

CONCEPT OF PRAKRITI IN AYURVEDA AND ITS SIGNIFICANCE IN EVADING LIFESTYLE DISORDERS

Dr. Snehal V. Kukade¹, Dr. Smita Mekhale², Dr. Mahendra Agrawal³, Dr. Divya Shahu⁴

¹MD (Samhita Sidhhant), Assistant Professor, Dept. of Sanskrit Samhita Sddhant
D.M.M. Ayurveda Mahavidyalaya, Yeotmal

²Assistant Professor, Dept. of Rachana Sharir, D.Y.Patil University School of Ayurveda,
Navi Mumbai.

³Professor Dept. of Panchkarma, B.M. Ayurveda Mahavidyalaya, Nagpur.

⁴Assistant Professor, Dept. of Sanskrit Samhita Sddhant, SNKA Medical College &
Hospital, Chandaus, Aligarh (UP)

ABSTRACT

The incidence of lifestyle diseases have been emerged as major health concern and continue to be the major cause of mortality worldwide. Few concept of Ayurveda can be applied successfully for prevention and treatment of lifestyle disorders. *Prakriti* is one of such concept. *Prakriti* means manifestation of special characteristics due to predominance of *Doshas* (*Vata*, *Pitta* and *Kapha* the functional component of body). All the physiological process are directly controlled by *Vata-Pitta* and *Kapha* (three body humors) and *Mansika Doshas* (functional psychic factors) thus healthy status can be maintained by maintaining normality of *Prakriti*. By knowing the *Prakriti* one will know about the strength of a person to combat with the lifestyle diseases as person having equilibrium in *Prakriti* is said to be having best immunity and strength. Disequilibrium in *Prakriti* greatly increases the risk of lifestyle diseases. Hence in present work an attempt has been made to elaborate the concept of *Prakriti* in Ayurveda and its significance in evading lifestyle disorders. It is clear from literary study and recent research works that *Prakriti* and lifestyle disorders are closely correlated with each other. Ayurveda has provided detail guideline in the form of *Dinacharya* and *Rutucharya* to maintain normal functioning of *Dosha* related with specific *Prakriti*.

Keywords: Ayurveda, *Prakriti*, lifestyle disorders, *Vata-Pitta* and *Kapha*

INTRODUCTION

Ayurveda a holistic medical science has given emphasis on maintaining health of healthy individuals and treating illness of diseased one. World is being attracted towards potential of therapeutics of Ayurveda as it describes ways not only to manage various diseases but also to prevent diseases including lifestyle disorders.

Ayurveda provides better solution in the forms of proper dietary management, lifestyle advises, detoxification and bio-purification procedures such as *Panchakarma*, medicaments, and rejuvenation therapies. Treating the patient as a whole, meaning intervention targeted toward complete physical, psychological, and

spiritual well-being is the holistic approach of Ayurveda which makes this science a wonderful option in lifestyle disorders.

The term lifestyle incorporates *Ahara* (food habits) and *Vihara* (do's and don't's in lifestyle). Lifestyle related disorders occur only because individual are not using or adopting way of life according to self-constitution of body. It is interesting to note that the *Ayurvedic* classics have emphasized the role of faulty lifestyle and inappropriate dietary habits in the causation and pathogenesis of diseases. It is noticed that most of the lifestyle related disorders and dietary habits as opposite to individual's *Prakriti* (special body constitution) described in *Ayurveda*; in terms of *Dinacharya* (daily regimen), and *Ritucharya* (seasonal regimen) and wholesome –unwholesome diet. Therefore, it clearly indicates that if a person wants to be healthy, he must design his lifestyle according to his *Prakriti*.

The incidence of lifestyle diseases such as hypertension, diabetes mellitus, dyslipidemia, and overweight/obesity associated with cardiovascular diseases is high on the rise. With rapid economic development and increasing westernization of lifestyle in the past few decades, prevalence of these diseases has reached alarming proportions among Indians in the recent years.¹ Hence in present work an attempt has been made to elaborate the concept of *Prakriti* in Ayurveda and its significance in evading lifestyle disorders.

Material and methods: Present work has been done based on critical review of classical information, published research works, modern literature and research works conducted at various institutes. The possible correlation has been made between collected information and has been presented in systematic way.

Observations and results: Based on the critical review of classical and recent information, the following observations have been found relevant to this study.

