

# بسم الله الرحمن الرحيم



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شبكة المعلومات الجامعية التوثيق الالكتروني والميكرونيلم





## جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

### قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة يعيدا عن الغيار













بالرسالة صفحات لم ترد بالأصل



### Evaluation of Bone Mineral Density and Body Composition in 10-11year Old Egyptian females

#### **Thesis**

Submitted for partial fulfillment of Master Degree in Pediatrics

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#### List of abbreviations

| Abb.   | Full term   |
|--------|---|
|        |   |
| AAP    | American academy of pediatrics                        |
| aBMD   | areal bone mineral density                            |
| BMAD   | apparent volumetric bone mineral density              |
| BMC    | bone mineral content                                  |
| BMD    | bone mineral density                                  |
| BMPs   | bone morphogenetic proteins                           |
| BP     | Bisphosphonates                                       |
| CT     | Computerized tomography                               |
| CV     | coefficients of variation                             |
| DXA    | dual-energy x-ray absorptiometry                      |
| DXR    | Digital X-ray Radiogrammetry                          |
| FFM    | Fat free mass   |
| FN     | femoral neck  |
| FNBMAD | Femoral Neck Bone Mineral Apparent Volumetric         |
|        | Density   |
| GH     | Growth hormone  |
| GIOP   | Glucocorticoid induced osteoporosis                   |
| IGF-1  | Insulin like growth factor 1                          |
| IJO    | Idiopathic Juvenile osteoporosis                      |
| IL     | interleukin   |
| IOM    | Institute of Medicine                                 |
| ISCD   | International Society for Clinical Densitometry       |
| LBM    | Lean body mass  |
| LS     | Lumbar spine  |
| LSBMAD | Lumbar spine Bone Mineral Apparent Volumetric density |
| M-CSF  | macrophage colony-stimulating factor                  |
| MRI    | Magnetic resonance imaging                            |

| MSCs   | mesenchymal stem cells                                      |
|--------|---|
| NAS    | National Academy of Science                                 |
| OCPs   | Osteoclast precursors                                       |
| OI     | Osteogenesis imperfecta                                     |
| OPG    | osteoprotegerin   |
| PBM    | peak bone mass  |
| PHV    | peak height velocity  |
| PPARγ2 | peroxisome proliferator-activated receptor gamma receptor 2 |
| pQCT   | peripheral quantitative computed tomography                 |
| pQUS   | Peripheral quantitative ultrasound                          |
| PTH    | parathyroid hormone   |
| RANK   | receptor activator of nuclear factor-kB                     |
| RANKL  | receptor activator of nuclear factor kappa-B ligand         |
| rhGH   | recombinant human GH  |
| ROI    | regions of interest   |
| TBLH   | total body less head  |
| TNFa   | tumour necrosis factor a                                    |
| TNFb   | tumour necrosis factor b                                    |
| TRP    | transient receptor potential calcium channels               |
| vBMD   | Volumetric bone mineral density                             |

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