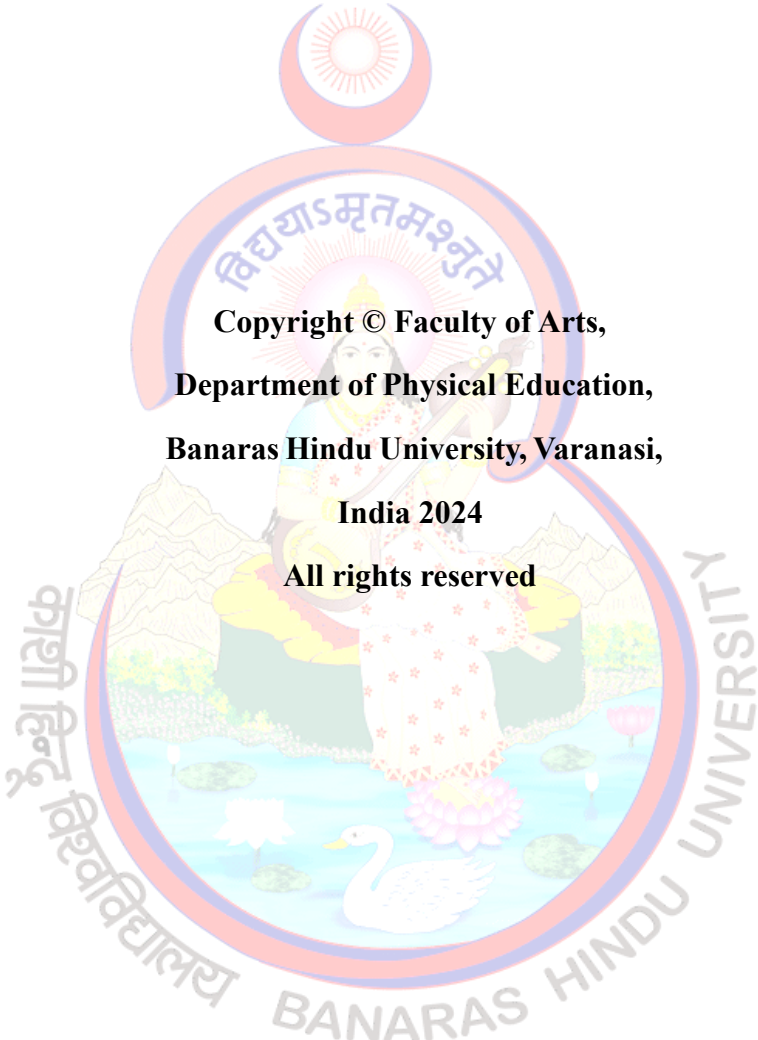
Mrs. Anita Sharma

&

Mr. Manoj Kumar Sharma

who have always been a source of inspiration for me

Throughout my whole life.



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DECLARATION

I, **Achal Sharma,** do hereby declare that the research work entitled **"Ayurveda Prakriti Characteristics of Sportsperson Based on Charak Samhita"**. My piece of work was carried out by me under the supervision of **Dr. Akhil Mehrotra**, associate professor, Department of Physical Education, BHU, Varanasi, and the work was duly approved by the research committee of the department. I have specified, using references, information from the work taken. I also declared that the subjects, number of subjects, data collection, and criterion measures mentioned in the delimitation were truly collected accordingly.

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CERTIFICATE FROM THE SUPERVISOR

This certifies that the statement made by the candidate is correct to the best of my knowledge.

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Achal Sharma

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CHAPTER I
INTRODUCTION

The Vedic tradition is the foundation of Ayurveda's roots. The earliest known Indian text, the Rig Veda, has references to Ayurvedic concepts. It presented the fundamental idea of the Pancha Mahabhutas, or the five major elements (ether, air, fire, water, and earth) (Ayurvedic India, n.d).

As Ayurveda developed, its tenets were methodically recorded in ancient writings, namely the Sushruta Samhita and the Charaka Samhita. Written in 1000 BCE, the Charaka Samhita concentrates on internal medicine, diagnosis, and treatment methods. It describes how the three doshas—Pitta (transformation), Kapha (structure), and Vata (movement)—are thought to be bioenergies that control both physiological and mental processes (Planet Ayurveda, n.d).

However, a key text in Ayurvedic surgery is the Sushruta Samhita, which was put together by the physician Sushruta. It describes a range of surgical methods and tools, showcasing ancient India's highly developed medical expertise (Culture and Heritage, 2024).

The development of Buddhism greatly aided the preservation and dissemination of Ayurvedic knowledge during the Mauryan period (3rd century BCE). Ayurveda spread to Tibet, Sri Lanka, China, and Southeast Asia through Buddhist monasteries that developed into medical teaching hubs (Culture and Heritage, 2024). During the Islamic era in India, Ayurveda and Greco-Arabic medicine (Unani) collaborated during the medieval era. Ayurveda's distinctive philosophy, which remained focused on doshic balance and natural healing, was not diminished by this confluence of techniques (History of Ayurveda, n.d).

The basis for comprehending human physiology, illness, and therapy in Ayurveda is the idea of Panch Mahabhuta, or the five major elements: Ākāśa (ether), Vāyu (air), Teja or Agni (fire), Āpā (water), and P□thvī (earth). The three Doshas—Pitta (fire + water), Kapha (water + earth), and Vata (ether + air)—are said to be the result of these elements' distinct combinations, which are thought to make up the whole world, including the human body. These Doshas govern all mental and bodily functions: Pitta regulates transformation and metabolism, Kapha provides stability and structure, and Vata directs movement. Every person is born with a unique Prakriti, or balance, of these Doshas that dictates their optimum lifestyle, personality, illness propensities, and physical makeup. Disease results from Dosha disruptions brought on by Mahabhuta imbalances. The main goals of Ayurvedic diagnosis and therapy are finding the element that is out of balance and reestablishing it through food, medicines, treatments, and lifestyle modifications that apply opposite characteristics. For instance, cooling foods, relaxing activities, and plants like neem manage excess fire (Pitta), which might show itself as anger or inflammation.

Earth contributes to bone construction, water to fluids, fire to digestion, air to circulation, and ether to body cavities, among other components that affect the body's tissues (Dhatus), organs, and functions. Panch Mahabhuta's idea, which directs Ayurvedic preventative wellness and individualized therapy, is therefore both philosophical and extremely useful. It promotes a balanced and all-encompassing approach to health by highlighting the synergy between the natural environment and the human body.

In sports science, performance is influenced by various factors such as genetics, training, nutrition, psychological resilience, and recovery mechanisms. While modern sports training largely relies on standardized

physiological conditioning, Ayurveda suggests that an individual's *Prakriti* is crucial in determining their athletic potential and susceptibility to injuries. *Vata-dominant* individuals are typically lean, agile, and quick but may lack endurance and be prone to injuries due to instability in their bodily functions. *Pitta-dominant* individuals possess high energy levels, a competitive mindset, and a strong metabolism, making them well-suited for endurance sports and high-intensity activities. Meanwhile, *Kapha-dominant* individuals are characterized by superior muscle mass, endurance, and stability but may lack speed and adaptability (Lad, 2002).

Introduction to the Study and Its Importance

The current study focuses on the *Ayurveda Prakriti characteristics of sportspersons based on Charak Samhita*. Understanding an athlete's *Prakriti* can provide crucial insights into their physical capabilities, mental resilience, and overall sports performance. Despite Ayurveda's ancient wisdom, its application in modern sports science remains largely underexplored. This study aims to bridge this gap by systematically analyzing the *Prakriti* characteristics of athletes and their impact on various aspects of sports performance, including endurance, strength, speed, recovery rate, and injury susceptibility.

The significance of this research lies in its potential to revolutionize sports training and athlete management by incorporating personalized approaches based on *Prakriti*. By aligning training programs, diet plans, and recovery strategies with an athlete's inherent constitution, sports professionals can enhance performance and reduce the risk of injuries. Furthermore, this study contributes to the growing field of integrative health sciences, where traditional knowledge systems like Ayurveda are combined with modern scientific methodologies to optimize human potential.

This research is particularly relevant in today's sports industry, where personalized fitness and recovery strategies are gaining prominence. The findings of this study can be utilized by coaches, sports scientists, and healthcare professionals to develop customized training modules tailored to an athlete's natural predisposition. Additionally, this study will serve as a foundation for future research exploring the integration of Ayurvedic principles with contemporary sports science, ultimately contributing to the advancement of holistic athlete development.

Historical Perspective of Ayurveda and Prakriti

The concept of *Prakriti* is deeply embedded in Ayurvedic philosophy and has been systematically documented in ancient texts such as *Charak Samhita*, *Sushruta Samhita*, and *Ashtanga Hridayam*. These texts classify individuals based on their dominant *dosha* and describe how it affects their physical and mental health. *Charak Samhita*, in particular, provides detailed descriptions of the influence of *Prakriti* on an individual's physiology, digestion, immunity, and even their emotional tendencies. The classification into *Vata, Pitta*, and *Kapha* types was developed as a way to understand how different body constitutions respond to diet, lifestyle, and environmental conditions.

In sports, this classification provides a unique perspective on athletic potential. In ancient India, physical fitness and training were integral parts of life, especially for warriors, wrestlers (*Malla Yuddha* practitioners), and athletes. Ayurveda was often used to determine suitable training regimens, diets, and recovery methods based on an individual's *Prakriti*. This personalized approach ensured that athletes optimized their performance while preventing injuries and imbalances in their *doshas*.

Application of Prakriti in Modern Sports Science

Recent studies have begun to explore the relevance of *Prakriti* in sports sciences, particularly in tailoring training regimens based on an athlete's inherent constitution.