Concept of *Prakriti*: This constitution comprises of both “physical body” as well as “mental body” *Prakriti* means “nature” or natural constitution of the human body. ‘*Pra*’ means the ‘beginning’ or ‘source of origin’ and ‘*kriti*’ means ‘to form’. Put together *Prakriti* means ‘natural form’. *Prakriti* word derived from ‘*Prakarotiiti*. *Prakriti* means manifestation of special characteristics due to predominance of *Doshas* (*Vata*, *Pitta* and *Kapha* the functional component of body), & in these *Prakriti* indicates predominance of specific *Dosha* in a human being. There are other factors which also determine the constitution of a body in minor way.² *Charaka* has mentioned several additional factors which determine the *Prakriti* such as nature of the season, condition inside the uterus, food of mother, during pregnancy, other regimens adopted by mother during pregnancy, *Sukra-Sonita* (sperm-ovum) of father and mother and *Mahabhuta Vikara*.³ These factors get afflicted with one or more of the *Doshas* which are dominantly associated with the above mentioned factors. Therefore, *Prakriti* of some people is dominated by *Vata*, some others by *Pitta*, some others by *Kapha* and some others by the combination of two *Doshas* and some cases, equilibrium are maintained by *Dosha*.^{4,5} Although all these factors mentioned above play an important role in determination of *Prakriti*.

***Prakriti* and lifestyle:** *Prakriti* and lifestyle are natural phenomena as well as occur essentially. All the physiological process are directly controlled by *Vata-Pitta* and *Kapha* and *Mansika Doshas* (functional psychic factors) thus by the predominant *Dosha* is a particular type of *Prakriti*.

The principles of maintaining a proper well-being of the body and lifestyle are two folds- the observance of personal, moral, seasonal conduct and for maintaining way of life it must be opposite to *Prakriti* of an individual as the objective of the science is establishing equilibrium of the body. *Prakriti* based guidelines for diet and lifestyle result in healthy tissues and homeostasis of *Doshas*. Every healthy individual should know about his/her *Prakriti*, so that one can know which are the healthy lifestyle and eating habits for him, by adopting which he can maintain his healthy state and prevent any disease which may come. For e.g., if a person is found to have *Pitta* predominant *Prakriti* he is advised all those food stuffs which produce more heat in the body. It is because he is having already increased heat in the body and by taking more heat producing regimens he may acquire many disease. This can be done only if we know the *Prakriti*. By knowing the *Prakriti* one

will know about the strength of a person to combat with the lifestyle diseases. Out of rest six types, *Prakriti* with one *Dosha* (*Prakriti* formed from one body humor) have better resistance than two *Dosha* *Prakriti* (*Prakriti* formed from two body humors). *Vata-Pitta-Kapha* *Prakriti* is susceptible to disease in decreasing order. In general by knowing your *Prakriti* you can be aware of the do's and don'ts for daily routine and to be in healthy state you can be aware of, what type of disorders or ailments your body can have in future, so that you can change your lifestyle.⁶ There is correlation between specific *Prakriti* and lifestyle disorder which is depicted in table no.1. According to type of *Prakriti*, Ayurveda has given some specific dietary regimens are needed to be followed for prevention of various lifestyle disorders.

Table no.1:- Common lifestyle diseases and type of *Prakriti* most prone for some disorders:

Sr.	Lifestyle disorder	Correlated Ayurvedic condition	Most prone <i>Prakriti</i>
1	Atherosclerosis	<i>Dhamanipraticchaya</i>	<i>Kapha</i> and <i>Vata</i>
2	Alzheimer's disease	<i>Smriti Bhransha</i>	<i>Kapha</i> and <i>Vata</i>
3	Some types of cancer	<i>Granthi</i> and <i>Arbuda</i>	<i>Kapha</i>
4	Asthma	<i>Shwasa</i>	<i>Kapha</i>
5	Liver cirrhosis	<i>Kamala</i>	<i>Vata</i> and <i>Pitta</i>
6	Type 2 diabetes	<i>Prameha</i>	<i>Kapha</i> and <i>Vata</i>
7	Chronic obstructive pulmonary disease	<i>Shwasa Roga</i>	<i>Kapha</i>
8	Heart disease	<i>Hridaya Roga</i>	<i>Kapha</i> and <i>Pitta</i>
9	Metabolic syndrome	<i>Agnimandya</i> , <i>Amlapitta</i> , <i>Aruchi</i> and <i>Grahani</i>	<i>Kapha</i> and <i>Pitta</i>
10	Chronic renal failure	<i>Mutra Roga</i>	<i>Kapha</i> and <i>Vata</i>
11	Osteoporosis	<i>Asthisushirata</i>	<i>Vata</i> and <i>Pitta</i>
12	Obesity	<i>Sthoulya</i>	<i>Kapha</i>
13	Depression	<i>Avasada</i>	<i>Vata</i> and <i>Pitta</i>

