Müosiin-I ja müosiin-II osa eukarüootses rakus.

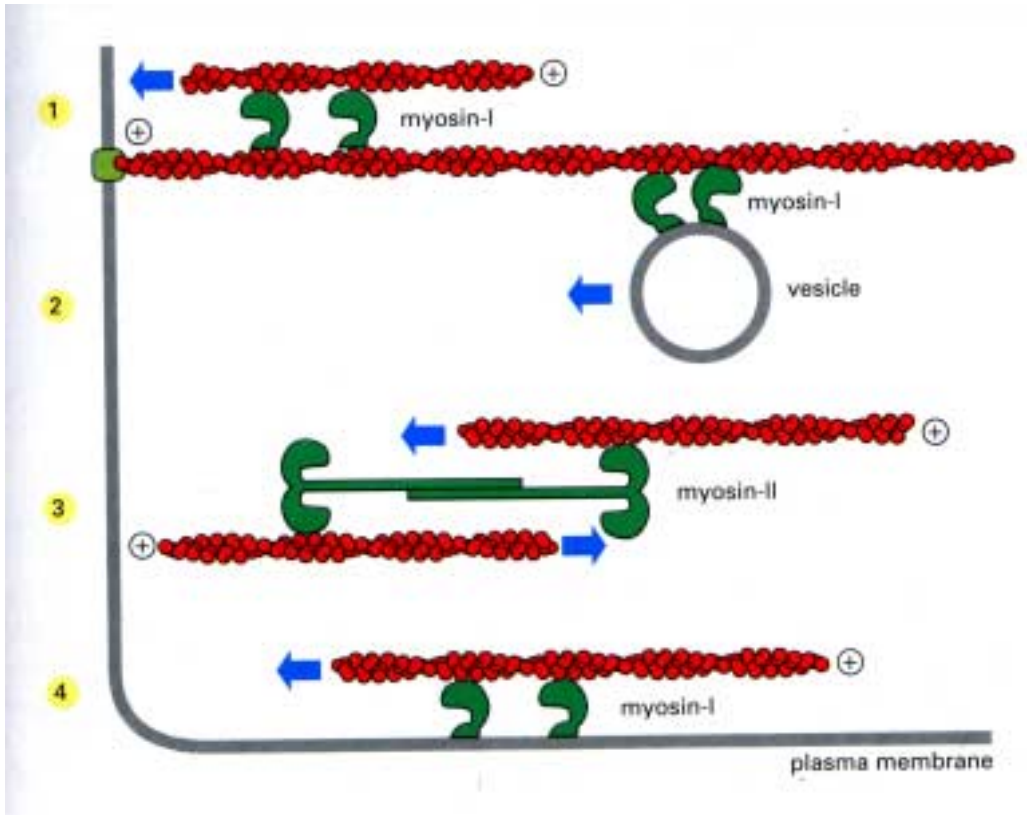
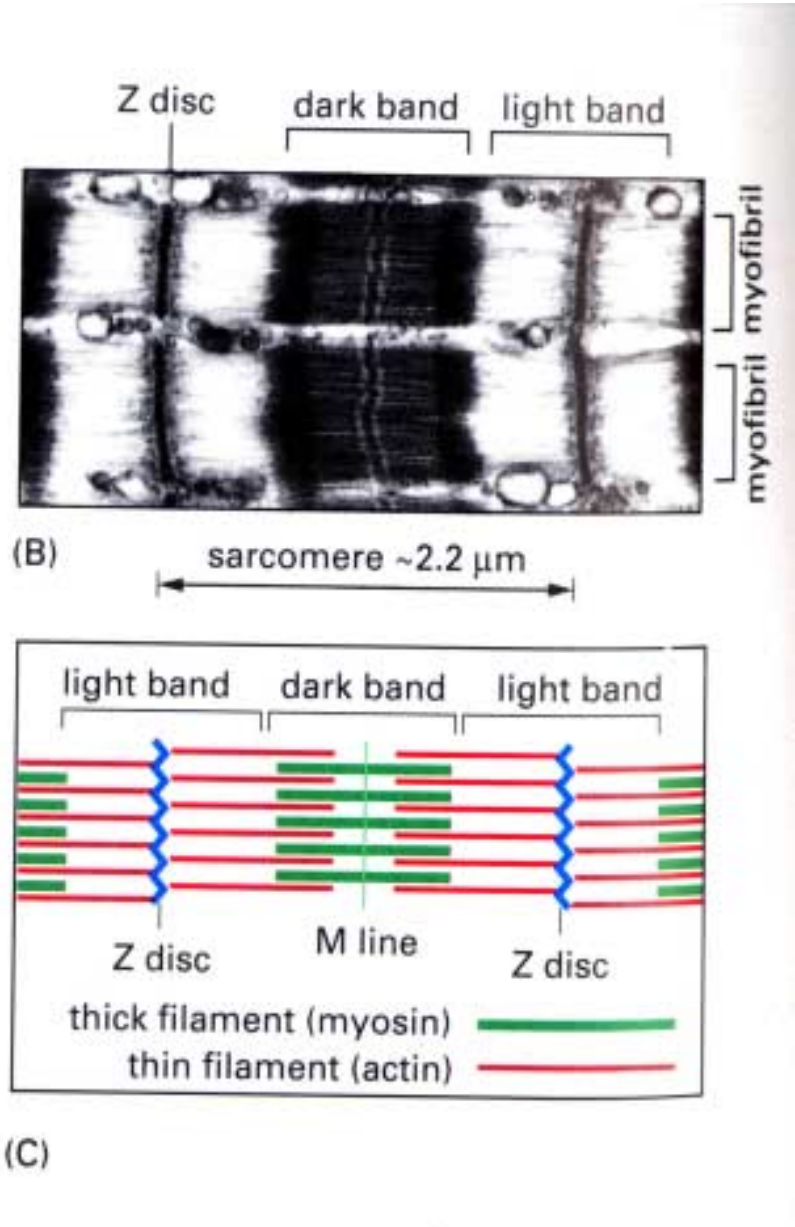
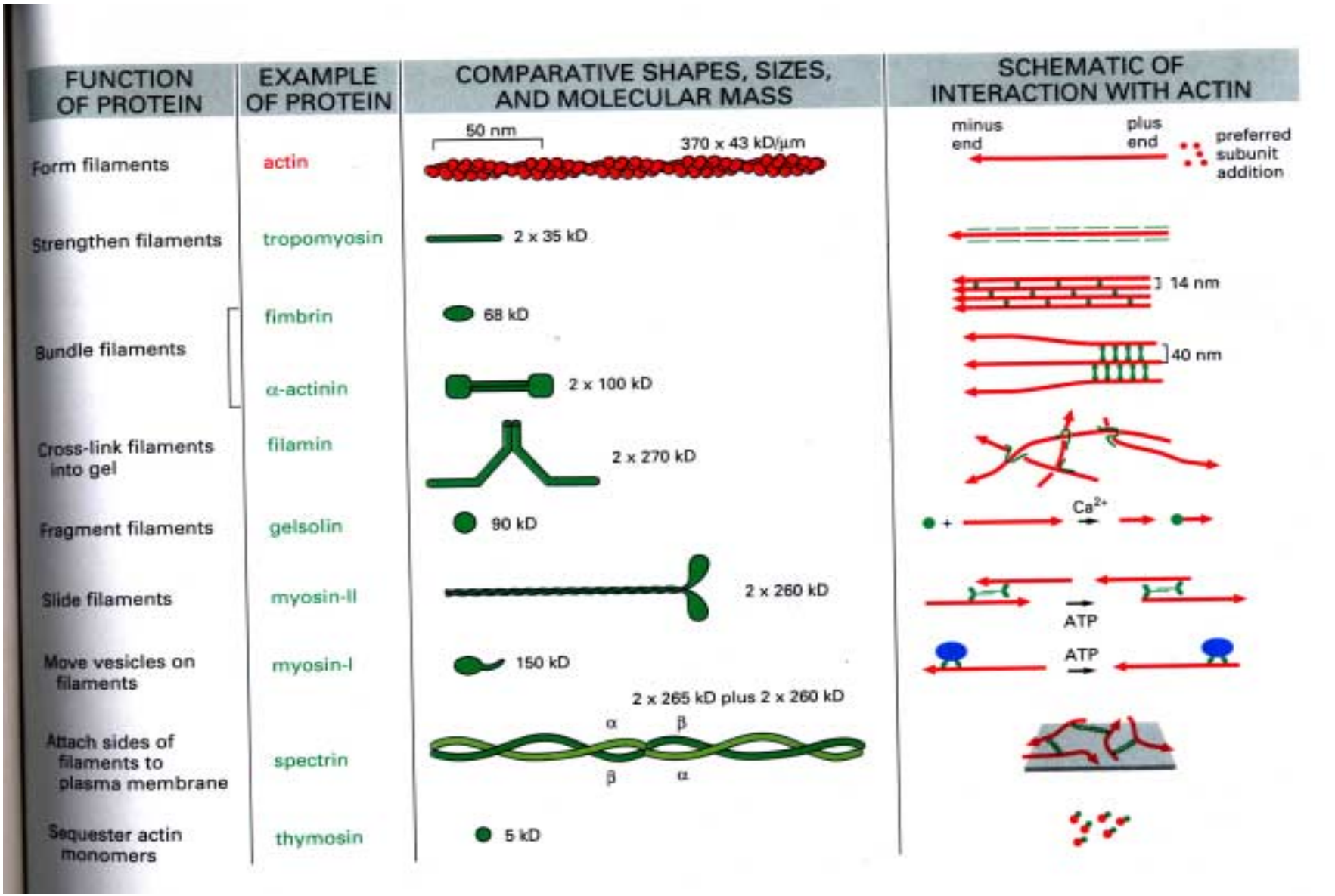