1. **Vata-Dominant Athletes:** These individuals are generally characterized by a lean body frame, high energy, and agility. They excel in activities requiring quick reflexes, such as sprinting, gymnastics, and tennis. However, due to their irregular metabolic tendencies, they are prone to fatigue, anxiety, and injuries, especially those related to joints and ligaments. Managing their *Prakriti* requires warm, nourishing foods, adequate hydration, and structured recovery periods to prevent burnout.
2. **Pitta-Dominant Athletes:** These individuals have strong digestion, high energy levels, and a competitive nature. They perform exceptionally well in endurance-based and high-intensity sports like long-distance running, football, and swimming. However, their natural heat and intensity can make them susceptible to inflammation and overexertion. Cooling foods, proper hydration, and mindfulness techniques can help maintain their optimal performance.
3. **Kapha-Dominant Athletes:** With a larger, muscular build, *Kapha* individuals excel in strength-based sports such as weightlifting, wrestling, and rowing. They have natural endurance and stability, making them resilient athletes. However, they may struggle with weight management and require dynamic workouts to maintain agility. A diet focused on metabolism-boosting foods and high-intensity training methods can enhance their athletic abilities.

Scientific Studies and Research on Prakriti in Sports

Research has indicated that understanding *Prakriti* can help in customizing training regimens, optimizing dietary plans, and designing personalized rehabilitation programs (Sharma et al., 2020). For instance, a study conducted by Tiwari (2017) examined the role of Ayurvedic *Prakriti* assessment in athletic performance and found that individuals with a dominant *Pitta* constitution exhibited superior cardiovascular endurance, while *Vata* types excelled in speed-based activities. *Kapha* individuals demonstrated remarkable muscular endurance and power but required additional motivation and metabolic stimulation.

Another study by Patel et al. (2019) investigated the injury susceptibility of athletes based on their *Prakriti*. The findings suggested that *Vata* athletes had a higher likelihood of joint-related injuries, while *Pitta* individuals were more prone to inflammatory conditions. *Kapha* athletes, although resilient, showed a tendency towards weight gain-related stress on joints. These findings highlight the importance of individualized sports training and recovery strategies based on Ayurvedic principles.

Bridging Ayurveda with Modern Sports Science

Despite its rich theoretical foundation, the practical application of *Prakriti* analysis in sports sciences remains underexplored. Contemporary sports training focuses primarily on biomechanical and physiological aspects while often overlooking the role of an individual's inherent constitution. By integrating Ayurvedic principles from *Charak Samhita* with modern sports science, this study seeks to examine the relationship between *Prakriti* and athletic performance. This research will provide insights into how Ayurvedic classifications can be leveraged for athlete selection, performance enhancement, injury prevention, and overall well-being (Tiwari, 2017).

With the increasing global interest in Ayurveda and holistic health approaches, this study aims to bridge the gap between traditional wisdom and modern scientific advancements. By analyzing the *Prakriti* of sportspersons, this research contributes to the growing body of knowledge that supports individualized and holistic approaches to athletic performance optimization.

Sports science and contemporary medicine have both placed a greater focus on individualized approaches to performance and wellness in recent years. Through the idea of Prakriti, or the intrinsic bodily constitution, the ancient Indian medical system known as Ayurveda provides one of the first examples of personalized therapy. The Charak Samhita states that each person's physical, physiological, and psychological characteristics are determined by the particular balance of the three Doshas Vata, Pitta, Kapha, and that they possess at birth. A person's metabolism, immunity, mental stability, physical strength, and susceptibility to sickness are all impacted by these Prakriti kinds. Although this idea has been studied in the fields of preventive medicine and general health, it is still not often used about sports and athletic performance.

Few studies have tried to categorize athletes based on their Prakriti or investigate how these constitutional types may affect their choice of sports, training responses, endurance levels, or injury susceptibility, despite the extensive descriptions of the characteristics and functional abilities linked to various Prakriti types found in Ayurvedic texts such as the Charak Samhita. As a possible internal driver of performance and adaptation, constitutional body types are often overlooked in the present corpus of sports science research, which favors external and quantifiable factors like aerobic capacity, muscular strength, biomechanics, and nutrition.

This disparity is especially noteworthy in a nation like India, where Ayurveda is not only deeply ingrained in the culture but is also becoming more widely acknowledged for its benefits to overall health. Athlete profiles that incorporate Ayurvedic concepts, like Prakriti evaluation, may yield insightful information on individualized training plans, recuperation techniques, and even the discovery of talent unique to a given sport. Furthermore, knowing the relationship between Prakriti kinds and athletic characteristics may help athletes become more mentally resilient and lower their chances of injury.

By examining and categorizing athletes using the Ayurvedic idea of Prakriti as it is presented in the Charak Samhita, this study aims to close the current gap. It seeks to investigate if particular Prakriti types are more common among particular athlete groups and how these constitutional traits could connect to athletic performance traits. By offering a conventional but scientifically sound viewpoint, this method might advance sports science and open the door to more customized and comprehensive training regimens.

1.1 Statement of the problem

The statement aims to examine the prevalence of Prakriti Tridosha (Vata, Pitta, and Kapha) in different sports players and define the characteristics of the athlete based on Charak Samhita.

1.2 Objective of the study

1. To identify the dominance of the Tridosha (Vata, Pitta, Kapha) in sportspersons.
2. To define the characteristics of the sportspersons based on the Ayurveda Prakriti (Vata, Pitta, Kapha).

1.3 Delimitation

1. The study was delimited to male sportspeople.
2. The study was further delimited to the age group of athletes 18-25 years old.
3. The study was delimited to only 3 sports, namely Volleyball, Handball, and Hockey.

1.4 Limitations

Certain limitations include the study's geographical area, Limited Sample Size, daily routine, medication, and diet.

1.5 Hypothesis

Based on available literature, experts' opinions, and personal knowledge, the hypotheses will be formulated:

Sportspeople will have different characteristics based on the dominance of the Prakriti.

1.6 Definition and explanation of the terms

1. **Tridosha Prakriti:** According to Ayurveda, an individual's "Prakriti" is their innate constitution, which is established by the vata, pitta, and kapha doshas' balance. Prakriti is said to be the distinct mix of these doshas that each person is born with. Knowing one's Prakriti can help one understand their inclinations—physical, mental, and emotional—as well as their susceptibilities to imbalances and health problems. It forms the basis of Ayurveda and directs the formulation of individualized health recommendations.

2. **Vata:** Vata is the tridosha built with a mix of air and space among the panchmahabhutas. Vata Prakriti exhibits some unique characteristics such as:

- Light build and body frame
- Quick and agile movements
- Enthusiastic, creative, and imaginative nature
- Variable appetite and digestion
- Tendency toward anxiety and worry
- Dry skin and hair

3. **Pitta:** Pitta is the Tridosha built with a mix of fire and water out of the five panchamahabhutas. Pitta Prakriti exhibits some unique characteristics such as:

- Medium build and body frame
- Strong metabolism and appetite
- Sharp intellect and good concentration
- Leadership qualities and assertiveness
- Strong digestion and tendency to be sensitive to heat
- Prone to irritability and anger when imbalanced.

4. **Kapha:** Kapha is the tridosha built with a mix of earth and water out of the five panchamahabhutas. Pitta Prakriti exhibits some unique characteristics such as:

- Larger build and body frame
- Slow metabolism and steady energy
- Calm, patient, and nurturing nature

- Strong endurance and resistance to illness
- Stable digestion and a tendency toward congestion
- Prone to lethargy and attachment when imbalanced

5. **Panch Mahabhuta:** The five elements through which the body is composed are air, water, space, fire, and earth. These together are called panch mahabhutas. Every cell of a living organism is composed of these five elements. The Prithvi mahabhuta (earth) made the main structure of the body cells. The aapamahabhut (water) made the cytoplasm of the body cell. The agnimahabhut (fire) controls the metabolism of the cells. The space residing in the body cell is controlled by the aakash (space) mahabhuta. The transportation of nutrients and waste material is governed by the vayu (air) mahabhuta.

1.7 Significance of the Study

1. The findings of the study will reveal the significant difference between the Prakriti among the different sportspersons.
2. The study's result will help classify the different sportspersons based on the unique quality of the Prakriti.
3. This study will further help the players and coaches choose sports specialization based on Prakriti's domination and unique quality.
4. The study's results will help psychologists and physiologists understand how to cater to the individual with a specific approach.

CHAPTER II

REVIEW OF RELATED LITERATURE

1. **(Wazir Singh, 2023)** The study investigates the relationship between tridosha prakriti and sports performance based on quality. Elements of Vata, Pitta, and Kapha are present in people with different degrees of predominance. Each Dosha gives certain characteristic qualities to the person, based on which an individual can be classified as belonging to that particular Dosha type. Charaka and Sushruta recognize seven types or categories into which people can be classified, depending on the dominance of the Doshas in their body. The sample for the present study consisted of 315 athletes aged 17 to 25 years who consented/informed to participate. A factorial design 2×7 was used with two independent variables with two levels of game (Team and Individual) and seven levels of prakriti (V, P, K, VP, KV, KP, VPK). Sports performance was studied in terms of T-score, which are standard scores with a mean of 50 and SD of 10.

   The findings suggest that Pitta prakriti players were found to be significantly different from all other prakriti types. Thus, it was concluded that people with pitta prakriti characteristics are not found to be good in sports as compared to other prakriti types.

   according to Ayurveda, our basic constitution is determined at the time of conception, known as Prakriti. Prakriti is a set of physical, mental, sensory, motor, and spiritual character of an individual, determined at the time of conception. At the time of fertilization, Vata, Pitta, and

Kapha determine the constitution of an individual by their permutation and combination, which is called "Prakriti."

In Ayurveda, the prakriti classification of individual constitution is based on differences in physical, physiological, and psychological characteristics, and is independent of racial, ethnic, or geographical considerations. The study investigates the relationship between Tridosha prakriti and sports performance among athletes of different games. A new methodology was developed, involving electrical, electronic, mechanical, and observational methods. The results were computed using a qualitative analysis of 315 athletes aged 17 to 25 years who participated in cricket, volleyball, basketball, wrestling, boxing, and athletics.

The study used an algorithmic heuristic approach to obtain a quantitative measure of tridosha level (vata, pitta, and kapha) and used knowledge-based concepts of worth coefficients and fuzzy multiattribute decision functions for regression modeling. Statistical validation on a large sample showed the accuracy of the study's estimates with a statistical confidence level above 90%.

