Diabetes

**Type I:** the immune system attacks insulin-producing cells in the pancreas. Without injections to replace the insulin, a Type 1 or insulin-dependent diabetic is unable to convert food into energy and will die. Scientists have been trying for decades to find out what prompts the immune system to attack. Recently a research team noticed that insulin cells bear a strong resemblance to a bug known as Coxsackie virus, both showing a distinctive chain of amino acids on their surface. The theory, still in the research stage, poses the question: what if the immune systems of some people can't distinguish between the virus and insulin-producing cells. If more study proves the virus to be the culprit, researchers plan to try to develop a vaccine.
Terms | Characteristics of: | Cancer treatment
--- | --- | ---
carcinoma in situ | benign | Surgery
metastasis | malignant | radiation therapy
relapse | radiocurable tumor | chemotherapy
remission | radiosensitive tumor | biological therapy
modality | radioresistant tumor | (refer back to article on biological treatment of malignant melanomas - see Skin section)
protocol

Staging and grading of tumors p. 780:
Grade: appearance (degree of maturity)
Stage: spread of tumor

Abbreviations: p. 798
bx
c
Pap smear
TNM

Practical Applications: p. 800-1
Exercises: G, H, I, J, L

Cancer Rates
Cancer rates and mortality have increased slightly for American black men according to the National Cancer Institute. These rates are based on statistics gathered over a 5-year period (1988-1992).

For all cancers combined, the new study finds that white non-Hispanic males are second to black males in incidence of disease. For cancer deaths, Hawaiian males were second to black males.

Among women, white non-Hispanics had the highest rate of all cancers. Alaskan Native women were second. For cancer deaths, Alaskan Native women had the highest mortality rates; black and Hawaiian women were second. The study found breast cancer was the most frequently diagnosed among all women, except Vietnamese-Americans who had more cervical cancer.

Lung cancer was the most frequent cause of cancer deaths among American women, while breast cancer was the second most frequent cause of cancer death in all groups except Alaskan Native women who die more often of colon or rectal cancer.

Prostate and lung cancer are the most common cancers and the most common causes of cancer deaths among all of the male groups studied. Black males had the highest rate of prostate cancer, while lung cancer was the most frequent cause of cancer death among black men.
Most of this chapter will be a review of radiology procedures covered in previous chapters.

EXERCISES: C, G, AND H p. 836

Practical Applications: p. 836-7

Vocabulary:
half-life
palliative
rad
radiolucent
radiopaque
scan
tagging
tracer studies
uptake

ABBREVIATIONS
CAT (CT)
CXR
MRI
PET
Tx - treatment
CHAPARACOLOGY
CHAPTER 21

Speciality areas of pharmacology, see Figure 21-1, p. 851

**Describe:**
chemical name
generic name (official name)
brand name (trade name)

**Role of:**
FDA
USP

**References:**
Hospital Formulary
PDR

**Methods of drug administration, see Table 21-1, p. 853**

**Drug Action, p 853-4 (also see Exercise F, p. 875)**
additive, cumulative, idiosyncrasy, synergism (potentiation)
tolerance
iatrogenic
side effect
contraindication

**Abbreviations: p. 870**
ac
cp
IV
NPO
prn

**Exercises: B, E, F**