Figure 16–71 Possible roles of myosin-I and myosin-II in a typical eucaryotic cell. The short tail of a myosin-I molecule contains sites that bind either to other actin filaments or to membranes. This allows the head domain to move one actin filament relative to another (1), a vesicle relative to an actin filament (2), or an actin filament and membrane relative to each other (4). In addition, small antiparallel assemblies of myosin-II molecules can slide actin filaments over each other, thus mediating local contractions in an actin filament bundle (3). In all four cases the head group "walks" toward the plus end of the actin filament it contacts.

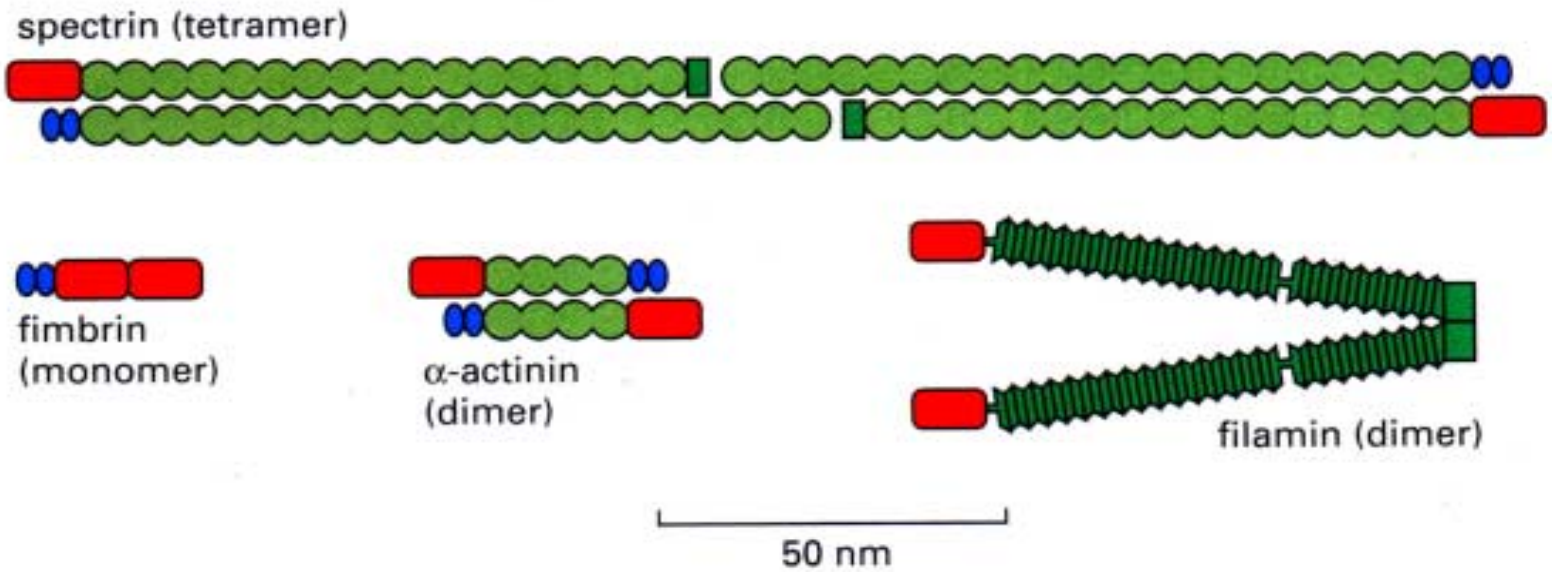
Skeletilihasraku müofibrillid.



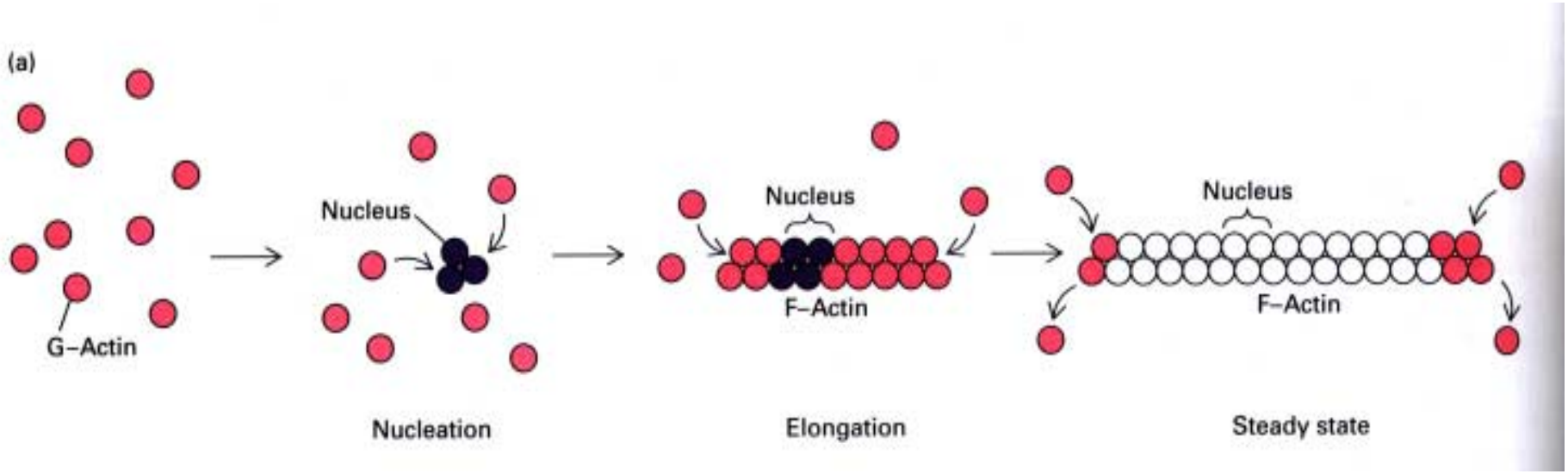
Põhilised aktiiniga seostuvad valgud.



