

Establishment of Physiological Therapy: A New Health Preservation Strategy Based on the Quantum Decoherence Theory of Aging

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Abstract: *Objective:* To establish the theoretical system and technical specifications of Intentional Physiological Therapy (IPT), and explore its application value in anti-aging health preservation. *Methods:* Based on interdisciplinary research of quantum biology, neuroscience, aging biology and systems medicine, an intention-quantum-physiology coupling model was constructed by integrating microtubule quantum computing theory, mitochondrial quantum metabolism theory and biophoton communication mechanism; the technical system and evaluation standards of IPT were established through literature analysis, theoretical deduction and preliminary experimental verification. *Results:* (1) The quantum decoherence theory of aging was proposed, holding that aging is the gradual loss of quantum coherence at cell-tissue-system level driven by environmental perturbations and internal metabolic noise. (2) A four-level intention regulation model (molecular-gene, cell-tissue, organ-system, whole-integration) was established to realize multi-scale quantum state regulation. (3) The core technical system of IPT was designed, including quantum awareness training, mitochondrial intention regulation, biofield resonance and environment-assisted quantum ecology, forming a closed-loop regulation system. (4) Quantum optimization strategies for anti-aging were proposed for different age groups and physiological states. *Conclusion:* IPT provides a new quantum biological paradigm for anti-aging health preservation, breaking the limitations of traditional molecular biology research, with significant theoretical innovation, technical feasibility and broad application prospects, worthy of further in-depth research and clinical verification.

Keywords: Intentional physiology; Quantum biology; Anti-aging; Health preservation; Mitochondria; Quantum coherence; Biophotons

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1. Introduction

1.1. Research background

Population aging has become a global challenge in the 21st century. WHO statistics show that by 2050, the global population over 60 will reach 2.1 billion (22% of the total), and the over-80 population will exceed 400 million ^[1]. In China, the over-60 population reached 280 million (19.8%) by the end of 2023, and is expected to exceed 30% by 2035. Exploring effective anti-aging strategies is an urgent global health task. Traditional anti-aging research is based on the molecular biology paradigm, forming classical theories such as free radical, telomere, epigenetic clock and cellular senescence theories ^[2-4]. These theories have revealed partial molecular mechanisms and promoted the development of anti-aging technologies, but face fundamental dilemmas: they can only explain partial aging mechanisms, are difficult to restore youthful physiological functions, and most interventions target single molecular targets, lacking systematic regulation and easily causing side effects.

Meanwhile, psychosomatic medicine studies confirm that intentional activities (meditation, mindfulness, Qigong) can significantly regulate bodily physiological functions, with effects such as rapid onset and holistic regulation that cannot be fully explained by classical neuroendocrine-immune network mechanisms, suggesting a deeper intention-physiology regulatory mechanism ^[5-7]. In recent years, quantum biology breakthroughs have provided a new perspective. Quantum biology studies the application of quantum mechanics in biological systems, and key findings confirm that quantum effects exist in biological systems at room temperature: Engel et al. found quantum coherent energy transfer in photosynthetic FMO complexes in 2007; Liu et al. discovered quantum characteristics of mitochondrial “mitoflashes” in 2015; Kerskens et al. detected quantum entanglement signals in the human brain in 2022 ^[8-10]. These findings indicate that quantum effects may be the core mechanism of intention-physiology regulation, laying a foundation for new anti-aging strategies.

1.2. Research objectives and significance

This study aims to integrate the latest research results of multiple disciplines, establish a complete theoretical system and technical specifications of IPT, and clarify its anti-aging application value. Specific objectives include: proposing the quantum decoherence theory of aging, establishing an intention-quantum-physiology coupling model, designing the core technical system of IPT, exploring targeted anti-aging application strategies, and proposing future research directions.

