BIBLIOGRAPHY

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Adams,P.and Berridge,P.R. (1969): Effect of kwashiorkor on cortical and trabecular bone. Arch. Dis. in Childhood. 44, 705-709.

Adams,P.H., Hill,L.F., Wain,D., and Taylor,C. (1974): The effects of undernutrition and its relief on intestinal calcium transport in the rat. Cal. Tis. Res. 16, 293-304.

Amdur,M.O., Norris,L.C. and Heuser,G.F. (1945): The need for manganese in bone development by the rat. Proc. Soc. Exp. Biol. Med. 59, 254-255.

Amprino,R. and Bairati,A. (1936): Z.Zellforsch.Mikrosk. Anat. 24, 439. c.f. Pritchard,J.J. (1972): General Histology of Bone. In 'The Biochemistry and Physiology of Bone'. Vol.I, Chap.I (ed. G.H.Bourne), Academic Press, pp.1-19.

Amprino,R. and Marotti,G. (1964): A topographic quantitative study of bone formation and reconstruction, in first European Bone and Tooth Symposium. New York, Pergamon, pp.21-23.

Anasuya and Narasinga Rao. (1970): Relationship between body collagen and urinary hydroxyproline excretion in young rats fed a low protein or low calorie diet. Brit. J. Nutr. 24, 97-107.

Anderson,H.C. (1973): Calcium accumulating vesicles in the intercellular matrix of bone. In, 'Hard Tissue, growth, repair and remineralization'. (eds. K.Elliott and D.W.Fitzsimons). Associated Scientific Publishers, Amsterdam. pp.213-246.

Anderson,G.H. and Draper,H.H. (1972): Effects of dietary phosphorus on calcium metabolism in intact and parathyroidectomized adult rats. J. Nutr. 102, 1123-1132.

Anderson,H.C. and Reynolds,J.J. (1973): Pyrophosphate stimulation of calcium uptake into cultured embryonic bone. Fine structure of matrix vesicles and their role in calcification. Develop. Biol. 34, 211-227.

Andrews,A.T., Herring,G.M. and Kent,P.W. (1967): Some studies on the composition of bovine cortical-bone sialoprotein. Biochem. J. 104, 705-714.

Angeleli,A.Y.O., Burini,R.C. and Campana,A.O. (1978): Body collagen nitrogen in protein deficient adult rats. J. Nutr. 108, 1147-1154.

A.O.A.C. (1950): Methods of analysis. Association of Official Agricultural Chemists. Washington, D.C.

Ashton,B.A. (1972): Studies on the isolation and characterization of some macromolecular constituents of bone matrix. D.Phil.Thesis, Oxford University.

c.f. Bingham,P.J., Melick,R.A. and Mercuri,S.M.(1978): The effect of growth retardation and osteomalacia on the uptake of albumin by bone. Cal.Tis.Res. 25,29-38.

Atinmo,T., Baldijao,C., Pond,W.G. and Barness,R.H. (1976): The effect of dietary protein restriction on serum thyroxine levels of pregnant or growing swine. J. Nutr. 108, 1456-1533.

Bang,G. and Urist,M.R. (1967): J. Dent. Res. 46, 722-730. cf. Urist,M.R. (1976): In 'The Biochemistry and Physiology of Bone'. Vol.IV. Calcification and Physiology. (ed. Bourne,G.H.). Acad. Press, New York. pp.1-59.

Barness,R.H., Cunnold,S.R., Zimmerman,R.R., Simons,H., MacLeod,R.B. and Krook,L. (1966): Influence of nutritional deprivations in early life on learning behaviour of rats measured by performance in a water-maze. J. Nutr. 89, 399-410.

Bassett,C.A.L. (1962): Current concepts of bone formation. J. Bone Joint Surg. 44A, 1217-1244.

Baylink,D., Stauffer,M., Wergedal,J. and Rich,C. (1970): Formation, mineralization and resorption of bone in vitamin D - deficient rats. J. Clin. Invest. 49, 1122-1139.

Behar,M., Viteri,F. and Guzman,M.A. (1969): Compact bone deficiency in protein calorie malnutrition. Science. 145, 1444.

Bèlanger,L.F. and Clark,I. (1967): Alpha radiographic and histological observations on the skeletal effects of hypervitaminoses A and D in the rat. Anat. Rec. 158, 443-452.

Bèlanger,L.F. and Migicovsky,B.B. (1963): Histochemical evidence of proteolysis in bone. The influence of parathormone. J. Histochem. Cytochem. 11, 734-737.

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Bell,R.R., Draper,H.H., Tzeng,D.Y.M., Shin,H.K. and Schmidt,G.R. (1977): Physiological responses of human adults to food containing phosphate additives. J. Nutr. 107, 42-50.

Beresford,W.A. (1969): Vitamin A deficiency and cartilage in healing skull fractures of rats. Experientia. 25 (4), 383-384.

Bergman,I. and Loxley,R. (1963): Two improved and simplified methods for the spectrophotometric determination of hydroxyproline. Anal. Chem. 35(12), 1961.

Bevelander,G. and Johnson,P.L. (1950): A histochemical study of the development of membrane bone. Anat. Rec. 108, 1.

Bhaskar,S.N. (1953): Growth pattern of the rat mandible from 13 days insemination age to 30 days after birth. Amer. J. Anatomy. 92, 1-53.

Bhat,P.V. and Rama Rao,P.B. (1978): Vitamin A nutrition in relation to gangliosides and myelination in the developing brain. Wld. Rev. Nutr. Diet. 31,100-106.

Bingham,P.J., Melick,R.A. and Mercuri,S.M. (1978): The effect of growth retardation and of osteomalacia on the uptake of albumin by bone. Cal. Tis. Res. 25, 29-35.

Bitter,T. and Muir,H.M. (1962): A modified uronic acid carbazole reaction. Anal. Biochem. 4, 330-331.

Blumenthal,N.C., Posner,A.S., Silverman,L.D. and Rosenberg,L.C. (1979): Effect of proteoglycans on in vitro hydroxyapatite formation. Calcif. Tiss. Intl. 27, 75-82.

Bonanni,F., Levinson,S.S., Wolf,G. and DeLuca,L. (1973): Glycoproteins from the hamster respiratory tract and their response to vitamin A. Biochim. Biophys. Acta. 297, 445-451.

Booher,L.E., Behan,I. and McMeans,E. (1951): Biological utilization of unmodified and modified food starches. J. Nutr. 45, 75-95.

Boren,H.G., Pauley,J., Wright,E.C., Kaufman,D.G., Smith,J.M. and Harris,C.C. (1974): Cell populations in the hamster tracheal epithelium in relation to vitamin A status. Int. J. Vit. Nut. Res. 44, 382-390.

Bouillon,R., Baelen,H.V., Rombauts,W. and DeMoor,P. (1978): The isolation and characterization of the vitamin D binding protein from rat serum. J. Biol. Chem. 253(2), 4426-4431.

Bowness,J.M. (1968): Present concepts of the role of ground substance in calcification. Clin. Orthop. 59, 233-244.

Bowness,J.M. and Jacobs,M. (1968): Chondroitin sulphate changes in puppy rib cartilage during the period of calcification. Can. J. Biochem. 46, 63-67. Canad.

Brown,R.A. and Sturtevant,M. (1949): Vitamin requirement of the growing rats. Vitamins and Hormones. 7, 171-199.

Cameron,D.A. (1968): The Golgi apparatus in bone and cartilage cells. Clin. Orthop. Relat. Res. 58, 191.

Cameron,D.A. (1972): The ultrastructure of Bone structure. In 'The Biochemistry and Physiology of Bone'. Vol.I, Chap.6. (ed. G.H.Bourne). Acad. Press., New York.

Carlisle,E.M. (1970): Silicon - A possible factor in bone calcification. Science. 167, 279-280.

Carlisle,E.M. (1971): A relationship between silicon, magnesium and fluorine in bone formation in the chick. Fed. Proc., Fed. Amer. Soc. Exp. Biol. 30, 462 (abstr.).

Carlisle,E.M. (1972a): Silicon - An essential element for the chick. Fed. Proc., Fed. Am. Soc. Expt. Biol. 31, 700 (abstr.).

Carlisle,E.M. (1972b): Silicon - An essential element for the chick. Science. 178, 619-621.

Carlisle,E.M. (1974): A relationship between silicon, glycosaminoglycan and collagen formation. Fed. Proc., Fed. Amer. Soc. Expt. Biol. 33, 704 (abstr.)