Patwardhan et al. (2005) evaluated 76 subjects for their Prakriti and human leucocyte antigen (HLA) DRB1 types. They hypothesized that Ayurveda classifies the whole human population into three major constitutions as Vata, Pitta, and Kapha, their possible combinations, and their homologous relation to human genetic structure. They observed a reasonable correlation between HLA type and Prakriti type, with the complete absence of the HLA DRB1*02 allele in the Vata type and HLA DRB1*13 in the Kapha type being significant. According to Ayurveda, there are seven body types based on the proportion of the three humours in the constitution. A perfectly balanced constitution is

Vata, Pitta, and Kapha in equal proportion, which is called "Sannipatika" (Tridoshic). Charaka believed that most Prakriti is the combination of three doshas, with the poorly represented third, known as "Dwandavaja" (Dual Doshic). These individuals exhibit action and behavior according to the characteristics of two predominant doshas, while there may be three "pure types" (Mono doshic) with disproportionately represented single doshas.

2. **(Shilpa Soni, 2023)** Prakriti, a term in Ayurveda, refers to the genetic charter of an individual that remains constant at some stage in their existence. The Ayurvedic system identifies various houses of tridosha (body humors) and how they affect prakriti or human body structure, primarily based on the dominance of one or more doshas. Understanding prakriti is crucial for developing individualized diet, lifestyle counseling, and remedies. The term Prakriti is derived from the qualitative and quantitative irreversible dosha predominance from birth to death. It is not the output of these doshas, which go through constant variations. Once fashioned Prakriti is also influenced but not modified due to environmental elements.

   In Ayurveda, Prakriti is an essential principle to understand the character and severity of diseases and a person's response to environmental elements, tablets, and susceptibility to diseases. The formation of Prakriti occurs during the union of Shukra and Shonita (sperm and ovum) in the Garbhashaya (womb) of the mother. It is created due to the dominance of any one, two, or all the three Vatadi doshas (Vata, Pitta, and Kapha) and Satvadi (satva,raja, and tama) Manas Gunas.

Accessory factors affecting the formation of Prakriti include primary and secondary or accessory factors. Acharya Charaka divided these determinants into two parts: 1) Factors dominating in intra-uterine life and hereditary factors; 2) Factors dominating in postnatal period and hereditary factors; 3) Factors dominating in intra-uterine life and hereditary factors; 4) Factors dominating in postnatal period and hereditary factors; 5) Factors dominating in intra-uterine life and hereditary factors; 6) Factors dominating in intra-uterine life and hereditary factors; 7) Factors dominating in postnatal period and hereditary factors; 8) Factors dominating in intra-uterine life and hereditary factors; and 9) Factors dominating in postnatal period and hereditary factors. Bhautik prakriti, also known as Sushruta's five types, are characterized by characteristics such as Vayvya (wind), Aagneya (fire), Jaliya (water), Parthiva (forgiving nature), and Nabhas (holy, long-lived). Parthiva prakriti individuals are stable, large-bodied, and forgiving, while Nabhas prakriti individuals are holy, long-lived, and have broader mouths and nostrils.

Manas prakriti, also known as Mahaprakriti, consist of three types: Sattvik, Rajsik, and Tamasik. Sattvik prakriti is characterized by a religious, loving, kind, and pure mind, good conduct, and respect for teachers. Rajsik prakriti has six types: Sarpa, Aasur, Rakhsa, Paishach, Shakun, and Preta. They are competitive, dominating, hardworking, perfectionists, short-tempered, jealous, ambitious, self-centered, friendly, and loyal only to those who help them.

Tamasik prakriti has three types: Pashu, Matsya, and Vanaspatya. These individuals are less intelligent, tend towards depression, excessive sleep, and dislike less responsibility. They are greedy, possessive, and attached, irritable, and do not care for others. Daihik

prakriti, also known as Sharirik prakriti and Doshaja prakriti, is composed of seven types: Ekadoshaja prakriti (Vata Prakriti, Pitta Prakriti, Kapha Prakriti), Dvandvaja prakriti (Vata-Pittaja, Vata-Kaphaja, Pitta-Kaphaja), and Samdoshaj prakriti (Vata-Pitta-Kaphaj) in equal proportions.

The study collected literary sources from ayurvedic samhitas like Charaka Samhita and Sushrutasamhita and correlated them with contemporary available books, literature, journals, websites, and research papers. Physical and anatomical characteristics of these prakritis include body structure, hair color, skin color, nails, lips, teeth, eyes shape and color, eye lashes, movements, and body temperature.

3. **(Ramakrishna, 2013)** This publication discusses healthy lifestyle prescriptions for different personality types (Tridosha Prakriti) in the Journal of Ayurveda and Holistic Medicine. The authors, including Kishore Kumar Ramakrishna, have published numerous works, including 671 publications and 7,372 publications. The study was published in January 2014 and has been accessed by over 776 people. The content was uploaded by Ramakrishna on June 7, 2016, and the user requested an enhancement of the downloaded file. The article is part of the Tridosha Prakriti series.

   Non-communicable diseases (NCDs) are a growing concern worldwide, particularly in developed and developing countries. These diseases are often caused by impaired lifestyle practices, leading to the development of non-infectious epidemics. The western medical system is working to address this issue by incorporating complementary and alternative systems of medicine (CAMs). Ayurveda and Yoga, ancient natural health care systems, play a crucial role in this endeavor.

According to Ayurveda, Tridoshas (Kapha, Vata, and Pitta), the three functional humours responsible for generation, organization, and destruction, contribute to both physical and psychological personality development from the time of zygote formation. Prakriti, a specific structure-function-behavior pattern and trait of a person known as Prakriti, are formed due to the predominant doshas (functional entities) during fertilization and remain unchanged throughout an individual's life span. A person remains healthy if their life style is in tune with their Prakriti to maintain the dynamic equilibrium of all three doshas.
There are seven types of Prakritis in Ayurveda: Vatala, Pittala, Kaphala, Vata Pittala, Vata Kaphala, Kapha Pittala, and Sama Prakriti. Three have single dosha, while others have dual dosha predominance. A person's type is based on the predominant physical and physiological properties, described as Gunas of Tridoshas, established during the manifestation of Prakriti during fertilization. Ayurveda provides elaborate advice on life style practices that include Ahara, Vihara, and Vichara suitable to the individual's Prakriti that helps in maintaining a balance of the three doshas and prevents exaggeration/vitiation of any one dosha.

The selection criteria for each Prakriti type are clearly laid down as Viruddha Guna (select those items of food or practices that have qualities which can oppose the dominant Guna (cravings) of the individual. Specific lifestyle instructions for each Prakriti type are available in classical texts of Ayurveda.
The present study aimed at preparing a table of suitable lifestyle prescriptions for different Prakriti types, in the present-day context, based on the recommendations by the classical texts. This would be a

useful addition to the present knowledge of lifestyle modification recommended by the WHO for NCDs.

The concept of lifestyle management is referred to in the authoritative literature of Ayurveda, namely the Bruhathrayees. The list of recommendations for each Prakriti type is provided in the classical texts of Ayurveda. In conclusion, Ayurveda and Yoga play a significant role in preventing the increasing incidence of non-communicable diseases (NCDs) through lifestyle modifications and interventions based on the fundamental concepts of Tridoshas and Prakriti. By incorporating these principles into modern medical practices, individuals can maintain a balance of the three doshas and promote positive health and disease prevention.

4. **(Shilpa Yerme, 2023)** This article discusses the importance of Prakriti-based exercise in promoting health and wellness. It highlights the benefits of Vyayama, or exercise, for the mind, body, and soul. Lifestyle disorders such as obesity, diabetes, cardiovascular diseases, joint diseases, and stress are often caused by a lack of proper exercise. Yoga and other forms of exercise may provide some benefits, but they may not provide the full benefits. Vyayama is a specific activity that imparts strength and firmness. Acharya Charaka explained the benefits of Vyayama in Sutrasthan, which means specific stretching. The term "Vyayama vi+ Aa+ Ghan" (shabdakalpadrum) means specific stretching.

   The features of optimal Vyayama include optimal sweating, increased respiration, lightness, and tightness in the cardiac region. Prakriti is the supreme concept of Ayurveda, formed at the time of fusion of Shukra Evam Shonita and remains the same throughout life. The three prakritis

(vata, pitta, kapha) are Ekal (vata, pitta, kapha), Dwandaja (vata-pitta, vata-kapha, pitta-kapha), and Sama Prakriti.

Benefits of Vyayama include a compact body, good appetite, reduced body fat, relieves sleepiness, enthusiasm, and endurance, Ashtang sangrah (easy digestion of even incompatible food), and Sushruta (well-built compact physique, charming appearance, tolerance to cold-heat, hunger, and thirst). Regular Vyayama can help check obesity.

The article also discusses the importance of balancing dosha when conducting exercise according to prakriti, age, and season. Vata type needs less exercise, pitta needs moderate, and kapha needs more intense exercises like jogging and aerobics. Winter and spring are the best seasons for exercise. In conclusion, Prakriti-based exercise is a valuable tool for maintaining health and well-being. Regular exercise can help prevent lifestyle disorders and improve overall health.

Prakriti is a concept in Ayurveda that enumerates body features, both internal and external. It is determined by the proportion of the three Dosha, which are ovum and spermatozoon, meaning Shukra and Shonita. Ayurveda emphasizes the constitutional, temporal, psychological, and emotional aspects of personality.

Vata individuals possess alpa Bala, pitta madhyam, and kapha Uttam bala, which requires selecting the type of Vyayama. The assessment of Sharirk Bala is done by determining Vyayama Shakti and Saar Pariksha, which are included in Dashvidh Pariksha. Strength is the quality of being physically strong or the capacity of an individual to withstand stress.

Vata prakriti involves warm, grounding, steady, and slow activities. To maintain vata's constitution, it is essential to select exercises according

to dosha, not just weight, B.M.R., and all things. Mild, regular exercise is key for vata, as they have high energy and low stamina. Following a regime that involves lying down on the earth or on the ground, practicing yoga barefoot, and engaging in smooth, flowing, grounding activities like hiking, swimming, stand-up paddle boarding, dance, or barre. Restorative yoga can also support vata's fragility.