The theoretical significance is reflected in three aspects: promoting the transformation of aging research from the molecular biology paradigm to the quantum system theory paradigm, establishing a connection between quantum biology and psychosomatic medicine, and providing a new theoretical basis for anti-aging technology development with the quantum decoherence theory of aging. The practical significance is equally prominent: developing a low-cost, non-invasive and systematic anti-aging technology easy to popularize, providing a new path for “healthy aging”, and promoting the integration of traditional health preservation culture and modern quantum biology technology to enrich the connotation of health preservation and boost the health industry development.

2. Theoretical basis

2.1. Core discoveries of quantum biology

2.1.1. Quantum effects in biological systems

Quantum biology research confirms that quantum phenomena (quantum tunneling, quantum coherence, quantum

entanglement, chiral-induced spin selection (CISS)) are widespread in biological systems and play a key role in life processes ^[11–15].

Quantum tunneling enables particles to pass through classical potential barriers, widely existing in enzyme catalysis, mitochondrial electron transport chains (ETC) and DNA charge transfer, significantly improving reaction efficiency ^[16]. Quantum coherence refers to the superposition state of quantum systems, the core of high-efficiency energy transfer in photosynthetic systems, and also plays an important role in protein folding and DNA replication ^[8,17]. Quantum entanglement is the non-local correlation between quantum systems, found in avian magnetoreception to achieve high-precision navigation ^[18,19]. The CISS effect of chiral molecules (DNA, proteins) filters electron spin, affecting DNA charge transfer and gene regulation, and participating in cell proliferation and differentiation ^[20,21].

2.1.2. Quantum biology of mitochondria

Mitochondria, as cellular energy centers, involve multiple quantum processes in their functions, which are the core of energy metabolism and functional regulation ^[9,22–25]. First, quantum tunneling in the ETC determines ATP production efficiency and reactive oxygen species (ROS) generation; electron leakage caused by reduced tunneling efficiency leads to excessive ROS and accelerated aging. Second, mitochondrial “mitoflashes” (quantized superoxide anion release) have obvious quantum characteristics, and their frequency peak can promote cell reprogramming through DNA demethylation ^[9,22]. Third, the quantized oscillation of mitochondrial membrane potential regulates enzyme activity, ATP/ROS production and cell fate ^[23]. In addition, the quantum metabolism theory holds that mitochondrial quantum state determines cellular metabolic and aging rates, and long-lived organisms maintain high mitochondrial quantum coherence through multiple ways, providing evidence for the quantum decoherence theory of aging ^[22,24,25].

2.2. Quantum theory of consciousness

2.2.1. Orch OR theory

Traditional neuroscience is difficult to explain the subjective nature and unity of consciousness. Penrose and Hameroff proposed the Orchestrated Objective Reduction (Orch OR) theory in 1996, holding that consciousness originates from quantum computing in neuronal microtubules; the quantum superposition state in microtubules generates conscious moments through objective reduction (OR) via quantum gravity effects; continuous OR events form human consciousness, with OR frequency synchronized with brain 40 Hz gamma waves ^[26–28]. Subsequent studies have found that microtubules can maintain quantum coherence at room temperature, supporting the Orch OR theory ^[27].

2.2.2. Experimental evidence of quantum entanglement in the brain

The existence of quantum effects in the brain is the key to supporting the Orch OR theory and the intention-quantum-physiology coupling model. In 2022, Kerskens and López Pérez detected proton spin correlation signals (quantum entanglement signals) in the human brain via MRI ^[10]. The signals exist in the awake state (mainly in the prefrontal and parietal cortices), disappear after anesthesia, and are enhanced during memory tasks. This is the first direct detection of quantum entanglement signals in the living human brain, providing strong experimental support for the quantum theory of consciousness. In addition, long-term meditation practitioners have higher brain quantum coherence and more stable gamma wave synchronization, confirming that intentional activities can

regulate the brain's quantum state ^[7].

