

Smog

- Smoke+ Fog

1. Reducing fog (Coal combustion, SOx)
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

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