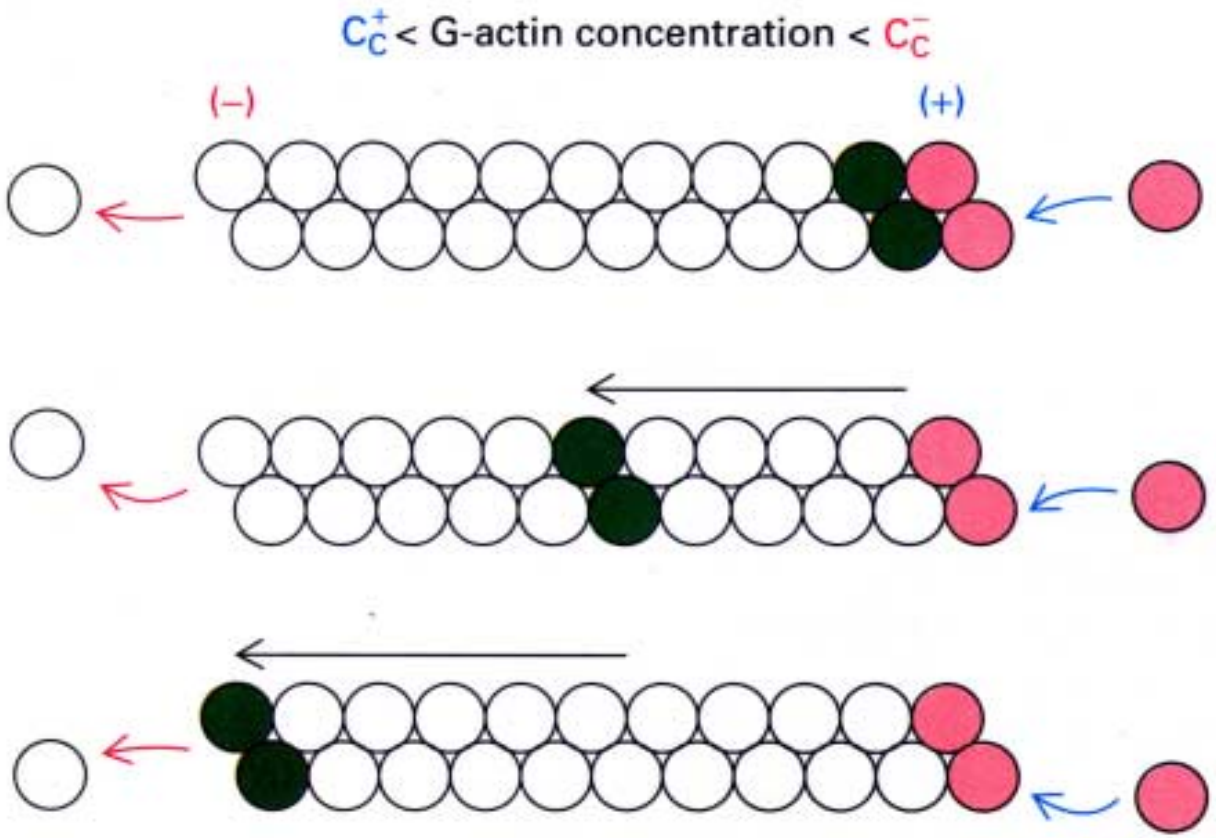
Nelja aktiiniga seostuva valgu struktuur.



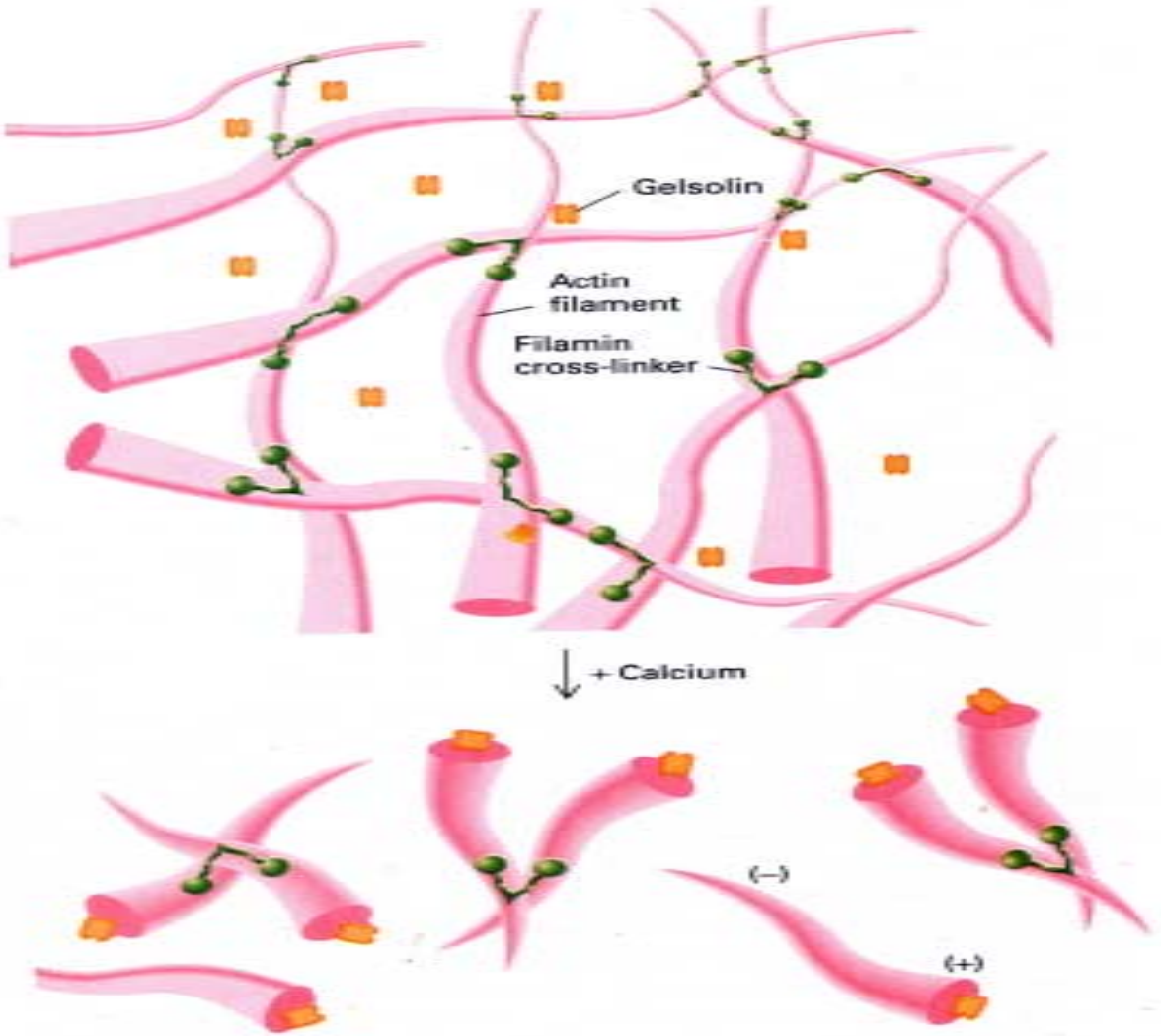
Aktiini molekulide polümeriseerumine.