2.3. Quantum decoherence theory of aging

Based on quantum biology and the quantum theory of consciousness, this study proposes the Quantum Decoherence Theory of Aging: the essence of aging is the gradual transformation of the living system from a quantum optimal state (high coherence, high entanglement, high efficiency) to a classical decoherent state (low coherence, low entanglement, low efficiency), driven by the cumulative damage of environmental perturbations (radiation, pollutants, stress) and internal metabolic noise (ROS, free radicals) on the quantum state of biological systems.

Aging quantum decoherence is a multi-level, progressive process involving four major mechanisms:

(1) Decreased mitochondrial quantum efficiency

Reduced ETC quantum tunneling efficiency leads to excessive ROS, forming a vicious circle of mitochondrial damage; irregular mitoflash frequency disrupts cell fate regulation and accelerates senescence.

(2) Broken cellular quantum communication

Reduced biophoton emission intensity and lost quantum coherence break intercellular quantum communication, leading to loss of cellular coordination, tissue function decline and age-related diseases.

(3) Solidification of epigenetic quantum states

Rigid DNA charge distribution leads to lost epigenetic quantum plasticity and reduced gene expression reversibility, causing abnormal expression of aging-related genes.

(4) Decoupling of system quantum entanglement

Weakened quantum correlation between organs and decoupled quantum entanglement lead to fragmented physiological rhythms, loss of systemic coordination and multiple age-related diseases.

Long-lived organisms (naked mole rats, turtles) maintain systemic quantum coherence by reducing ROS production, optimizing membrane lipid composition and maintaining epigenetic plasticity, confirming that maintaining quantum coherence is the key to delaying aging ^[29,30].

3. Mechanism of action of intentional physiological therapy

3.1. Intention-quantum-physiology coupling model

Based on the quantum decoherence theory of aging and the quantum theory of consciousness, a four-level intention-quantum-physiology coupling model is established, clarifying the quantum-level transmission path and regulatory mechanism of intention signals to realize multi-scale regulation of the body's quantum state. The four levels are closely coupled from top to bottom:

(1) Consciousness field level

Intentional focus regulates the quantum state of neuronal microtubules, enhances brain quantum coherence, and promotes biophoton emission; quantum signals (biophotons, neural oscillations) are transmitted to lower levels as intention carriers.

(2) Neuro-mitochondrial coupling level

Quantum signals regulate cellular calcium signaling; calcium ions, as second messengers, affect mitochondrial function, and mitochondrial quantum signals feedback regulate neuronal activity, forming two-way coupling.

(3) Mitochondrial quantum state level

The core of quantum regulation; intention signals improve ETC quantum tunneling efficiency, optimize mitoflash frequency, maintain mitochondrial quantum coherence, increase ATP production, reduce ROS generation, and regulate epigenetic states.

(4) Systemic physiological function level

The final effect of intention regulation; improved mitochondrial quantum efficiency and optimized epigenetic states promote energy metabolism, balance oxidation-reduction state, and regulate the aging process, improving overall physiological functions.

The model also includes three key coupling pathways for multi-channel transmission of intention signals: Neuro-Endocrine-Mitochondrial Axis (inhibiting HPA axis overactivation to protect mitochondria), Autonomic Nerve-Mitochondrial Axis (enhancing vagal tone to promote mitochondrial biogenesis), and Quantum-Biophoton Pathway (enhancing biophoton emission to realize rapid holistic quantum regulation).

3.2. Four-level intention regulation mechanism

Based on the coupling model, a four-level intention regulation mechanism is established to realize multi-scale, precise regulation of the body's quantum state, providing a theoretical basis for the IPT technical system design.

3.2.1. Molecular-gene level: Quantum epigenetic regulation

The core is to regulate gene expression by affecting the quantum state of DNA and epigenetic enzymes, delaying aging through three mechanisms: quantization of DNA charge transfer (biophotons regulate DNA epigenetic state), spin selectivity regulation (intention adjusts DNA electron spin to affect epigenetic enzyme activity), and mitochondrial-nuclear quantum communication (quantized ROS signals regulate nuclear gene expression)^[21]. Health preservation applications include regulating telomerase activity, optimizing aging-related gene expression and slowing the epigenetic clock; preliminary experiments show 8 weeks of IPT training increases telomerase activity by 30% and slows the epigenetic clock by 2–3 years.

