

# RIBOSOMAS



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# Hujayraning membranasiz organoidlari, ularning funksiyasi va ahamiyati

Reja:

- 1.Hujayraning membranasiz organoidlari
- 2.Ribosomalar tuzilishi va funksiyasi
- 3.Hujayra markazi va uning ahamiyati



*Hujayrani membranasiz  
organoidlariga ribosoma va  
polisoma, mikronaycha  
sentrasoma, kiprikcha, xivchin,  
fibrillyar tuzilmalar kiradi.*



Ribosomalar oksil sintezini amalga oshiruvchi membranasiz organoid. Ribosomalar eukariot va prokariotlarda ham uchraydi. O'lchami 20-30 nm. Ribosomalar ikkita katta va kichik subbirliklardan iborat.

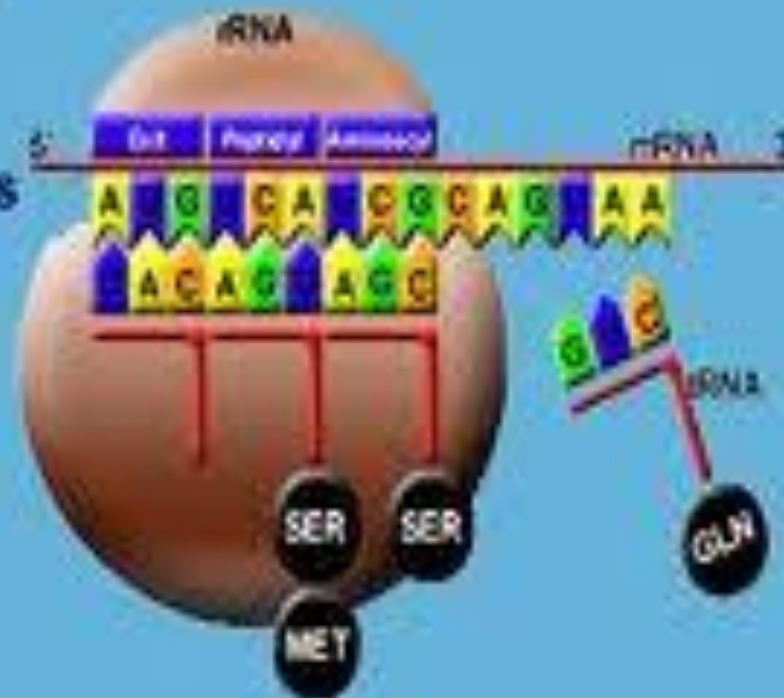
# Ribosomas

## Procariotas

Menores

Menos densos  
(70S)