Fast-moving sports may be attractive to vata, but they are not the most balancing for their constitution. Vata types benefit more from strengthening and balancing exercises on a regular basis that gradually build-up core energy levels. They need to curb their enthusiasm and work slowly to build real strength and stamina. General tips for vata exercise include applying oil before and after exercise, drinking water before, during, and after exercise, listening to spiritual music during exercise, using good quality shoes or knee bands, taking energy snacks after exercise, avoiding overexertion, starting with mild exercise for 20 minutes, lying down on the earth or on the ground, practicing yoga barefoot, and ending with savasana.

5. **(Kanchan Joshi, 2021)** Ayurveda, the oldest medical science, is based on the concept of tridosha, which are the three humors or forces of the body that bring health when in balance and produce diseases when out of balance. This study focuses on the basic Ayurvedic theory of Tridosha and how to balance it in our body. The term "tridosha" is derived from the Sanskrit words "tri" and "dosh," meaning three and pollutant or vitiated factor respectively, and in combination they mean the "three pollutants" or "tri-pollutant." In essence, the pollutants or vitiating factors play a significant role in maintaining health or well-being and disease or illness.

Ayurveda was developed around 3,000 BCE and is believed to be the oldest and most holistic medical system in the world. The wisdom of this healing method was passed down through ancient Indian spiritual texts, called the "Vedas." There are four major Vedas, each of which describes, in some parts, the principles of health, disease, and treatment. One of these texts, the "Rig Veda" (also known as "Rik Veda" or "Rigveda"), contains philosophical verses on the nature of existence, as well as information on the three basic human constitutions. It discusses the use of herbs to heal the mind and body, and to keep oneself young. Another Veda, the "Atharva Veda," contains information on everything from internal medicine and surgery to infertility and psychiatry.

The knowledge we have now is by three surviving texts of Charaka Samhita, Sushruta Samhita, and Vaghbata. The link between panchamahabhuta and Ayurvedic Tridoshas is that the five great elements - Akash (space), Vayu (air), Agni (fire), Jala (water), and Prithvi (earth) - are considered the basis of the universe. When these five basic elements making up the composition of the human body get impregnated with Atma and soul, health or well-being is maintained.

The Ayurvedic system of doshas, consisting of the same elements as mahabhutas (mahabhutas) that form our body, ensures that all mahabhutas are held together and exert their functions in synergy for the optimum functioning of the human body. These doshas are considered as three pillars of the body, and their balance is crucial for the body to be healthy.

Vata Dosha, made up of air and space elements, uniformly distributes heat and coldness throughout the body, controlling all physiological activities and pitta, kapha, body tissues, and waste excretion. It is predominantly located in the lower portion of the body, below the navel region. The Vata dosha has five sub-doshas: Prana Vata, Vyana Vata, Udana Vata, Samana Vata, and Apana Vata.

Pitta Dosha, made up of Fire and Water, represents fire forces responsible for digestion, formation of nutritive juices, segregation of nutrients and wastes, absorption, and distribution of nutrients. It is located in the middle portion of the body, between the heart and navel, where the digestive fire is located. The dosha is further divided into five subcategories: Ranjak Pitta produces Rakta or blood, Bhrajak Pitta controls skin pigmentation, Aalochak Pitta governs sight, Sadhak Pitta governs psychological capabilities, and Pachak Pitta controls digestive functioning in the duodenum part of the small intestines.

Kapha Dosha, made up of Earth and water element, acts as a coolant and buffer system, counteracting excessive heat caused by Pitta and excessive dryness caused by Vata Dosha. It helps in nurturing tissues and is the cause for body immunity. Kledak Kapha is found in the stomach and works to digest the digestive processes.

6. **(Bhushan Patwardhan, 2005)** The study by Patwardhan Bhushan, Joshi Kapana, and Chopra Arvind aims to classify the human population based on the human leucocyte antigen (HLA) DRB1 gene. The study hypothesizes that a human phenome based on Ayurveda could provide an appropriate approach for identifying phenotypes

associated with hap-lotypes. The Prakriti classification, based on differences in physical, physiological, and psychologic characteristics, is independent of racial, ethnic, or geographical considerations. The study evaluated 76 subjects for their Prakriti and HLA DRB1 types. The results showed a reasonable correlation between HLA type and Prakrititype. The complete absence of the HLA DRB1*02 allele in the Vata type and of HLA DRB1*13 in the Kaphatype are significant, with a frequency of 4.715 and p-0.05. HLA DRB1*10 had higher allele frequency in the Kaphatype than in the Pitta and Vatatypes. The study concludes that Ayurveda classifies the whole human population in three major constitutions as Vata, Pitta, Kapha, and their possible combinations. The homologous relation to human genetic structure needs to be studied for validation. If validated, the hypothesis would have far-reaching implications for pharmacogenomics, modern genetics, human health, and Ayurveda.

The concept of "individuality" in a person is complex and requires a comprehensive understanding of genotypes and phenotypes. Current classification of human populations is based on ethnicity, geographical location, language, or self-reported ancestral history, but these labels are inaccurate representations of genetic clusters and do not reflect underlying genetic makeup. The complexity of human demographic history makes it difficult to explore such relationships.

The Human Genome Project has revealed the complexity in the relationship between genotype and phenotype. Identifying specific phenotypic features and correlating them with genotypes constitutes the basic program of phenomics. A proposed Human Phenome Project

aims to create comprehensive phenotypic data sets from different populations to find broad-based genomic representation. However, there is no consensus on how to define phenotypes or which phenotypic features are to be included in the database. Classifying human populations remains a major challenge for biomedical sciences.
Ayurveda, a traditional Indian system of medicine, is explored for this purpose. Ayurveda is built around the belief in the unique individuality of every subject and has a holistic approach. The foundations of Ayurveda for the prevention, diagnosis, and treatment of diseases are based on the concept of three Doshas: Vata(V), Pitta(P), and Kapha(K). Each Dosha has specific attributes expressed in physical, physiological, and psychologic characteristics. The dominance of one or more Doshas is assessed to classify individual Prakriti subtypes.

Prakriti is specific for each individual and is determined at the time of conception and remains unaltered over the individual's lifetime. Prakriti-specific treatment, including prescription of medications, diet, and lifestyle, is a distinctive feature of Ayurveda. The study hypothesizes that Prakriti has a genetic connotation that could provide a tool for classifying the human population based on broad phenotype clusters.

To substantiate this hypothesis, a panel study was conducted on human leucocyte antigen (HLA) gene polymorphism in the human population, classified by the three major Prakrititypes. In modern medicine, many chronic diseases have an immunogenetic basis, and susceptibility and resistance to such diseases are primarily associated with genes encoding peptide-presenting HLA molecules. HLA genes exhibit a

high degree of polymorphism in various ethnic groups and have many alternative forms of genes known in genetics as BHUSHAN ET AL.

7. **(Sharayu Phule, 2022)** The study aims to evaluate the correlation between Prakriti (Ayurveda constitution) and health-related physical fitness in normal healthy individuals aged 22 to 35 years. The research was conducted using a standardized, validated questionnaire and software (Ayusoft C-DAC) and the ALPHA-FIT fitness test battery. The researchers used Pearson's correlation coefficient (r) to study the association between Prakriti (Ayurveda constitution) and fitness factors.

   The study population consisted of 50 healthy individuals, aged 22 to 35 years. The Prakriti evaluation was done using a standardized, validated questionnaire and software (Ayusoft C-DAC). Health-related physical fitness was assessed using the reliable, valid, and field-based set of ALPHA-FIT fitness test battery. The results showed a significant positive correlation between Kapha dominant constitution and health-related physical fitness, while no significant correlation was found between health-related physical fitness and Vata and Pitta dominant constitution.

   The study concludes that identifying the Prakriti (Ayurveda constitution) may help in categorizing the population based on physical strength and fitness. This could help in promoting better health outcomes and overall well-being among the population.

In conclusion, the study highlights the importance of understanding the relationship between Prakriti (Ayurveda constitution) and health-related physical fitness in the context of traditional Indian medicine. By identifying the Prakriti (Ayurveda constitution), researchers can better understand the factors influencing physical health and improve the overall quality of life for individuals.

Ayurveda, India's natural health care tradition, introduces the concept of Prakriti (Ayurveda constitution), which genetically determines and classifies individuals into phenotypic groupings with specific characteristics like physique, temperament, and behavior. The constitution of an individual corresponds to the predominance of dosha, which are Vata, Pitta, and Kapha. The predominance of dosha is determined at the time of fertilization and is influenced by the mother's lifestyle, internal environment of the womb, and nature of gametes.

The Prakriti represents classical physical, physiological, and psychological characteristic features according to the attributes of the dominant dosha. For example, a person with a Kapha constitution has firmness, compactness of the body, a stable gait, excellent strength, while those with a Pitta constitution have medium body frame, looseness and softness of joints and muscles, moderate strength, and others with emaciated or dwarf bodies, inconsistent gait, unstable joints, and lesser strength.

The contemporary science of genomics, individualized medicine, and Ayurveda have inspired scholars to evaluate the relationship between Prakriti (Ayurveda constitution) and various objective parameters such

as Harvard step test, hand dynamometer, height-arm span, and cardio-vascular exercise capacity. This study aimed to evaluate the relation between Prakriti (Ayurveda constitution) and health-related physical fitness. Good health-related physical fitness indicates that a person has good ability to complete routine activities and leisure activities with vigor and resist the risk of developing metabolic disorders due to hypoactivity.

The ALPHA-FIT test battery for adults is a reliable, valid, and easily applicable field-based set of tests used for assessing all components of health-related physical fitness of adults. This tool helps categorize individuals based on their risk of cardiovascular disease or obesity. The study examined Prakriti (Ayurveda constitution) of healthy participants using a valid questionnaire (Ayusoft C-DAC) and assessed their health-related physical fitness using the ALPHA-FIT test battery for adults.

8. **(Shilpa Shankarrao Walkikar, 2023)** Prakriti, a Sanskrit term, is a fundamental concept in Indian philosophy and spirituality, including Hinduism and Jainism. It represents the character of the body about the Dosha, which is determined at the moment of conception based on the predominant Dosha. This character does not change throughout a person's lifetime and is responsible for their physical and mental attributes. There are seven types of Prakriti, and people with certain Prakriti have different bodies in terms of how they work, act, react to things in their environment, and are more likely to get diseases. Prakriti identifies how an individual reacts to environmental conditions, lifestyle changes, and drugs, and how susceptible they are to different

diseases. It is one of the first ideas in preventive and personalized medicine.

