

94)<sup>2</sup> cannot remove waste products and excess water their blood. Dialysis removes waste products.

95)<sup>2</sup> the kidney walls allow waste to pass through  
urea, ions, glucose, and amino acids pass

96)<sup>2</sup> the body retains excess  $H_2O$  + waste  
swelling of hands + feet

97)<sup>1</sup> hemodialysis, ions and other solute, flow out of blood into  
the dialysate  
[dialysate] lower <sup>than</sup> in blood      [High]  $\rightarrow$  [Low]  
ion

98)<sup>2</sup> dialysate is similar to blood serum, but no waste products

99)<sup>2</sup> kidney dialysis

hemodialysis - done at medical centers use dialyzer

Peritoneal - at home uses patients abdominal cavity as a filter

100)<sup>2</sup> adds special formulated dialysis fluid into abdominal cavity waste diffuse across membrane after 15 min fresh bag is used

$$102)<sup>6</sup> 5 \text{ meq} \times \frac{1 \text{ mmol}}{2 \text{ meq}} \times \frac{1 \text{ mol}}{1000 \text{ mmol}} = 2.5 \times 10^{-3} \text{ mol Ca}^{2+} \text{ per } 500 \text{ cm}^3 \text{ sol}$$

$$5 \text{ meq} \times \frac{1 \text{ mmol}}{3 \text{ meq}} \times \frac{1 \text{ mol}}{1000 \text{ mmol}} = 1.7 \times 10^{-3} \text{ mol PO}_4^{3-} \text{ per } 500 \text{ cm}^3 \text{ sol}$$

20