

anatomy skeletal muscle quiz

anatomy skeletal muscle quiz is an essential tool for students and professionals alike, serving as a vital resource for understanding the intricate structures and functions of skeletal muscles in the human body. This article will delve deeply into the anatomy of skeletal muscles, how they operate, and their significance in the overall functioning of the muscular system. By engaging with this topic, readers will gain insights into key concepts, learn how to assess their knowledge through quizzes, and discover effective study techniques tailored for mastering this subject. The article will also provide guidance on various anatomical terms, muscle types, and the physiological mechanisms behind muscle contraction.

To facilitate a deeper understanding, this article will unfold through structured sections, providing a comprehensive overview of skeletal muscle anatomy and its relevance in education and practice.

- Understanding Skeletal Muscle Anatomy
- The Structure of Skeletal Muscles
- Functionality of Skeletal Muscles
- Types of Skeletal Muscles
- Importance of Skeletal Muscle Quizzes
- Effective Study Techniques for Mastering Muscle Anatomy
- Conclusion

Understanding Skeletal Muscle Anatomy

Skeletal muscle anatomy forms the foundation for understanding how muscles operate within the human body. Skeletal muscles are a type of striated muscle tissue that is under voluntary control. They play a crucial role in facilitating movement, maintaining posture, and producing heat through metabolic activity. Each skeletal muscle is composed of bundles of muscle fibers known as fascicles, which are further made up of individual muscle fibers (myofibers) containing numerous myofibrils. These myofibrils are responsible for the contraction of muscles due to the presence of actin and myosin filaments.

The Role of Skeletal Muscles

Skeletal muscles are primarily responsible for moving the skeleton and enabling locomotion. They also support bodily posture and stabilize joints. The contraction of skeletal muscles is initiated by signals from the nervous system, leading to coordinated movements essential for daily activities and athletic performance.

The Structure of Skeletal Muscles

The structural components of skeletal muscles include several layers, each with its unique role. These layers are vital for muscle function and include:

- **Epimysium:** A connective tissue sheath that surrounds the entire muscle.
- **Perimysium:** This sheath encases individual fascicles, grouping muscle fibers together.
- **Endomysium:** A thin layer of connective tissue that surrounds each muscle fiber, providing support and insulation.

Each of these layers contains blood vessels and nerves that supply nutrients and stimulate muscle contraction. The arrangement of these tissues allows for the effective transmission of force and the ability to withstand the mechanical loads placed on muscles during contraction.

Muscle Fiber Composition

Muscle fibers are classified into two main types based on their contraction speed and endurance:

- **Type I fibers:** Also known as slow-twitch fibers, these are more resistant to fatigue and are primarily used for endurance activities.
- **Type II fibers:** Known as fast-twitch fibers, these are more suited for explosive movements and fatigue quickly.

Understanding these fiber types is crucial for athletes and trainers in tailoring training programs to enhance performance based on specific muscle characteristics.

Functionality of Skeletal Muscles

The functionality of skeletal muscles is often assessed through their ability to contract. Muscle contraction occurs through a process called the sliding filament mechanism, where actin and myosin filaments slide past each other to shorten the muscle fiber. This process is initiated by calcium ions released from the sarcoplasmic reticulum in response to a nerve impulse.

Mechanism of Muscle Contraction

During muscle contraction, several key steps are involved:

1. Neurotransmitter release at the neuromuscular junction.
2. Action potential generation in the muscle fiber.

3. Release of calcium ions from the sarcoplasmic reticulum.
4. Interaction between actin and myosin filaments, leading to contraction.

This coordinated process allows for precise and controlled movements essential for various activities, from simple tasks to complex athletic performances.

Types of Skeletal Muscles

Skeletal muscles can further be categorized based on their location and function. They are primarily classified into two categories:

- **Axial muscles:** These muscles support the head, neck, and trunk, contributing to posture and stability.
- **Appendicular muscles:** These are responsible for limb movement, including those of the arms and legs.

Each type of muscle plays a distinct role in the body, ensuring that various movements can occur effectively and efficiently.

Importance of Skeletal Muscle Quizzes

Skeletal muscle quizzes serve as an effective educational tool for students and professionals in fields such as anatomy, physiology, and sports science. These quizzes can help reinforce knowledge, test understanding, and identify areas that require further study. Engaging in quizzes can also enhance memory retention and improve test performance.