Libres en el  
citoplasma



## Eucariotas

Mayores

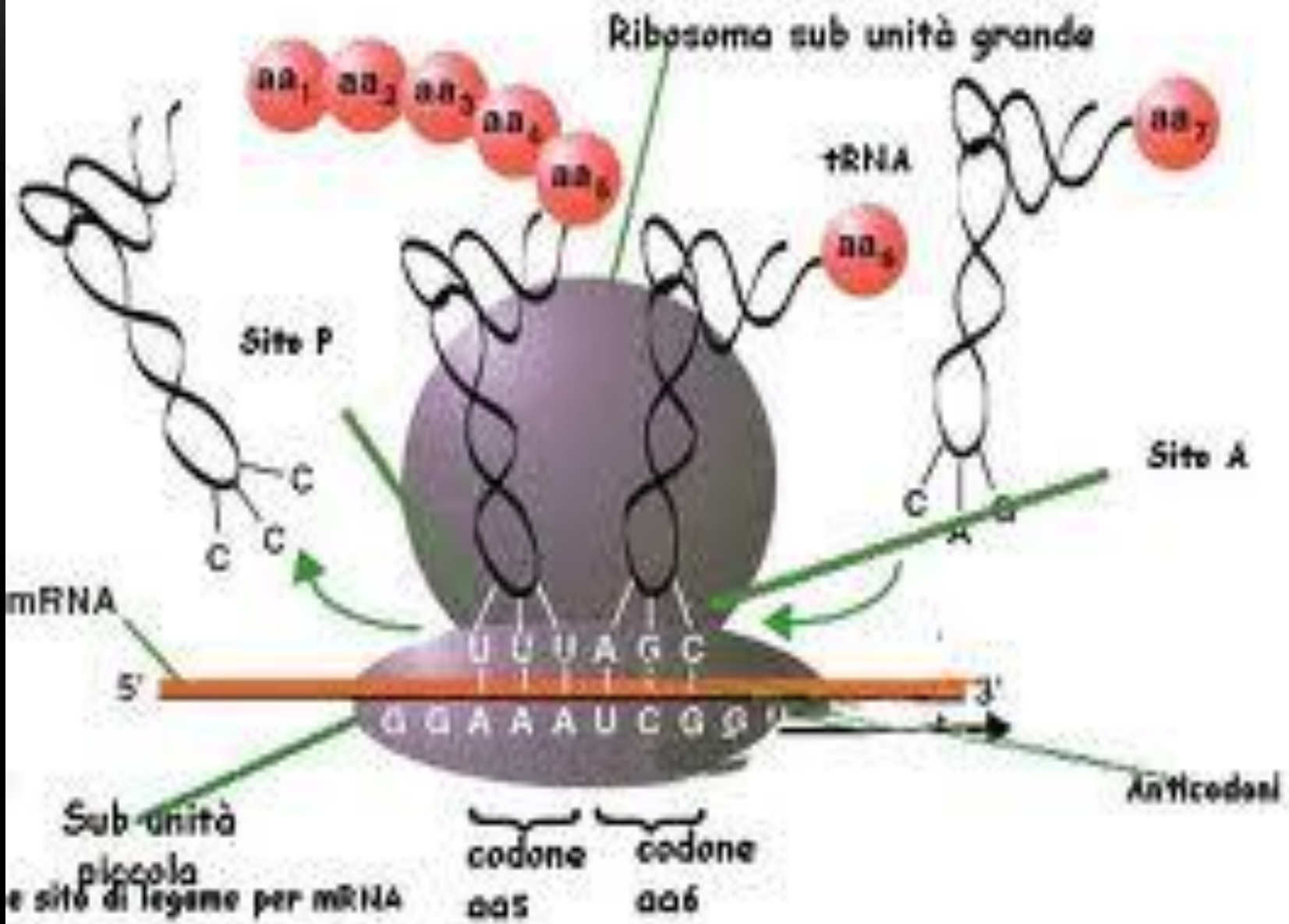
Más densos  
(80S)

Ligados al  
Retic. Endop.  
Rugoso o  
libres en el  
citoplasma





RIBOSOMALARNI ASOSIY  
FUNKSIYASI  
INFARMATSION-RNK  
ASOSIDA, TRANSPORT-RNK  
YORDAMIDA OKSILLARNI  
AMINOKISLOTA  
MOLEKULALARIDAN  
YIG'ADI, SINTEZ QILADI



HUJAYRA MARKAZI HAYVON  
HUJAYRALARIDA UCHRAYDIGAN  
MEMBRANASIZ ORGANOID BOLIB YADRO  
YAQINIDA JOYLASHGANI UCHUN  
SENTROSOMA DEB ATALADI.SENTRASOMA  
IKKI SENTRIOLADAN IBORAT.HAR BIR  
SENTRIOLA BIR BIRIGA NISBATAN TO'G'RI  
BURCHAK HOSIL QILIB JOYLASHADI.



