

Smog

- Smoke+ Fog

1. Reducing fog (Coal combustion, SO_x)
2. Photochemical oxidant smog (Incomplete combustion)

Tobacco smoke

Major	Minor	Pregnancy
10x Higher prob of lung cancer	Cardiovascular disease	impact on fetus weight

Malnutrition

Marasmus	Kwashiorkor
- Starving	- Protein deficiency
- Normal serum albumin level	- Hypoalbuminemia
- Loss of muscle	- General edema

Vit. A

Function	Deficiency
- Vision	- Night blindness
- Differentiation of epithelial cells	- Xerophthalmia
- Host resistance	- Pulmonary infections
- Metabolic effects on retinoids	- Stones
	- Hyperkeratosis

Lead

Toxicity	Storage
1. Inhibit heme synthesis	Bone& Teeth >Blood >Soft tissue
2.2 Interfere brain development& nerve transmission	

Vit. D

Source	Deficiency
- UV light	1. Children: Rickets
- Dietary source	- Cartilage overgrowth
Metabolism	2. Adult: Osteomalacia
1,25(OH) ² D: Most active form	- Uncalcified bone

Functions

- Ca, P intestinal absorption
- PTH-dependent reabsorption
- Steroid hormone

Vit. K

- Synthesis of clotting factor VII, IX, X
- Bleeding diathesis

Vit. C

NOT synthesized	Scurvy
- Metabolism of collagen& basic intracellular matrix	- Bleeding tendency