DISCUSSION:

Basically, a particular lifestyle of person is a cumulative product of his/her physical

capacity co-ordinated with psychological functioning, displayed in the form of habits, behavior, dietary and living pattern based on his own training sought from childhood, and mimics he gained from his immediate companions including parents, siblings, peers, etc. Thus, it involves a pure psychological and innate control over the physical and sensory activities. When this initiation, control, and coordination are disturbed, it leads to the derangement of lifestyle and results in any lifestyle disorder. Ayurveda narrated this phenomenon as 'Prajnaparadha' (intellectual blasphemy)⁷ which is one of the three basic causes of any disease. There are ample improper actions as an impact of *Prajnaparadha* which are root causes of various diseases, e.g., habit of suppression of any natural urge. Reversal of any neurotransmission or improper removal of the waste products formed during metabolism leading to accumulation of toxins is the basic cause of a disease. Therefore, the habit of suppression of urge in improper lifestyle can be considered as one of the root causes of lifestyle diseases. Removal of these accumulated waste products is the first line of treatment as described in Ayurveda by Charaka.⁸

Specific diet is necessary to maintain normal functioning of *Doshas*. Poor eating habits which are not suitable for specific *Prakriti* greatly increase the risk of lifestyle diseases like cancer, heart disease, diabetes and various other health conditions. Poor eating habits can include the over-consumption of certain foods, dietary deficiencies and excessive intake of saturated fats and refined or processed foods. This affects people at both ends of the socio-economic spectrum; with different types of diseases affecting both people.⁹ Sedentary lifestyle is one of the distinctive features of urbanization, develop-

ment and progress. Almost all inhabitants of cities are engaged in occupations that require little physical activity and most don't even permit much time to engage in any physical activity. This is a huge contributing factor responsible for malfunctioning of *Dosha* (especially in *Kapha* and *Pitta Prakriti*) and thereby increased risk of lifestyle diseases and chronic conditions like hypertension, high cholesterol and it can subsequently lead to problems with obesity, heart disease, diabetes, strokes, and so on. It can also increase levels of stress and anxiety and raise the risk of suffering from various other health conditions.¹⁰ Persons having *Kapha Prakriti* are more prone to hyperlipidemic disorders as *Kapha* has similar characteristics to that of fatty and lipid tissues. Obesity has become one of the greatest problems for modern society as it greatly increases the risk of numerous health conditions from diabetes and hypertension to sleep apnea, osteoarthritis, lower back pain and gallbladder disease.¹¹

Vata has similar characteristics which can be compared with psychosomatic functions. Therefore *Vata Prakriti* is considered to be more prone to malnutrition and stress related disorders. Stress doesn't just affect us emotionally or mentally, it also has a clear physical effect as it aggravates and increases the risk of conditions like obesity, cardiac disease, diabetes, asthma, Alzheimer's disease, rapid aging and gastrointestinal problems. Stress and anxiety can also affect one's ability to relax and get proper sleep, contributing to a further deterioration in health and a host of other problems. Chronic depression poses even greater risks to one's health and this problem often goes hand in hand with other unhealthy habits like comfort eating, which contributes to the problem of