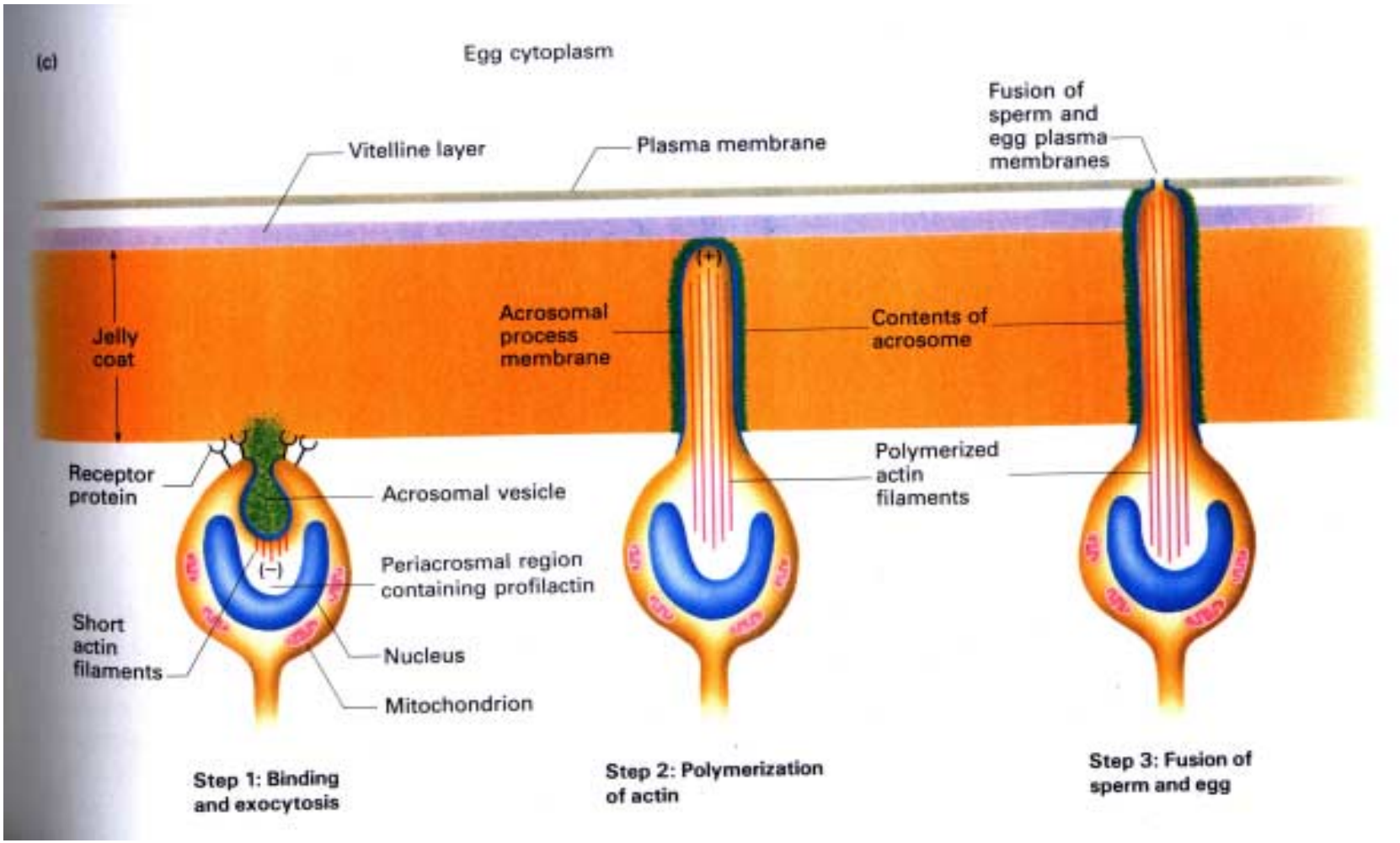
Treadmilling'u nähtus aktiini polümeriseerumisel.



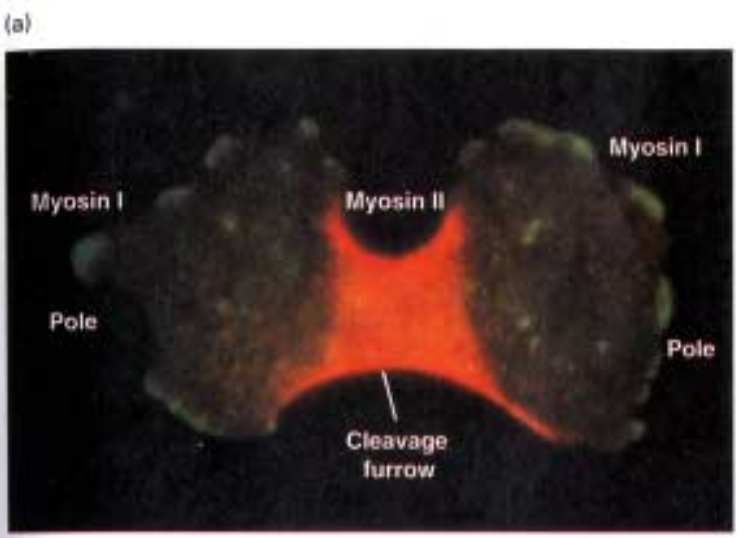
Aktiini ja filamiini seostumine.

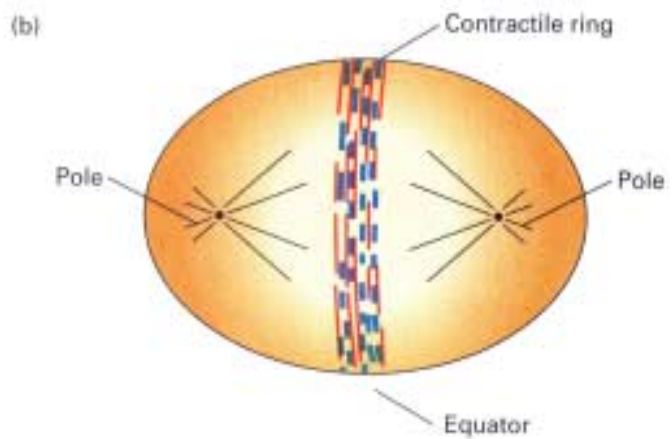


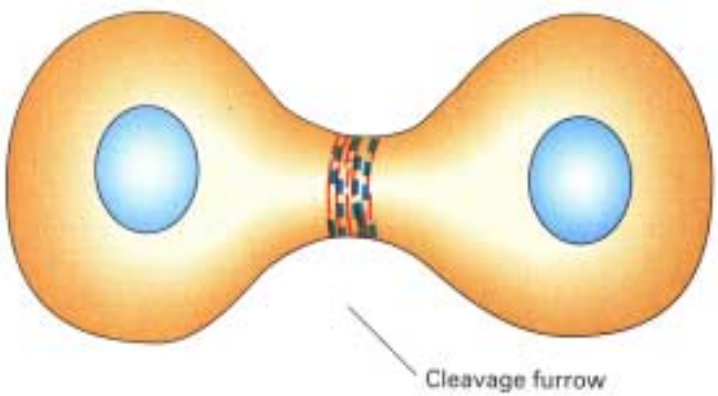
Spermatosoidi akrosomaalreaktsioon.



Tsütoplasma jagunemine tsütokineesi käigus kontraktiilse aktiini rõnga abil.

