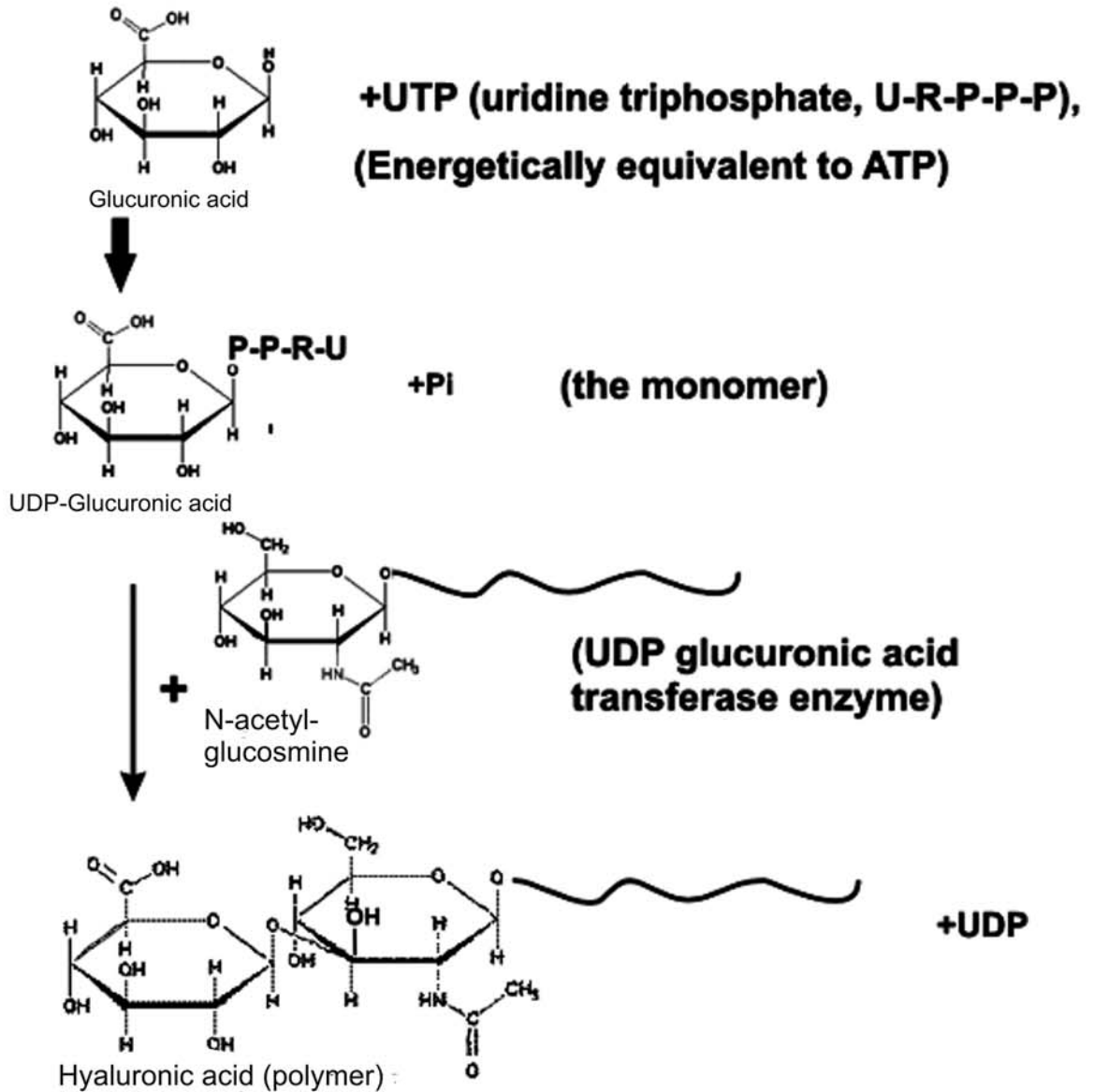


9-4

**Polysaccharide synthesis: Hyaluronic acid (joint lubricant)**



**Poly beta-(1,4)-D-glucuronic acid-beta(1,3)-N-acetyl-D-glucosamine**

**Next monomer: UDP-N-acetyl glucosamine**

**Next addition requires a second enzyme:  
UDP-N-acetyl glucosamine transferase**

**Entire polymer can be built with these two alternating enzymes**