unhealthy eating, as well as a lack of physical activity.¹²

Sleep is one of the vital factor related with maintaining normal functioning of *Dosha*. It is understood from the classical information that sleep upto 8 hours and day time sleeping is good for *Vata Prakriti*, however day time sleeping is not recommended for *Kapha* and *Pitta Prakriti*. Maximum 6 hours sleep is sufficient in *Kapha* and *Pitta Prakriti*. Sleep is one of the most neglected requirements for human health and well-being. Several studies have clearly indicated the importance of sleep in terms of both quantity and quality for general health as it affects various metabolic, endocrine and neurological functions of the body. Sleep deprivation, whether through a lack of sufficient sleep or interrupted and poor quality sleep significantly imbalances normal functioning of *Doshas* and increases the risk of hypertension, heart disease, elevated cholesterol and triglyceride levels, obesity, sleep apnea and a number of other health conditions. Smoking and alcoholism are the factors which affect normal functioning of *Dosha* in *Vata* and *Pitta Prakriti*. Smoking is one of the biggest public health problems because of the high risk it poses. Smoking is associated with various lifestyle diseases such as numerous respiratory disorders like bronchitis and asthma, lung cancer, oral cancer and other cancers, cardiovascular diseases, strokes and numerous other health conditions.

Since *Prakriti* is related to certain physical and mental tendencies that determine susceptibility to diseases, the ancient texts of Ayurveda also provide guidelines for maintaining lifestyles in accordance with one's *Prakriti* for continued healthy living in a personalized manner.¹³ Although numerous publications exist in all the above mentioned topics, on assessing

the present literature we felt the need for synthesizing the current state of evidence regarding Ayurvedic *Prakriti*, its relation to metabolism, chronic disease, and genotypes, and the future direction. In this review we have attempted to collate evidence with regards to the relation of *Prakriti* with metabolism, chronic disease and genotypes known so far. We also take this knowledge further to predict a future where it will be possible to screen newborns using their genotype and thus determine their *Prakriti*, which can then help us decide the type of most healthy and suitable lifestyle for such newborns to lead a disease free and productive life. This will be a novel step towards personalized preventive medicine for humans.

Vata, *Pitta*, and *Kapha Prakriti* are found to have unique metabolic activities. According to Ayurveda, *Kapha* is slow, *Pitta* is fast, and *Vata* is considered to have variable metabolism. Various studies have tried to establish correlation between specific *Prakriti* types and different metabolic activities occurring in the body. Recently, a study reported that body mass index (BMI) in *Vata-Pitta Prakriti* was significantly less as compared to *Kapha-Pitta Prakriti* and the *Vata-Pitta Prakriti* individuals were found to be having maximum platelet aggregation.¹⁴ One of the associations of *Tridoshas* has been hypothesized by Hankey (2005) in which it was suggested that the peptide coenzyme A, which occurs in all cells across all species-preserved through evolution and is associated with lipid metabolism, is linked with the *Tridoshas* at the cellular level.¹⁵ One more study describes the concept of *Prakriti* in aging stating that the *Pitta* predominance *Prakriti* type individuals have high basal metabolic rate (BMR) and energy consumption leading to tissue destruction and premature aging and average life span,

while *kapha* predominance *Prakriti* type have a tendency to delayed manifestation of aging and longer life span.¹⁶

A research study demonstrated probable genomic basis for metabolic differences attributed by *Prakriti* and concluded that *Pitta Prakriti* are fast metabolizers and *kapha* ones are slow and are influenced by different doses of CYP2C19 substrates.¹⁷ Thus it was apparent from this study that fast and slow metabolism was one of the major differentiating phenomena with respect to correlations between CYP2C19 genotypes and *Prakriti*. Another research work explained connection between Ayurveda *Tridosha* system with psychological and endocrinological components of a human being and suggests possible biomarkers related to the three body types.¹⁸ According to this research work, the genopsyo-somatotyping of humans as comprised by the *Tridosha* theory of Ayurveda is mediated by certain nuclear receptors; mainly those related to androgen, T-cells, and thyroxine which are related to *Pitta* (mesomorphic or andrus), *Kapha* (endomorph or thymus), and *Vata* (ectomorph or thyrus), respectively.¹⁹

Prakriti or a person's constitution of his/her *Tridoshas* also has a clear link to the susceptibility one has for chronic diseases. Based on the properties of the three body types, the predominance of *Kapha* body types for gaining weight is quite well known.²⁰ This propensity to gain weight and for obesity is in turn linked with a number of chronic lifestyle diseases such as heart disease, hypertension, and diabetes; all of which are increasingly viewed collectively as metabolic syndrome. Similarly looking at the properties of *Pitta* body type it can be predicted that such individuals can have a propensity to develop ulcers, bleeding disorders, and skin disorders more common.²¹ *Vata* body types can

have propensity to develop neurological problems, dementia, movement and speech disorders, arrhythmias, and related chronic diseases as well.²² However, of the three body types, classical texts suggest that *Vata* type individuals will have maximum propensity for chronic lifestyle related disease.²³