In Hinduism, Prakriti is associated with the material world and is often contrasted with Purusha, which represents the spiritual or divine aspect. According to some Hindu philosophical systems, the entire universe is created and sustained by the interaction between Prakriti and Purusha. In Jainism, Prakriti refers to the physical and material aspects of reality, including the substances and forces that make up the physical world. It is an integral part of Jain cosmology and is central to understanding the nature of existence and Karma in Jain philosophy. The concept of Prakriti is complex and has different interpretations in various philosophical schools within these traditions.

Prakriti refers to the Swabhava or temperament of an individual, encompassing their physical, psychological, intellectual, and emotional characteristics. It is influenced by external factors such as male and female reproductive tissue, season, uterine factors, diet, and lifestyle of the mother, and the proportion of the five elements viz. Akash, Vayu, Agni, Jala, and Prithvi.

The Prakriti Nirmana states that the dominant Doshas during the union of male and female gametes manifest the Prakriti of an individual. This Prakriti remains unchanged throughout the lifespan but is influenced by external factors. The factors responsible for the Prakriti include the Shukra and Shonita Prakriti, which are inherited from birth and transmitted to the child through Beeja Bhagas.

Kala and Garbhashaya Prakriti are also determinants of Prakriti, as the nature of Kala influences the natural variation of Doshas in the body. Matura Ahara and Vihara Prakriti, which involve food regimens aggravating different Doshas during pregnancy, also affect the Prakriti of the individual. Food regimens that aggravate the Doshas can lead to hunchbacks, blindness, lazyness, or dwarf-heighted Garbha. Mahabhuta Vikara Prakriti, generated by the predominance of the three Deha Doshas, is greatly influenced by the basic constituent materials of the universe, the Pancha Mahabhutas. These Mahabhutas are visualized in individuals born with the predominance of the Doshas, affecting both physical and psychological levels.

9. **(Surbhi, 2024)** The study explores the role of Tridosha Prakriti on psychological wellbeing in a sample of 200 individuals aged 25-60 years. The three doshas - Vata, Pitta, and Kapha - are believed to play a crucial role in an individual's physical and mental health. The findings revealed significant associations between Prakriti types and dimensions of psychological wellbeing. Individuals with predominant Kapha Prakriti exhibited higher levels of autonomy, purpose in life, environmental mastery, personal growth, and positive relations compared to Vata and Pitta types. Conversely, Vata constitutions displayed greater vulnerability across wellbeing markers, consistent with descriptions of anxious and sensitive temperaments.

   The convergence of traditional Indian medicine and modern psychology is emerging as a promising frontier in personalized healthcare. The ancient Ayurvedic concept of Prakriti, or the unique psycho-physiological constitution of an individual, holds significant implications for understanding and improving psychological well-

being. Prakriti, derived from the Samkhya philosophy, categorizes individuals into three primary Dosha types: Vata, Pitta, and Kapha, each with distinct physical, cognitive, and emotional characteristics. This holistic view of health integrates the physical, mental, and spiritual realms, aligning well with the growing recognition of the mind-body connection in modern psychology and healthcare.

Carola Ryff and her colleagues have significantly contributed to the understanding of psychological well-being, identifying six key dimensions: self-acceptance, positive relations, autonomy, environmental mastery, purpose in life, and personal growth. By analyzing these relationships, healthcare professionals might develop personalized interventions targeting psychosocial aspects linked to tridosha imbalances, ultimately improving patients' quality of life.

The Tridosha theory suggests that an individual's physical, mental, and emotional well-being is influenced by the balance of the three doshas: vata, pitta, and kapha. Each dosha represents different physiological and psychological characteristics, and imbalances in these doshas can lead to various mental health conditions.

Ayurveda views psychological well-being as an integral part of overall health, emphasizing the balance of mind, body, and spirit. The traditional Indian system of medicine posits that the Tridoshas - Vata, Pitta, and Kapha - are the fundamental forces that govern an individual's biological and psychological makeup. The concept of Sattvavajaya Chikitsa, or trance therapy, in Ayurveda highlights the significance of the mind-body connection in managing health and

disease. By addressing the imbalance of doshas, this approach aims to restore harmony between the physical and mental realms, thereby promoting psychological well-being.

Yoga, an integral part of the ancient Indian knowledge system, shares a deep connection with Ayurveda in its approach to mental health. Both yoga and ayurveda emphasize the importance of maintaining a balance between the doshas and gunas (qualities) for optimal physical and mental health. The concept of salutogenesis, proposed in the field of public health, aligns with the Ayurvedic approach to health, emphasizing the importance of environmental factors and individual awareness in shaping health outcomes.

The relationship between the Tridosha Prakriti (constitutional type) and psychological wellbeing is well documented in the ancient Ayurvedic texts. Ayurvedic principles and psychological wellbeing indicators like autonomy, environmental mastery, personal growth, and self-acceptance are well documented. Vata dosha individuals have higher psychological resilience scores, while those with dominant kapha dosha show higher emotional stability and lower neuroticism. Ayurvedic interventions for each dosha type can enhance psychological wellbeing parameters such as stress reduction, self-esteem enhancement, and overall quality of life. Studies also show significant variance in social wellbeing among elderly individuals.

10. **(Swati Dhole, 2023)** The Ayurvedic system of medicine, which focuses on the balance of five elements (earth, air, water, fire, and space), is crucial for human health and fitness. A person's prakriti can

be identified through various methods, including examination and palpation. Good health is considered a balance of these three doshas: Vata, Pitta, and Kapha.

Ayurvedic doctors evaluate a person's prakriti through clinical examination, including questions about physiological and behavioral traits. There is a need to develop models for predicting prakriti classes that have been used to predict various diseases. Ayurvedic doctors examine a person's prakriti by assessing physical features or inspecting their pulse nature. Based on this investigation, they identify, prevent, and cure diseases in patients by prescribing medicine.
The most common way to measure Tridosha is by heartbeat, a characteristic technique of Ayurveda where the practitioner places the index, middle, and ring fingers on the wrist and independently measures the strengths of the Vata, Pitta, and Kapha doshas. However, this technique lacks a quantitative measure of confidence and requires a master expert to obtain an accurate result.

An alternate technique to classify a person in Tridosha is based on physiological features like hair, eyes, nose, lips, skin color, etc. This alternative technique uses image processing techniques to automatically retrieve features from the images of human body parts to get the prakriti of the human being. Vata Dosha is the energy of movement and is composed of air and space. It has characteristics such as dry, light, mobile, rough, cold, and quick. People with this dosha have a tall, thin, small body and a long face, with dry, rough skin and a lack of shine. They are more prone to diseases such as arthritis, Alzheimer's, and diseases related to the nervous system.

Pitta Dosha, the energy of metabolism and digestion, is hot, sharp, and liquid, while Kapha Dosha, a lubricating energy, is composed of earth and water. These doshas are typically medium-build and medium-height individuals with soft, reddish skin and large, fat bodies. Digital Image Processing is a sub-group of digital signal processing that uses algorithms to extract features from images of physiological parts of a human being. It involves image segmentation, extraction of features using algorithms, and identification or verification.

Research has shown that traditional medical systems like Ayurveda, which deeply understand the effects of food on physiology, can help combat chronic lifestyle diseases and improve health and well-being. Traditional cuisines evolved alongside these medical systems to optimize nutrition in the context of local climate and food availability. The study of Ayurvedic methods affecting gene expression further increases the correlation and understanding between the current medical system and Ayurveda.

An intelligent human recognition system was designed based on Prakrit language image analysis and machine learning algorithms. Images of the language were taken with a webcam and processed with a Raspberry Pi development board. Algorithms were developed using OpenCV python libraries. Thirteen geometry, two non-geometric features, and two texture attributes were extracted from each tongue image to identify Prakrit Vata, Pitta, and Kapha.

In conclusion, understanding the doshas of Pitta, Kapha, and Digital Image Processing can help improve our understanding of human health and well-being. Advances in computational intelligence in materials science and the integration of Ayurvedic methods can further enhance our understanding of these concepts.

11. **(Jagruti Chaple,2014)** Prakriti, or Atma, is the unique psychosomatic temperament of an individual, encompassing their physical, functional, and behavioral characteristics. In the Indian system of healthcare, three basic mutually reciprocal mechanisms, namely, are responsible for maintaining homeostasis in human beings. The most accepted theory of Prakriti is based on tridosha, which classifies the entire human population into seven constitutional types. The body is considered a combination of various components. Each individual has a different combination and is therefore a distinct entity.

    Knowing one's Prakriti holds the key to health, liberation, and ultimately, self-realization. In Ayurveda, no two people are alike, and every person is born with a definite genetic constitution that determines body type, behavior patterns, needs, and predispositions. Three forms of energy work as a team in the body, like executives of an organization.

    There is a relation between parents and inborn children in blood grouping, and the hereditary gene is directly concerned with the inborn child's metabolic pattern. However, the concept of Prakriti and Doshas has not been used in modern techniques. Some questions remain

unanswered, such as why someone is successful, rich, poor, and varied in their life, and if it is an inborn character that leads to success.

Ayurveda, the native Indian system of medicine, divides the human population into seven constitutional types: all Vata, Pitta, Kapha, and Vata-Pitta. Each type has its unique characteristics, such as strength, appetite, adaptability, and compactness of the body. Understanding these doshas helps individuals understand themselves better and live according to their nature, creating a more appropriate life.

The characteristics of doshas can be applied to various aspects of an individual's life, such as lifespan, measuring, choosing the perfect partner in marriage, and choosing an appropriate profession or occupation. By assessing an individual's health status, such as strength, appetite, adaptability, and compactness, one can form conclusions about their health status.

Ayurveda also prescribes various foods and lifestyles according to an individual's constitution, which is crucial for diagnosing and treating underlying disorders. Treatment is dependent on the acceptability of the body to medications and the type of herbs, diets, and lifestyles that will help in treatment. The concept of Ayurveda considers the individual as a whole rather than just focusing on diseases.

Preventive and promotive health care is also considered in Ayurveda, with a diagnosis of diseases and the role of the body in disease management. Once the patient's constitution is known, treatment in Ayurveda is carried out in a way that leads to balanced, optimal health in all fields.