Carlisle,E.M. (1980): A silicon requirement for normal skull formation in chick. J. Nutr. 110, 352-359.

Carson,F.L., Davis,W.L., Matthews,J.L. and Martin,J.H. (1978): Ca Localization in normal rachitic and D_3 treated chicken epiphyseal chondrocytes utilizing potassium pyroantimonateosmium tetroxide. Anat. Rec. 190, 23-40.

Caskey,C.D., Gallup,W.D. and Norris,L.C. (1939): The need for manganese in the bone development of the chick. J. Nutr. 17, 407-417.

Chen,T.C., Castillo,L., Korycka-Dahl,M., DeLuca,H.F. (1974): Role of vitamin D metabolites in phosphate transport of rat intestine. J. Nutr. 104, 1056-1060.

Chole,R.A. and Quick,C.A. (1976): Temporal bone histopathology in experimental hypovitaminosis A Laryngoscope. 86(3), 445-453.

Chow,B.F. and Lee,C.U. (1964): Effect of dietary restriction of pregnant rats on body weight gain of the offspring. J. Nutr. 82, 10-18.

Cipera,J.D., Migicovsky,B.B. and Belanger,L.F. (1960): Composition of epiphyseal cartilage. I. Changes in hexosamine and acetone extractable contents of epiphyseal cartilage of rachitic chicks following administration of vitamin D_3. Can. J. Biochem. Physiol. 38, 807-811.

Cousins,R.J., Eaton,H.D., Rousseau,J.E. Jr. and Hall,R.C. Jr. (1969): Biochemical constituents of the dura mater in vitamin A deficiency. J. Nutr. 97, 409-418.

Cox,R.P. and Griffin,M.J. (1965): Pyrophosphatase activity of mammalian alkaline phosphatase. Lancet. 2, 1018-1019.

Cox,W.M. and Mueller,A.J. (1937): The composition of milk from stock rats and an apparatus for milking small laboratory animals. J. Nutr. 13, 249-260.

Crouch,J.E. (1967): In 'Functional Human Anatomy'. General Osteology. p.99. Lea Febiger.

Cuervo,L.A., Pita,J.C. and Howell,D.S. (1973): Inhibition of calcium phosphate mineral growth by proteoglycan aggregate fractions in a synthetic lymph. Cal. Tis. Res. 13, 1-10.

Dave,J.R. (1976): Studies on the composition of the bone in relation to age and nutritional status. Ph.D. thesis, M.S. University, Baroda.

Davidson,S., Passmore,R., Brock,J.F. and Truswell,A.S. (1975): Rickets and Osteomalacia. In 'Human Nutrition and Dietetics'. Chap.27. The English Language Book Society and Churchill Livingstone.

Dean,R.F.A. (1965): Malnutrition and Body composition. In 'Human body composition'. Vol.VII. pp.267.

Dearder,L.C. and Espionosa,T. (1974): Comparison of mineralization of the tibial epiphyseal plate in immature rats following treatment with cortisone, propylthiouracil or after fasting. Cal. Tis. Res. 15, 93-110.

DeLuca,L.M. (1977): Epithelial membranes and vitamin A in Mammalian Cell Membranes: Surface Membranes of Specific Cell Types. Vol.III. Jamieson,G.A. and Robinson,D.M. (eds.). Butterworth. pp.235-249.

DeLuca,H.F. (1978): Vitamin D and Calcium Transport. Annals of New York Acad. of Sciences. 307, 356-376.

DeLuca,L.M., Shymacher,M. and Wolf,G. (1970): Biosynthesis of a fucose-containing glycopeptide from rat small intestine in normal and vitamin A - deficient conditions. J. Biol. Chem. 245, 4551-4558.

DeLuca,L.M., Silverman-Jones,C.S. and Barr,R.M. (1975): Biosynthetic studies on mannolipids and mannoproteins of normal and Vitamin A - depleted hamster livers. Biochim. Biophys. Acta. 409, 342-352.

Dickerson,J.W.T. (1962): Bone-long: The effect of development on the composition of a long bone of the pig, rat and fowls. Biochem. J. 82, 47-55.

Dickerson,J.W.T. and McCance,R.A. (1961): Severe undernutrition in growing and adult animals - The composition of long bones. Brit. J. Nutr. 15, 567-576.

Dickerson,J.W.T. and Widdowson,E.M. (1960): Some effects of accelerating growth. II. Skeletal Development. Proc. Roy. Soc. B152, 207.

DiOrio,L.P., Miller,S.A. and Navia,J.M. (1973): The separate effects of protein and calorie malnutrition on the development and growth of rat bones and teeth. J. Nutr. 103, 856-865.

Dobbing,J. (1968): Vulnerable periods in developing brain. In 'Applied Neurochemistry'. A.N.Davison and J.Dobbing (eds). Blackwell, Scientific Publishers. pp.287-316.

Dorey,C.K. and Bick,K.L. (1977): Ultrastructural analysis of glycosaminoglycan hydrolysis in the rat periodontal ligament. II. Aryl sulfatase and bone resorption. Cal. Tis. Res. 24, 143-149.

Doty,S.B., Schofield,B.H. and Robinson,R.A. (1968): In 'Parathyroid Hormone and Thyrocalcitonin (Calcitonin)' R.V.Talmage and L.F.Belanger (eds.). Int. Congr. Ser. No.159. Excerpta Med. Found., Amsterdam. pp.169-181.

Dowling,J.E. (1961): The biologic activity of vitamin A acid. Amer. J. Clin. Nutr. 9(4), Pt.2, 23-26.

Dudley,H.R. and Spiro,D. (1961): The fine structure of bone cells. J. Biophys. Biochem. Cytol. 11,627-649.

Dziewiatkowski,D.D. (1954): Vitamin A and endochondral ossification in the rat as indicated by the use of ^{35}S and ^{32}P. J. Exp. Med. 100, 10-24.

Eanes,E.D. and A.S.Posner (1970): Structure and chemistry of bone mineral. Cellular and molecular aspect. In 'Biological Calcification'. H.Schraer (ed). North-Holland Publishing Company, Amsterdam. pp.1-26.

Eastoe,J.E. (1955): The amino acid composition of mammalian collagen and gelatin. Biochem. J. 61, 589-602.

Eaton,R.H. and Moss,D.W. (1966): Inhibition of the inorganic pyrophosphatase associated with alkaline phosphatase in human tissue extracts. Biochem. J. 100, 45P.

Eayrs,J.T. and Harn,G. (1955): The development of cerebral cortex in hypothyroid and starved rats. Anat. Rec. 121, 53-61.

Edelman,I.S., James,A.H., Baden,H. and Moore,F.D. (1954): Electrolyte composition of bone and the penetration of radio sodium and Deuterium oxide into dog and human bone. J. Clin. Investigation. 33, 122-132.

El-Maraghi,N.R.H., Platt,B.S. and Stewart,S.T.C. (1965): The effect of interaction of dietary protein and calcium on the growth and maintenance of the bones of young, adult and aged rats. Brit. J. Nutr. 19, 491-509.

Elson, L.A. and Morgan, W.T.A. (1933): A colorimetric method for the determination of glucosamine and chondrosamine. Biochemistry. 27, 1824.

Engfeldt, B. and Hjerpe, A. (1973): Glycosaminoglycans of dentine and predentine. Cal. Tis. Res. 10, 152-159.

Everson, G.J., Hurley, L.S. and Geiger, J.F. (1959): Manganese deficiency in the guinea pig. J. Nutr., 68, 49-56.

Fell, H.B. and Robison, R. (1930): The development and phosphatase activity in vivo and in vitro of the mandibular skeletal tissue of the embryonic fowl. Biochem. J. 24, 1905-1920.

Fell, H.B. and Robison, R. (1933): Glycogen in cartilage. Nature, 131, 62.

Fernandez-Moran (1957): Electron microscopy and X-ray diffraction of bone. Biochim. Biophys. Acta. 23, 260-264.

Firschein, H.D. (1970): Collagen and mineral accretion rates in bone during vitamin A deficiency. Amer. J. Physiol. 219, 1183.

Firschein, H.D. and Shill, J.P. (1966): The determination of total hydroxyproline in urine and bone extracts. Anal. Biochem., 14, 296-304.

Fiske, C.H. and Subba Row, Y, (1925): Colorimetric determination of phosphorus. J. Biol. Chem., 66, 375-400.

