Understanding life with renal failure depends in part upon having a general understanding of how normal kidneys work. This chapter sets out very briefly the structure and function of the waterworks.

A few definitions will help make this chapter clear.

1) *Urinary tract*. This term includes the kidneys, the ureters or tubes connecting them to the bladder, the bladder and the urethra – the tube which passes to the outside.

2) *Anatomy*. This means the structure of the body or portions of it such as the urinary tract.

3) *Physiology*. Physiology is the study of how the body or parts of the body work.
Anatomy of the Urinary Tract

The urinary tract is made up of the kidneys, ureters, bladder and urethra. These are shown in Figure 3.1. The kidneys are at the very back of the body cavity so that their upper portions are behind the lower ribs. Each kidney weighs about a quarter of a pound. Blood flows to the kidneys via the renal arteries and returns to the general circulation through the renal veins. A fine tube, called the ureter, passes down from each kidney to the bladder. Urine passes to the bladder through the ureters. The tube

Figure 3.1  A diagram of the urinary tract