A recent study have discovered *Vata-Kapha* body type is significantly correlated with diabetes mellitus, hypertension, and dyslipidemia with highest levels of inflammatory markers such as IL6, TNF alpha, hsCRP, and HOMA IR. These inflammatory markers were also found to be higher in *Kapha* body type.²⁴ Thus; the patterns of association that might be expected from Ayurvedic *Prakriti* theory have been shown to have clear links with certain chronic disease conditions. In addition to obesity and related disorders of heart, blood pressure, and diabetes; *Doshas* have been linked to other types of chronic disease as well such as rheumatoid arthritis (RA).²⁵ Juyal *et al.*, (2012) discovered that inflammatory genes were more associated with *Vata* subgroup of patients, while oxidative stress pathway genes were more observed in *Pitta* and to some extent *Kapha* subgroup. This study delineated the fact that there were discreet pathways for the same disease for RA etiology in different *Prakriti*-based subgroups which according to them took us closer to validating concepts of *Prakriti* and personalized medicine as defined by Ayurveda.²⁵

Links of *Prakriti* has also been made with aging and cancer. Purva and Meena (2011) in their paper outlined the fact that the aging process was associated with the *Prakriti* of an individual with the *Pitta* predominant individuals supported by *Vata* being prone to premature aging since they have increased BMR and this

tends to destroy the tissues faster compared to the other two *Doshas*.²⁶ In another article, it was inferred that cancer patients had primarily *Pitta* dominance followed by *Kapha* dominance compared to normal controls.²⁷ *Vata* is associated with bone, *Pitta* with blood, while *Kapha* is associated with other tissues related to structure and storage such as adipose tissue. As such, it is difficult to treat when people with *Vata Prakriti* develop bone cancer, people with *Pitta Prakriti* develop leukemias, and people with *Kapha Prakriti* develop cancer of soft tissues according to Ayurveda.²⁸ All these works represent close relation between *Prakriti* and lifestyle diseases.

CONCLUSIONS:-

Prakriti and lifestyle disorders are closely correlated with each other and the lifestyle managed as per type of *Prakriti* will have significant role in prevention and management of lifestyle related disorders. Ayurveda has provided detail guideline in the form of *Dinacharya* and *Rutucharya* to maintain normal functioning of *Dosha* related with specific *Prakriti*. Few research works have established role of *Prakriti* in lifestyle related diseases however clinical studies on large number of subjects are needed for strongly elaborating and attracting the global attention towards the unique concept of *Prakriti*.

REFERENCES:

1. Pappachan MJ. Increasing prevalence of lifestyle diseases: high time for action. Indian J Med Res. 2011;134:143–5.
2. Acharya Agnivesha, Charaka Samhita edited by Dr. laxmidher Diwvedi, vol-II, Vimansthana chap.8, Chaukhamba Academy, Varanasi.
3. Acharya Agnivesha, Charaka Samhita, edited by Brahmanda Tripathi; Viman Sthana8/100.
4. Vagbhatta, Ashtang Hridayawith commentaries Sarvangasundari of Arunadutta and Ayurveda Rasayana by Hemadri,, edited by Murthy K. R. Krishnadas Academy, Varanasi(India), 6th ed,2009. Sharir Sthana 3/83, p.379.
5. Astanga Hridayam with the commentaries of Arundatta and Hemadari edited by Vaidya Hari Shastri Paradakar, 9th edition, Chaukhambha Academy, Varanasi.
6. Sharma Pooja1, Sodhi Danisha, Gupta Vikas, Dadhich NK. A Retrospect on *Prakriti* and Lifestyle Int J Ayu Pharm Chem 2015 Vol. 2 Issue 3
7. Agnivesha. Charaka, Dridhabala, Charaka Samhita, Sharira Sthana, Katidhapurushiya Shariradhyaya, 1/102-109. 7th ed. Varanasi: Chowkhamba Sanskrit Series Office; 2002. Text with English Translation and Critical Exposition Based on Chakrapanidatta's 'Ayurveda Dipika', by Dr. Ram Karan Sharma and Vaidya Bhagvan Dash.
8. Nahar GP, Jindal R. 1st ed. Modinagar: Arogya Sewa Prakashan; 2002. Science of Natural life; pp. 18–29.
9. <http://www.med-health.net/Lifestyle-Diseases.html>, last accessed on 15/05/2016 at 2.30 PM
10. <http://www.med-health.net/Lifestyle-Diseases.html>, last accessed on 15/05/2016 at 2.35 PM
11. <http://www.med-health.net/Lifestyle-Diseases.html>, last accessed on 15/05/2016 at 3.10 PM
12. <http://www.med-health.net/Lifestyle-Diseases.html>, last accessed on 15/05/2016 at 2.30 PM
13. Hankey A. The scientific value of Ayurveda. J Alt Complement Med 2005;11:221-5.
14. Bhalerao S, Deshpande T, Thatte U. Prakriti (Ayurvedic concept of consti-