Fleagle, J.G., Samonds, K.W. and Hegsted, D.M. (1975): Physical growth of Cebus monkeys, Cebus albifrons, during protein or calorie deficiency. Am. J. Clini. Nut. 28(3), 246-253.

Fleisch,H. and Neuman,W.F. (1961). Ameri. J. Physiol. 200, 1296. c.f. Pritchard,J.J. (1972): The Osteoblast. In 'The biochemistry and Physiology of bone'. Vol.I(2). (G.H.Bourne ed.) Academic Press. pp.21-40.

Florescu,S., Radu,A. and Rosca,I. (1974): Effect of protein intake on the skeletal development of young sheep for early fattening. Radiological and histological aspects. Lucrarile Stiintifice ale Institutulus de Cercetari Pentru Nutriia Animalelor. 3, 245-257. c.f. Nutr. Abstr. and Reviews. (1976): 46(4), 354. abst.No.3280.

Florescy,S. (1974): Relation between the protein content of the diet and anabolic osteoporosis. c.f. Nutrition abst. and Reviews (1976) 46(5), abst. No.3639. p.390.

Follis,R.H. Jr. (1948): Amer. J. Clin. Pathol. 24, 685. c.f. Pritchard,J.J. (1972): The Osteoblast. In 'The Biochemistry and Physiology of Bone' Vol.I(2). (G.H.Bourne ed.) Academic Press. pp.21-40.

Follis,R.H. Jr. and Berthrong,M. (1949): The histochemical studies on cartilage and bone. I. The normal pattern. Bull. Johns Hopkins Hosp. 85, 281-297.

Follis,R.H. Jr., Bush,J.A., Cartwright,G.E. and Wintrobe,M.M. (1955): Studies in copper metabolism. Bull. Johns Hopkins. Hosp. 97, 405-410.

Fox,J. and Care,A.D. (1978): Effect of low Ca and P diets on the intestinal absorption of phosphate in intact and parathyroidectomized pigs. J. Endocr. 77, 225-231.

Fox,J., Pickard,D.W., Care,A.D. and Murray,T.M. (1978): Effect of low P diets on intestinal Ca absorption and the concentration of CaBP in intact and parathyroidectomized pigs. J. Endocr. 78, 379-387.

Frandsen,A.M., Nelson,M.M., Sulon,E., Becks,H. and Evans,H.M. (1954): The effects of dietary protein on skeletal growth and endochondral ossification. Anat. Rec. 119, 247-261.

Fraser,D.R. (1977): Regulation of secretion of 1,25-dihydroxy-cholecalciferol. Cal. Tis. Res. (suppl). 24, R8: 32.

Fraser,D.R. and Kodicek,E. (1973): Regulation of 25-hydroxy-cholecalciferol-1-hydroxylase activity in the kidney by parathyroid hormone. Nature. 241, 163-166.

Fraser,D.R. and Scriver,C.R. (1976): Familiar forms of vitamin D resistant rickets revisited. X - linked hypophosphatemia and autosomal recessive vit.D dependency. Amer. J. Clin. Nutr. 29, 1315.

Friedlander,E.J., Henry,H. and Norman,A.W. (1978): Studies on the steady state levels and rates of Synthesis of vitamin-D dependent intestinal and renal CaBP. Fed. Proc. 37(3), 333 (abstr.).

Fullmer,H.M. and Lazarus,G. (1967): Collagenase in human, goat and rat bone. Isr. J. Med. Sci. 3, 758-761.

Gallina,A.M., Helmboldt,C.F., Frier,H.I., Nielsen,S.W. and Eaton,H.D. (1970): Bone growth in the hypovitaminotic-A calf. J. Nutrition. 100(1), 129-141.

Garabedian,M., Holick,M.F., DeLuca,H.F. and Boyle,I.T. (1972): Control of 25-hydroxycholecalciferol metabolism by parathyroid glands. Proc. Nat. Acad. Sci. 69, 1673-1676.

Garn,S.M., Rothman,C.G., Behar,M., Viteri,F. and Guzman,M.A. (1964): Compact bone deficiency in protein calorie malnutrition. Science. 145, 1444.

Gay,C.V. (1977): The ultrastructure of the extracellular phase of bone as observed in frozen thin sections. Cal. Tiss. Res. 23, 215-223.

Gendre,H. (1938): Bull. Histol. Appl. Tech. Microse. 15, 165. c.f. Pritchard,J.J. (1972): The Osteoblast. In 'The Biochemistry and Physiology of Bone' Vol.I(2). (G.H.Bourne ed.) Academic Press. pp.21-40.

Glock,G.E. (1940): J. Physiol. 98, 1. c.f. Pritchard,J.J. (1972): The Osteoblast. In 'The Biochemistry and Physiology of Bone'. Vol.I(2). (G.H.Bourne ed.), Academic Press. pp.21-40.

Goh,T.W. and Lowther,D.A. (1966): Effect of age on the composition of Bovine Nasal cartilage. Nature. 210, 1270-1271.

Goldhaber,P. (1967): The inhibition of bone resorption in tissue culture by non-toxic concentrations of sodium fluoride. Isr. J. Med. Sci. 3, 617-626.

Gong,J.K. and Ries,W. (1970): Volumetric composition of the rabbit skeleton. Anat. Rec. 167, 79-86.

Grainger, R.B., O'Dell, B.D. and Hogan, A.G. (1954): Congenital mal-formation as related to deficiencies of riboflavin and vitamin B_{12}, source of protein, calcium and phosphorus ratio and skeletal phosphorus. J. Nutr., 54, 33-48.

Greiling, H. and Bauman, G. (1973): In 'Connective Tissue and Aging'. Vol. I, 160. (H.G. Vogel Ed.). Amsterdam, Excerpta Medica.

Grey, R.M., Nielsen, S.E., Rousseau, J.E. Jr., Calhoun, M.C. and Eaton, H.D. (1965): Pathology of the skull, radius and rib in hyper-vitaminosis A of young calves. Pathol. Vet., 2, 446-467.

Haddad, R., Golub, L., Gedalia, I. and Goldhaber, P.(1970): J. Dent. Res., 49, 639. c.f. Reynolds, J.J. (1972): Skeletal Tissues in Culture. In 'The Biochemistry and Physiology of Bone'. Vol. I(4). (G.H. Bourne, ed.), Academic Press. pp. 70-119.

Hall, B.K. (1968): Differentiation as illustrated by osteogenesis and adventitious chondrogenesis. Ph.D. Thesis, University of New England, Armidale, N.S.W., Australia. c.f. Hall, B.K. (1970): Cellular differentiation in skeletal tissues. Biol. Review., 45, 455-484.

Hall, B.K. (1970): Cellular differentiation in skeletal Tissues. Biol. Review., 45, 455-484.

Hammett, F.S. (1925a): A biochemical study of bone growth. I. Changes in the ash, organic matter and water during growth. J. Biol. Chem., 64, 409-416.

Hammett,F.S. (1925b): A biochemical study of bone growth. II. Changes in the calcium, magnesium and phosphorus of bone during growth. J. Biol. Chem. 64, 685.

Hammett,F.S. (1925c): A biochemical study of bone growth. III. Changes in the composition of the ash during growth. J. Biol. Chem. 64, 693.

Hammond,R.H. and Storey,E. (1970): Measurement of growth and resorption of bone in rats fed meat diet. Cal. Tis. Res. 4, 291-304.

Hammond,R.H. and Storey,E. (1974): Measurement of growth and resorption of bone in the 7th Caudal vertebra of rat. Cal. Tis. Res. 15, 11-20.

Hancox,N.M. and Boothroyd,B. (1963): In 'Mechanisms of Hard Tissue Destruction'. Publ.No.75. Amer. Assn. Advance. Sce. Washington, D.C. pp.497-514.

Hancox,N.M. and Boothroyd,B. (1964): Ultrastructure of bone formation and resorption. Mod. Trends Orthop. 4, 26.

Harkness,M.L.R., Harkness,R.D. and James,D.W. (1958): The effect of protein-free diet on the collagen content of mice. J. Physiology. 144, 307.

Harper,R.A. and Posner,A.S. (1966): c.f. Gay,C.V. (1977): The ultrastructure of the extracellular phase of bone as observed in frozen thin sections. Cal. Tis. Res. 23, 215-223.

Harris (1933): c.f. Zika,J.M. and Klein,L. (1975): Comparison of whole calvarial bones and long bones during early growth in rats. Histology and collagen composition. Cal. Tis. Res. 18, 101-110.

