Control of the cell cycle

What is cancer?
A result of changes in one or more genes that produce enzymes that are involved in controlling the cell cycle. These changes are expressed as cancer when something prompts the damaged genes into action.

Cancerous cells form masses of tissue called tumors in later stages, cancer cells enter the circulatory system and spread throughout the body, a process called metastasis, forming new tumors.

Difficult to pinpoint b/c both genetic + environmental factors are involved: ex) cigarette smoke, air/water pollution, exposure to UV radiation from Sun, viral infections

Prevention:
→ Healthy diet =
  • ↓ fat + ↑ fiber
  • Carotenoids
  • Vitamins A, C, E
  • Calcium

Healthy lifestyle =
• Daily exercise
• No tobacco use
• Use sunscreen