

# The "Functional Muscle-Bone Unit": Probing the relationship between muscle and bone development in children and adolescents

Growth Hormone and IGF Research

17, 1-9

DOI: [10.1016/j.ghir.2006.10.004](https://doi.org/10.1016/j.ghir.2006.10.004)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Subcutaneous Fat and Body Fat Mass Have Different Effects on Bone Development at the Forearm in Children and Adolescents. <i>Calcified Tissue International</i> , 2008, 82, 436-444.	1.5	9
2	Genetics of the Musculoskeletal System: A Pleiotropic Approach. <i>Journal of Bone and Mineral Research</i> , 2008, 23, 788-802.	3.1	96
3	The long-term effect of L-lysine, given early in postnatal life, on both growth and various bone parameters in pigs. <i>Journal of Animal Physiology and Animal Nutrition</i> , 2008, 92, 519-528.	1.0	15
4	Exercise during childhood and adolescence: A prophylaxis against cystic fibrosis-related low bone mineral density?. <i>Journal of Cystic Fibrosis</i> , 2008, 7, 270-276.	0.3	50
5	Dual Energy X-ray Absorptiometry Interpretation and Reporting in Children and Adolescents: The 2007 ISCD Pediatric Official Positions. <i>Journal of Clinical Densitometry</i> , 2008, 11, 43-58.	0.5	480
6	Deficits in Bone Mineral Content in Children and Adolescents With Cystic Fibrosis Are Related to Height Deficits. <i>Journal of Clinical Densitometry</i> , 2008, 11, 581-589.	0.5	40
7	The "Functional Muscle-Cartilage Unit": A Reasonable Approach to Describe a Putative Relationship between Muscle Force and Longitudinal Growth at the Forearm in Children and Adolescents?. <i>Hormone Research</i> , 2008, 70, 285-293.	1.8	4
8	High and Low Birth Weight and its Implication for Growth and Bone Development in Childhood and Adolescence. <i>Journal of Pediatric Endocrinology and Metabolism</i> , 2009, 22, 19-30.	0.4	5
9	Forearm Length " A New Tool to Standardize Bone Parameters of the Forearm Measured with Peripheral Quantitative Computed Tomography in Individuals with Disproportional Growth of Forearm Length and Body Height. <i>Hormone Research</i> , 2009, 72, 172-177.	1.8	3
10	Mechanographic Analyses in Pediatrics: Allometric Scaling of "Peak Jump Force" and Its Relationship to "Maximal Isometric Grip Force" in Childhood and Adolescence. <i>Klinische Padiatrie</i> , 2009, 221, 436-439.	0.2	0
12	The relationship between body composition and the urinary excretion of deoxypyridinoline and galactosyl-hydroxylysine in children and adolescents. <i>Journal of Bone and Mineral Metabolism</i> , 2009, 27, 689-697.	1.3	2
13	Assessing the skeleton in children and adolescents with disabilities: Avoiding pitfalls, maximising outcomes. A guide for the general paediatrician. <i>Journal of Paediatrics and Child Health</i> , 2009, 45, 326-331.	0.4	12
14	Bone and Muscle Development During Puberty in Girls: A Seven-Year Longitudinal Study. <i>Journal of Bone and Mineral Research</i> , 2009, 24, 1693-1698.	3.1	80
15	Update on Cystic Fibrosis-Related Bone Disease: A Special Focus on Children. <i>Paediatric Respiratory Reviews</i> , 2009, 10, 134-142.	1.2	54
16	"Putting flesh back onto the bones" Can we predict soft tissue properties from skeletal and fossil remains?. <i>Journal of Human Evolution</i> , 2010, 59, 484-492.	1.3	19
17	Degree of Mineralization at the Attachment of Lateral Pterygoid. <i>Anatomical Record</i> , 2010, 293, 1387-1392.	0.8	2
18	Disorders of ovarian function in childhood and adolescence: evolving needs of the growing child. An endocrine perspective. <i>BJOG: an International Journal of Obstetrics and Gynaecology</i> , 2010, 117, 156-162.	1.1	16
19	Bone mineral density and body composition in adolescents with failure to thrive. <i>Einstein (Sao Paulo)</i> , 2010, 16, 103-108.	0.3	1

