

(54) Title of the invention : Novel Combined Training System for Enhancing Physical Fitness, Physiological Health, and Skill Performance in Varsity Volleyball Players Using SAQ and Super Circuit Training Methods with AI and Machine Learning Integration

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(57) Abstract :
 The present invention relates to a novel training system that combines Speed, Agility, Quickness (SAQ) training and Super Circuit training to enhance the physical fitness, physiological health, and skill performance of volleyball players. The system integrates Artificial Intelligence (AI) and Machine Learning (ML) technologies to provide a personalized, data-driven training experience. By using AI-powered motion capture systems and real-time physiological monitoring, the training program adapts dynamically to each player's progress, ensuring optimal performance while reducing the risk of overtraining and injury. Machine learning algorithms analyze player data to predict injury risks, customize workout intensity, and offer corrective feedback on movement patterns, jump height, passing, and serving skills. This invention provides a holistic, adaptive training solution that improves volleyball-specific performance while maintaining athlete health and safety. The system is designed to continuously evolve based on player needs, offering real-time feedback and personalized recommendations to optimize training outcomes.

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