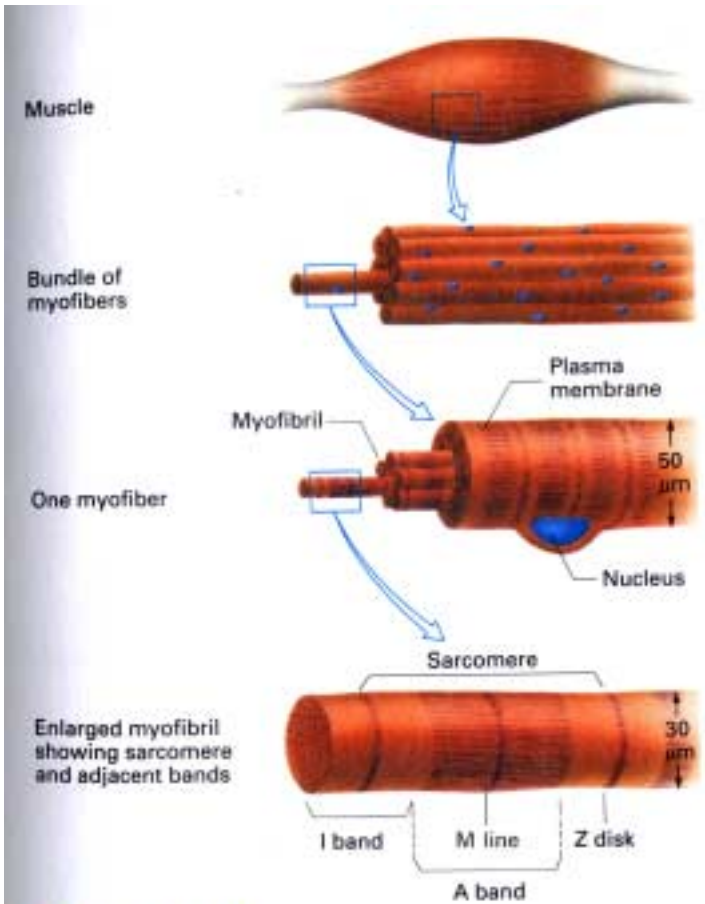






▲ FIGURE 22-37 The role of myosin II in cytokinesis. (a) During cell division of an *Dictyostelium* ameba, myosin II (red) is concentrated in the cleavage furrow while myosin I (green) is localized at the poles of the cell. (b) During mitosis (see Chapter 23) when the spindle poles and aster microtubules separate, myosin (blue) and actin (red) in the cortex of the cell assemble into an equatorial contractile ring around the cell. As the nuclei in the daughter cells start to reform, the contractile ring constricts, causing the membrane to form a cleavage furrow. In the last step of mitosis, the cell is pinched into two parts. (Part (a) Courtesy of Y. Fukui.)

Skeleti- e. vöötlihase struktuur.



▲ FIGURE 22-24 Structure of muscle. Muscle tissue is composed of bundles of multinucleated muscle cells, or myofibers. Each muscle cell, or fiber, is packed with bundles of actin and myosin filaments, or myofibrils, which extend the length of the cell. Packed end to end in a myofibril is a chain of sarcomeres. The sarcomere is the functional unit of contraction; it is about 2 μm long in resting muscle. Contraction of the sarcomeres shortens the length of a myofibril.

Lihase kokkutõmbe libisevate filamentide mudel.

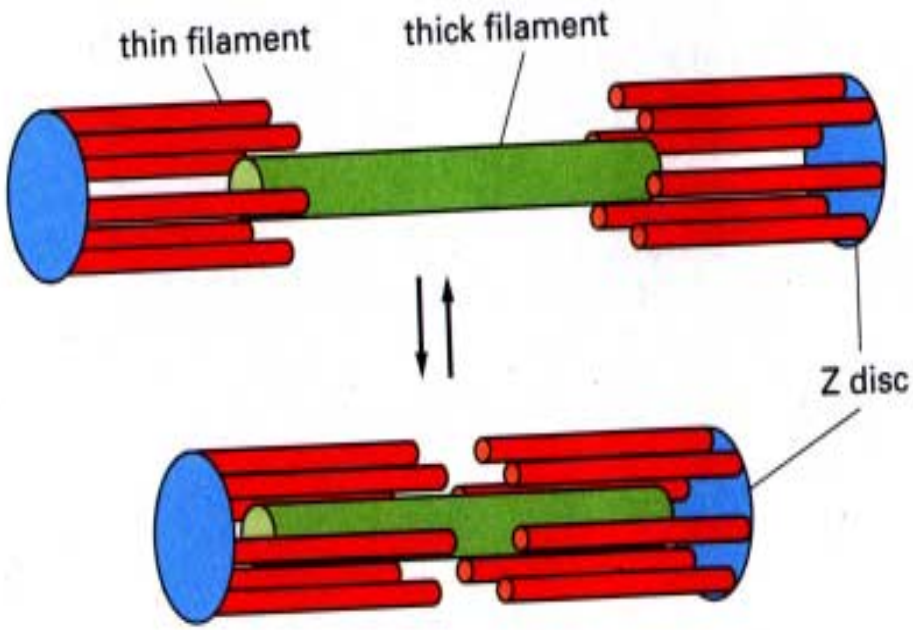
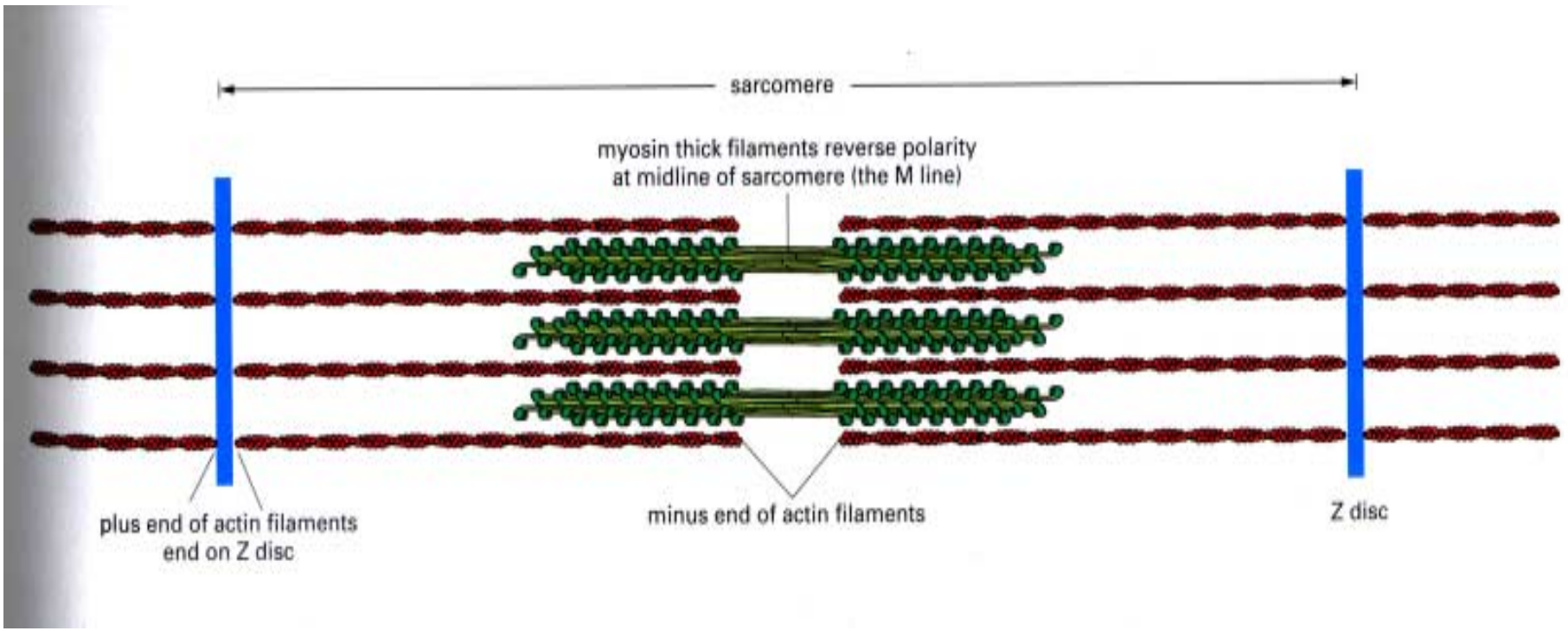
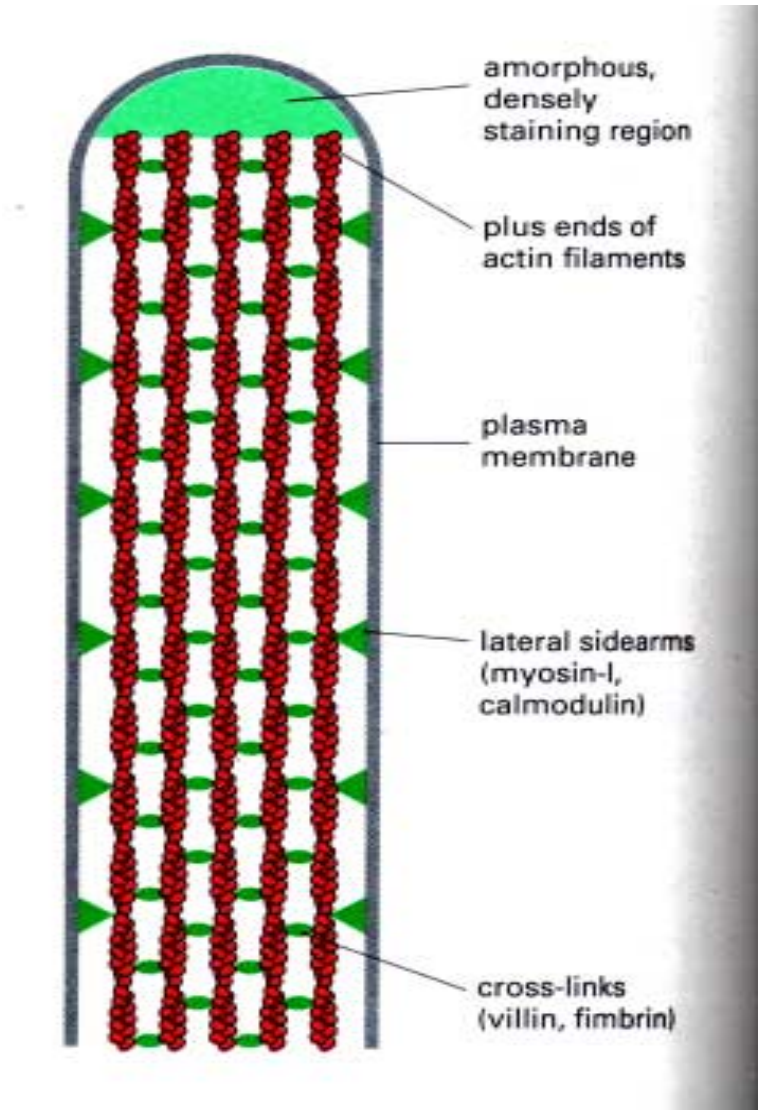