Benefits of Quizzing

The key benefits of utilizing quizzes in learning about skeletal muscle anatomy include:

- **Active Recall:** Quizzing encourages active engagement with the material, aiding memory retention.
- **Self-Assessment:** Quizzes allow learners to evaluate their understanding and identify knowledge gaps.
- **Reinforcement of Knowledge:** Regular quizzing helps solidify concepts and enhances recall ability.

By incorporating quizzes into study routines, individuals can significantly improve their grasp of skeletal muscle anatomy and related concepts.

Effective Study Techniques for Mastering Muscle Anatomy

To master the anatomy of skeletal muscles, employing effective study techniques is crucial. Here are several strategies that can enhance learning:

- **Visual Aids:** Utilize diagrams, charts, and 3D models to visualize muscle structures and their relationships.
- **Flashcards:** Create flashcards with key terms and definitions to reinforce memory through spaced repetition.
- **Group Study:** Collaborate with peers to discuss concepts and quiz each other on muscle anatomy.
- **Practice Quizzes:** Regularly engage in quizzes to assess knowledge and adapt study techniques based on performance.

These techniques not only make studying more interactive but also promote deeper understanding and retention of muscle anatomy concepts.

Conclusion

Understanding skeletal muscle anatomy is fundamental for anyone pursuing a career in health, fitness, or sports science. Engaging with materials like anatomy skeletal muscle quizzes can significantly enhance conceptual clarity and retention of knowledge. By mastering the intricacies of skeletal muscle structure and function, professionals can better apply this knowledge in practical settings, ensuring optimal health and performance outcomes. Through effective study techniques and regular assessment, learners can achieve a comprehensive understanding of this essential aspect of human biology.

Q: What are the main components of skeletal muscle anatomy?

A: The main components of skeletal muscle anatomy include the epimysium, perimysium, and endomysium, which are connective tissue sheaths that protect and organize muscle fibers. Additionally, muscle fibers consist of myofibrils containing actin and myosin filaments responsible for contraction.

Q: How do skeletal muscles differ from smooth and cardiac muscles?

A: Skeletal muscles are striated and under voluntary control, primarily facilitating movement of the skeletal system. In contrast, smooth muscles are non-striated and involuntary, found in internal organs, while cardiac muscles are striated and involuntary, specialized for heart contractions.

Q: Why are muscle fiber types important?

A: Muscle fiber types, namely Type I (slow-twitch) and Type II (fast-twitch), are important because they determine the muscle's endurance and strength capabilities. Understanding these types helps in tailoring training programs to enhance athletic performance and recovery.

Q: What role do quizzes play in studying muscle anatomy?

A: Quizzes play a significant role in studying muscle anatomy by promoting active recall, allowing self-assessment of knowledge, and reinforcing learning through regular practice, which enhances memory retention and understanding.

Q: What are some effective study techniques for anatomy?

A: Effective study techniques for anatomy include using visual aids, creating flashcards, participating in group studies, and engaging in practice quizzes to reinforce concepts and improve retention.

Q: How does muscle contraction occur?

A: Muscle contraction occurs through the sliding filament mechanism, where actin and myosin filaments within muscle fibers slide past each other, initiated by calcium ions released from the sarcoplasmic reticulum following a nerve impulse.

Q: What are the functions of skeletal muscles?

A: The functions of skeletal muscles include facilitating movement, maintaining posture, stabilizing joints, and generating heat through metabolic activity during contraction.

Q: What is the significance of skeletal muscles in physical fitness?

A: Skeletal muscles are significant in physical fitness as they are responsible for strength, endurance, and overall physical performance, affecting everything from daily activities to athletic competitions.

Q: How can understanding skeletal muscle anatomy aid in injury prevention?

A: Understanding skeletal muscle anatomy can aid in injury prevention by allowing individuals to recognize proper movement patterns, enhance flexibility, and develop strength in specific muscle groups, reducing the risk of strains and injuries.

Q: What is the importance of muscle recovery in fitness training?

A: Muscle recovery is crucial in fitness training as it allows damaged muscle fibers to repair and grow stronger, preventing overuse injuries and ensuring optimal performance in subsequent workouts.