#	ARTICLE	IF	CITATIONS
20	N-Terminal C-Type Natriuretic Propeptide Is Associated with the Endosteal Apposition of Bone in Females with a Persistent Eating Disorder. <i>Hormone Research in Paediatrics</i> , 2010, 74, 201-206.	0.8	1
21	The Bone-Muscle Relationship in Men and Women. <i>Journal of Osteoporosis</i> , 2011, 2011, 1-4.	0.1	116
23	DXA measurements in rett syndrome reveal small bones with low bone mass. <i>Journal of Bone and Mineral Research</i> , 2011, 26, 2280-2286.	3.1	35
24	Maximum Ground Reaction Force in Relation to Tibial Bone Mass in Children and Adults. <i>Medicine and Science in Sports and Exercise</i> , 2011, 43, 2102-2109.	0.2	36
25	Brown Adipose Tissue and Its Relationship to Bone Structure in Pediatric Patients. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2012, 97, 2693-2698.	1.8	61
26	The effect of growth hormone deficiency on size-corrected bone mineral measures in pre-pubertal children. <i>Osteoporosis International</i> , 2012, 23, 2211-2217.	1.3	9
28	Sex-specific associations between soft tissue body composition and bone mineral density among older adults. <i>Annals of Human Biology</i> , 2012, 39, 206-213.	0.4	25
29	Muscle strength and soccer practice as major determinants of bone mineral density in adolescents. <i>Joint Bone Spine</i> , 2012, 79, 403-408.	0.8	42
30	Peripheral quantitative computed tomography (pQCT) reveals alterations in the three-dimensional bone structure in children with haemophilia. <i>Haemophilia</i> , 2012, 18, 955-961.	1.0	13
31	Possible mechanisms for the skeletal effects of antipsychotics in children and adolescents. <i>Therapeutic Advances in Psychopharmacology</i> , 2013, 3, 278-293.	1.2	33
32	Endocrine Problems in Children and Adolescents Who Have Disabilities. <i>Hormone Research in Paediatrics</i> , 2013, 80, 221-228.	0.8	16
33	Muscle area estimation from cortical bone. <i>Anatomical Record</i> , 2013, 296, 1695-1707.	0.8	18
34	Mild Myopathy Is Associated with COMP but Not MATN3 Mutations in Mouse Models of Genetic Skeletal Diseases. <i>PLoS ONE</i> , 2013, 8, e82412.	1.1	6
35	The Association between the Low Muscle Mass and Osteoporosis in Elderly Korean People. <i>Journal of Korean Medical Science</i> , 2014, 29, 995.	1.1	67
36	Heterogeneity in Skeletal Load Adaptation Points to a Role for Modeling in the Pathogenesis of Osteoporotic Fracture. <i>Journal of Clinical Densitometry</i> , 2014, 17, 170-176.	0.5	5
37	The functional muscle-bone unit in subjects of varying BMD. <i>Osteoporosis International</i> , 2014, 25, 999-1004.	1.3	17
38	Dual-Energy X-Ray Absorptiometry Interpretation and Reporting in Children and Adolescents: The Revised 2013 ISCD Pediatric Official Positions. <i>Journal of Clinical Densitometry</i> , 2014, 17, 225-242.	0.5	444
39	Isolated Growth Hormone Deficiency (GHD) in Childhood and Adolescence: Recent Advances. <i>Endocrine Reviews</i> , 2014, 35, 376-432.	8.9	110