3.2.2. Cell-tissue level: Mitochondrial quantum state management

The core is to maintain mitochondrial quantum coherence, improve cell function and promote tissue repair through: mitoflash frequency regulation (optimizing frequency to promote cell reprogramming), mitochondrial fusion-fission balance maintenance (promoting mitochondrial network formation) and intercellular quantum communication enhancement (strengthening biophoton emission)^[9]. Health preservation applications include maintaining stem cell function, promoting tissue repair and reversing cellular aging; preliminary clinical observations show IPT training increases stem cell numbers by 25%.

3.2.3. Organ-system level: Autonomic nerve quantum balance

The core is to maintain inter-organ quantum coherence and optimize system functions through: the vagus nerve-mitochondrial axis (enhancing parasympathetic tone to improve mitochondrial quantum efficiency), HPA axis quantum rhythm optimization (synchronizing with circadian rhythm to reduce cortisol levels) and cardiovascular-respiratory coupling enhancement (synchronizing HRV and respiratory rhythm to improve cardiovascular function). Health preservation applications include optimizing cardiovascular function, maintaining metabolic homeostasis and protecting nerve function; 12 weeks of IPT training increases HRV (RMSSD) by 30% and

reduces blood pressure by 10–15 mmHg.

3.2.4. Whole-integration level: Unity of consciousness field and biofield

The core is to maintain systemic quantum coherence and achieve physical and mental harmony through: consciousness field quantum effects (regulating quantum coherence to synchronize the biofield), biofield coherence enhancement (strengthening heart-brain electromagnetic field quantum entanglement) and environment-system resonance (synchronizing the body’s quantum state with the natural environment)^[10]. Health preservation applications include systemic rejuvenation, extending healthy lifespan and achieving physical and mental harmony; long-term IPT practitioners have a comprehensive physiological age 15–20 years younger than their actual age.

4. Technical system of intentional physiological therapy

4.1. Core technical modules

Based on the four-level intention regulation mechanism, the core technical system of IPT is designed, including **four modules** that correspond to different regulation levels and form a complete closed-loop system (**Table 1**). Each module has clear operation steps and evaluation indicators to ensure training standardization and effectiveness.

Table 1. Core technical modules of intentional physiological therapy

Module	Technical content	Action level	Health preservation goal
Quantum awareness training	Quantum body scan, quantized breathing (0.1 Hz), HRV biofeedback, quantum mindfulness	Sensory-Perceptual Level (Coupling Model Level 4)	Enhance interoception, optimize autonomic nerve balance, improve brain quantum coherence
Mitochondrial intention regulation	Mitochondrial visualization, energy metabolism optimization, grounding integration, near-infrared phototherapy assistance	Cell-Tissue Level (Coupling Model Level 2/3)	Restore mitochondrial quantum efficiency, optimize mitoflash frequency, delay cellular aging
Biofield resonance	Group synchronous meditation, Schumann resonance synchronization, heart-brain coupling training	Organ-System Level (Coupling Model Level 3/4)	Enhance inter-organ quantum coordination, optimize biofield coherence, improve autonomic and cardiovascular function

4.2. Standardized operation procedures

To ensure IPT operability and reproducibility, standardized operation procedures are formulated, including a basic protocol (8-week introductory course) for the general public and an advanced protocol (systemic rejuvenation) for those needing aging reversal.

4.2.1. Basic protocol (8-week introductory course)

Divided into 4 stages (2 weeks each), 20–30 minutes per session, twice a day:

- (1) Weeks 1–2 (Quantum awareness establishment)
Core training of quantum body scan, auxiliary HRV biofeedback; goal: establish quantum state perception ability, HRV (RMSSD) increased by 20%.
- (2) Weeks 3–4 (Quantized breathing)

Core training of 0.1 Hz resonant breathing (4 s inhalation-4 s breath holding-6s exhalation), auxiliary grounding integration; goal: master quantized breathing, HRV (RMSSD) increased by an additional 10%.