Figure 16–85 The sliding filament model of muscle contraction. The actin and myosin filaments slide past one another without shortening.

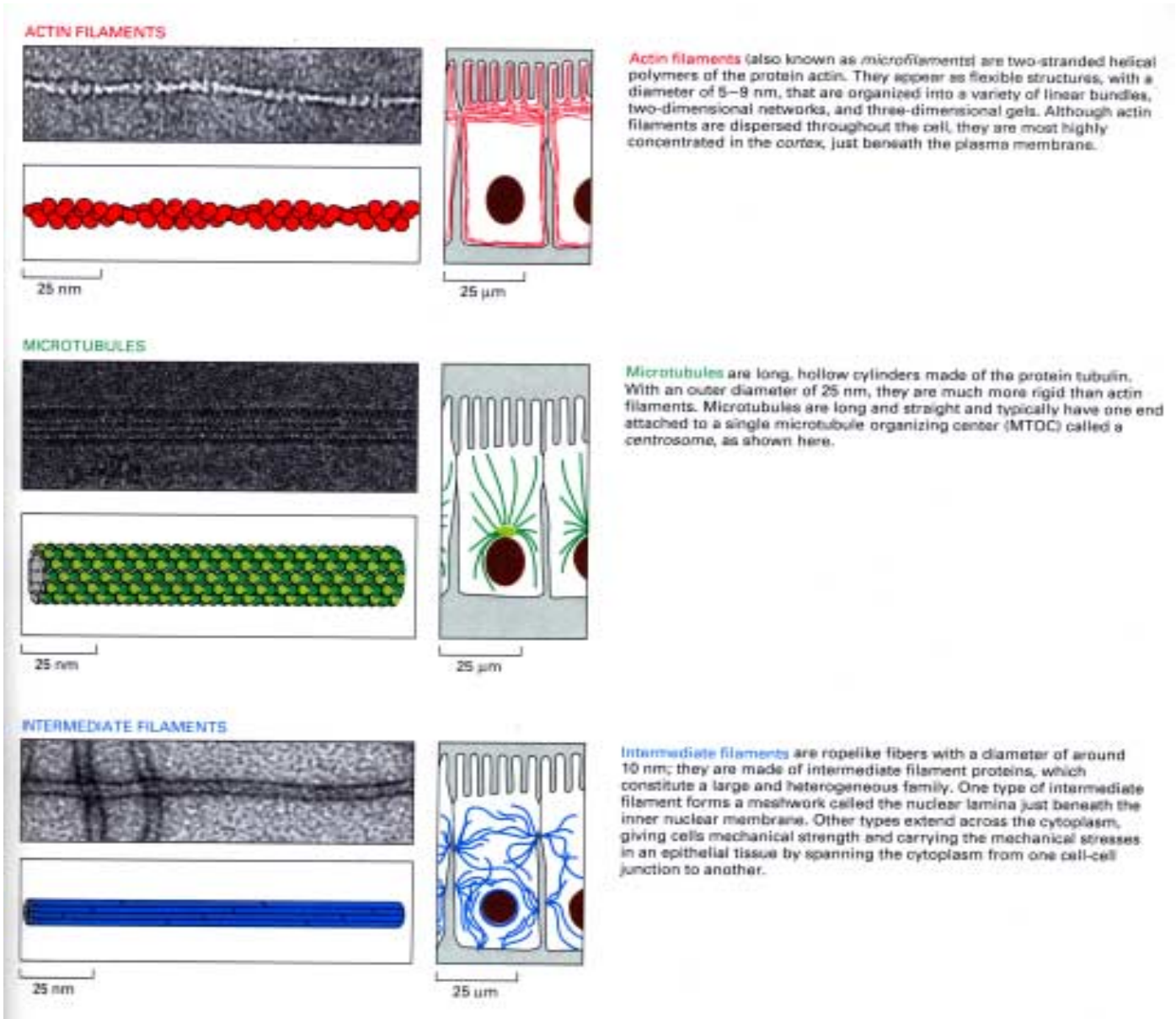
Aktiini ja müosiini filamendid sarkomeeris.



Mikrohatu ehitus.



Kolm valgu filamentide tüüpi, mis moodustavad tsütoskeleti.



Aktiini filamentide tüübid substraadil roomavas rakus.