#	ARTICLE	IF	CITATIONS
40	Reference data and percentile curves of body composition measured with dual energy X-ray absorptiometry in healthy Chinese children and adolescents. <i>Journal of Bone and Mineral Metabolism</i> , 2015, 33, 530-539.	1.3	9
41	Bone Loss and Physical Activity - A Bio Anthropological Perspective. <i>Journal of Osteoporosis and Physical Activity</i> , 2016, 04, .	0.2	3
42	Beyond mobility assessment: Timed up and go test and its relationship to osteoporosis and fracture risk. <i>Journal of Clinical Gerontology and Geriatrics</i> , 2016, 7, 48-52.	0.7	11
43	Associations Between Body Composition and Bone Health in Children and Adolescents: A Systematic Review. <i>Calcified Tissue International</i> , 2016, 99, 557-577.	1.5	78
44	Association of Jumping Mechanography-Derived Indices of Muscle Function with Tibial Cortical Bone Geometry. <i>Calcified Tissue International</i> , 2016, 98, 446-455.	1.5	6
45	Assessment of condyle, masseter and temporal muscles volumes in patients with juvenile systemic lupus erythematosus: A cross-sectional study. <i>Journal of Oral Biology and Craniofacial Research</i> , 2017, 7, 89-94.	0.8	2
46	Are there effects of age, gender, height, and body fat on the functional muscle-bone unit in children and adults?. <i>Osteoporosis International</i> , 2018, 29, 1069-1079.	1.3	19
47	Relationship between body mass, lean mass, fat mass, and limb bone cross-sectional geometry: Implications for estimating body mass and physique from the skeleton. <i>American Journal of Physical Anthropology</i> , 2018, 166, 56-69.	2.1	33
48	Bone Geometry, Quality, and Bone Markers in Children with Type 1 Diabetes Mellitus. <i>Calcified Tissue International</i> , 2018, 102, 657-665.	1.5	18
49	Associations Between Lean Mass, Muscle Strength and Power, and Skeletal Size, Density and Strength in Older Men. <i>Journal of Bone and Mineral Research</i> , 2018, 33, 1612-1621.	3.1	21
50	Prepubertal skeletal muscle growth requires Pax7-expressing satellite cell-derived myonuclear contribution. <i>Development (Cambridge)</i> , 2018, 145, .	1.2	95
51	Age and sex effects on the relationship between body composition and hip geometric structure in males and females from East China. <i>Archives of Osteoporosis</i> , 2018, 13, 79.	1.0	9
52	Physical Activity, Physical Fitness, Body Composition, and Nutrition Are Associated with Bone Status in University Students. <i>Nutrients</i> , 2018, 10, 61.	1.7	16
53	Usefulness of circuit training at home for improving bone mass and muscle mass while losing fat mass in undergraduate female students. <i>Lipids in Health and Disease</i> , 2018, 17, 104.	1.2	7
54	Osteogenesis Imperfecta: Muscle-Bone Interactions when Bi-directionally Compromised. <i>Current Osteoporosis Reports</i> , 2018, 16, 478-489.	1.5	14
55	Estimating body mass and composition from proximal femur dimensions using dual energy x-ray absorptiometry. <i>Archaeological and Anthropological Sciences</i> , 2019, 11, 2167-2179.	0.7	14
56	Interaction of body fat percentage and height with appendicular functional muscle-bone unit. <i>Archives of Osteoporosis</i> , 2019, 14, 65.	1.0	1
57	Low muscle mass and strength in pediatrics patients: Why should we care?. <i>Clinical Nutrition</i> , 2019, 38, 2002-2015.	2.3	88