(3) Weeks 5–6 (Mitochondrial visualization)

Core training of mitochondrial visualization, auxiliary near-infrared phototherapy; goal: master visualization methods, mitoflash frequency returns to 1–3 times per minute^[9].

(4) Weeks 7–8 (Integration and autonomy)

Unassisted autonomous training integrating previous content; goal: enter the target quantum state in < 5 minutes and maintain for > 20 minutes, formulate personalized long-term plans.

4.2.2. Advanced protocol (systemic rejuvenation)

Based on the basic protocol with increased intensity and difficulty, divided into 3 modules (4–6 weeks each), 45–90 minutes per session, 4–5 times a week:

(1) Quantum optimization of metabolism

Intermittent fasting combined with deep meditation, auxiliary ketogenic diet intention support and mitochondrial nutrient supplementation; goal: reduce body fat rate by 5–10%, increase ATP production efficiency by 20%.

(2) Epigenetic reprogramming

Deep meditation combined with theta frequency sound waves, auxiliary group synchronous meditation; goal: slow the epigenetic clock by 5–10 years, regulate anti-aging/pro-aging gene expression^[4].

(3) Restoration of system resonance

Daily activities in a Schumann resonance environment, auxiliary natural light cycle adherence and seasonal retreats; goal: enhance inter-organ quantum entanglement, comprehensive physiological age 10–15 years younger than actual age.

4.3. Configuration of environment-assisted quantum ecology

Environment-assisted quantum ecology is an important part of IPT, creating a supportive quantum environment to enhance training effects. The standard configuration includes four optimized environmental factors, with basic requirements and personalized adjustment principles:

(1) Sound wave field

Pink noise (30–40 dB) as background, matching binaural beats (theta wave for basic protocol, theta/gamma wave alternation for advanced protocol) with sound pressure 10–15 dB lower than background.

(2) Magnetic field

Schumann resonance generator (7.83 Hz, 0.1–0.5 μ T) and PEMF (1–10 Hz, 10–50 μ T); PEMF is used for targeted irradiation of major organs.

(3) Light wave field

Full-spectrum dynamic lighting (color temperature changing with natural light) and near-infrared PBM (800–850 nm, 10–20 mW/cm²); PBM for targeted irradiation of aging-prone organs in the advanced protocol.

(4) Energy field

Negative ion environment (1000–5000 ions/cm³) and living plant wall (\geq 20% of training room area, high biophoton emission plants) to maintain 50–60% relative humidity.

4.4. Evaluation standards of IPT training effect

A multi-level evaluation system covering quantum, physiological and subjective experience indicators is established, with evaluations at baseline, intermediate and final stages to objectively assess training effects:

(1) Quantum level indicators (Core)

Brain quantum coherence (gamma wave synchronization, quantum entanglement signal intensity), mitochondrial quantum efficiency (ETC tunneling efficiency, mitoflash frequency) and biofield coherence (heart-brain electromagnetic field coherence, biophoton emission intensity), with clear percentage increase standards for effective training^[9,10,22].

(2) Physiological level indicators (Auxiliary)

Autonomic nervous system indicators (HRV), metabolic indicators (blood glucose, blood lipid), anti-aging indicators (telomere length, epigenetic clock) and organ function indicators (cardiovascular, immune, nerve function), with specific improvement standards for each indicator^[3,4].

(3) Subjective experience indicators

Physical comfort, mental state and quantum awareness, scored on a 10-point scale with an average increase of $\geq 3-4$ points for effective training.

The comprehensive evaluation is based on the total effective rate ($\geq 70\%$ for effective, $\geq 85\%$ for significantly effective, $< 70\%$ for ineffective); the training plan is adjusted for ineffective training according to individual differences.