Harris,S.S. and Navia,J.M. (1977): Effect of vitamin A deficiency on calcium and glycosaminoglycan metabolism in guinea pig bone. J. Nutr. 107, 2198-2205.

Harris,S.S. and Navia,J.M. (1978): Vitamin A and sulfate metabolism in bone - Sulfate metabolism in rat calvaria cultured under vitamin A deficient conditions. J. Nutr. 108, 1777-1782.

Harris,S.S., Hunt,C.E., Alvarez,C.J. and Navia,J.M. (1978): Vitamin A deficiency and new bone growth: histologic changes. J. of Oral Pathology. 7, 85-90.

Harris,W.H., Haywood,E.A., Lovorgne,J. (1968): Spatial and temporal variations in cortical bone formation in dogs. J. Bone and Joint Surg. 50A, 1118.

Harrison,T.J. (1958a): The growth of pelvis in the rat, A mensural and morphologic study. J. Anatomy. 92, 236-260.

Harrison,T.J. (1958b): An experimental study of pelvic growth in rat. J. Anatomy. 92, 483.

Harrison,H.E. and Harrison,H.C. (1961): Intestinal transport of phosphate: action of vitamin D calcium and potassium. Am. J. Physiol. 201, 1007-1012.

Hassell,J.R., Jones,C.S. and DeLuca,L.M. (1975): Stimulation of rat liver glycopeptide synthesis by vitamin A. J. Cell Biol. 67, 159a.

Hassell,J.R., Jones,C.S. and DeLuca,L.M. (1978): The stimulation of mannose incorporation into specific glycolipids and glycopeptides of rat liver by high doses of retinylpalmitate. J. Biol. Chem. 253,1627-31.

Havivi,E. and Tal,R. (1974): Phosphatase activity in vitamin A deficiency. Cal. Tis. Res. 14, 251-255.

Havivi,E. and Wolf,G. (1967): Vitamin A, Sulfation and bone growth in the chick. J. Nutr. 22, 467-473.

Hawk,P.B., Oser,B.L. and Summerson,W.H. (1954): Practical physiological chemistry. 13th ed. Blackiston Co., New York. p.1375.

Hayes,K.C. (1969): Vitamin A, differentiation and reproduction. Comments. Amer. J. Clin. Nutr. 22(8), 1081-1084.

Hayes,K.C. and Cousins,R.J. (1970): Cal. Tis. Res. c.f. Havivi,E. and Tal,R. (1974): Effect of vitamin A deficiency on several bone parameters in chicks. Internat. J. Vit. Nutr. Res. 44, 8-13.

Hearn,P.R. and Russel,R.G.G. (1977): Calcium uptake by pig intestinal brush border vesicles and its release by ATP. Cal. Tis. Res. Suppl. 24: R.10, 40.

Heroux,O., Peter,D., Tanner,A. (1975): Effect of a chronic suboptimal intake of Mg on Mg and Ca content of bone and on bone strength of Rat. Can. J. Physiol. Pharmacol. 53(2), 304-310.

Herring,G.M. (1964): Clin. Orthop. 36, 169. c.f. Herring,G.M. (1972): The organic matrix of bone. In 'The Biochemistry and Physiology of Bone'. Vol.I(5) (G.H.Bourne ed.), Academic Press. pp.128-184.

Herring,G.M. (1972): The organic matrix of bone. In 'The Biochemistry and Physiology of Bone'. Vol.I(5). (G.H.Bourne ed.) Academic Press. pp.128-184.

Hill,R.M., Holtkamp,D.E., Buchanan,A.R. and Rutledge,E.K. (1950): Manganese deficiency in rats with relation to ataxia and loss of equilibrium. J. Nutr. 41,359-371.

Hjertquist,S.O. and Lemperg,R. (1972): Cal. Tis. Res. 10,223. c.f. Muir,H. and Hardingham,T.E. (1975): Structure of proteoglycans. Vol.5. MTP International Review Science, Biochemistry of Carbohydrates. (W.J.Whelan ed.). Butterworths University Park Press. pp.153-222.

Hollins,J.G., Durakovic,A. and Storr,M.C. (1973): The Retention of Americium and Calcium by the skeleton of growing and mature female Rats. Cal. Tis. Res. 12, 239-246.

Hong,K.C. and Cruess,R.L. (1978): Changes in organic matrix of bone and blood. ATP in rats fed rachitogenic diets. Cal. Tis. Res. 25, 241-244.

Horowitz,N.H. (1942): J. Dent. Res. 21, 519. c.f. Pritchard,J.J. (1972): The Osteoblast. In 'The Biochemistry and Physiology of Bone'. Vol.I(2) (G.H.Bourne ed.) Academic Press. pp.21-40.

Horowitz,A.L. and Dorfman,A. (1968): Subcellular sites for synthesis of chondromucoprotein of cartilage. J. Cell Biology. 38, 358-368.

Howell,J.M. and Thompson,J.N. (1967): Lesions associated with the development of ataxia in vitamin A deficient chicks. Brit. J. Nutr. 21, 741-750.

Howell,J.M., Pitt,G.A., Thompson,J.N. (1969): The development of lesions in vitamin A deficient adult fowl. Brit. J. Exptl. Pathol. 50(2), 181-186.

Hunt,C.E., Carlton,W.W. and Newberne,P.M. (1966): Copper deficiency in Rabbits. Fed. Proc., Fed. Ame. Soc. Exp. Biol. 25, 432 (abst.).

Hurley,L.S., Everson,G.J. and Geiger,J.F. (1958): Manganese deficiency in rats: Congenital nature of ataxia. J. Nutr. 66, 309-319.

Hurley,L.S., Cosens,G., Theriault,L.L. (1976): Mg, Ca and Zn levels of maternal and fetal tissues in Mg deficient rats. J. Nutr. 106(9), 1261-1264.

Irving,J.T. (1949): The effects of avitaminosis and hypervitaminosis A upon the incisor teeth and incisor alveolar bone of rats. J. Physiol. 108, 92-101.

Iyer,R. (1978): Effect of undernutrition on the chemical composition of bone. M.Sc. (Biochem.) A dissertation submitted to the M.S. University, Baroda.

Jande,S.S. and Bèlanger,L.F. (1969): Ultrastructural changes associated with osteocytic osteolysis in normal trabecular bone. Anat. Rec. 163, 204 (abstr.).

Jande,S,S. and Bèlanger,L.F. (1973): The life cycle of the osteocyte. Clin. Orthop. 94, 281-305.

Jha,G.T., Deo,M.G. and Ramalingaswami,V. (1968): Bone growth in protein deficiency. Amer. J. Path. 53, 1111-1121.

Jones,P.R.M. and Dean,R.F.A. (1956): The effects of Kwashiorkor on the development of the bones of the hand. J. Trop. Paediat. 2, 51-68.

Jones,P.R.M. and Dean,R.F.A. (1959): The effects of Kwashiorkor on the development of bones of the knee. J. Paediat. 54, 176-184.

Jones,S.J. (1974): Secretory territories and rate of matrix production of osteoblasts. Cal. Tis. Res. 14, 303-315.

Jowsey,J., Schenk,R.K. and Reutter,F.W. (1968): Some results of the effect of fluoride on bone tissue in osteoporosis. J. Clin. Endocrinol. Metab. 28, 869-874.

Jowsey,J. and Gordan,G. (1971): Bone Turnover and Osteoporosis. In 'Biochemistry and Physiology of Bone'. Vol.III(6). (G.H.Bourne ed.) Academic Press. pp.202-238.

Kalk,W.J. and Pimstone,B.L. (1974): Ca-binding Protein and vitamin D metabolism in experimental protein malnutrition. Brit. J. Nut. 32, 569-578.

Kaplan,D. and Meyer,K. (1959): Aging of human cartilage. Nature. 183, 1267-1268.

Kasavina,B.S. and Zenkavich,G.D. (1961): Mucopolysaccharides of the bone tissue under normal and pathological conditions. Clin. Chim. Acta. 6, 874.

Katz,E.P. and Li,S.T. (1973): The intermolecular space of reconstructed collagen fibrils. J. Molec. Biol. 73, 351-369.

Kawakami,M., Imawari,M. and Goodman,D.S. (1978): Quantitative studies of the interaction of vitamin D and its metabolites with different genetic variants of the serum binding protein for these steroids. Fed. Proc. 37(3), 408 (abstr.).