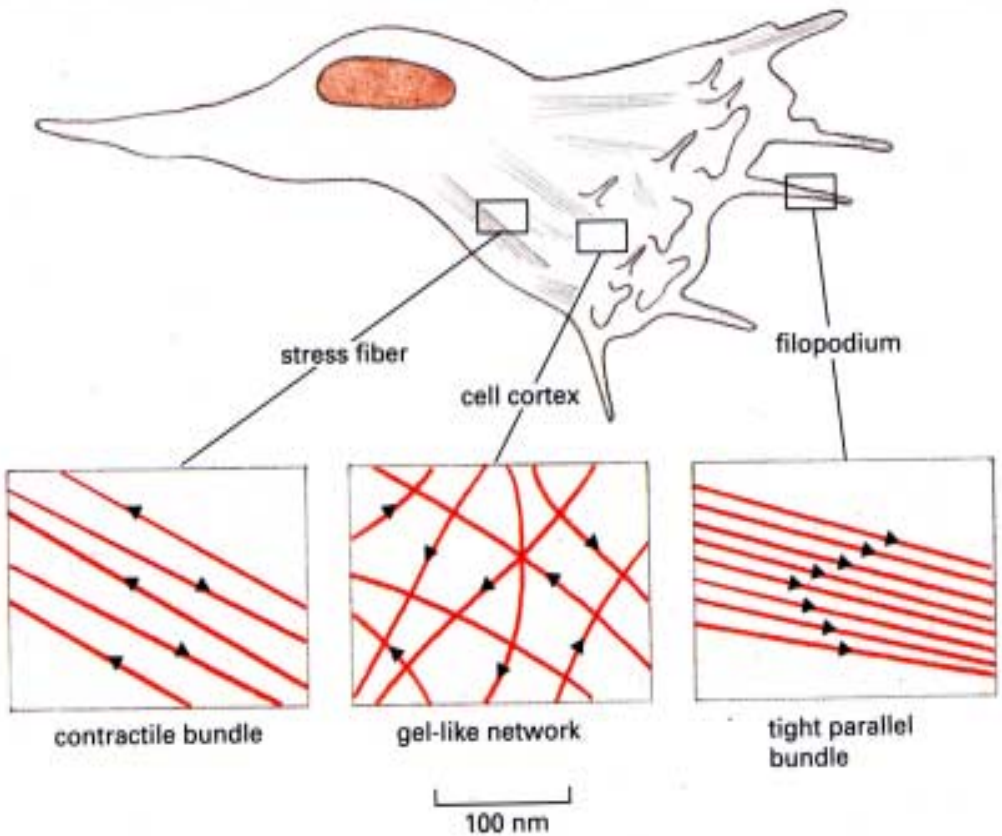
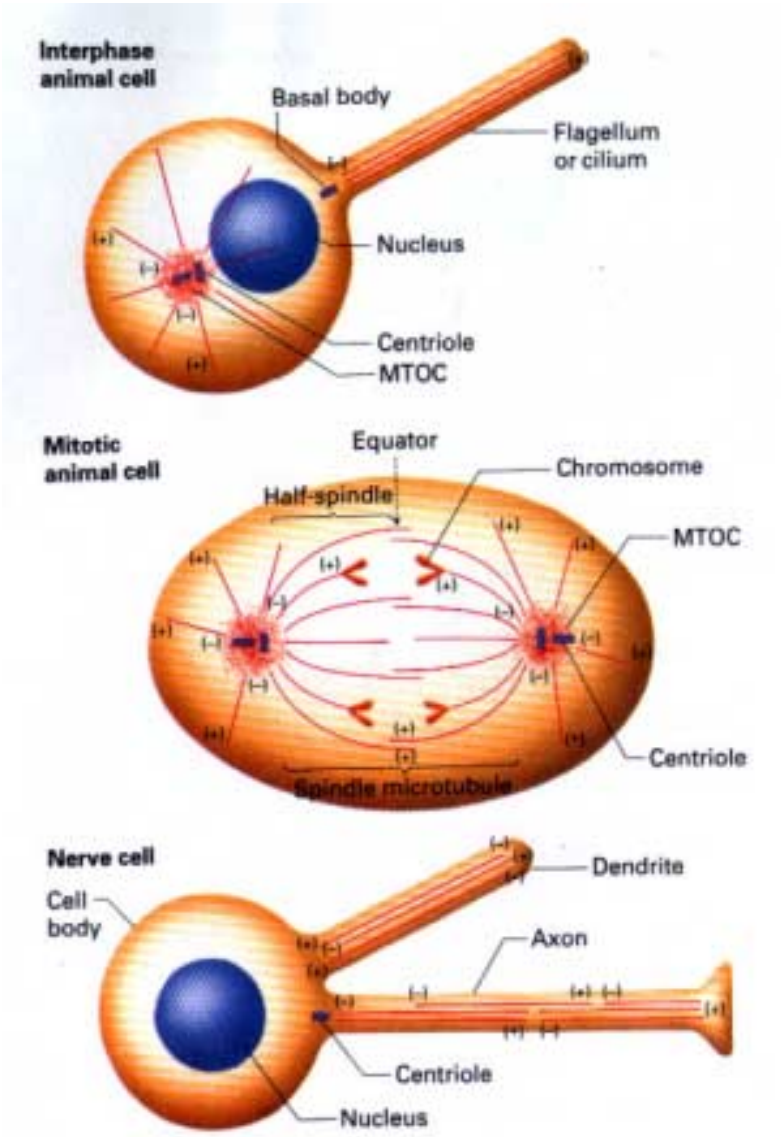
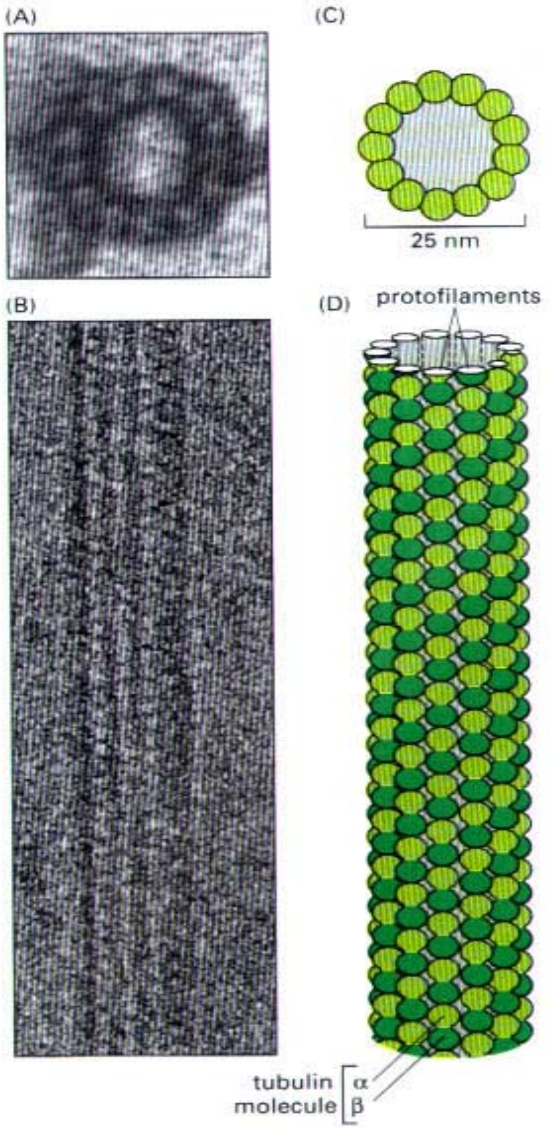


Figure 16–65 Three types of cortical arrays of actin filaments. A crawling cell is shown with three areas enlarged to show the arrangement of actin filaments drawn to scale. Arrowheads point toward the plus end of the filaments.

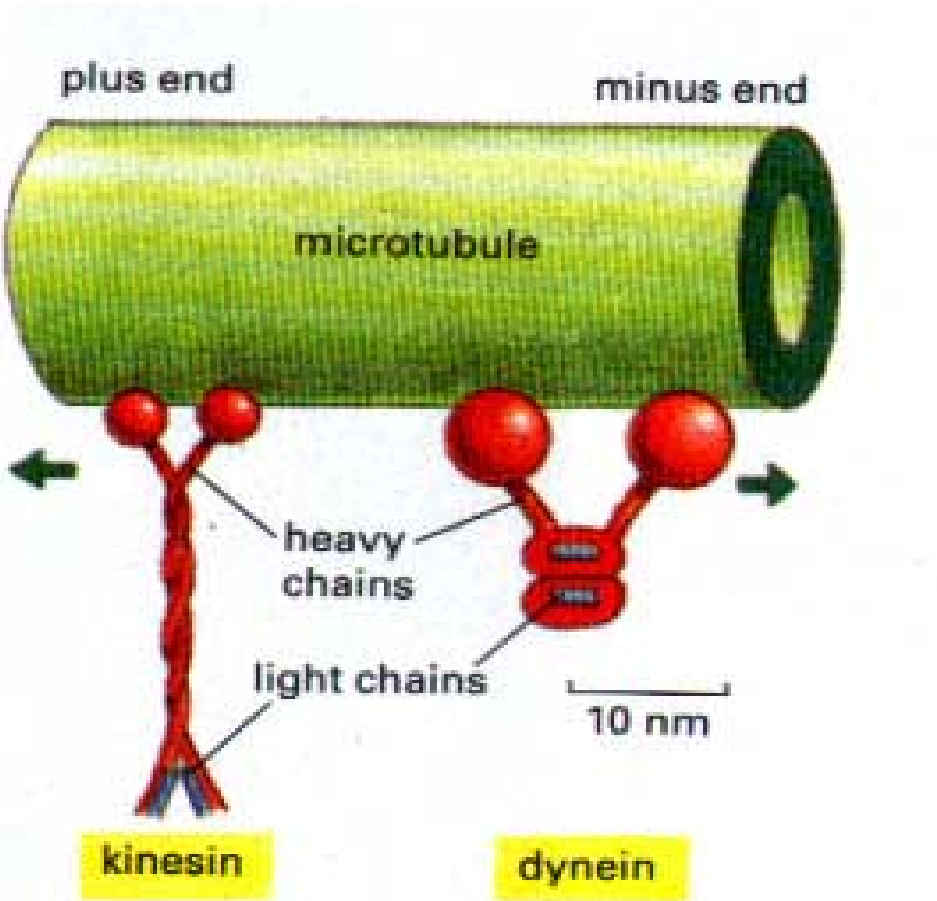
Mikrotuubulite paiknemine rakus.



