

# *Theoretical Basis and Practical Application of TCM Constitution and Health-Related Behavior Conglomerate Model*

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**Abstract:** This article reviews the theoretical basis, research progress, and practical application of the TCM constitution and health-related behavior conglomerate model in health management. By systematically analyzing the core concepts of TCM constitution theory and combining the latest findings in health behavior research, it explores the interactive mechanisms between the two in disease prevention, health promotion, and personalized medicine. The article also evaluates the limitations of current research and suggests future research directions to provide new perspectives and methodologies for multidisciplinary research combining TCM constitution and health behaviors.

## 1. Introduction

With the global changes in the spectrum of diseases, the medical community's exploration of future medical systems and structures has become increasingly profound. Currently, the scientific methods guiding healthcare are primarily centered on "human health" within the bio-psycho-social medical model, which coincides with the TCM holistic medical model of the human-nature-social psychology. Modern medicine no longer focuses solely on "disease" as the center of research but, like TCM, places "humans" at the center.

As individuals, humans possess unique characteristics, and ensuring health requires addressing individual uniqueness. Constitution, as an expression of individual uniqueness, plays an increasingly important role in the effective treatment and prevention of diseases. Under the guidance of the concept of "treatment based on constitution differentiation," selecting appropriate treatment methods according to individual constitution can achieve therapeutic effects in the state of "already ill" and preventive effects in the state of "not yet ill." This provides new methodological guidance for the TCM concept of "preventive treatment of disease" and fully utilizes the unique advantages of TCM in maintaining health through this approach.

As medicine progresses, the clinical treatment methods and outcomes for colorectal cancer have significantly improved. However, the incidence and mortality rates of colorectal cancer remain high, and many patients experience unsatisfactory treatment outcomes and severely reduced quality of life post-diagnosis. Consequently, reducing the incidence of colorectal cancer has become a hot

topic in medical research. Given that the occurrence of colorectal cancer is a complex and prolonged pathological process, interrupting the precancerous state, which is a critical stage in the formation of colorectal cancer, can prevent its occurrence. This aligns with the TCM concept of "preventive treatment of disease."

As a key focus in TCM theoretical research, the theory of constitution plays a vital role in disease prevention. However, research on the prevention of colorectal cancer based on constitution is still limited, and a systematic theoretical framework has yet to be established, hindering its potential application. Therefore, to further enhance TCM's ability to prevent colorectal cancer and reduce its incidence, it is crucial to explore the correlation between constitution and colorectal cancer under the guidance of the TCM theory of "preventive treatment of disease."

## 2. Main Content

The constitution state indicated in the "Inner Canon of the Yellow Emperor" is determined by congenital endowment. As the system of TCM constitution developed, later TCM practitioners incorporated pathological factors and classified constitution into two major categories: normal constitution and biased constitution. The biased constitution can be understood as the transitional stage from normal constitution to a disease state. Traditional Chinese medicine believes that the occurrence of diseases in the human body is mainly related to the strength and weakness of vital qi and pathogenic qi. As stated in "Su Wen Yi Pian - Discussion on Needling Methods": "When vital qi is present inside, pathogenic qi cannot invade." The strength of vital qi, to a certain extent, represents the robustness of the constitution, indicating that constitutional factors play a crucial role in the occurrence and evolution of diseases.

TCM constitution has become a hot topic in recent TCM research. Constitution has relative stability, determined by congenital genetic factors; at the same time, it is dynamically variable, influenced by postnatal environment, dietary habits, lifestyle, emotional and psychological factors, and past diseases. The characteristics of constitution and its correlation with diseases provide a new perspective for the study of disease etiology. By identifying constitution types and recognizing constitution-related susceptibilities to diseases, timely interventions can be implemented to improve constitution status and thus achieve the goal of disease prevention.

The four fundamental principles of TCM constitution study are "inheritance theory," "life process theory," "body-mind composition theory," and "environmental constraint theory." These principles suggest that variations in physiological functions and psychological states exist among different constitution types, necessitating specific measures in disease prevention[1]. Modern medical paradigms have transitioned from a disease-centric approach to a health-centric one, aligning TCM's holistic medical model with the modern biopsychosocial medical model. TCM's "preventive treatment" ideology offers unique advantages in health maintenance and sub-health intervention. The individuality of each person determines their constitution's characteristics, and tailoring adjustments based on personal constitution places the individual at the center of health management[2]. This personalized, systematic, and comprehensive adjustment under the guidance of "treatment based on constitution differentiation" enhances the effectiveness and precision of disease prevention. Ultimately, the goal of constitution theory research is clinical application, providing a feasible approach to disease prevention beyond medicinal regulation and treatment.