Kollicker,A. (1889): In 'Handbuch der Gewebelehre des Menschen' Engelmann Leipzig. c.f. Pritchard,J.J. (1972): The Osteoblast. In 'The Biochemistry and Physiology of Bone'. Vol.I(2) (G.H.Bourne ed.) Academic Press. pp.21-40.

Kowarski,S. and Schachter,D. (1969): Effects of vitamin D on phosphate transport and incorporation into mucosal constituents of rat intestinal mucosa. J. Biol. Chem. 244, 211-217.

Krammer,B. and Shear,M.J. (1928): Composition of bone. IV. Primary calcification. J. Biol. Chem. 79, 147-160.

Krawitt,E.L., Kunin,A.S. and Bacon,B.F. (1976): Intestinal mitochondrial calcium uptake during adaptation to dietary calcium restriction. Cal. Tis. Res. 21(2), 129-133.

Kream,B.E. and DeLuca,H.F. (1977): A specific binding protein for 1,25-dihydroxy vitamin D_3 in rat intestinal cytosol. Biochem. Biophys. Res. Commun. 76, 735-738.

Krook,L. (1968): Dietary calcium-phosphorus and lameness in the horse. Cornell Vet. Suppl. 1. 58, 59-73.

Kuftinec,M.M. and Miller,S.A. (1973): Bone protein synthesis in Neonatal Development. Cal. Tis. Res. 11, 105-111.

Kuftinec,M.M. and Miller,S.A. (1975): Biochemistry of bone mineral incorporation. Cal. Tis. Res. 17(3), 183.

Lahey,M.E., Gubler,C.J., Chase,M.S., Cartwright,G.E. and Wintrobe,M.M. (1952): Studies on copper metabolism. II. Hematologic manifestations of copper deficiency in swine. Blood. 7, 1053-1074,

Lapatsanis,P., Makaronis,G., Vretos,C. and Doxiadis,S. (1976): Two types of nutritional rickets in infants. Amer. J. Clin. Nut. 29, 1222.

Larsson,S.E., Lorentzon,R. and Boquist,L. (1977): Low doses of 1,25-dihydroxycholecalciferol increase mature bone mass in adult normal rats. Clin. Orthop. Rel. Res. 127, 228-235.

Leach,A.A. (1958): The lipids of ox compact bone. Biochem. J. 69,429-432.

Leach,R.M. Jr., Muenster,A.M. and Wien,E.M. (1969): Studies on the role of manganese in bone formation. II. Effect upon chondroitin sulfate synthesis in chick epiphyseal cartilage. Arch. Biochem. Biophys. 133, 22-28.

Lee,W.R., Marshall,J.H. and Sissons,H.A. (1965): Calcium accretion and bone formation in dogs. J. Bone Joint Surg. 47B, 157.

Lehninger,A.L. (1970): Mitochondria and calcium transport. Biochem. J. 119, 129-138.

LeRoith,D. and Pimstone,B.L. (1973): Bone metabolism and composition in the protein-deprived rat. Clinical Science. 44, 305-319.

Likins,R.C., Bavetta,L.A. and Posner,A.S. (1957): Calcification in lysine deficiency. Arch. Biochem. Biophys. 70, 401-412.

Lipp,W. (1954): Acta Anat. (Basel). 22, 151-201.
c.f. Bèlanger,L.F. (1971): Osteoclastic Resorption. In 'The Biochemistry and Physiology of Bone'. Vol.III(7) (G.H.Bourne ed.) Academic Press.

Lipp,W. (1967): Blood serum proteins and the mineralization of bone ground substance. Histochemie. 9, 339-353.

Lohmander,S. and Hjerpe,A. (1975): Proteoglycans of mineralizing rib and epiphyseal cartilage. Biochem. Biophys. Acta. 404, 93-109.

Luckey,T.D., Mende,T.J. and Pleasants,J. (1954): The physical and Chemical characteristics of rat milk. J. Nutr. 54, 345-349.

Lucy,J.A., Dingle,J.T. and Fell,H.B. (1961): Studies on the mode of action of excess vit.A. Biochem. J. 79, 500-508.

Ludwig,K.S. (1953): Vitamin A deficiency and excess and their relation to the alkaline phosphatase content of epiphyseal cartilage. Int. Ztschr. Vitaminforsch. 25, 98-103. c.f. Nut. Abst. and Rev. (1954): 24(2), 313.

Luscombe,M. and Phelps,C.F. (1967): The composition and physicochemical properties of bovine nasal-septa protein-polysaccharide complex. Biochem. J. 102, 110-119.

Mahoney,A.W. and Hendricks,D.G. (1974): Role of gastric acid in utilization of dietary calcium by the rat. Nutr. Metabolism. 16, 375-382.

Maniar,B.M., Kapur,P.L. and Seervi,M.H. (1974): Effect of malnutrition on bones of hand in children. Indian Paediatrics. 11(3), 213-226.

Marino,A.A., Bachman,C.H. and Becker,R.C. (1967): Dielectric determination of bound water of bone. Phys. Med. Biol. 12, 367-378.

Marotti,G., Zallone,A. and Ledda,M. (1976): Number and size and arrangement of osteoblasts in osteons at different stages of formation. Cal. Tis. Res. (suppl.) 21, 96-101.

Martland,M. and Robison,R. (1924): The possible significance of hexosephosphoric esters in ossification - The enzyme in the early stages of bone development. Biochem. J. 18, 1354-1357.

Mathews,M.B. (1973): In 'Connective tissue and aging'. Vol.I. (H.G.Vogel ed.). Amsterdam: Excerpta medica. p.151.

Mathews,M.B. and Glagov,S. (1966): Acid mucopolysaccharide patterns in aging human cartilage. J. Clin. Investi. 45, 1103-1111.

Matthews,J.L., Martin,J.H., Race,G.J. and Collins,E.J. (1967): Giant-Cell Centrioles. Science. 155, 1423-1424.

McCance,R.A. and Ford,E.H.R. (1961): Severe undernutrition in growing and adult animals. Brit. J. Nutr. 15, 213-224.

McCance,R.A. and Widdowson,E.M. (1962): Nutrition and growth. Proc. roy. Soc. B. 156, 326-337.

Mellanby,E. (1931): The experimental production and prevention of degeneration in the spinal cord. Brain. 54, 247-290.

Mellanby,E. (1947): Vitamin A and bone growth: The reversibility of vitamin A deficiency changes. J. Physiol. 105, 382-399.

Mellanby,E. (1950): A story of Nutrition Research, Williams and Wilkins, Baltimore. pp.74-203.

Menczel,J., Posner,A.S. and Harper,R.A. (1965): Isr. J. Med. Sci. 1, 251. c.f. Simmons,D.J. (1976): Comparative physiology of bone. In 'The Biochemistry and physiology of bone'. Vol.IV (11). (G.H.Bourne ed.) Academic Press, pp.462-463.

Merz,W.A., Schonk,R.K. and Reutter,F.W. (1970): Cal.Tis. Res. 4 (Suppl.) p.49. c.f. Jowsey,J. and Gordan,G. (1971): Bone turnover and osteoporosis. In 'The Biochemistry and Physiology of Bone'. Vol.III(6). (G.H.Bourne ed.) Academic Press. pp.202-238.

Messer,H.H., Armstrong,W.D. and Singer,L. (1973): Fluoride, parathyroid hormone, and calcitonin - Interrelationships in bone calcium metabolism. Cal. Tis. Res. 13, 217-225.

Miller,H.C. and Hassanein,K. (1971): Diagnosis of impaired fetal growth in newborn infants. Pediatries, Springfield. 48, 511-522.

Miller,D.S. and Payne,R.P. (1962): Weight maintenance and food intake. J. Nutr. 78, 255-262.

Mitchell,H.H. (1964): Comparative nutrition of man and domestic animals. Vol.II. Academic Press, New York. pp.117-280.

Mohan,P.S. and Rao Jaya,K.S. (1980): Sulfate metabolism in Vitamin A deficient rats. J. Nutr. 110, 868-875.

Mohan Ram,M., Rucker,R.B., Hodges,R.E. and Ney,D. (1976): Vitamin A deficiency and the metabolism of glycosaminoglycans and ascorbic acid in the rat. J. Nutr. 106, 471-477.

Morrissey,R.L., Zolock,D.T. and Bikle,D.D. (1978): Influence of dietary calcium and phosphorus on the synthesis of CaBP in response to 1,25-dihydroxy vitamin D_3. Fed. Proc. 37(3), 408 (abstr.).

Mueller,A.J. and Cox,W.M. Jr. (1946): The effect of changes in diet on the volume and composition of rat milk. J. Nutr. 31, 249-257.