[Anatomy Skeletal Muscle Quiz](#)

Find other PDF articles:

<http://www.speargrouppllc.com/gacor1-21/pdf?ID=hBY23-8637&title=nepali-sex-video.pdf>

anatomy skeletal muscle quiz: Exercises for the Anatomy & Physiology Laboratory Erin C. Amerman, 2019-02-01 This concise, inexpensive, black-and-white manual is appropriate for one- or two-semester anatomy and physiology laboratory courses. It offers a flexible alternative to the larger, more expensive laboratory manuals on the market. This streamlined manual shares the same innovative, activities-based approach as its more comprehensive, full-color counterpart, Exploring Anatomy & Physiology in the Laboratory, 3e.

anatomy skeletal muscle quiz: Anatomy and Physiology Super Review Editors of REA, 2012-05-24 Get all you need to know with Super Reviews! Each Super Review is packed with in-depth, student-friendly topic reviews that fully explain everything about the subject. The Anatomy & Physiology Super Review includes an introduction to anatomy and physiology, the chemistry of life, cells and the skin, the skeletal system, the nervous system, the endocrine system, the circulatory system, the respiratory system, the digestive system, the urinary system, the reproductive system, and human development. Take the Super Review quizzes to see how much you've learned - and where you need more study. Makes an excellent study aid and textbook companion. Great for self-study! DETAILS - From cover to cover, each in-depth topic review is easy-to-follow and easy-to-grasp - Perfect when preparing for homework, quizzes, and exams! - Review questions after each topic that highlight and reinforce key areas and concepts - Student-friendly language for easy reading and comprehension - Includes quizzes that test your understanding of the subject.

anatomy skeletal muscle quiz: Anatomy & Physiology All-in-One For Dummies (+ Chapter Quizzes Online) Erin Ody, 2023-03-28 The knee-bone's connected to the...what was it again? From complicated Latin names to what can seem like a million-and-one things to memorize, no one's saying anatomy and physiology is easy. But, with a little help from your friends at Dummies, it doesn't have to be impossible! Anatomy & Physiology All-in-One For Dummies is your go-to guide for developing a deep understanding of the parts of the human body and how it works. You'll learn the body's structures and discover how they function with expert help from the book's easy-to-use teaching features. You can even go online to access interactive chapter quizzes to help you absorb the material. With this book, you'll: Get a grip on key concepts and scientific terminology used to describe the human body Discover fun physiology facts you can apply to everyday life both inside and outside the classroom Learn how the body's different systems interact with one another So, if you're looking to ace that next test, improve your overall grade, reduce test anxiety, or just increase your confidence in the subject, grab a copy of Anatomy & Physiology All-in-One For Dummies. It's your one-stop, comprehensive resource for all things A&P!

anatomy skeletal muscle quiz: Anatomy and Physiology for the Manual Therapies Andrew Kuntzman, Gerard J. Tortora, 2009-08-17 Anatomy & Physiology for the Manual Therapies 1e is designed to meet the specific needs of students preparing for careers in the manual therapies, such as massage therapy and careers as physical therapy assistants. This book provides the most appropriate depth of coverage for each body system -- in both narrative and visuals -- and by including relevant applications linking the content to situations they will face in their careers.

anatomy skeletal muscle quiz: An Illustrated Atlas of the Skeletal Muscles Bradley S. Bowden, Joan M. Bowden, 2014-09-01 An Illustrated Atlas of the Skeletal Muscles, Fourth Edition is designed as a functional reference, supplement, and study guide for students and health professionals with a broad diversity of interests in the normal structure and function of skeletal-muscular systems.

anatomy skeletal muscle quiz: Exploring Anatomy & Physiology in the Laboratory Core Concepts, 2e Erin C. Amerman, 2018-02-01 This brief version of Exploring Anatomy and Physiology in the Laboratory, 3e, is intended for one-semester anatomy and physiology courses geared toward allied health students. Exploring Anatomy & Physiology Laboratory: Core Concepts, by Erin C. Amerman is a comprehensive, beautifully illustrated, and affordably priced lab manual that features an innovative, interactive approach to engage your students and help ensure a deeper understanding of A&P.

anatomy skeletal muscle quiz: Manual of Structural Kinesiology R. T. Floyd, Clem W. Thompson, 2001 This book provides a straightforward look at human anatomy and its relation to movement. The text identifies specific muscles and muscle groups and describes exercises for strengthening and developing those muscles. The Manual of Structural Kinesiology makes important information readily available to students through a combination of logical presentation and a concise writing style. (Publisher's Description).