## 3. The theoretical origin of the constitution theory of Traditional Chinese Medicine

The "Huangdi Neijing" states: "Therefore, the sage does not treat those who are already ill, but those who are not yet ill; does not treat those who are already in chaos, but those who are not yet in chaos. Treating illness after it has formed, or governing after chaos has ensued, is like digging a

well when one is already thirsty, or casting a weapon in the midst of battle— is it not too late?" Since ancient times, many physicians have repeatedly emphasized "treating disease before its onset," aiming to restore the body to its initial healthy state. Treating disease before its onset is akin to governing a country: to maintain national stability, one must eliminate the source of unrest in its cradle; similarly, treating disease before its onset involves taking preventive measures before the body's condition progresses to a state of illness. Waiting until "illness has formed and then treating it, or chaos has ensued and then governing it" is indeed too late.

The "Wenre Lun" also states: "... if a person has a congenital deficiency of kidney water, even if the lower burner is not yet affected, early signs of imbalance will manifest. It is essential to examine the tongue; if sweet and cold herbs are supplemented with salty and cold ones, the goal is to first stabilize areas not yet affected by pathogenic factors, to prevent further decline." In the context of warm diseases, this statement emphasizes taking preventive measures before the pathogen deeply invades and spreads, using the interrelationships of the Five Elements to regulate the pathological changes of the internal organs, achieving the effect of "stabilizing areas not yet affected by pathogens."

As an influential academic thought in TCM theory, the core idea of "treating disease before its onset" lies in prevention before illness, preventing complications during illness, and preventing recurrence after recovery. Firstly, prevention before illness is paramount, focusing on health preservation. As the "Huangdi Neijing" states: "Follow the laws of yin and yang, harmonize with the techniques of life, moderate food and drink, maintain regular daily life, avoid overexertion, and keep both body and mind in harmony to live out one's natural lifespan, surpassing a hundred years." This teaches us to follow natural laws, adapt to seasonal changes, pay attention to mental cultivation, eat reasonably, and exercise appropriately to strengthen the body and prolong life. Secondly, preventing complications during illness runs through the entire course of the disease, by understanding the intrinsic connections and transmission patterns of disease development, using TCM diagnostic and treatment measures for early diagnosis and treatment to prevent disease progression and changes. Lastly, preventing recurrence after recovery plays an important role in the treatment process. If post-treatment care is inadequate, the disease often recurs or leaves sequelae. Therefore, post-treatment care is necessary to consolidate the therapeutic effect and prevent recurrence.

#### **4. Theoretical Framework of Health-Related Behaviors**

Health behavior encompasses a series of conscious activities and habits undertaken by individuals to maintain or improve their health status, covering physical, psychological, and social health aspects[3]. Health behaviors can be categorized into dietary behaviors, exercise behaviors, preventive behaviors, safety behaviors, psychological health behaviors, and smoking and alcohol cessation. These behaviors play a crucial role in chronic disease prevention, addressing key points like weight control, blood pressure reduction, lipid reduction, blood sugar control, and cancer prevention[4]. Factors influencing health behaviors are multifaceted, including personal factors (knowledge and awareness, psychological state, physiological factors), social factors (family influence, culture, and beliefs), and environmental factors (physical environment, socioeconomic environment, policy environment). Understanding these factors is essential for devising effective health promotion strategies and improving overall health levels[5].

#### **5. Interactive Mechanisms between TCM Constitution and Health Behaviors**

TCM constitution theory provides a theoretical basis for personalized health management, raising health awareness and dynamically adjusting health behaviors. For example, qi-deficiency

individuals can adjust their diet and exercise plans according to seasonal changes to adapt to environmental shifts. In chronic disease prevention and treatment, precise prevention strategies can be developed by identifying high-risk individuals through constitution identification. Personalized treatment combining TCM constitution theory can enhance treatment efficacy and patient compliance, making them more proactive in their treatment process. In community health intervention and public health, constitution assessment, health education, and monitoring play vital roles.

## **6. Application Research of the TCM Constitution and Health Behavior Conglomerate Model**

TCM constitution theory provides a theoretical basis for personalized health management, raising health awareness and dynamically adjusting health behaviors. For example, qi-deficiency individuals can adjust their diet and exercise plans according to seasonal changes to adapt to environmental shifts[6]. In chronic disease prevention and treatment, precise prevention strategies can be developed by identifying high-risk individuals through constitution identification. Personalized treatment combining TCM constitution theory can enhance treatment efficacy and patient compliance, making them more proactive in their treatment process. In community health intervention and public health, constitution assessment, health education, and monitoring play vital roles[7].