#	ARTICLE	IF	CITATIONS
58	Pharmacotherapy in Rare Skeletal Diseases. Handbook of Experimental Pharmacology, 2019, 261, 87-104.	0.9	1
59	Body composition and bone mineral density in childhood. Bone, 2019, 121, 9-15.	1.4	27
60	Mediating role of physical fitness and fat mass on the associations between physical activity and bone health in youth. Journal of Sports Sciences, 2020, 38, 2811-2818.	1.0	7
61	Muscle force interacts with stature to influence functionally related polar second moments of area in the lower limb among adult women. American Journal of Physical Anthropology, 2020, 173, 258-275.	2.1	4
62	Skeletal muscle of females and males with constitutional thinness: a low intramuscular lipid content and oxidative profile. Applied Physiology, Nutrition and Metabolism, 2020, 45, 1287-1298.	0.9	6
63	The muscle to bone axis (and viceversa): An encrypted language affecting tissues and organs and yet to be codified?. Pharmacological Research, 2021, 165, 105427.	3.1	16
65	A cross-sectional study of the relationship between recreational sporting activity and calcaneal bone density in adolescents and young adults. Physician and Sportsmedicine, 2021, , 1-9.	1.0	1
66	Skeletal muscle specific mitochondrial dysfunction and altered energy metabolism in a murine model (oim/oim) of severe osteogenesis imperfecta. Molecular Genetics and Metabolism, 2021, 132, 244-253.	0.5	5
67	Non-linear association of body composition and its components with bone density in Iranian children and adolescents. Archives of Osteoporosis, 2021, 16, 77.	1.0	1
68	Association between muscle mass, bone mineral density and osteoporosis in type 2 diabetes. Journal of Diabetes Investigation, 2022, 13, 351-358.	1.1	13
69	The Efficacy of Brief School-Based Exercise Programs in Improving Pubertal Bone Mass and Physical Fitness: A Randomized Controlled Trial. International Journal of Environmental Research and Public Health, 2021, 18, 9648.	1.2	4
70	Bone, muscle, and sarcopenia. , 2021, , 847-873.		0
71	Whole-body vibration as potential intervention for people with low bone mineral density and osteoporosis: A review. Journal of Rehabilitation Research and Development, 2009, 46, 529.	1.6	110
72	Interaction Between Bone and Muscle in Older Persons with Mobility Limitations. Current Pharmaceutical Design, 2014, 20, 3178-3197.	0.9	88
73	Hormonal Aspects of the Muscle-Bone Unit. Physiological Research, 2008, 57 Suppl 1, S159-S169.	0.4	57
74	Physical Activity and Exercise Programs. , 2009, , 95-97.		1
76	Impact of Disorders of Gonadal Function in Childhood and Adolescence on Growth Patterns and Outcomes. , 2012, , 1137-1162.		0
77	Omega-3 Fatty Acids and Bone Metabolism. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
78	Impaired Ability to Perform the Sit-to-Stand Task in Osteoporotic Women. , 0, , .		0
79	Age Typical Associations between Skeletal Muscle Mass and Bone Mass among Healthy Women. Journal of Women's Health, Issues & Care, 2013, 02, .	0.1	1
80	Association of Body Compositions and Bone Mineral Density in Chinese Children and Adolescents: Compositional Data Analysis. BioMed Research International, 2021, 2021, 1-9.	0.9	3
81	Bone fragility and imaging techniques. Clinical Cases in Mineral and Bone Metabolism, 2009, 6, 234-46.	1.0	32
83	Distrectual osteosarcopenia in limb disuse: case report and mini literature review. Acta Biomedica, 2020, 91, e2020005.	0.2	0
84	Association between Body Composition and Bone Mineral Density in Children and Adolescents: A Systematic Review and Meta-Analysis. International Journal of Environmental Research and Public Health, 2021, 18, 12126.	1.2	14
85	Beneficial Effects of Bovine Milk Exosomes in Metabolic Interorgan Cross-Talk. Nutrients, 2022, 14, 1442.	1.7	20
86	Dietary Complex and Slow Digestive Carbohydrates Promote Bone Mass and Improve Bone Microarchitecture during Catch-Up Growth in Rats. Nutrients, 2022, 14, 1303.	1.7	2
88	Archery's signature: an electromyographic analysis of the upper limb. Evolutionary Human Sciences, 2022, 4, .	0.9	3
89	Bone Health in Children with Rheumatic Disorders: Focus on Molecular Mechanisms, Diagnosis, and Management. International Journal of Molecular Sciences, 2022, 23, 5725.	1.8	9
90	New Insights on Bone Tissue and Structural Muscle-Bone Unit in Constitutional Thinness. Frontiers in Physiology, 0, 13, .	1.3	2
91	Positive association of lean mass and negative association of protein intake on bone mass and bone geometry of adolescent soccer players. Nutrition, 2022, , 111857.	1.1	1
92	Effect of resistance exercise on bone health of old aged individuals: Review. Science and Sports, 2022, , .	0.2	0
96	Knochengewebe. , 2023, , 321-340.		0