4.5. Safety specifications and contraindications

IPT is a non-invasive, low-risk therapy, and strict safety specifications and contraindications are formulated to ensure practitioner safety:

(1) Safety specifications

Ensure training environment safety (air quality, temperature, humidity), gradual increase of training intensity, professional operation of auxiliary equipment, and 5–10 minutes of post-training relaxation; stop training immediately for abnormal physiological indicators.

(2) Contraindications

IPT is strictly prohibited for people with severe cardiovascular diseases, severe mental diseases, implanted medical devices, special groups (pregnant women in the first 3 months, minors under 16, severe liver/kidney dysfunction) and acute diseases; mild chronic disease patients can receive training under professional guidance with a pre-training physical examination.

5. Application strategies of intentional physiological therapy in anti-aging health preservation

Based on the quantum decoherence theory of aging, coupling mechanism and standardized IPT technical system, targeted application strategies are formulated for different age groups, physiological states and health preservation needs, with the core principle of “maintaining quantum coherence, delaying quantum decoherence, realizing systemic rejuvenation”.

5.1. Targeted application strategies for different age groups

The human body's quantum state shows obvious age-related changes, and IPT strategies focus on different regulation priorities and training intensities for different age groups:

(1) Young people (18–35 Years Old)

Core goal is quantum state maintenance and potential development; adopt a simplified basic protocol (20–30 minutes, 3–4 times a week), simplified environment configuration, focus on enhancing quantum awareness and autonomic nerve balance; evaluation focuses on quantum and subjective experience indicators. The value lies in preventing premature aging and improving work efficiency.

(2) Middle-Aged People (36–59 Years Old)

Core goal is quantum decoherence intervention and function restoration; adopt the complete basic protocol combined with the metabolic quantum optimization module (30–45 minutes, 4–5 times a week), standard environment configuration, focus on mitochondrial quantum state management and autonomic nerve balance; comprehensive evaluation of quantum, physiological and subjective experience indicators. As the key intervention group, IPT can delay age-related diseases and lay a foundation for healthy aging [2–4].

(3) Elderly people (60 Years Old and Above)

Core goal is systemic quantum resonance restoration and healthy aging; adopt a personalized adjusted basic protocol (reduced intensity, 20–30 minutes, 3–4 times a week), optimized environment configuration (focus on safety and comfort), focus on the unity of consciousness field and biofield; evaluation focuses on physiological and subjective experience indicators with real-time safety monitoring. IPT can improve the elderly's physical and mental state and reduce chronic disease burden [5,7].

5.2. Integration of IPT and traditional health preservation methods

Traditional Chinese health preservation methods (Qigong, Tai chi, traditional Chinese medicine health preservation) have core concepts consistent with IPT (maintaining systemic quantum coherence, physical and mental harmony). Their integration can complement each other and enhance anti-aging effects:

(1) Integration with Qigong and Tai Chi

Add quantum awareness training and mitochondrial visualization to Qigong/Tai chi movements; Qigong/Tai chi promotes quantum energy flow circulation, while IPT enhances quantum coherence to improve the efficiency of “intention leading Qi”; configure environment-assisted quantum ecology in practice to enhance the effect of “unity of man and nature” [5–7].

(2) Integration with traditional Chinese medicine health preservation

Adjust IPT training plans and environment configuration according to TCM constitution classification; combine IPT with TCM regimens (diet therapy, meridian massage); use TCM syndrome differentiation to evaluate IPT effects, forming a comprehensive evaluation system with quantum and physiological indicators.

5.3. Promotion and popularization paths of IPT

To promote the wide application of IPT, three-level promotion and popularization paths are proposed, combining professional training, home application and public health services to realize IPT standardization, popularization and industrialization:

(1) Professional training system construction

Formulate standardized training syllabuses and assessment standards, establish professional training institutions (offline + online), and build a national IPT professional certification system to ensure service standardization and professionalism.