ЭНДОПЛАЗМАТИЧЕСКИЙ  
РЕТИКУЛУМ  
СКЛАДЧАТЫЙ

МИКРОВОРСИНКИ

ЦЕНТРОСОМА

ЭНДОПЛАЗМАТИЧЕСКИЙ  
РЕТИКУЛУМ  
ГЛАДКИЙ

ЦЕНТРИОЛИ

ЛИЗОСОМЫ

ВАКУОЛИ

РИБОСОМЫ

РДРО

КЛЕТОЧНАЯ ИЛИ  
ЦИТОПЛАЗМАТИЧЕСКАЯ  
ОБОЛОЧКА

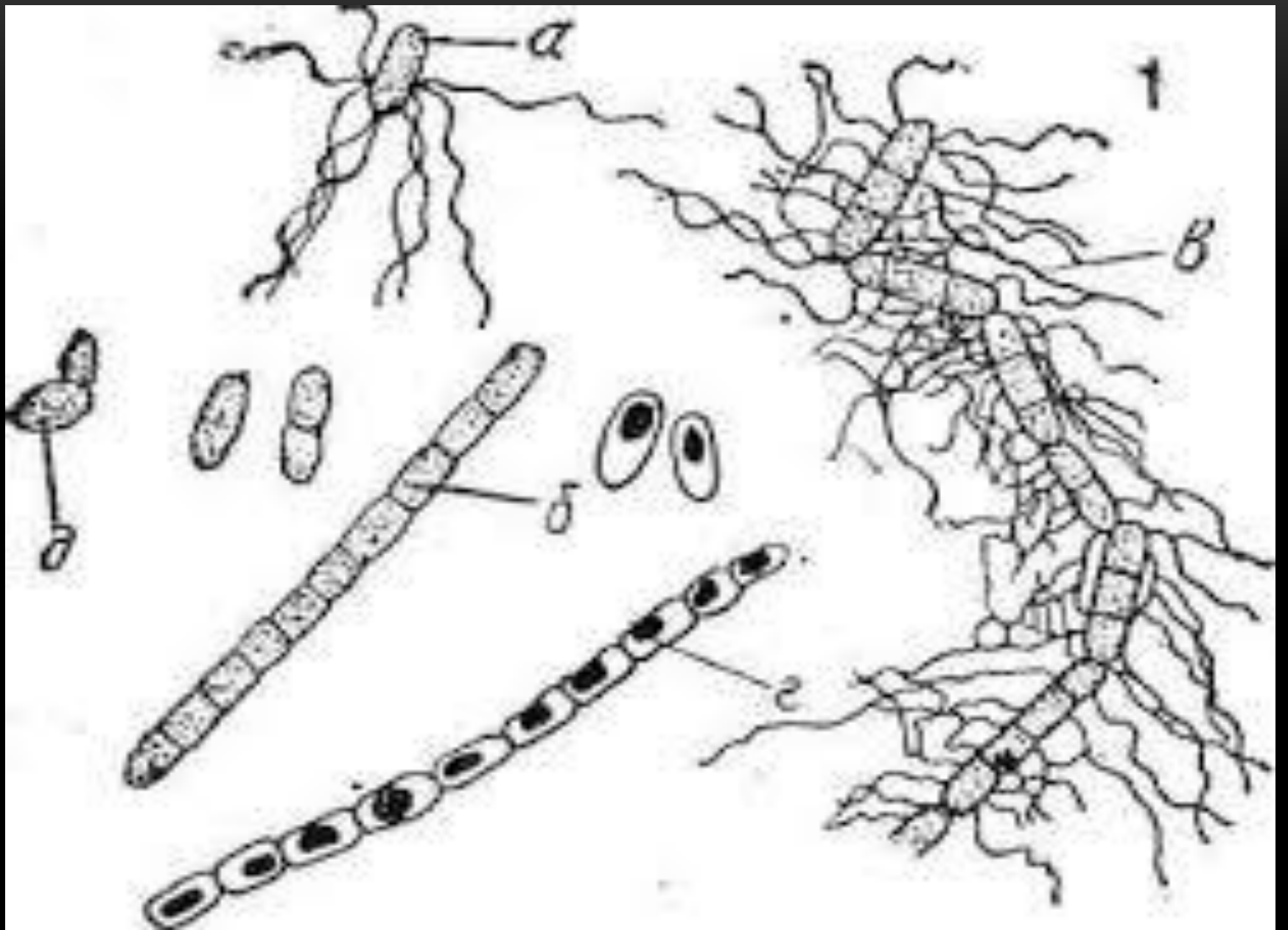