In conclusion, understanding and analyzing the doshas of an individual is essential for achieving health, liberation, and self-realization. By observing and adjusting one's lifestyle and diet, individuals can improve their overall well-being and achieve a more fulfilling life.

12. **(Dr. Sarika Yadav, 2017)** Ayurveda is a life science aimed at promoting health, preventing disease in healthy individuals, and alleviation disease in diseased individuals. The concept of Prakruti (Constitution) is described in all Ayurvedic classics in detail, emphasizing its importance. Prakruti comprises the anatomical, physiological, psychological, and social frameworks of a person and is employed to understand the temperament of an individual. It is explained in Dashvidha Parikshya Bhav, which are to be considered before employing treatment for the diseased, and in Swastha Chatushka, which emphasizes its importance in health.

    Prakruti makes every person unique, meaning physiological and psychological characteristics differ from person to person depending upon the Prakruti. These factors are important for knowledge of Nidan (diagnosis), Chikitsa (treatment), Pathya-Apathya (do and don'ts), and Sadhyata Asadhyata (prognosis) of Vyadhi (disease). If these factors are properly observed or followed, a person will keep a person Swastha (healthy).

    Current advances in Ayurveda, genomics, and personalized medicine have motivated several workers to explore a possible association between Prakruti and different objective parameters, encircling the fields of hematology, biochemistry, physiology, psychology, and

genomics. Ayurveda has a unique specialty of holistic approach, including all the factors necessary for maintenance of health and treatment of diseases.

Prakruti is a classification system in Ayurveda texts, categorized into Doshaja, Manasa, Bhautika, and Jatyadi Prakruti. Deha Prakruti is based on the dominance of Dosha, with seven types: Ekadoshaja, Vata-Pittaja, Vata-Shleshmaja, and Pitta-Shleshmaja, and Sama-Prakruti, which occurs due to the predominance of all three Dosha. Individuals of Sama-Prakruti are said to be Shreshtha (excellent) while Dwandja Prakruti are Nindya (condemned).

Manasa Prakruti is based on Manas Guna (Satva, Raja, and Tama), with three types: Satvik, Rajas, and Tamas. These are subdivided into sixteen/eighteen types. Bhautika Prakruti is based on the dominance of Patanmahabhuta, with five types: Parthiva, Apya, Taijas, Vayaviya, and Akashiya. Jatyadi Prakruti is influenced by factors such as Shukra Prakruti (sperm), Shonita Prakruti (ovum), Kala Prakruti (time or season), Garbhashaya Prakruti (condition of uterus), Maturahar-Vihar Prakruti (diet and behavior of mother), and Mahabhutavikar Prakruti.
Prakruti knowledge is crucial in both healthy and diseased individuals, as it covers all physical, mental, psychological, and social aspects. It is included in the tenfold investigation methods, such as Dashavidha Atura-Pariksha, and helps diagnose and provide detailed instructions for adopting a healthy lifestyle. Prakruti knowledge helps achieve the goals of Ayurveda, such as disease prevention and treatment.

In the explanation of Rogayatana (base of diseases), Asatmyaindriyartha Samyoga (improper use of drugs) emphasizes the importance of Prakruti knowledge in achieving healthy and effective health.

13. **(Devnarayan Khatua,2023)** In precision medicine, the focus has shifted from a population-based one-size-fits-all approach to an individualized approach, aiming to tailor medicine according to an individual's genetic make-up and response to drug, diet, and environment. Machine learning algorithms are being developed to dissect inter-individual variability in the population, which is important for disease prevention in healthy individuals and early actionable interventions. In Ayurveda, an individual's constitution type, Prakriti, is used for predicting healthy and disease trajectory and individualized management. Prakriti refers to the nature of the body in terms of doshas, and the time of conception is decided according to the predominance of doshas. Any population can be stratified into seven Prakriti groups, with the Vata, Pitta, and Kapha being the three phenotypic extremes with contrasting disease susceptibilities and responses. The study uses powerful dense neural network deep learning algorithms for predicting Prakriti classes, and benchmarks the method with state-of-the-art supervised machine learning. The study provides a computational framework for predicting Prakriti, which can be implemented in large-scale precision medicine studies.

Inter-individual variability in a population contributes to differences in disease susceptibility, prognosis, and response to the environment. This variability is evident in variable responses to medications and side

effects. Efforts are ongoing to understand the basis of this inter-individual variability for early diagnosis, prevention, and management. Precision medicine has emerged as a new field that aims to provide tailored recommendations based on an individual's attributes. Technologies such as sensors, monitoring devices, and high-throughput multi-omics platforms are being developed to capture the diverse physiological, metabolic, and cellular readouts of an individual in spatio-temporal dimensions. Big Data Analytics from these multidimensional readouts could help distinguish patterns in populations and discover signatures specific to individuals.

The enormous heterogeneity in expression and sequence variation of genes, coupled with genetic network interactions and environmental factors, contributes to phenotypic diversity in health and disease. The definition of phenotypes relies on easily measurable physical attributes such as height, weight, BMI, or those measured in disease conditions such as diabetes, coronary heart disease, rheumatoid arthritis, Celiac's, Parkinson's, Alzheimer's, multiple sclerosis, etc. In the present era of phenomics, emphasis is shifted to deep and composite phenotypes along with molecular endo-phenotypes from omics studies for identification of groups that differ in susceptibility, prediction, and response to therapy.

There is still an unmet demand for developing phenotypic methods for the classification of the healthy individual at a system level. Integrating holistic phenotyping concepts from traditional knowledge-based medicine is gaining credence lately. Ayurveda, the Indian system of traditional medicine, has a personalized approach to healthcare,

classifying individuals into seven constitution types called “Prakriti.” Knowledge of individuality based on Prakriti forms helps in customizing the therapeutic regime.

CHAPTER III

METHODOLOGY

3.1 Selection of subjects

Random sampling has been used to select the subjects and collect the data. The participants will be chosen from sports specializations, namely volleyball, handball, and hockey, and aged between 16 to 25 years.

3.2 Selection of variables

S. No.	Dependent variable	Independent variable
1	Vata dosha	Different Sports specialization
2	Pitta dosha	
3	Kapha dosha	

3.3 Criterion measure

Prakriti will be assessed using the self-assessment questionnaire by Prof. Kishore Patwardhan and Rashmi Sharma, IMS, BHU, Varanasi.

Tripathi, P. K., Patwardhan, K., & Singh, G. (2010, August 30). *Supplementary Material*.

3.4 Collection of the data

The researcher explained the objective of the study to the participants and provided detailed instructions regarding how to fill out the questionnaire. All necessary clarifications were given to ensure that each participant clearly understood the process. Adequate time was spent addressing any questions or doubts that arose during the instruction phase. Once the investigator was assured that the participants had comprehended the instructions properly, the questionnaires were distributed individually.

Participants were given ample time to thoughtfully complete the questionnaire without any pressure or time constraints. Throughout the process, the researcher maintained a supportive environment to ensure honest and accurate responses. After the participants had completed the questionnaires, they were carefully collected by the researcher for further analysis.

The self-assessment questionnaire was designed to assess the Ayurvedic constitution (Prakriti) of the participants and consisted of a total of 25 items. Of these, 12 items pertained to Kapha Prakriti, 5 items to Pitta Prakriti, and 8 items to Vata Prakriti.

3.5 Statistical procedure

For a better understanding of the data, descriptive statistics were used, and to check the relationship between the Prakriti and the Sports Performance, the one-way ANOVA was used as a statistical technique on IBM SPSS 24, at a 95% confidence level.

CHAPTER IV

ANALYSIS OF DATA AND RESULTS

4.1 Analysis of data

The researcher has analyzed the data collected on selected subjects, as he has already discussed the variables in Chapter III. The analysis of data was carried out by using IBM SPSS version 24.

Table 1: Mean Of Different Games with Different Prakriti Types

PRAKRITI TYPE	DIFFERENT GAMES	MEAN	SD'S	N
VATA	HOCKEY	35.0900	12.71	10
	HANDBALL	50.9180	23.59	
	VOLLEYBALL	37.2820	19.67	
PITTA	HOCKEY	32.4300	9.99	10
	HANDBALL	37.3940	14.92	
	VOLLEYBALL	38.1960	15.60	
KAPHA	HOCKEY	49.8560	11.95	10
	HANDBALL	50.7490	13.56	
	VOLLEYBALL	54.5100	10.84	

Table 1 reveals that, based on their Ayurvedic prakriti types (Pitta, Kapha, and Vata), athletes' performances in three distinct sports, hockey, handball, and volleyball, are compared in this data. In each sport, ten individuals represent each prakriti type, and the mean scores and standard deviations show how well each group performed.

Handball had the highest mean score among individuals with Vata Prakriti (50.92), suggesting it may be a sport that aligns closely with the mental and physical traits of the Vata constitution. According to Ayurveda, Vata types

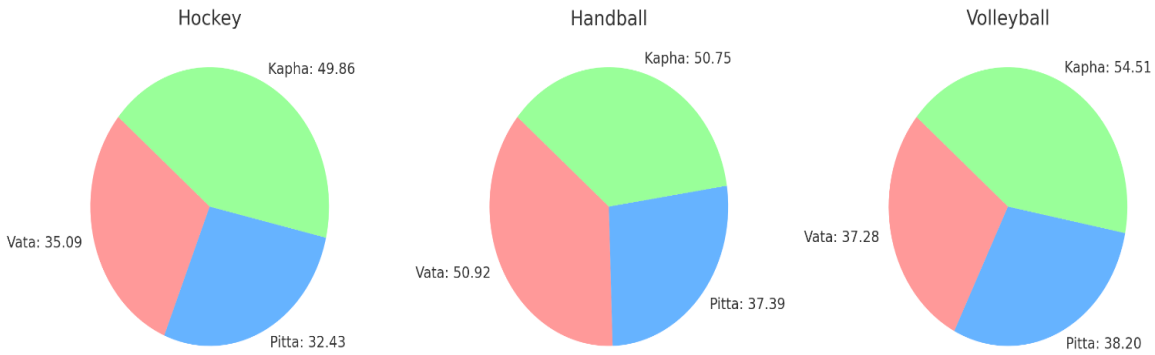
are generally swift, nimble, and vivacious—qualities that are beneficial in a fast-paced and dynamic sport like handball. However, this group's substantial standard deviation (23.59) indicates that individual performance varies greatly. This could point to inconsistency, possibly due to the naturally erratic nature of Vata individuals, which may lead to fluctuations in their levels of coordination, endurance, or attention. The somewhat lower scores in hockey (35.09) and volleyball (37.28) imply that these sports may not fully correspond with the predominant Vata characteristics or that individuals with Vata Prakriti may require additional training to excel in them.