## **7. Recent Progress in TCM Constitution and Health Behavior Research**

Significant progress has been made in the study of TCM constitution and health behaviors, driven by advances in science and TCM theory. Recent studies have refined TCM constitution classification standards through large-scale epidemiological surveys and multi-center clinical research. Research has confirmed the close association between TCM constitution types and susceptibility to various chronic diseases[8]. For example, phlegm-dampness constitution is linked to diabetes and hyperlipidemia, while qi-stagnation constitution correlates with depression and anxiety disorders. Studies on constitution adjustment methods for different types, such as warming methods for yang-deficiency and yin-nourishing methods for yin-deficiency, have shown positive clinical outcomes, providing a scientific basis for constitution identification and health behavior interventions[9].

## **8. Limitations and Challenges in Current Research**

Despite significant progress, challenges remain in research methods, integrative research, and interdisciplinary collaboration. These include the subjectivity of constitution classification standards, limited sample sizes, and lack of long-term follow-up[10]. Integrating TCM constitution and health behavior research faces difficulties in combining theory with practice, personalizing intervention measures, and evaluating multifactorial intervention effects. Interdisciplinary research also encounters obstacles such as academic barriers, methodological differences, and data integration challenges.

## **9. Obstacles and Solutions in Interdisciplinary Research**

**Academic Barriers:** Significant academic barriers exist between TCM constitution theory and disciplines such as modern medicine, public health, and psychology. Researchers face differences in theoretical backgrounds, research methods, and academic language, complicating communication and coordination in interdisciplinary collaboration.

Differences in Research Methods: TCM research often uses qualitative analysis and empirical summaries, whereas modern scientific research emphasizes quantitative analysis and experimental verification. These differences in research methods increase the difficulty of interdisciplinary research[11].

Challenges in Data Integration: Research on TCM constitution and modern health behaviors involves large amounts of heterogeneous data, such as constitution identification results, genomic data, and health behavior records. Effectively integrating and analyzing these data remains a significant challenge[12].

Solutions: Governments, research institutions, and academic bodies should develop standardized constitution assessment tools based on objective indicators and standardized questionnaires. This will help reduce subjectivity and variability in constitution classification, thereby improving research reliability and reproducibility. These entities should also conduct large-scale, multi-center studies to increase the sample size and enhance the generalizability of their research findings.

Furthermore, they should perform long-term follow-up studies to comprehensively evaluate the enduring effects of health behaviors. To strengthen interdisciplinary collaboration, governments, research institutions, and academic bodies should promote deeper cooperation between Traditional Chinese Medicine (TCM) and disciplines such as modern medicine, public health, and psychology [13]. In order to accomplish this, interdisciplinary research teams should be formed by these entities to jointly conduct comprehensive studies on TCM constitution and health behaviors.

Leveraging emerging technologies, such as big data and artificial intelligence, is essential. Governments, research institutions, and academic bodies should use these technologies to integrate and analyze multi-dimensional health data, enhancing the scientific rigor and precision of their research [14]. For example, they can develop constitution identification algorithms using machine learning techniques and utilize big data platforms for dynamic monitoring and analysis of health behaviors and constitution status.

Lastly, governments and research institutions should enhance policy support and resource investment to promote in-depth research on TCM constitution and health behaviors. This will facilitate the translation and application of research findings into practical solutions that can benefit society.

## 10. Future Research Directions and Prospects

Future research will focus on integrating TCM constitution with genomics, optimizing personalized intervention strategies, and innovating integrative models of TCM and modern medicine. By enhancing interdisciplinary collaboration and applying emerging technologies, the scientific basis and practicality of TCM constitution theory can be further improved, providing robust support for personalized health management and disease prevention[15].

## 11. Conclusion

This article reviews the theoretical basis, research progress, and practical application of the TCM constitution and health-related behavior conglomerate model in health management. Research indicates that TCM constitution theory, through constitution classification and identification, offers theoretical support for personalized health management, effectively guiding disease prevention and health promotion. Recent large-scale epidemiological surveys and multi-center clinical studies have optimized constitution classification standards, and related research has elucidated the susceptibility of different constitution types to chronic diseases. While current research faces challenges in methodology, integration, and interdisciplinary cooperation, these issues can be addressed through the development of standardized assessment tools, large-scale studies, and the application of



emerging technologies. Future research in integrating TCM constitution with genomics, optimizing personalized intervention strategies, and innovating integrative models of TCM and modern medicine is expected to make significant advancements, enhancing the scientific and practical value of TCM constitution theory for personalized health management and disease prevention.

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