РЕДЕРНАЯ  
ОБОЛОЧКА

ЦИТОПЛАЗМА

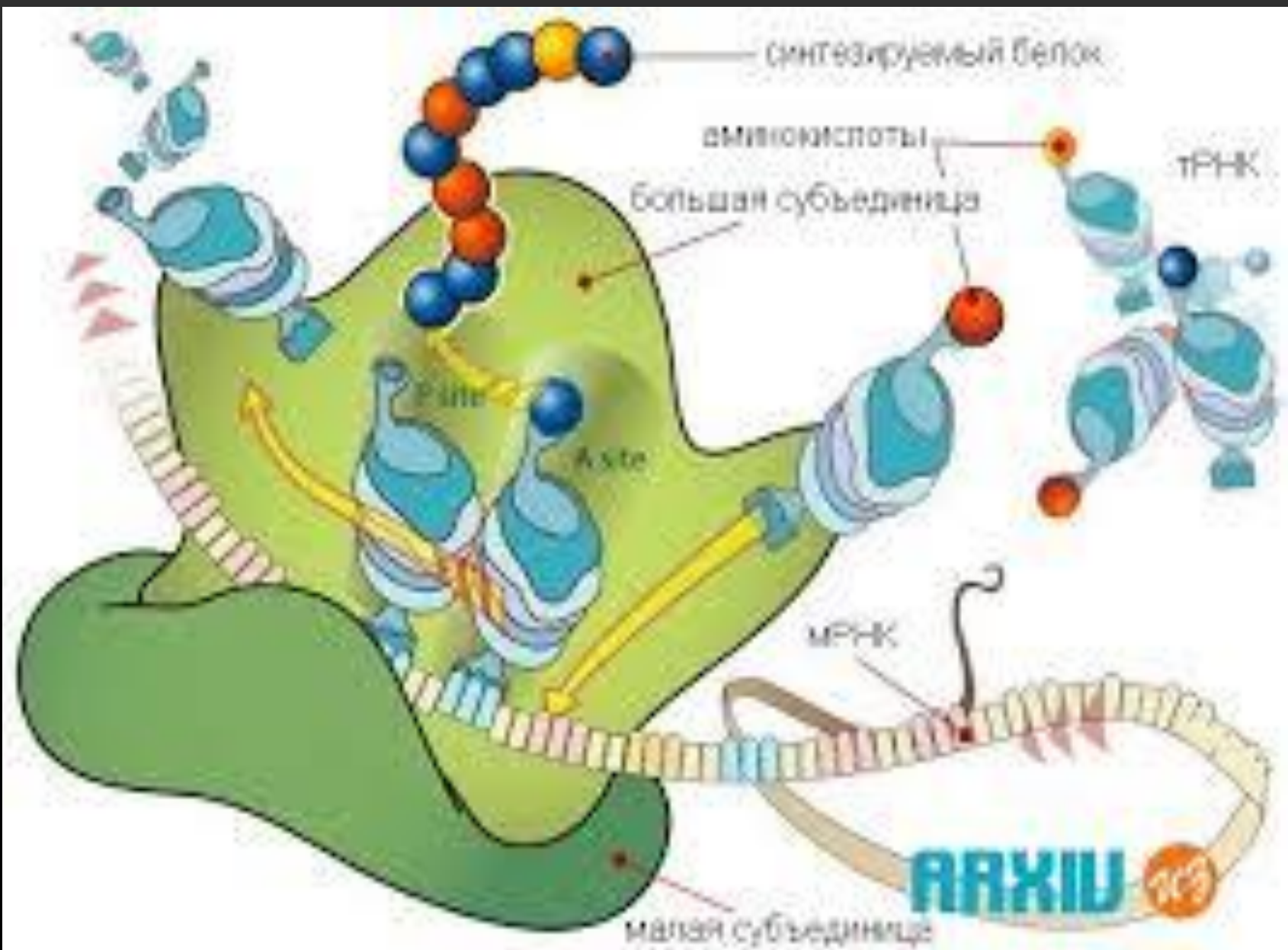
ЯДРЫШКИ

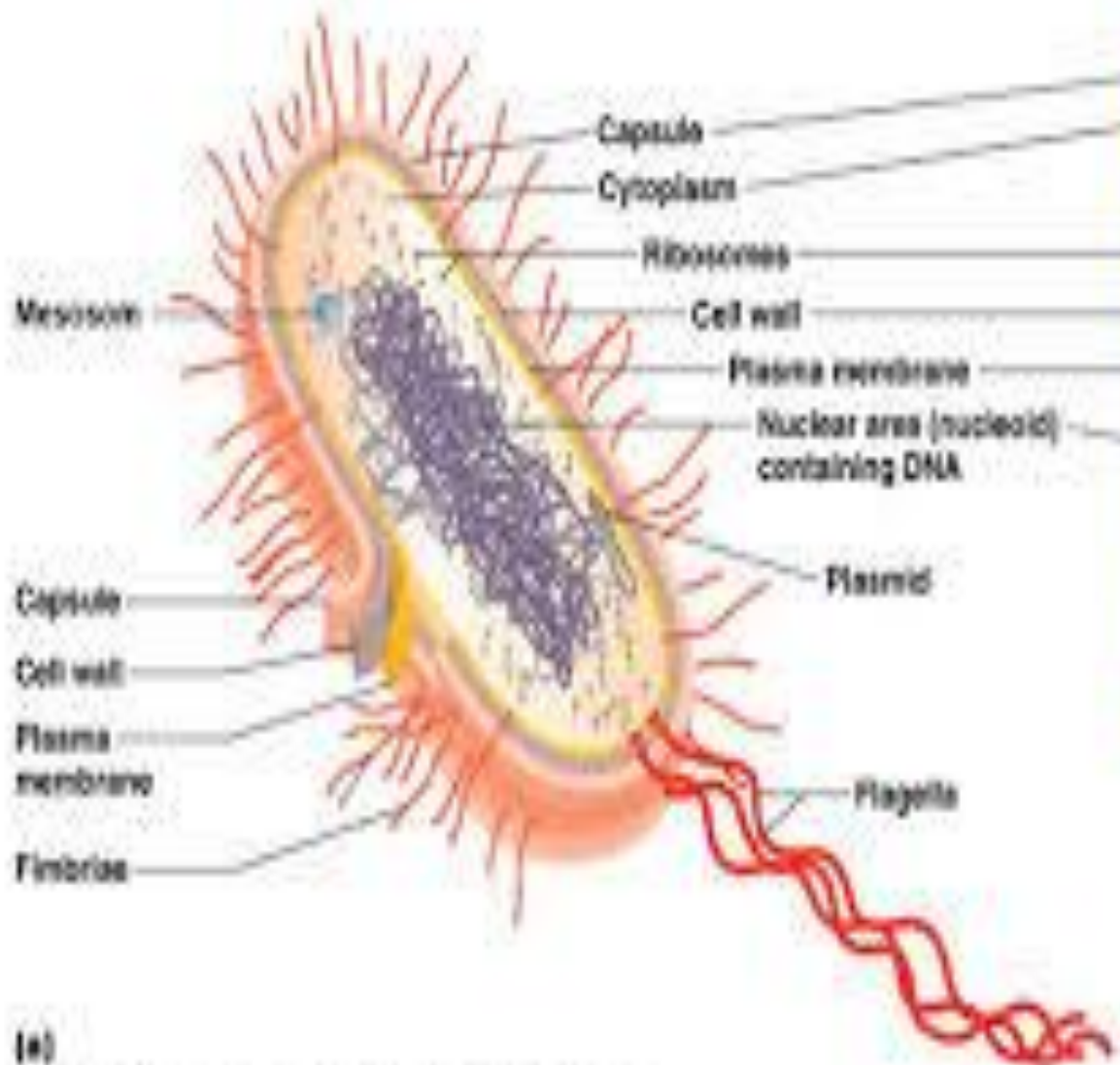
ВНУТРИКЛЕТОЧНЫЕ  
ЦИТОСКЕЛЕТИЧЕСКИЕ  
НИТИ





- *. Har bir sentriola silindrsimon tuzilgan va devori 9 ta mikronaychalar kompleksi bilan o'ralgan. Har bir mikronaycha kompleksi 3 ta mikronaychadan iborat. Jami 9 ta uchlik (triplet) aynan shunday joylashib, sentriolani hosil qiladi. Demak, har bir sentriola tarkibida 27 ta mikronaycha mavjud ( $9 \times 3 = 27$ )*