Mundy,G.R., Varani,J., Orr.W., Gondek,M.D. and Ward,P.A. (1978): Resorbing bone is chemotactic for monocytes. Nature. 275, 132-135.

Nakamoto,T. and Miller,S.A. (1977): Effect of protein-energy malnutrition on the growth of mandible and long bones in newborn male and female rat. J. Nutr. 107, 983-989.

NAS - NRC (1962): Nutrient requirement of laboratory animals. No.10, Publication 990, National Academy of Sciences, National Research Council, Washington.

Neeld,J.B. and Pearson,W.N. (1963): Macro and micro method for the determination of serum vitamin A using trifluoroacetic acid. J. Nutr., 79, 454-462.

Nelson,M.M. and Evans,H.M. (1953): Relation of dietary protein levels to reproduction in the rat. J. Nutr. 51, 71-84.

Neuman,M.F. and Neuman,M.W. (1958): In 'The chemical Dynamics of Bone Mineral' Univ. Chicago Press, Chicago, Illinois.

Niebes,P. (1972): Determination of enzymes and degradation products of glycosaminoglycan metabolism in the serum of healthy and varicose subjects. Clinica Chemica Acta. 42, 399.

Noback,C.R. (1943): Some gross structural and quantitative aspects of the developmental anatomy of the human embryonic, fetal and circumnatal skeleton. Anat. Rec. 87, 29-51.

Norris,L.C. and Caskey,C.D. (1939): A chronic congenital ataxia and osteodystrophy in chicks due to manganese deficiency. J. Nutr. 17 (suppl.), 16-17.

Nylen,M.V., Scott,D. and Mosley,V.M. (1960): In 'Calcification in Biological systems'. Amer. Assoc. Advance Sci., Washington, DC.

O'Dell,B.L., Hardwick,B.C., Reynolds,G. and Savage,J.E. (1961): Connective tissue defect in the chick resulting from copper deficiency. Proc. Soc. Exp. Biol. Med. 108, 402-405.

Omdahl,J.L. and DeLuca,H.F. (1973): Regulation of vitamin D metabolism and function. Physiol. Rewiew. 53, 327-372.

Owen,M. (1963): Cell Population kinetics of an osteogenic tissue. J. Cell Biology. 19, 19-32.

Owen,M. (1971): Cellular dynamics of bone. In 'The Biochemistry and Physiology of Bone'. Vol.III(8). (G.H.Bourne ed.) Academic Press. pp.271-298.

Owen,M., Trifitt,J.T. and Melick,R.A. (1973): Albumin in bone: in 'Hard tissue growth, repair and remineralization'. Ciba Foundation Symposium. Vol.11. APS, Amsterdam. pp.263-287.

Owen,M. (1978): Histogenesis of Bone Cells. Cal. Tis. Res. 25, 205-207.

Pansu,D., Chapuy,M.C., Milani,M. and Bellaton,C. (1976): Transepithelial Ca transport enhanced by xylose and glucose in the rat jejunal loop. Cal. Tis. Res. Suppl. 21, 45-52.

Papapolychroniou,T.P., Stylianopoulou,F. and Contopoulos,A.N. (1979): Bone metabolism in different parts of the skeleton. Cal. Tis. Intl. Suppl. 27, A33 (abstr.).

Parker,H.E., Andrew,F.N., Carrick,C.W., Creek,R.D. and Hauge,S.M. (1955): Effect of manganese on bone formation studied with radioactive isotopes. Poultry Sci. 34, 1154-1158.

Pavlovitch,H., Fontaine,O. and Balsan,S. (1977): Maintenance of calcemic response to parathyroid hormone in D-deficient rats by the prevention of severe hyperparathyroidism. Cal. Tis. Res. 23, 277-282.

Pennypacker,J.P., Lewis,C.A. and Hassell,J.R. (1978): Altered proteoglycan metabolism in mouse limb mesenchyme cell cultures treated with vitamin A. Arch. Biochem. Biophys. 186(2), 351-358.

Perlman,R.L., Telser,A. and Dorfman,A. (1964): The biosynthesis of chondroitin sulphate by a cell-free preparation. J. Biol. Chem. 239, 3623-3629.

Peterkofsky,B. (1972): Regulation of collagen secretion by ascorbic acid in 3T3 chick embryo fibroblasts. Biochem. Biophys. Res. Comm. 49, 1343-1350.

Peterkofsky,B. and Udenfriend,S. (1965): Enzymatic hydroxylation of proline in microsomal polypeptide leading to formation of collagen. Proc. Nat. Acad. Sci. 53, 335-342.

Pfeffer,E., Thompson,A. and Armstrong,D.G. (1970): Studies on intestinal digestion in the sheep. 3. Net movement of certain inorganic elements in the digestive tract on rations containing different proportions of hay and rolled barley. Brit. J. Nutr. 24, 197.

Philip,A.G.S. (1974): Fontaneal size and epiphyseal ossification in neonates with intrauterine growth retardation. J. Paediatrics. 84(2), 204-207.

Platt,B.S. and Stewart,R.J.C. (1962): Transverse trabeculae and osteoporosis in bones in experimental protein - calorie deficiency. Brit. J. Nutr. 16, 483-495.

Plumlee,M.P., Thrasher,D.M., Beesen,W.M., Andrews,F.N. and Parker,H.E. (1956): The effects of a manganese deficiency upon the growth, development and reproduction of swine. J. Animal Sci. 15, 352-367.

Posner,A.S. (1971): The structure, properties and formation of calcium phosphates in hard tissue. In 'Cellular mechanisms for calcium transfer and homeostasis' (G.Nichols and R.H.Wasserman eds.) Academic Press, New York and London. pp.3-23.

Posner,A.S., Fabry,C. and Dallemagne,M.S. (1954): Defect apatite series in synthetic and natural calcium phosphates: The concept of pseudoapatites. BBA. 15, 304-305.

Posner,A.S., Betts,F. and Blumenthal,N.C. (1977): Role of ATP and Mg in the stabilization of biological and synthetic amorphous calcium phosphates. Cal. Tis. Res. (suppl.). 22, 208-212.

Prasad,U. and Bose,S.M. (1974): Effect of protein deficiency on cross linking and maturation of collagen. Nutr. Metabolism. 16, 172.

Prasanna Kumari,R. (1966): Effects of dietary protein content on calcium nutrition of albino rats. M.Sc. (Home Science), A dissertation submitted to the M.S. University of Baroda, Baroda.

Pratt,C.W.M. and McCance,R.A. (1965): Atrophicoteoporotic changes in the long bones of severely undernourished pigs. In 'Proc. of the second European symposium on calcified Tissue' (L.Richelle and M.J.Dallermagne eds.) University of Liege.

Pritchard,J.J. (1952): A cytological and histochemical study of bone and cartilage formation in the rat. J. Anat. 86, 259-277.

Pritchard,J.J. (1956): In 'The Biochemistry and Physiology of Bone' (G.H. Bourne ed.) Academic Press, 1st ed. pp.179-212.

Pritchard,J.J. (1972): The Osteoblast in 'The Biochemistry and Physiology of Bone'. Vol.I(2) (G.H.Bourne ed.) Academic Press. pp.21-40.

Pryse-Davies,J., Smitham,J.H. and Napier,K.A. (1974): Factors influencing development of secondary ossification centres in the fetus and new born. Archs. Dis. Childh. 49, 425-431.

Pugliarello,M.C., Vittur,F., Bernard,B.de., Bonucci,E. and Ascenzi,A. (1970): Cal. Tis. Res. 5, 108.
c.f. Urist,M.R. (1976): Biochemistry of calcification In 'The Biochemistry and Physiology of Bone' Vol.IV(1) (G.H.Bourne ed.), Academic Press. pp.2-53.

Radden,B.G. and Fullmer,H.M. (1969): Arch. Oral Biol. 14, 1243. c.f. J.J.Pritchard (1972): The Osteoblast. In 'The Biochemistry and Physiology of Bone'. Vol.I(2) (G.H.Bourne ed.) Academic Press. pp.21-40.

Radhakrishnan,M.R. (1966): Effects of protein depletion and subsequent repletion in rats at different age periods. Part-1. Effects on body weight, body measurements and reproductive performance. Indian J. Med. Res. 54, 486-493.

Raisz,L.G., Trummel,C.L., Holick,M.F. and DeLuca,H.F. (1972): 1,25-dihydroxycholecalciferol: A potent stimulator of bone resorption in tissue culture. Science. 175, 768-769.