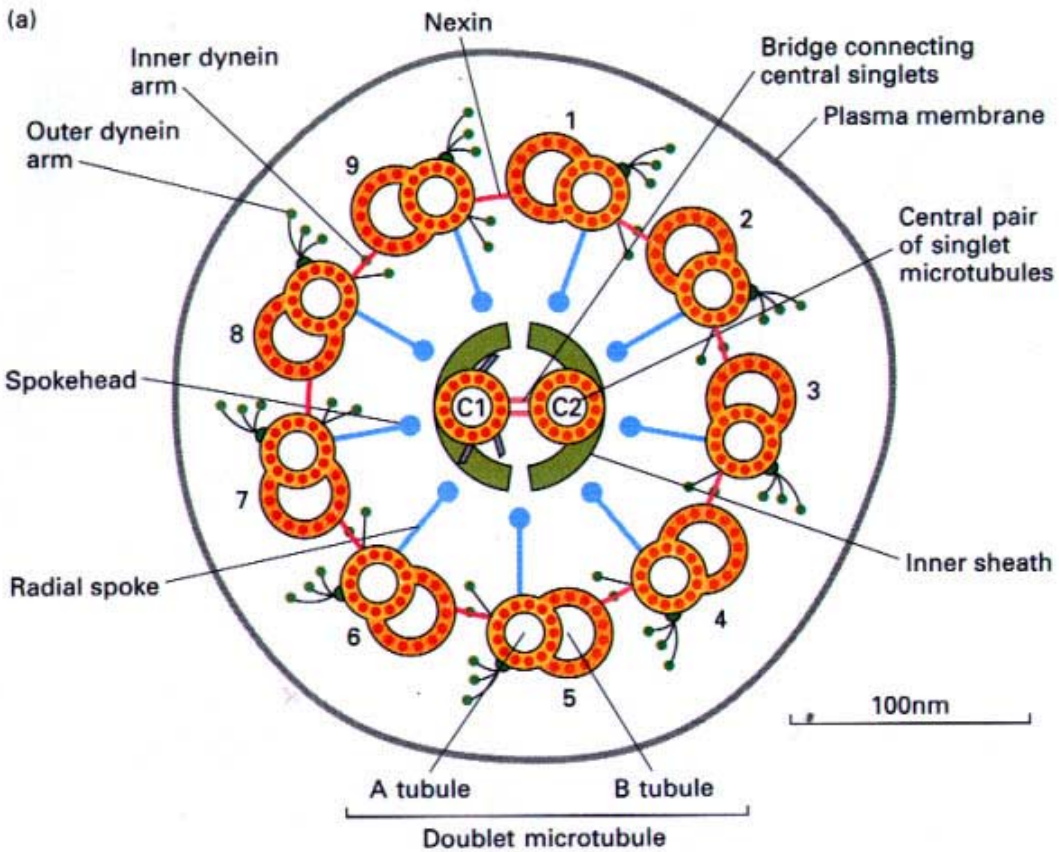
Mikrotuubuli ehitus.



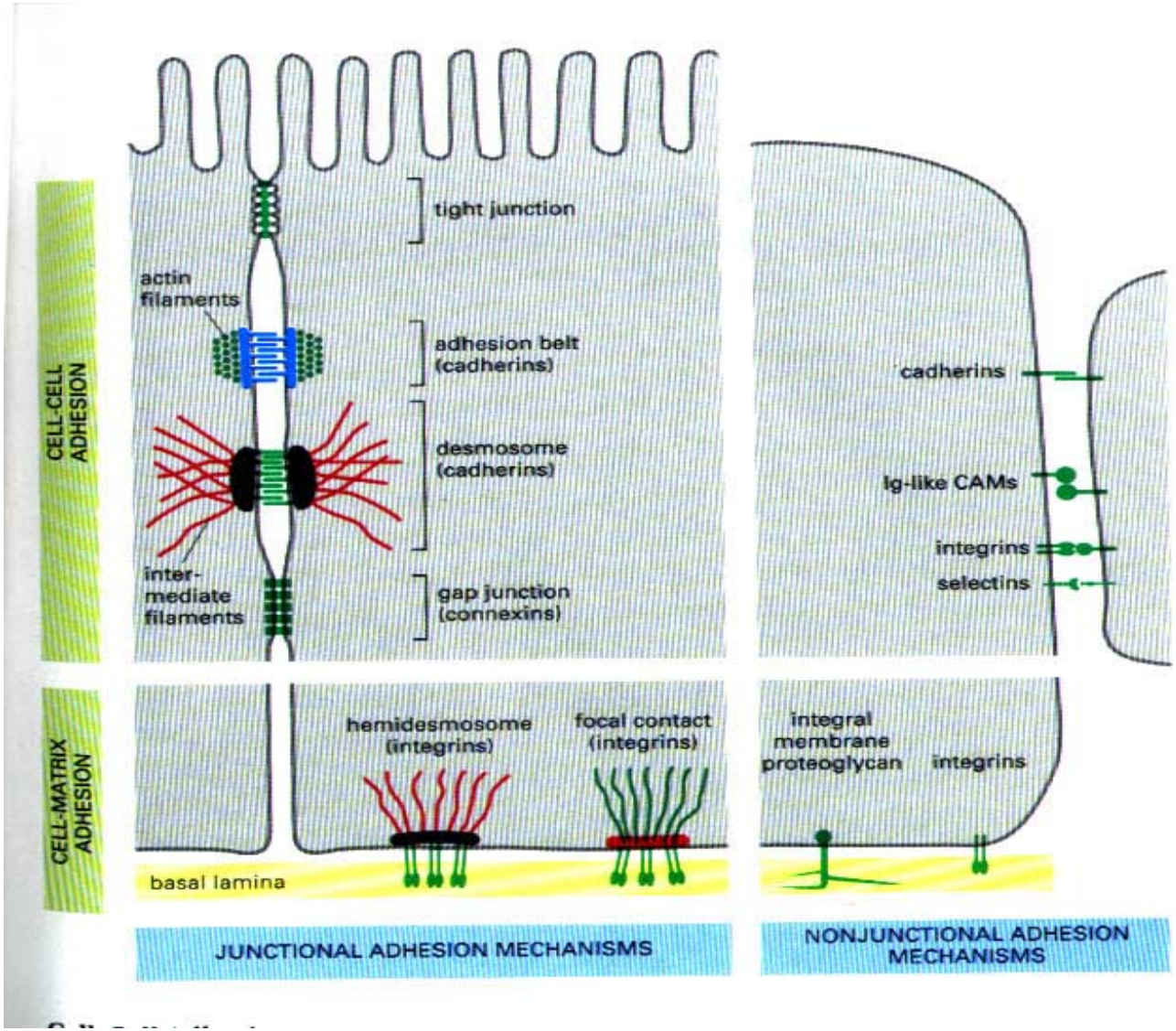
Mikrotuubulite mootorvalgud.



Ripsme või viburi ehitus.



Ühendused, mille kaudu loomarakk on seotud teiste rakkudega ja ekstratsellulaarse maatriksiga.



Intermediaarsete filamentide ehitus.