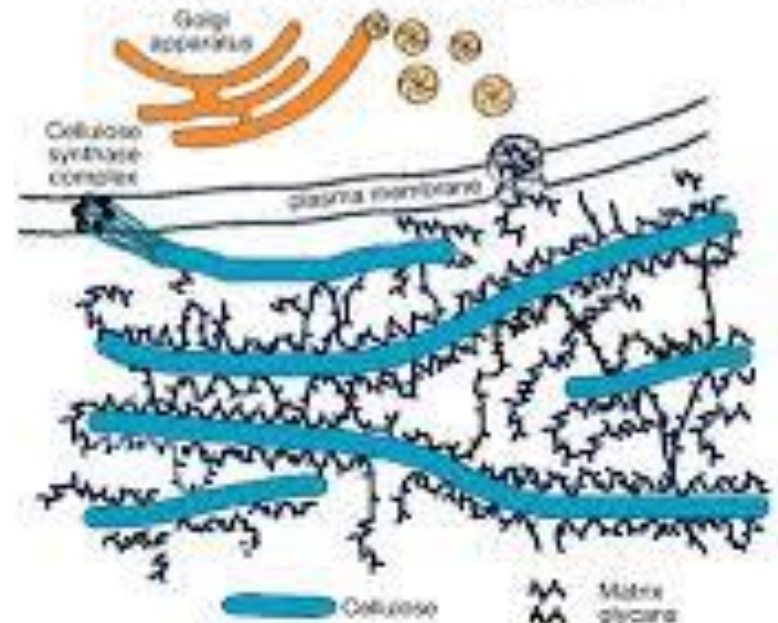
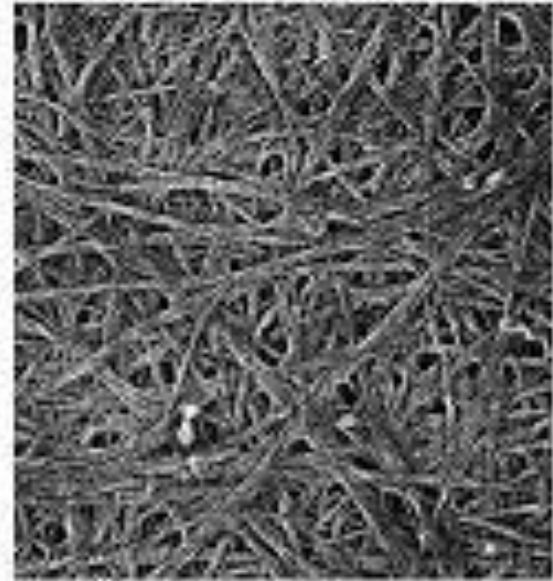
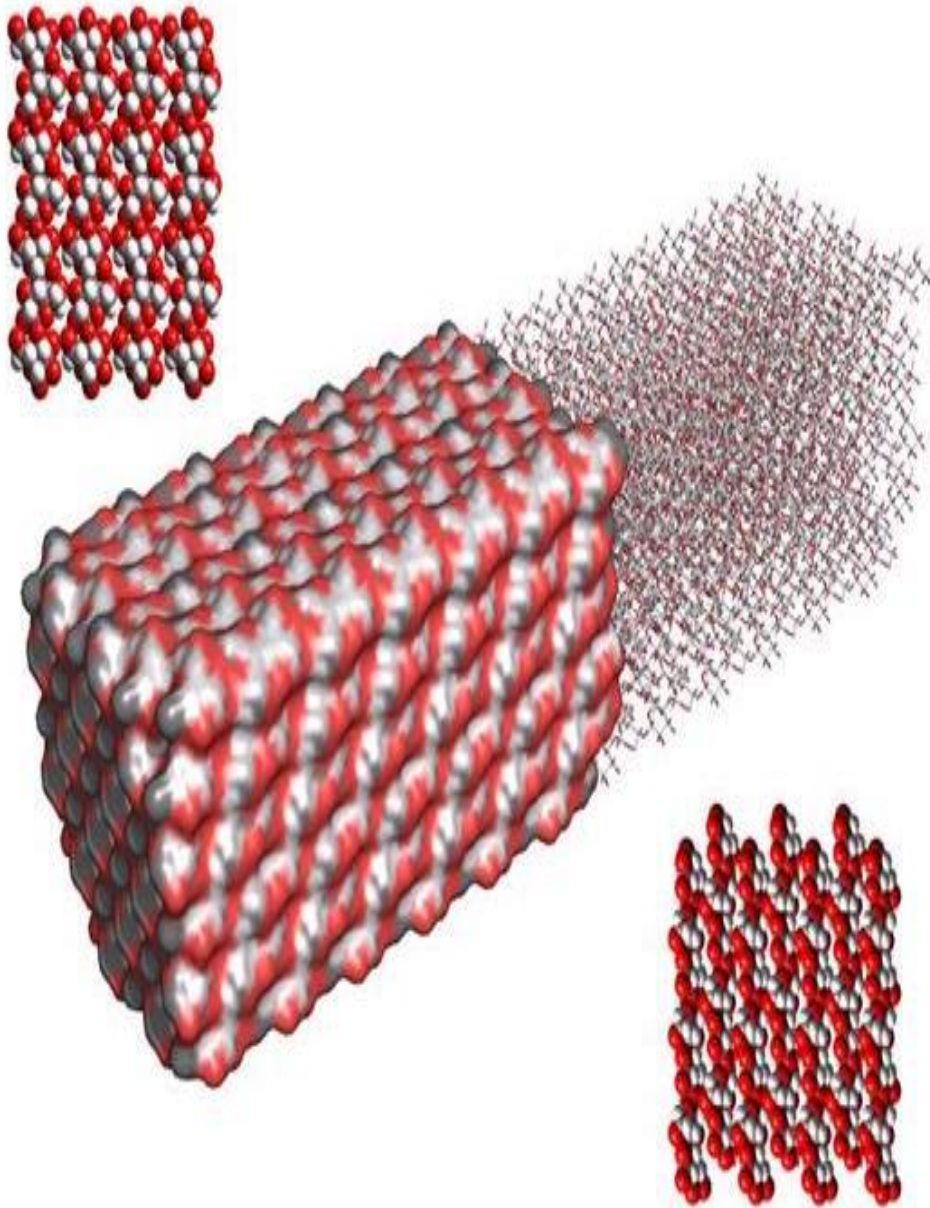
(b)