(2) Home-based IPT application promotion

Develop portable auxiliary equipment (Schumann resonance generators, HRV biofeedback bracelets), build online training platforms (APP, WeChat mini-program) with courses and effect tracking, and launch popular science content to improve public awareness and acceptance.

(3) Integration into public health services

Set up IPT training rooms in community health service centers, promote IPT in nursing homes, and cooperate with health departments to carry out anti-aging public health projects, providing data support for IPT popularization^[1].

6. Discussion and future research directions

6.1. Discussion

This study establishes the theoretical system and technical specifications of IPT based on the quantum decoherence theory of aging, breaking the limitations of traditional molecular biology anti-aging research and providing a new quantum biological paradigm^[2-4]. Compared with traditional anti-aging interventions, IPT has three advantages: holistic and systematic regulation (multi-level quantum state regulation), non-invasive and low-risk (no drug side effects, suitable for long-term use), and interactive and sustainable (improving the body's quantum plasticity and self-regulation ability).

The theoretical innovation of this study is proposing the quantum decoherence theory of aging, redefining the essence of aging, and establishing the intention-quantum-physiology coupling model to clarify the quantum biological mechanism of intention regulating physiology^[8-10,22]. The technical innovation is designing the standardized IPT technical system with core modules, operation protocols, environment configuration, evaluation standards and safety specifications, ensuring IPT operability and reproducibility.

However, the study has limitations: insufficient preliminary experimental verification with small sample sizes, complex and expensive quantum level indicator detection methods, and an incompletely clear mechanism of intention regulating the body's quantum state, all of which need further research^[10,22].

6.2. Future research directions

Based on the research results and limitations, the following future research directions are proposed:

(1) Large-scale clinical verification

Conduct large-scale randomized controlled trials and long-term follow-up studies to verify IPT effectiveness and safety, providing clinical evidence for popularization.

(2) Improvement of quantum detection technology

Develop simple, low-cost portable quantum detection equipment to realize rapid detection of quantum level indicators and promote evaluation popularization^[10,25].

(3) In-depth research on mechanism

Use advanced technologies (single-molecule quantum imaging, transcriptomics) to study the specific

mechanism of intention regulating the quantum state, especially quantum epigenetic regulation and mitochondrial quantum state management ^[4,9,21,22].

(4) Optimization of IPT technical system

Optimize technical modules and protocols based on clinical and mechanism research, develop personalized training plans and new environmental auxiliary equipment.

(5) Industrialization development

Integrate IPT with health care, elderly care and sports industries, develop a series of products and services to promote research result transformation.

(6) International cooperation and exchange

Strengthen cooperation with foreign research institutions, introduce advanced technologies and concepts, and promote the global development and application of IPT ^[8,10,26].

7. Conclusion

This study integrates the latest research results of quantum biology, neuroscience, aging biology and psychosomatic medicine, proposes the quantum decoherence theory of aging, establishes the intention-quantum-physiology coupling model, and designs the standardized technical system and application strategies of IPT ^[2–15,26–30]. The research results show that IPT is a new anti-aging health preservation strategy with significant theoretical innovation, technical feasibility and broad application prospects.

IPT breaks through the limitations of traditional molecular biology anti-aging research, takes maintaining the body's quantum coherence as the core, realizes multi-scale, systematic regulation of the quantum state through intention regulation and environment assistance, effectively delaying quantum decoherence, restoring mitochondrial function, optimizing organ function and achieving anti-aging effects ^[2–4,9,22–25]. Targeted application strategies for different age groups and integration with traditional health preservation methods further enhance IPT practicality and popularization.

Despite existing limitations, with the in-depth development of quantum biology and continuous optimization of IPT technology, IPT is expected to become an important anti-aging health preservation method, benefiting the general public, promoting the health industry development and providing a new path for global healthy aging ^[1].

Disclosure statement

The authors declare no conflict of interest.

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