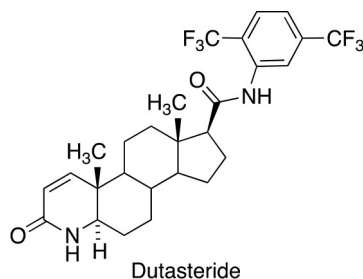


FIGURE 3.33

Irreversible inhibition of 5 α -reductase by finasteride.



7 REGULATION OF GONADOTROPIN-RELEASING HORMONE: CONTROL OF THE HYPOTHALAMIC–PITUITARY–GONADAL AXIS

7.1 INTRODUCTION

Testosterone production in men is controlled by the hypothalamic–pituitary–gonadal axis. Secretion of gonadotropin-releasing hormone (GnRH, LHRH) from the hypothalamus stimulates the pituitary gland to release luteinizing hormone (LH), which acts on testicular Leydig cells to produce testosterone. The strategies currently employed for achieving a reduction of testosterone levels for the treatment of prostatic cancer,⁷⁶ including the strategies already discussed, are summarized in Figure 3.34.