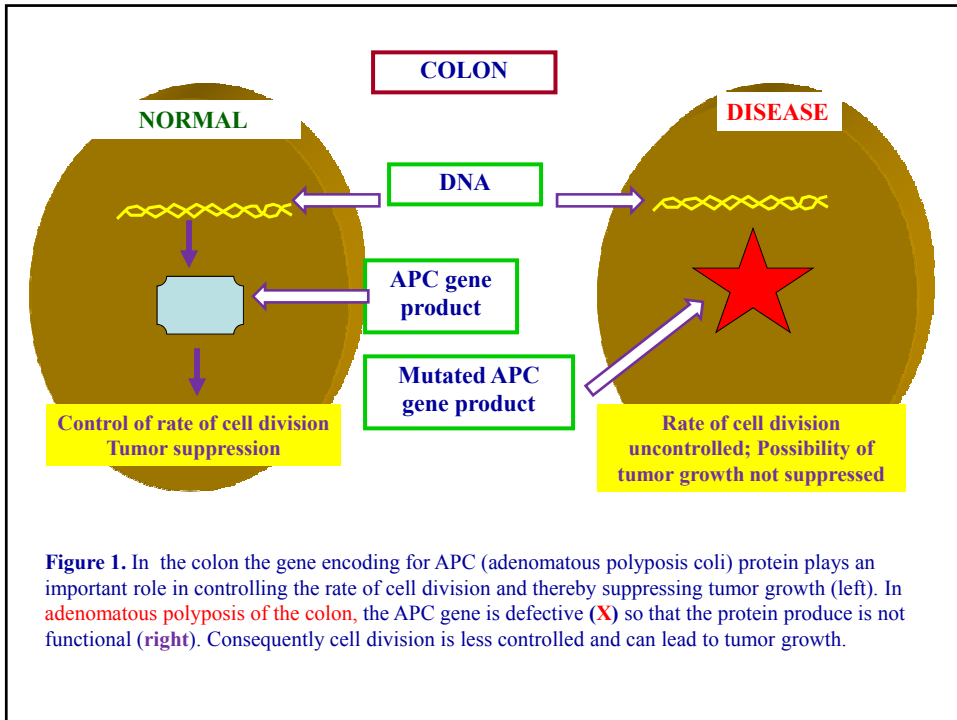


# ADENOMATOUS POLYPOSIS OF THE COLON

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## ADENOMATOUS POLYPOSIS COLI (APC)

- product of APC gene is a tumor suppressor
- tumor suppressor genes prevent uncontrolled growth of cells that may result in tumors
- APC protein functions include control of:
  - how often a cell divides
  - how a cell attaches to other cells in that tissue
  - movement of the cell relative to the tissue
  - accurate number of chromosomes



**Figure 1.** In the colon the gene encoding for APC (adenomatous polyposis coli) protein plays an important role in controlling the rate of cell division and thereby suppressing tumor growth (left). In **adenomatous polyposis of the colon**, the APC gene is defective (**X**) so that the protein produce is not functional (right). Consequently cell division is less controlled and can lead to tumor growth.