(a)

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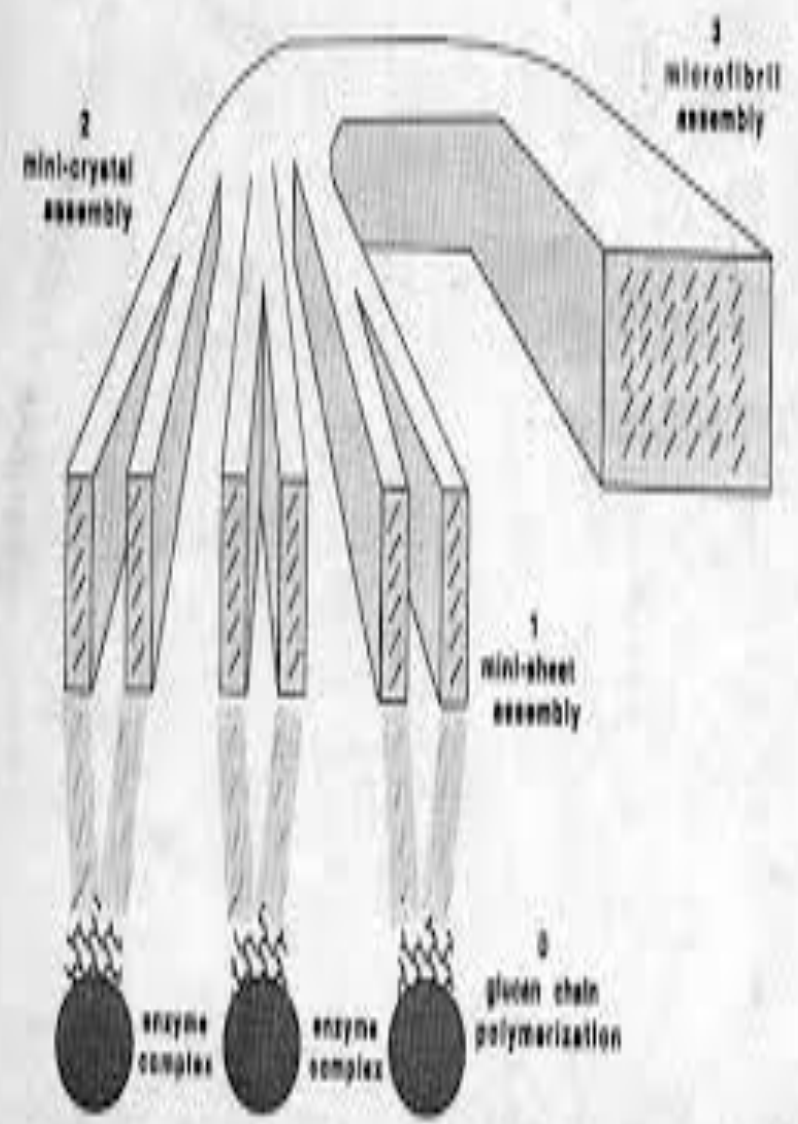
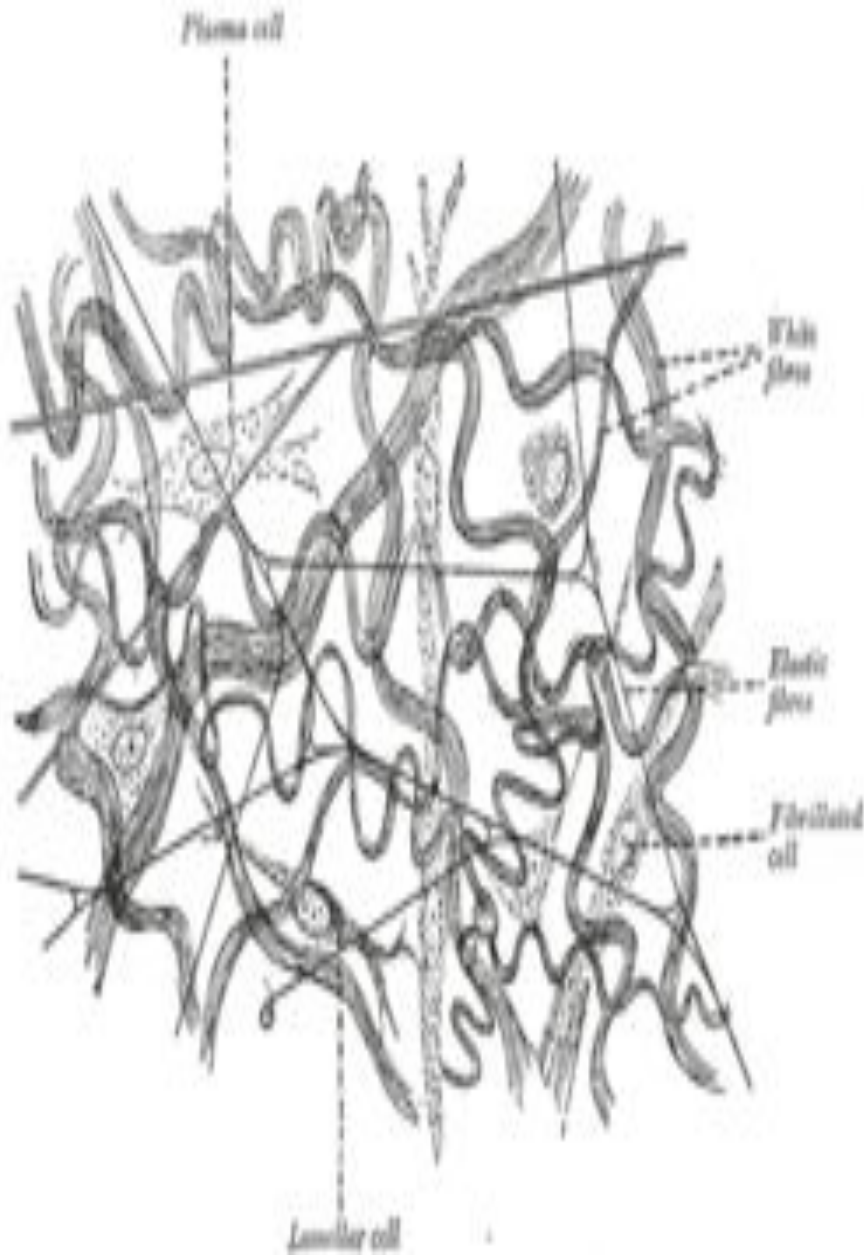
- **Funksiyasi: bo'linish dukining yo'nalishini belgilash, xromosomalarning qutblanishini ta'minlash. Hujayraning bo'linishida sentriolalar qarama-qarshi tomonga joylashadi va mikronaychalar bo'linish dukini hosil qiladi. Anafazada mikronaychalar xromosomalalar sentromerasi va organoidlar bilan birikib, ularni qutblarga tortadi**