- tution) and variations in Platelet aggregation. BMC Complement Altern Med 2012;12:248.
15. Hankey A. A test of the systems analysis underlying the scientific theory of Ayurveda's Tridosha. J Altern Complement Med 2005;11:385-90.
 16. Purva MC, Meena MS. A review on role of Prakriti in aging. AYU (An International Quarterly Journal of Research in Ayurveda) 2011;32:20-4.
 17. Ghodke Y, Joshi K, Patwardhan B. Traditional Medicine to Modern Pharmacogenomics: Ayurveda Prakriti Type and CYP2C19 Gene Polymorphism Associated with Metabolic Variability. Evid Based Complement Alternat Med 2011;2011:249528.
 18. Rizzo-Sierra CV. Ayurvedic genomics, constitutional psychology, and endocrinology: The missing connection. J Altern Complement Med 2011;17:465-8.
 19. Rizzo-Sierra CV. Ayurvedic genomics, constitutional psychology, and endocrinology: The missing connection. J Altern Complement Med 2011;17:465-8.
 20. Dey S, Pahwa P. *Prakriti* and its associations with metabolism, chronic diseases, and genotypes: Possibilities of new born screening and a lifetime of personalized prevention. J Ayurveda Integr Med 2014;5:15-24
 21. Tiwari S, Gehlot S, Tiwari SK, Singh G. Effect of walking (aerobic isotonic exercise) on physiological variants with special reference to *Prameha* (diabetes mellitus) as per *Prakriti*, AYU 2012;33 (1):44-9
 22. Rastogi S. Development and Validation of a Prototype Prakriti Analysis Tool (PPAT): Inferences from a pilot study. Ayu 2010;33:209-18.
 23. Tiwari S, Gehlot S, Tiwari SK, Singh G. Effect of walking (aerobic isotonic exercise) on physiological variants with special reference to *Prameha* (diabetes mellitus) as per *Prakriti*. AYU (An International Quarterly Journal of Research in Ayurveda) 2012;33:44-9.
 24. Mahalle NP, Kulkarni MV, Pendse NM, Naik SS. Association of constitutional type of Ayurveda with cardiovascular risk factors, inflammatory markers and insulin resistance. J Ayurveda Integr Med 2012;3:150-7.
 25. Juyal RC, Negi S, Wakhode P, Bhat S, Bhat B, Thelma BK. Potential of ayurgenomics approach in complex trait research: Leads from a pilot study on rheumatoid arthritis. Plos One 2012;7:e45752.
 26. Purva MC, Meena MS. A review on role of Prakriti in aging. AYU (An International Quarterly Journal of Research in Ayurveda) 2011;32:20-4.
 27. Venkatraghavan S, Sundaresan TP, Rajagopalan V, Srinivasn K. Constitutional study of cancer patients—its prognostic and therapeutic scope. Anc Sci Life 1987;7:110-5.
 28. Venkatraghavan S, Sundaresan TP, Rajagopalan V, Srinivasn K. Constitutional study of cancer patients—its prognostic and therapeutic scope. Anc Sci Life 1987;7:110-5

CORRESPONDING AUTHOR

Dr.Snehal V. Kukade

Assistant Professor, Dept. of Sanskrit
Samhita Sddhant

D.M.M. Ayurveda Mahavidyalaya, Yeotmal.

Email: swkukade@gmail.com

Source of Support: Nil

Conflict of Interest: None Declared