Pitta prakriti people, on the other hand, had similar mean scores in all three sports: 32.43 in hockey, 37.39 in handball, and 38.19 in volleyball. Regardless of the sport, this stability implies that Pitta types keep a balanced and adaptive character, functioning at a reasonable level. According to Ayurvedic philosophy, Pitta people are renowned for their persistence, concentration, and muscularity, which may help them adjust well to a variety of sports. This group's moderate standard deviations show that the members are quite consistent with one another. Although Pitta people are consistent and disciplined, their performance does not peak in any one game, which may suggest that they lack a clear advantage in any of these activities without specialized instruction.

With the greatest mean scores in all three sports, 49.86 in hockey, 50.75 in handball, and 54.51 in volleyball, the Kapha Prakriti people stand out. This pattern suggests that Kapha types would be more athletic overall, especially in sports like volleyball that require strength and stability. According to Ayurveda, people with Kapha have exceptional strength, endurance, and composure qualities that are advantageous in sports requiring perseverance and persistent effort. Additionally, this group's comparatively low standard

deviations (varying from 10.84 to 13.56) indicate that their performance is highly consistent and dependable. This implies that Kapha people not only often do well but also tend to keep up that performance around a variety of people and circumstances.

Graph 1. Representation of the distribution of prakriti in different spors.



Based on the above data, a characterization of the sportsperson has been done, representing the Ayurvedic principles.

Table 2: Classification of characteristics based on the Dominance of the Prakriti in different games.

Sports	**Hockey**	**Handball**	**Volleyball**
Dominant Prakriti	**Kapha**	**Kapha-Vata**	**Kapha**
Physical	Strong, well-balanced physique, muscular endurance, powerful lower body, and excellent core strength.	**Vata:** Lean, light, agile, quick-footed. **Kapha:** Strong, broad shoulders, powerful grip, good core strength.	Tall, well-built, strong upper body for powerful spiking & blocking, excellent jump strength.

Physiological	High stamina, strong metabolism, balanced energy levels, and low susceptibility to fatigue.	**Vata:** High bursts of energy but quick fatigue. **Kapha:** Sustained endurance, steady metabolism, good recovery ability.	Balanced energy output, great lung capacity, stable endurance, and low fatigue levels.
Psychological	Stable, disciplined, patient, and able to handle high-intensity competition.	**Vata:** Quick-witted, fast decision-maker, spontaneous. **Kapha:** Stable, focused, resilient, patient under stress.	Calm, methodical, disciplined, and mentally steady even in long matches.
Behavioral	Structured play, excellent positioning, consistent performance.	**Vata:** Excels in transitions, highly reactive. **Kapha:** Reliable, defensive, solid presence in the team.	Structured, predictable, consistent, maintains strategic positioning.
Cognitive	Methodical thinker, long-term strategist, good at maintaining concentration	**Vata:** Adaptable and reacts quickly to dynamic play. **Kapha:** Consistent, plans ahead, thinks strategically.	Excellent focus, long-term planner, excels in structured play.
Emotional	Emotionally resilient, does not get easily frustrated, and stays composed under pressure.	**Vata:** High energy but prone to stress & overthinking. **Kapha:** Emotionally	Highly composed, rarely loses temper, maintains emotional control in high-pressure moments.

		controlled, calm, secure.	
Recovery & Injury Resistance	Recovers well, is resistant to injuries, strong immune system, durable against physical challenges.	**Vata:** Prone to minor injuries due to quick movements. **Kapha:** Strong recovery, resistant to fatigue and injury.	Strong immune system, rarely suffers injuries, and quick recovery from fatigue.
Social	Highly cooperative, strong team spirit, supportive, thrives in structured teamwork.	**Vata:** Adaptable, social, enjoys fast-paced environments. **Kapha:** Reliable teammate, structured leader, supportive.	Team-oriented, thrives in group dynamics, and dependable in collaborative play.

Hockey and Kapha Dominance

Hockey players frequently exhibit Kapha Prakriti, a constitutional typology characterized by stability, endurance, and resilience. (Charaka Samhita, Sūtrasthāna 7/45-47) These individuals possess a robust, muscular physique, exceptional stamina, and emotional equilibrium, which are essential for high-intensity activities, defensive strategies, and team dynamics. Their relatively slow reflexes and enhanced immune function facilitate rapid injury recovery and consistent performance in demanding matches.

Handball and Vata-Kapha Dominance

Handball players exhibit a Vata-Kapha mixed dominance, balancing agility and speed (Vata) and stability and endurance (Kapha) (Patwardhan et al.,

2005; Charaka Samhita, Sūtrasthāna 7/39-41, 7/45-47) Vata characteristics, like rapid reaction time and lean body composition, are beneficial for swift transitions and decision-making. However, those with Vata tend to experience fatigue more quickly, making Kapha's endurance and recovery essential in handball. This dual dominance allows players to maintain rapid movement while maintaining effective defensive positions (Sharma, 2014).

Volleyball and Kapha Dominance

Volleyball players exhibit a Kapha Prakriti, characterized by patience, endurance, and powerful movements. (Charaka Samhita, Sūtrasthāna 7/45-47; Rastogi et al., 2012). These traits enable powerful blocking, controlled jumps, and structured gameplay. In contrast to hockey, Kapha's characteristics contribute to defensive resilience in volleyball. Individuals with Kapha constitution have elevated lung capacity and stable energy levels, enabling them to sustain rallies, maintain composure, and execute well-coordinated strategies. Their composed temperament allows them to remain focused under pressure (Patwardhan et al., 2005).

4.2 Discussion of the findings

According to the current study, among male athletes aged 16 to 25, Pitta Prakriti was the least prevalent constitutional type in all three chosen sports: hockey, handball, and volleyball. Given that Ayurvedic literature describes Pitta individuals as having a robust metabolism, high energy levels, and a competitive spirit- qualities generally advantageous in sports performance- this discovery is significant.

Pitta-type people frequently performed worse in endurance and team-based activities than Vata and Kapha types, indicating a substantial difference in sports performance results. Pitta was the least common, which is consistent

with the current findings and may suggest that this Prakriti is naturally selected against in these particular sporting circumstances. **(Wazir Singh, 2023)**

Furthermore, Pitta people are more likely to have inflammatory diseases and internal warming, which may hinder their performance in sports requiring prolonged effort and quick recovery **(Patel et al., 2019).** Due to these innate inclinations, people with Pitta Prakriti may be less likely or able to stick with physically demanding, heat-producing sports like hockey and handball, which might result in a self-selection bias.

Kapha was more strongly correlated with strength and endurance, whereas Pitta Prakriti was not significantly correlated with high levels of physical fitness in healthy persons. This might help to explain why, whether intentionally or unintentionally, coaches and selectors may favour players who are Kapha- or Vata-dominant for various sports **(Sharayu Phule, 2022)**

According to Ayurveda, Pitta Prakriti does better in colder, more cerebral settings where their leadership and keen intellect may be exploited, as opposed to sports requiring a lot of physical stamina and temperature control. This might further reduce Pitta types' attractiveness or skill in demanding outdoor team sports.

Possible Explanations for Low Pitta Representation

Several factors may contribute to the underrepresentation of Pitta Prakriti among these athletes:

1. Susceptibility to Heat-Related Problems: Because of their innate characteristics, Pitta people are more vulnerable to heat-related imbalances **(पित्त प्रकोप)**, such as inflammation and overheating **(उष्ण)**. Sports that require

a lot of physical exercise, frequently outside, including Hockey, Handball, and Volleyball, might make these problems worse. Pitta people may get uncomfortable or be more susceptible to heat-related illnesses, preventing them from engaging in these sports for an extended period **(Lad, 2002; Ramakrishna, 2013).**

2. Physiological Stress and Recovery: Pitta types have faster depletion of energy stores, even if they are advantageous for energy generation. Pitta people may find it more difficult to recover quickly and maintain endurance due to the demanding nature of these activities **(Patel et al., 2019).**

3. Psychological Factors: The strategic and cooperative nature of team sports like Hockey, Handball, and Volleyball requires establishing a balance between team dynamics and individual motivation. Pitta people could like settings where individual achievement is valued more highly, which could affect the sport they choose **(Sharma & Kumar, 2017).**

The results imply that although Pitta people could possess certain positive characteristics, their physiological sensitivity to heat, vulnerability to overexertion, and risk of inflammation may be factors in their underrepresentation in sports like hockey, handball, and volleyball. Future studies should examine if these trends hold for other sports and environmental settings, which could provide more complex training adjustments based on Prakriti.

CHAPTER V

SUMMARY, CONCLUSION, AND RECOMMENDATION

5.1 Summary

This dissertation examines the applicability of Ayurvedic Prakriti classification—Vata, Pitta, and Kapha—in characterizing the physical and psychological attributes of athletes, utilizing principles from the Charak Samhita. The study focuses on male athletes aged 16–25 years engaged in volleyball, handball, and hockey to identify the predominant doshic constitution among these players and analyze its impact on sports performance traits such as strength, endurance, agility, psychological resilience, and injury susceptibility. A standardized self-assessment questionnaire developed by Patwardhan and Sharma (IMS-BHU) was employed to ascertain each athlete's Prakriti type.

The sample consisted of 30 male athletes, with 10 participants from each sport. Statistical analysis was conducted using IBM SPSS 24, and a one-way ANOVA was applied at a 95% confidence level to explore the relationship between sport-specific performance and the athletes' Prakriti types. The mean performance scores of Kapha-dominant players were significantly higher across all sports compared to those of Pitta and Vata types. Specifically, Kapha types scored 49.86 (SD = 11.95) in hockey, 50.75 (SD = 13.56) in handball, and 54.51 (SD = 10.84) in volleyball. Conversely, Vata-dominant players exhibited variable performance with higher standard deviations: 50.92 (SD = 23.59) in handball, 35.09 (SD = 12.71) in hockey, and 37.28 (SD = 19.67) in volleyball. Pitta athletes demonstrated moderate performance with means ranging from 32.43 to 38.19 and smaller SDs, indicating more consistency but lower peak performance.