anatomy skeletal muscle quiz: Learn Human Body Anatomy by GoLearningBus WAGmob, 2015-01-20

anatomy skeletal muscle quiz: An Outline for Teaching Anatomy and Physiology Jesse Feiring Williams, 1929

anatomy skeletal muscle quiz: Anatomy Demystified Dale Layman, 2004-07-15 Say goodbye to dry presentations, grueling formulas, and abstract theories that would put Einstein to sleep -- now there's an easier way to master the disciplines you really need to know. McGraw-Hill's Demystified Series teaches complex subjects in a unique, easy-to-absorb manner, and is perfect for users without formal training or unlimited time. They're also the most time-efficient, interestingly written brush-ups you can find. Organized as self-teaching guides, they come complete with key points, background information, questions at the end of each chapter, and even final exams. You'll be able to learn more in less time, evaluate your areas of strength and weakness and reinforce your knowledge and confidence. This clear, heavily-illustrated guide to the human body covers anatomy of cells and tissues, muscle tissue, major muscles of the body, nervous tissue, membranes, organs, cancer, the skin, the human skeleton, the nervous system, glands, the senses, the cardiovascular system, the immune system, the respiratory system, digestion, genitourinary system, the embryo, and more.

anatomy skeletal muscle quiz: Mosby's Anatomy & Physiology Study and Review Cards - E-Book Dan Matusiak, 2013-07-01 Mosby's Anatomy & Physiology Study and Review Cards, 2nd Edition helps students learn and retain the fundamentals of Anatomy and Physiology. Divided into 20 color-coded sections, more than 330 cards cover all of the body systems with a vivid mix of illustrations, tables, quizzes and labeling exercises. The vibrant illustrations and supporting text will make the most of study time while improving comprehension and retention. - 330 sturdy, full-color flash cards based on Patton & Thibodeau content enhance your understanding and retention of A&P concepts. - Labeling flashcards with image on the front and label key on the back are ideal for visual learners to practice anatomy identification and grasp anatomical relationships. - Hundreds of study questions on cards with answers on the back help reinforce core content. - Convenient, portable size

lets you study A&P on the go. - New and updated illustrations from Patton textbooks make transitioning from reading to studying seamless. - New and revised questions ensure you have the best A&P preparation possible. - All cards reflect the latest content from the Patton & Thibodeau texts to provide you with the most up to date A&P content.

anatomy skeletal muscle quiz: Human Biology Daniel D. Chiras, 2013

anatomy skeletal muscle quiz: Buck's 2023 Coding Exam Review - E-Book Elsevier, 2022-11-24 Prepare to succeed on your coding certification exam with Buck's Coding Exam Review 2023: The Physician and Facility Certification Step! This extensive exam review provides complete coverage of all topics included on the physician and facility coding certification exams — including anatomy, terminology, and pathophysiology for each body system; reimbursement issues; CPT, HCPCS, and ICD-10-CM/PCS coding; and more. Six full practice exams (with answers and rationales) simulate the testing experience and provide enough practice to reassure even the most insecure exam-taker. It's the only coding exam review you need! - UNIQUE! Six full practice exams on the Evolve companion website simulate the experience of taking the actual coding certification exams, allowing you to assess your strengths and weaknesses in order to develop a plan for focused study. - Full coverage and exam prep for facility and physician coding - Answers and rationales to questions on the practice exams let you check your work. - Concise outline format helps you access key information quickly and study more efficiently. - Mobile-optimized quick quizzes offer on-the-go practice with more than 350 medical terminology, pathophysiology, CPT, HCPCS, and ICD-10-CM questions. - Real-life coding reports simulate the reports that you will encounter on the job and challenge you to apply key coding principles to actual cases. - Test-taking tips in the Success Strategies section guide you step-by-step through the entire exam process. - NEW! Updated content features the latest coding information available, promoting accurate coding and success on the job. - NEW! Revised physician exam mimics the latest format changes to best simulate the exam experience.

anatomy skeletal muscle quiz: Principles of Human Anatomy Gerard J. Tortora, 1989 A basic student textbook of body systems and organs. Includes clinical applications. Appendix includes a list of correct terms for anatomical eponyms.