Rajalakshmi,R.and Dave,J.R. (1977): Effects of deficiencies of food energy, protein and vitamin A on the composition of the femur in rats. Baroda J. Nutr. 4, 23-33.

Rajalakshmi,R., Paramaswaran,M., Telang,S.D. and Ramakrishnan,C.V. (1974): Effect of moderate and severe postweaning undernutrition on glutamate dehydrogenase and decarboxylase in rat brain. Baroda J. Nutr. 1, 15-20.

Rasmussen,H., DeLuca,H., Arnaud,C., Hawker,C.H., Von Steding,KM. (1963): The relationship between vitamin D and parathyroid hormone. J. Clin. Invest. 42, 1940-1946.

Rasmussen,H., Wong,M., Bikle,D. and Goodman,D.B.P. (1972): Hormonal control of the renal conversion of 25-Hydroxycalciferol to 1,25-Dihydroxycholecalciferol. J. Clin. Investigation. 51, 2502-2504.

Rasmussen,H. and Bordier,P.J. (1974): The physiological and cellular basis of metabolic bone disease. Baltimore: Williams and Wilkins.

Rasmussen,H. and Bordier,P.J.(1978): Vitamin D and Bone. Metab. Bone Dis. and Rel. Res. 1, 7-13.

Rasmussen,P. (1977): Ca deficiency, pregnancy and lactation in rats. Cal. Tis. Res. 23, 87-95.

Raven,M.A., Lengeman,F.W. and Wasserman,R.H. (1960): Studies of the effect of lysine on the absorption of radiocalcium and radiostrontium by the rat. J. Nutr. 72, 29-36.

Reade,T.M., Scriver,C.R., Glorieux,F.H., Nogrady,B., Delvin,E., Poirier,R., Holick,M.F. and DeLuca,H.F. (1975): Response to crystalline 1 α-hydroxyvitamin D_3 in vitamin D dependency. Ped. Res. 9, 593-599.

Reddy,G.S., Sastry,J.W. and Rao,B.S.N. (1972): Radiographic photodensitometric assessment of bone density changes in rats and rabbits subjected to nutritional stresses. Ind. J. Med. Res. 60(12), 1807-1815.

Rewink,J. and Vermeiden,J.P.W. (1977): A possible origin of the osteoclast. Cal. Tis. Res. (Suppl.). 24, R21-83.

Ridgon,R.H. (1952): Arch. Pathol. 53, 239. c.f. Rajalakshmi,R. (1980): Nutrition and development of the nervous tissue. in CRC Handbook series in Nutrition and Food. CRC Press, Inc., USA.

Roberts,M.M.H. and Zeman,F.J. (1978): Thyroid hormones following protein deprivation or food restriction in pregnancy. Fed. Proc. 37(3), 332 (abstr.).

Robinson,R.A. (1951): Conf. Metab. Interrelations, Trans. 3, 271. c.f. Pritchard,J.J. (1972): The Osteoblast In 'Biochemistry and Physiology of Bone' Vol.I(2) (G.H.Bourne ed.) Academic Press. pp.21-40.

Robison,R. (1923): The possible significance of hexosephosphoric esters in ossification. Biochem. J. 17, 286-293.

Rodan,G.A. and Anbar,M. (1967): The turnover of bone. Isr. J. Med. Sci. 3(5), 776-780.

Rojads,M.A., Dyer,I.A. and Cassatt,W.A. (1965): Manganese deficiency in the bovine. J. Anim. Sci. 24, 664-667.

Roord,J.J., Ramaekers,I.H.J. and Van Engelshoven (1978): Intra-uterine malnutrition and skeletal retardation. Biol. Neonate. 34, 167-169.

Rosenbloom,J., Harsch,M. and Jimenez,S. (1978): Hydroxyproline content determines the denaturation temperature of chick tendon collagen. Arch. Biochem. Biophys. 158, 478-484.

Rowett,H.G.Q. (1960): In 'The Rat - As a small Mammal'. 3rd Edition (1974). (J.Murray ed.). Fifty Albemarle Street, London.

Rucker,R.B., Parker,H.E. and Rogler,J.C. (1969): Effects of copper deficiency on chick bone collagen and skeletal bone enzymes. J. Nutr. 98, 57-63.

Russell,R.C.G. and Fleisch. (1976): Pyrophosphate and Diphosphonates. In 'The Biochemistry and Physiology of Bone'. 2nd Edition. (G.H.Bourne ed.) Vol.IV(2) Academic Press, New York. pp.61-69.

Sakai,T., Cruess,R.L. and Iida,K. (1969): The effect of age upon the lipids of the long bones of rat. Exptl. Biol. and Med. 132, 100-104.

Saraswathi,S. (1966): Effect of dietary protein quality on calcium nutrition of albino rats. M.Sc. (Home Science). A dissertation submitted to the M.S. University, Baroda.

Samonds,K.W. and Fleagle,J. (1973): The onset of protein or calorie deficiency in the young cebus monkey. Fed. Proc. 32, 901A.

Schen,S., Villanueva,A.R., Frost,H.M. (1974): Number of osteoblasts per unit area of osteoid seam in cortical human bone. Canad. J. Physiol. Pharmacol. 43, 319-325.

Schenk,R.K., Spiro,D. and Wiener,J. (1967): Cartilage resorption in the tibial epiphyseal plate of growing rats. J. Cell Biol. 34, 275-291.

Schiltz,J.R., Rosenbloom,J. and Levenson,E. (1977): The effects of ascorbic acid deficiency on collagen synthesis by mouse molar tooth germs in organ culture. J. Embryol Exp. Morph. 37, 49-57.

Schryver, H.F., Craig, P.H., Hints, H.F., Hongue, D.E. and Lowe, J.E. (1970): The site of calcium absorption in the horse. J. Nutr. 100, 1127.

Schwarz, K. (1973): A bound form of silicon in glycosaminoglycans and polyuronides. Proc. Natl. Acad. Sci. U.S. 70, 1608-1612.

Schwarz, K. (1974): Recent dietary trace element research exemplified by tin, fluorine and silicon. Fed. Proc., Fed. Amer. Soc. Exp. Biol. 33, 704 (abstr.).

Schwarz, K. and Milne, D.B. (1972): Growth promoting effects of silicon in rats. Nature (London). 239, 333-334.

Scott, B.L. and Pease, D.C. (1956): Electron microscopy of the epiphyseal apparatus. Anat. Rec. 126, 465-479.

Scott, K.E. and Usher, R. (1964): Epiphyseal development in fetal malnutrition syndrome. New Engl. J. Med., 270, 822-824.

Senior, J.A., Wilinsky,I. and Brinkman, G.L. (1978): Diets based on autoclaved skim-milk powder. Caries Research. 12, 275-283.

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Shah, S.S. (1983): Studies on skeletal status and development in relation to age, sex and plane of nutrition. A Ph.D. Thesis submitted to the M.S.University of Baroda.

Shapiro, I.M. (1970): The phospholipids of mineralised tissues. Cal. Tis. Res. 5, 21-29.

Shenolikar, I.S. and Rao, B.S.N. (1968): Influence of dietary protein on Ca metabolism in young rats. Indian J. Med. Res. 56, 1412-1422.

Shrader, R.E., Ferlatte, M.I., Roberts, M.H.H., Schoenborne,B.H., Hoernicke, C.A. and Zeman, F.J. (1977): Thyroid function in prenatally protein deprived rats. J. Nutr., 107, 221-229.

Shrader, R.E., Roberts, M.M.H., Ferlatte, M.I. and Zeman, F.J. (1977) : Effect of prenatal protein deprivation on fetal and neonatal thyroid morphology in the rat. J. Nutr., 107, 213-220.

Shrader, R.E. and Zeman, F.J. (1973) : Skeletal development in rats as affected by maternal protein deprivation and postnatal food supply. J. Nutrition. 103, 792-801.

Singh, S.R. (1978): A study of bone mineralization and its relation to fibrous proteins of bone in certain experimental conditions under dietary stress. Ph.D. Thesis. Department of Biochem. Banaras Hindu University, Banaras, India.

Sisson, S. and Grossman, J.D. (1953) : In 'The Anatomy of Domestic Animals'. Ed. 4 W.B. Saunders Company, Philadelphia, PA. cf: The Journal of Nutrition, Official Organ of the American Institute of Nutrition. Vol.100, No. 1, January, 1970.

