Cholesterol, a component of the tissue of all mammals and a precursor to the human sex hormones testosterone and estradiol.

Testosterone, a male sex hormone that is produced by the body from cholesterol. A surge in testosterone levels occurs in males at the onset of puberty to trigger the changes of adolescence.

Estradiol, a female sex hormone responsible for the development of breasts and other characteristics of females. Note the similarity to the structure of testosterone. Small chemical differences can lead to a large difference in biological effects.

Methyl salicylate, wintergreen odor

L-dopa, a drug that can cross the blood/brain barrier and increase levels of dopamine, a neurotransmitter precursor deficient in the brains of patients with Parkinson’s disease.

O-dopa, the mirror image of L-dopa. This compound has no activity as a drug for the treatment of Parkinson’s disease.

Figure 4.14. Salicylic acid

cis-Diaminedichloroplatinum(II), also known as cisplatin or Platinol®, is an effective anticancer drug.

trans-Diaminedichloroplatinum(II), is a toxic compound with negligible anticancer properties.