anatomy skeletal muscle quiz: Buck's Coding Exam Review 2025 - E-BOOK Elsevier Inc, Jackie Koesterman, 2025-01-02 Prepare to succeed on your coding certification exam with Buck's Coding Exam Review 2025: The Physician and Facility Certification Step! This extensive exam review provides complete coverage of all topics included on the physician and facility coding certification exams — including anatomy, terminology, and pathophysiology for each body system; reimbursement issues; CPT, HCPCS, and ICD-10-CM/PCS coding; and more. Six full practice exams (with answers and rationales) simulate the testing experience and provide enough practice to reassure even the most insecure exam-taker. It's the only coding exam review you need! - NEW! Updated content features the latest coding information available, promoting accurate coding and success on the job. - NEW! Revised exams mimic the latest format changes to best simulate the exam experience. - Six full practice exams on the Evolve companion website simulate the experience of taking the actual coding. certification exams, allowing you to assess your strengths and weaknesses in order to develop a plan for focused study. - Full coverage and exam prep for facility and physician coding. - Coverage reflects the latest changes to the CPT E/M guidelines for office and other outpatient codes. - Answers and rationales to questions on the practice exams let you check your work. - Concise outline format helps you access key information quickly and study more efficiently. - Mobile-optimized quick quizzes offer on-the-go practice with more than 350 medical terminology, pathophysiology, CPT, HCPCS, and ICD-10-CM questions. - Real-life coding reports simulate the reports that you will encounter on the job and challenge you to apply key coding principles to actual cases. - Test-taking tips in the Success Strategies section guide you step-by-step through the entire exam process.

anatomy skeletal muscle quiz: Conference Proceedings. New Perspectives in Science Education Pixel, 2017

anatomy skeletal muscle quiz: *Exploring Anatomy & Physiology in the Laboratory, 4th Edition*

Erin C Amerman, 2022-01-14 Over three previous editions, Exploring Anatomy & Physiology in the Laboratory (EAPL) has become one of the best-selling A&P lab manuals on the market. Its unique, straightforward, practical, activity-based approach to the study of anatomy and physiology in the laboratory has proven to be an effective approach for students nationwide. This comprehensive, beautifully illustrated, and affordably priced manual is appropriate for a two-semester anatomy and physiology laboratory course. Through focused activities and by eliminating redundant exposition and artwork found in most primary textbooks, this manual complements the lecture material and serves as an efficient and effective tool for learning in the lab.

anatomy skeletal muscle quiz: The Anatomy and Physiology Learning System Edith

Applegate, 2014-09-29 Who said learning A&P can't be fun? The Anatomy and Physiology Learning System, 4th Edition makes it easy to learn normal structure and function of the body, and summarizes the common disorders found in each body system. Written by well-known educator Edith Applegate, this book combines clear, crisp writing with hundreds of vibrant illustrations. This edition includes a stronger emphasis on medical vocabulary, so you understand key terms before you learn anatomy. A wide array of engaging features simplifies physiology concepts, and an Evolve website supports the book with a wealth of new learning opportunities. Even if you have little or no background in science, you will learn the A&P you need to enter your career! - A clear and concise writing style makes the book easy to read and understand, even if you have a limited background in science. - Quick Check questions let you check your comprehension at various points within a chapter. - Chapter quizzes provide recall, thought, and application questions to check your understanding of A&P concepts. - An Evolve website includes online tutoring, a Body Spectrum coloring book, Anatomy & Physiology Pioneers boxes with brief biographies of trailblazers in science and medicine, 3-D animations, an audio glossary, Spanish pronunciations of key terms, and frequently asked questions. - Outlines and objectives at the beginning of each chapter help you prioritize your study. - Key terms are highlighted to help you analyze, pronounce, and spell important medical words. - A glossary provides definitions and a pronunciation guide for key terms. - Functional Relationships pages illustrate the connection between each individual system and the other body systems, showing how all systems work together. - Representative Disorders describe the common health issues associated with each body system. - Focus on Aging boxes describe the effects of aging on body systems. - Quick Applications boxes connect the material to real-world scenarios. - From the Pharmacy boxes describe common medications for each body system and include a brief description of the drug and its action, common uses, and abbreviations. - 100 new high-quality illustrations help you visualize anatomical features and physiological processes. - Chapter summaries and vocabulary quizzes have been added to the end of each chapter. - New Building Your Medical Vocabulary section covers the history of medical words, giving you the building blocks to use and recognize new terms.