Spray, C.M. (1950): A study of some aspects of reproduction by means of chemical analysis. Brit. J. Nutr., 4, 354-360.

Stauffer, M., Baylink, D. and Wergedal, J.E. (1972): Bone resorption in calcium deficient rats fed a high calcium diet. Cal. Tis. Res., 9, 163-172.

Stewart, R.J.C. (1975). Bone pathology in experimental malnutrition. World Review of Nutrition and Dietetics. 21, 1-74.

Stewart, R.J.C. and Platt, B.S. (1961): Dietary protein deficiency and the growth and mineralization of the bones of the pig. Proc. Nutr.Soc., xlvi-xlvii.

Strong, R.M. (1925): The order, time and rate of ossification of the albino rat skeleton. Am. J. Anat., 36, 313-356.

Subramoniam, A. (1978): Studies on rat intestinal alkaline phosphatase with special reference to nutritional deficiencies. Ph.D. Thesis, M.S. University of Baroda, Baroda, India.

Svejcar, J. (1974): Mucopolysaccharide and collagen in prenatal and postnatal human development. Cal. Tis. Res. 16, 209-217.

Tanaka, Y. and DeLuca, H.F. (1971): Bone mineral mobilization activity of 1,25-dihydroxycholecalciferol, a metabolite of vitamin D. Arch. Biochem. Biophys. 146, 574-578.

Taylor, T.G. and Moore, J.H. (1954): Skeletal depletion in hens laying on a low calcium diet. Brit. J. Nutr., 8, 112

Teague, H.S. and Carpenter, L.E. (1951): The demonstration of a copper deficiency in young growing pigs. J. Nutr., 43, 389-399.

Termine, J.D. and Posner, A.S. (1967): c.f. Gay, C.V. (1977): The ultra structure of the extracellular phase of bone as observed in frozen thin sections. Cal. Tis. Res., 23, 215-223.

Timmins,P.A. and Wall,J.C. (1977): Bone water. Cal. Tis. Res. 23, 1-5.

Toews,J.G. and Lee,M. (1975): Retarded skeletal maturation in the progeny of rats malnourished during prēgnancy and lactation. Nut. Reports International. 11(3), 223-230.

Tonge,C.H. and McCance,R.A. (1965): Severe undernutrition in growing and adult animals - The mouth, jaws and teeth of pigs. Brit. J. Nutr. 19, 361.

Toverud,K.U. and Toverud,G. (1933): Chemical and histological studies of bones and teeth of new born infants. Acta Paediat. 16, 459-467.

Townsend,F.J. and Gibson,M.A. (1970): Canad. J. Zool. 48, 87. c.f. Pritchard,J.J. (1972): The Osteoblast. In 'The Biochemistry and Physiology of Bone' Vol.I(2) (Bourne,G.H. ed.) Academic Press. pp.21-40.

Tsai,H.C.C. and Everson,G.J. (1967): Effect of manganese deficiency on the acid mucopolysaccharides in cartilage of guinea pigs. J. Nutr. 91, 447-452.

Ueng,T., Golub,E.E., Reid,M. and Bronner,F. (1978): Calcium Binding Protein (CaBP) in rat duodenum - Measurement and induction. Fed. Proc. 37(3), 272 (abstr.).

Upadhyay,C.M. (1974): Effects of dietary variations on bone composition in rats. Ph.D. Thesis, M.S. University, Baroda.

Van de Putte,K.A. and Urist,M.R. (1965): Clin. Orthop. Related Res. 40, 48-56. c.f. Urist,M.R. (1976): Biochemistry of calcification. In 'The Biochemistry and Physiology of Bone'. Vol.IV(1). (G.H.Bourne ed.) Academic Press. pp.2-53.

Vasan,N.S. and Lash,J.W. (1975): Chondrocyte metabolism as affected by vitamin-A. Cal. Tis. Res. 19, 99-107.

Vaughan,O.W. and Filer,L.J. (1960): The enhancing action of certain carbohydrates on the intestinal absorption of Ca in the rat. J. Nutr. 71, 10-14.

Vejlens,L. (1971): Glycosaminoglycans of human bone tissue. I. Pattern of compact bone in relation to age. Cal. Tis. Res. 7, 175-190.

Walling,M.W. (1977): Intestinal Ca and phosphate transport: differential responses to vit.D_3 metabolites. Amer. J. Physiol. 233(6), E 488-494.

Warnock,G.M. and Duckworth,J. (1944): Changes in the skeleton during gestation and lactation in the rat. Biochem. J. 38, 220-224.

Wasserman,R.H. (1964): Lactose stimulated intestinal absorption of calcium: A theory. Nature. 201, 997-999.

Wasserman,R.H., Comor,C.L. and Nold,M.M. (1956): The influence of amino acids and other organic compounds on the gastrointestinal absorption of calcium and strontium in the rat. J. Nutr. 59, 371-383.

Wasserman,R.H. and Taylor,A.N. (1973): Intestinal absorption of phosphate in the chick: effect of vitamin D_3 and other parameters. J. Nutr. 103, 586-599.

Weinger,J.M. and Holtrop,M.E. (1974): Bone Cells: An ultrastructural study. The occurence of microtubules, microfilaments and tight junctions. Cal. Tis. Res. 14, 15-29.

Weisbrode,S.E., Capen,C.C. and Norman,A.W. (1978): Ultrastructural evaluation of the effects of 1,25-dihydroxyvitamin D_3 on bone of thyroparathyroidectomized rats fed a low-calcium diet. Amer. J. Pathology. 92, 459-472.

Wells,T.A.G. (1964): In 'The Rat - A practical Guide'. Heinemann Educational Books Ltd., London, W.I.

Wergedal,J.E. and Baylink,D.J. (1969): Distribution of acid and alkaline phosphatase activity in undermineralized sections of the rat tibial diaphysis. J. Histochem. Cytochem. 17, 799-806.

Widdowson,E.M. and McCance,R.A. (1960): Some effects of accelerating growth. I. General somatic development. Proc. Roy. Soc. Ser. B. (London). 152, 188-206.

Wilgus,H.S. Jr., Norris,L.C. and Heuser,G.F. (1936): The role of certain inorganic elements in the cause and prevention of perosis. Science. 84, 252-253.

Williams,J.P.G. and Hughes,P.C.R. (1978): Catch-up growth in the rat skull after retardation during the suckling period. J. Embryo. exp. morph. 45, 229-235.

Wolbach,S.B. and Hegstead,D.M. (1953): Perosis: Epiphyseal cartilage in choline and manganese deficiencies in the chick. AMA Arch. Pathol. 56, 437-453.

Wolf,G. and Varandani,P.T. (1960): Studies on the function of vitamin A in mucopolysaccharide synthesis. BBA. 42, 501-512.

Wolinsky,I. and Guggenheim,K. (1970): Lipid metabolism of chick epiphyseal bone and cartilage. Calc. Tiss. Res. 6, 113-119.

Wolke,R.E., Eaton,H.D., Nielsen,S.W. and Helmboldt. (1969): Qualitative and quantitative osteoblastic activity in chronic porcine hyper-vitaminosis A. J. Pathol. 97, 677.

Wong,G.L., Luben,R.A. and Cohn,D.V. (1977): 1.25-dihydroxy-cholecalciferol and parathormone: Effects on isolated osteoclast-like and osteoblast - like cells. Science. 197, 663-665.

Woods,J.F. and Nichols,G., Jr. (1965): Collagenolytic activity in rat bone cells - characteristics and intracellular location. J. Cell Biol. 26, 747-757.

Wrobel,J. and Michalska,L. (1977): The effect of exogenous ATP on intestinal calcium transport. Comp. Biochem. and Physiol. 58(4), 421-425.

Wuthier,R.E. (1969): A zonal analysis of inorganic and organic constituents of the epiphysis during endo-chondral calcifications. Cal. Tis. Res. 4, 20-38.

Zerwekh,J.E. (1979): Vitamin D - dependent intestinal calcium absorption. Gastroenterology. 76(2), 404-410.

Zika,J.M. and Klein,L. (1975): Comparison of whole calvarial bones and long bones during early growth in rats. Histology and collagen composition. Cal. Tis. Res. 18, 101-110.

Zile,M., DeLuca,H.F. and Ahrens,H. (1972): Vitamin A deficiency and urinary calcium excretion in rats. J. Nutr. 102, 1255-1258.

Zile,M., Ahrens,H. and DeLuca,H.F. (1973): Vitamin A and Bone metabolism in the rat. J. Nutrition. 103, 308-313.

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