The ANOVA results indicated statistically significant differences among the groups, thereby supporting the hypothesis that athletes exhibit distinct performance characteristics based on Prakriti dominance. The findings suggest that individuals with a Kapha dominance demonstrate superior physical endurance, emotional stability, and recovery capacity, rendering them more suitable for sports requiring sustained effort and muscular endurance. Conversely, individuals with a Vata dominance excel in speed and agility but are more susceptible to inconsistency and injuries. Meanwhile, those with a Pitta dominance are competitive and energetic but may be prone to heat-related issues and overexertion. This research provides compelling evidence for the integration of Ayurvedic principles into athlete profiling and sports training. By tailoring training, nutrition, and recovery plans according to Prakriti, coaches and sports scientists can enhance athletic performance and mitigate injury risk. The study establishes a scientific connection between classical Ayurvedic diagnostics and modern sports science, advocating for a holistic, constitution-based approach to optimizing athlete development.

5.2 Conclusion

Kapha Prakriti emerged as the most prevalent and performance-enhancing constitution across the three sports examined.

- Volleyball players exhibited the highest representation of Kapha Prakriti, which is associated with superior strength, stamina, and consistency qualities that align well with the explosive and endurance-oriented nature of the sport.

- Similarly, hockey players demonstrated a predominance of Kapha characteristics, including muscular strength, emotional stability, and excellent recovery capabilities, all of which contribute to their consistent performance under pressure.

- In the case of handball players, a dual dominance of Kapha-Vata was observed, combining the agility, speed, and responsiveness of Vata with the endurance and physical strength of Kapha. This blend of Prakriti is particularly advantageous for a fast-paced, multidirectional sport such as handball.

- Conversely, Pitta Prakriti was identified as the least dominant across all sports. Although individuals with Pitta Prakriti possess high metabolism, energy, and competitiveness, their performance levels were moderate and relatively consistent, lacking the peak output observed in Kapha types. Furthermore, Pitta individuals may be more susceptible to overexertion, inflammation, and heat-related issues, which could impede performance during prolonged physical exertion.

5.3 Recommendation

- Future research should examine a wider range of sports, including individual events.

- Future studies should include a larger and more diverse sample size, including female athletes and players from various geographic, cultural, and socio-economic backgrounds.

- Controlled experimental studies where training, diet, and recovery strategies are modified based on Prakriti classification should be carried out to validate the practical impact of Ayurvedic profiling in sports.

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The self-assessment questionnaire to assess *Prakriti**

Sl. No.	Question/statement	*Guna*	Is your answer the following?	Scores to be allotted if your answer is the one that is mentioned in the previous column	Allot the Scores in this column
		KAPHA			
1.	Whether your skin remains oily throughout the year in comparison to others?	*Snigdha*	Yes	120	
2.	Are your body-hairs & skin shiny, even when no oil or moisturizer is used?	*Shlakshna*	Yes	120	
3.A.	Are you considered attractive among your friends?	*Mridu*	Yes	40	
3.B.	Do even mild or trivial injuries on your body make you upset?	*Mridu*	Yes	40	
3.C.	Among your family members, is your complexion considered fairer?	*Mridu*	Yes	40	
4.	Do you think you have intense sexual desire?	*Madhura*	Yes	120	
5.A.	Have you got well built muscles?	*Saara*	Yes	60	
5.B.	Do you change your body posture frequently? (You cannot manage yourself in a stable posture for a long duration.)	*Saara*	No	60	
6.	Do you have a well-nourished & normally developed body? (You are neither malnourished nor obese.)	*Sandra*	Yes	120	
7.A.	Are you lazy and disinterested in activities like morning walk/ jogging, swimming or any type of outdoor games?	*Manda*	Yes	40	
7.B.	Are you slow in consuming the food? (Even after all have left the dining hall, you are still consuming the same amount of food).	*Manda*	Yes	40	

7.C.	When you go to morning walk or college or office, do you walk slowly in comparison to others?	*Manda*	Yes	40	
8.A.	If you are assigned any work, do you take some extra time to start it?	*Stimita*	Yes	40	
8.B.	Do you get irritated easily? (For example, when you don't get breakfast on time in your hostel or when the power goes off while watching a cricket match or your favourite movie on television).	*Stimita*	No	40	
8.C.	Are you late to develop/suffer from symptoms after exposure to common causative factors? (For example, during seasonal changes, when your friends are easily caught up with flu etc., you are still healthy among them).	*Stimita*	Yes	40	
9.	Does your gait (style of walking) change with respect to speed or manner frequently?	*Guru*	No	120	
10.A.	Do you feel hungry more frequently and do you consume more food in comparison to others?	*Shita*	No	30	
10.B.	Do you tolerate heat easily?	*Shita*	Yes	30	
10.C.	Do you consume liquids in more quantity and frequency in comparison to others?	*Shita*	No	30	
10.D.	Do you perspire less in comparison to others?	*Shita*	Yes	30	
11.	Are sounds produced frequently in your joints on movement?	*Picchila*	No	120	
12.A.	Have you got a good/ attractive complexion?	*Achcha*	Yes	60	
12.B.	Have you got sweet & pleasant voice?	*Achcha*	Yes	60	
				1440	**Total=**
PITTA					
1.A.	Are you more comfortable in winter than summer?	*Ushna*	Yes	17	

1.B.	Among your family members, is your complexion considered fairer?	*Ushna*	Yes	17	
1.C.	Does your temperature of oral cavity remain towards upper limit of normal range?	*Ushna*	Yes	17	
1.D.	Do you have excessive black moles, Freckles etc on your skin? Or Have you noticed new appearance of black moles often on your skin?	*Ushna*	Yes	17	
1.E.	Do you feel excessive hunger & thirst in comparison to others?	*Ushna*	Yes	17	
1.F.	Have you experienced premature graying, wrinkling of skin & early baldness?	*Ushna*	Yes	17	
1.G.	Do you have soft, scanty, brown hair on your face, body & head?	*Ushna*	Yes	17	
2.A.	Do you involve yourself in risky & heroic activities requiring physical strength often?	*Tikshna*	Yes	24	
2.B.	Do you have ability to digest large quantities of food easily?	*Tikshna*	Yes	24	
2.C.	Do you take large quantities of food & drink in comparison to others?	*Tikshna*	Yes	24	
2.D.	Do you get easily irritated for small/negligible problem in day-to-day life?	*Tikshna*	Yes	24	
2.E.	Do you consume food more frequently than others? (5-6 times/day)	*Tikshna*	Yes	24	
3.A.	Do you have soft & loose muscle bulk especially around the joints?	*Drava*	Yes	60	
3.B.	In comparison to others do you pass urine & stool in large quantities and do you perspire more?	*Drava*	Yes	60	

4.	Do your friends complain of bad smell being emitted from your body & mouth?	*Visra*	Yes	120	
5.	Do you think you have intense sexual desire?	*Amla+ Katu*	No	120	
				600	**Total=**
		VATA			
1.A.	Whether your skin remains dry throughout the year in comparison to others?	*Ruksha*	Yes	30	
1.B.	Is your body undernourished/ emaciated?	*Ruksha*	Yes	30	
1.C.	Have you got rough, low, broken or obstructed voice?	*Ruksha*	Yes	30	
1.D.	Does Your sleep last less than 6 hours per day? Or Can your sleep be disturbed easily?	*Ruksha*	Yes	30	
2.A.	Do you change walking speed & style from time to time?	*Laghu*	Yes	40	
2.B.	Do you keep changing your food habits from time to time?	*Laghu*	Yes	40	
2.C.	Do you keep changingyour walking / jogging habit from time to time?	*Laghu*	Yes	40	
3.	Do you keep your joints, eyes, eyebrows, jaw, lips, tongue, head, Shoulder, hands & feet frequently moving?	*Chala*	Yes	120	
4.A.	Are you considered a talkative among your friends?	*Bahu*	Yes	60	
4.B.	Do you have prominent veins & tendons all over the body?	*Bahu*	Yes	60	
5.A.	Do you generally start the work assigned to you immediately?	*Shighra*	Yes	15	
5.B.	Do you get irritated easily? (E.g., when you do not get breakfast on time in your hostel or when the power goes off while watching a cricket match or your	*Shighra*	Yes	15	

	favourite movie over television)				
5.C.	Do you get frightened easily?	*Shighra*	Yes	15	
5.D.	Do you make friends easily & also lose them easily?	*Shighra*	Yes	15	
5.E.	Do you generally learn things quickly? Or Do you have a good grasping power?	*Shighra*	Yes	15	
5.F.	Is your long term memory weak? (E.g., you can remember only few names of your friends at your primary school).	*Shighra*	Yes	15	
5.G.	Are you more comfortable in summer? Or Do you prefer hot/warm drinks over cold drinks?	*Shighra*	Yes	15	
5.H.	Do you generally develop symptoms immediately after exposure to common causative factors?(You are easily caught by diseases like flu, allergy during seasonal changes).	*Shighra*	Yes	15	
6.A.	Do you shiver in winter season more than your friends?	*Shita*	Yes	60	
6.B.	Do you often feel stiffness in your body after exercise, travelling?	*Shita*	Yes	60	
7.	Are your nails, teeth, hands, feet and hairs on your body and face rough?	*Parusha*	Yes	120	
8.A.	Do you have cracks on the body especially on the heels?	*Vishada*	Yes	60	
8.B.	Are some crackling sounds produced in your joints during movements?	*Vishada*	Yes	60	
				960	**Total=**

$$\frac{Total\ scores\ scored\ by\ an\ individual\ \ for\ a\ \ Dosha}{Total\ scores\ \ allotted\ \ to\ that\ Dosha} x100$$

Final percentage scores for*Vata* =
Final percentage scores for*Pitta*=
Finalpercentage scores for*Kapha*=

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