anatomy skeletal muscle quiz: Buck's Coding Exam Review 2024 - E-Book Elsevier,

2023-11-23 - NEW! Updated content features the latest coding information available, promoting accurate coding and success on the job.

anatomy skeletal muscle quiz: Cumulated Index Medicus , 1982

Related to anatomy skeletal muscle quiz

Human Anatomy Explorer | Detailed 3D anatomical illustrations There are 12 major anatomy systems: Skeletal, Muscular, Cardiovascular, Digestive, Endocrine, Nervous, Respiratory, Immune/Lymphatic, Urinary, Female Reproductive, Male Reproductive,

Human body | Organs, Systems, Structure, Diagram, & Facts human body, the physical substance of the human organism, composed of living cells and extracellular materials and organized into tissues, organs, and systems. Human

TeachMeAnatomy - Learn Anatomy Online - Question Bank Explore our extensive library of guides, diagrams, and interactive tools, and see why millions rely on us to support their journey in

anatomy. Join a global community of learners and

Human anatomy - Wikipedia Human anatomy can be taught regionally or systemically; [1] that is, respectively, studying anatomy by bodily regions such as the head and chest, or studying by specific systems, such

Human body systems: Overview, anatomy, functions | Kenhub This article discusses the anatomy of the human body systems. Learn everything about all human systems of organs and their functions now at Kenhub!

Open 3D Model | AnatomyTOOL Open Source and Free 3D Model of Human Anatomy. Created by Anatomists at renowned Universities. Non-commercial, University based. To learn, use and build on

Anatomy - MedlinePlus Anatomy is the science that studies the structure of the body. On this page, you'll find links to descriptions and pictures of the human body's parts and organ systems from head

Human Anatomy Explorer | Detailed 3D anatomical illustrations There are 12 major anatomy systems: Skeletal, Muscular, Cardiovascular, Digestive, Endocrine, Nervous, Respiratory, Immune/Lymphatic, Urinary, Female Reproductive, Male Reproductive,

Human body | Organs, Systems, Structure, Diagram, & Facts human body, the physical substance of the human organism, composed of living cells and extracellular materials and organized into tissues, organs, and systems. Human

TeachMeAnatomy - Learn Anatomy Online - Question Bank Explore our extensive library of guides, diagrams, and interactive tools, and see why millions rely on us to support their journey in anatomy. Join a global community of learners and

Human anatomy - Wikipedia Human anatomy can be taught regionally or systemically; [1] that is, respectively, studying anatomy by bodily regions such as the head and chest, or studying by specific systems, such

Human body systems: Overview, anatomy, functions | Kenhub This article discusses the anatomy of the human body systems. Learn everything about all human systems of organs and their functions now at Kenhub!

Open 3D Model | AnatomyTOOL Open Source and Free 3D Model of Human Anatomy. Created by Anatomists at renowned Universities. Non-commercial, University based. To learn, use and build on

Anatomy - MedlinePlus Anatomy is the science that studies the structure of the body. On this page, you'll find links to descriptions and pictures of the human body's parts and organ systems from head

Related to anatomy skeletal muscle quiz

Human Anatomy: Muscular System - Skeletal Muscles, Biceps & Triceps (Hosted on MSN6mon) The film explores the muscular system of the human body, detailing the roles and functions of the three types of muscles: skeletal, smooth, and cardiac. Skeletal muscles, which are voluntary and work

Human Anatomy: Muscular System - Skeletal Muscles, Biceps & Triceps (Hosted on MSN6mon) The film explores the muscular system of the human body, detailing the roles and functions of the three types of muscles: skeletal, smooth, and cardiac. Skeletal muscles, which are voluntary and work

Anatomy and physiology of ageing 10: the musculoskeletal system (Nursing Times7y) Bones and skeletal muscles undergo a gradual age-related degeneration that accelerates frailty and makes older people more prone to sarcopenia, osteoporosis, osteoarthritis and falls Abstract With

Anatomy and physiology of ageing 10: the musculoskeletal system (Nursing Times7y) Bones and skeletal muscles undergo a gradual age-related degeneration that accelerates frailty and makes older people more prone to sarcopenia, osteoporosis, osteoarthritis and falls Abstract With