- Mikrofibrillalar bu oqsilli ip, qalinligi 4 nm.
- Aktin va miozin tolalarini hosil etuvchi mikrofiloelementlardir.
- Mikrofibrillalar funksiyasi. Hujayra va uning qismlari harakatida, endo – ekzotsitozda, hayvon hujayrasi sitokinezi jarayonida,
- qisqaruvchi halqaning shakllanishida, hujayraning shaklini belgilashda qatnashadi. Muskul hujayrasi sitoplazmasida mikrofibrillalar
- mavjudligi tufayli muskul tolalari qisqaradi





- MIKROFIBRILLALAR YOKI TAYANCH FLBRILLALAR HAYVON HUYAYRASI UCHUN XOS BO'LIB, U ASOSAN EPITELIY HUYAYRALARIDA VA BA'ZAN GLIAL HUYAYRALARDA UCHRAYDI. MIKROFIBRILLALAR OQSIL TABIATLI BO'LSA KERAK. ULAR BIR NECHA YUZ FIBRILLALARDAN TASHKIL TOPGAN TUTAMLAR HOSIL QILISHI MUMKIN, MIKRONAYCHALAR SINGARI TAYANCH FUNKSIYASINI O'TAYDI.





# ETIBORINGIZ UCHUN RAHMAT