EXAM II REVIEW **BIOL217** **SPRING 2025** **DR. PRYOR**

Vitamins – organic cofactors
Fat-soluble vitamins (A, D, E, K)
Vitamin A (retinol) – for vision
Hypervitaminosis A
Vitamin D (calciferol) – for bones, calcium utilization
Rickets
Vitamin E (tocopherol) – for reproductive health
Vitamin K - for blood clotting/coagulation

Water-soluble vitamins (C, B1, B2, B3, B5, B6, B7, B9, B12)
Vitamin C (ascorbic acid)
Scurvy
Vitamin B1 (thaimin)
Beriberi
Vitamin B2 (riboflavin)
Vitamin B3 (niacin)
Pellagra
Nixtamalization
Vitamin B5 (pantothenic acid)
Vitamin B6 (pyridoxin)
Vitamin B7 (biotin)
Vitamin B9 (folate) – for erythrocytes
Vitamin B12 (cobalamine) for erythrocytes
Anemia

Minerals – inorganic cofactors
Macrominerals
Calcium, phosphorus – for bones, teeth, eggshells
Sodium, chlorine, potassium – for nerves
Microminerals

Domestic dogs
Canis familiaris
Canis lupus
B.A.R.F. diets
Salmonella bacteria - food poisoning
AAFCO
Grain-free diets
Canine dilated cardiomyopathy (DCM)
Amylase
Overweight/obesity problems
5-point scoring system
How to convert kg to lbs
How to use energy requirement formula
Calorie content of dry dog food
Protein requirements of dogs (%)
How to use protein requirement formula
Coprophagy
Pica
Food allergies
Hypersensitivity
Dermatitis
Gastrointestinal problems
Exocrine pancreatic insufficiency (EPI)
Lipase, amylase, protease
Pancreatitis
Urinary stones (uroliths)
Struvites
Heart disease
Hypertension
Diarrhea
Anticoagulant rodenticides
- inhibit Vit. K
Cholecalciferol (Vit. D3) rodenticides
- increase blood calcium, kidney damage