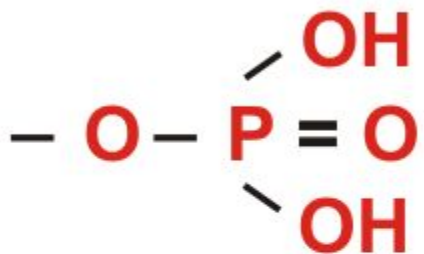
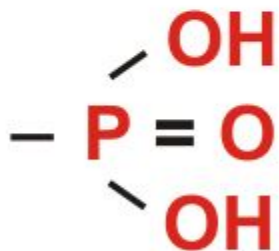




2004



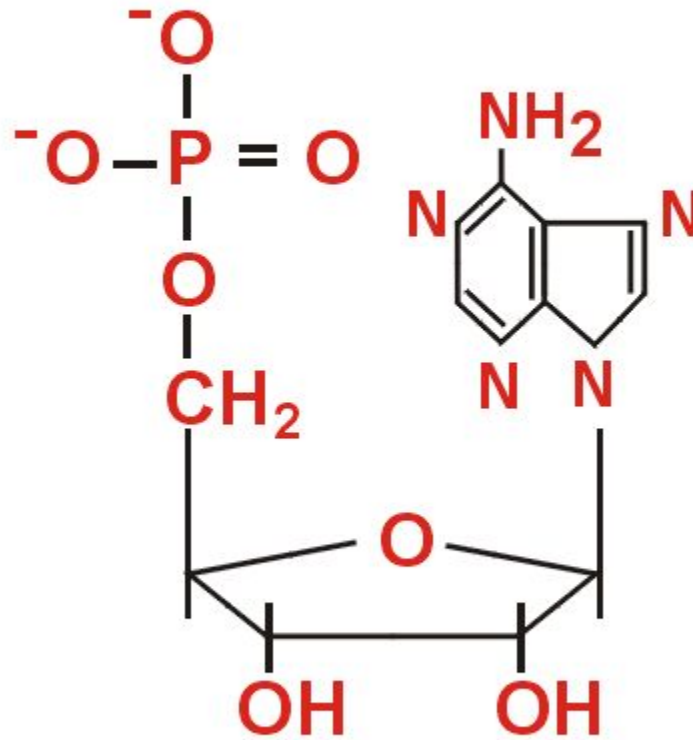
фосфатная группа

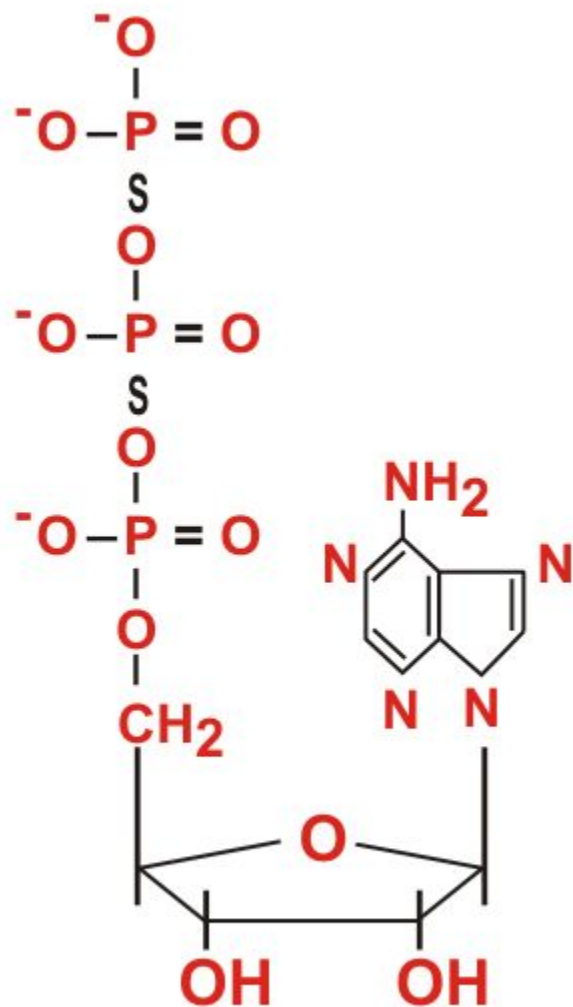


фосфорильная группа



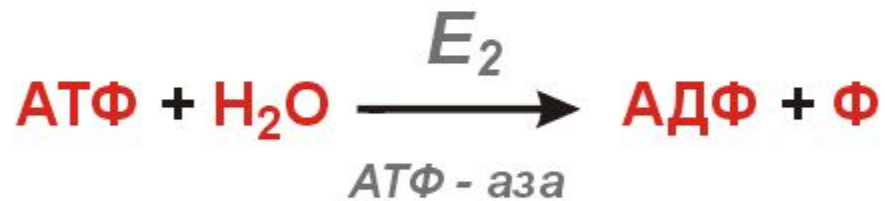
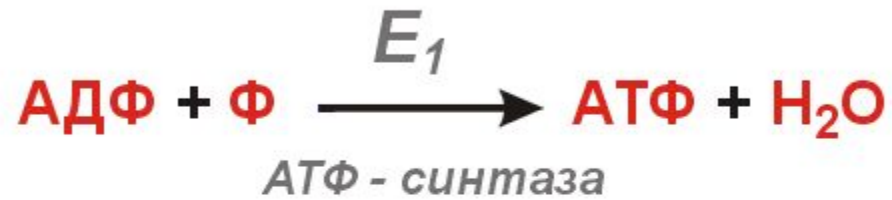
AMΦ





ATP<sup>4-</sup>  
Mg ATP<sup>2-</sup>

(ADP<sup>3-</sup>  
Mg ADP<sup>-</sup>)



$$\Phi_H = P_i$$



## НАД и НАДФ

*Окисленная форма*

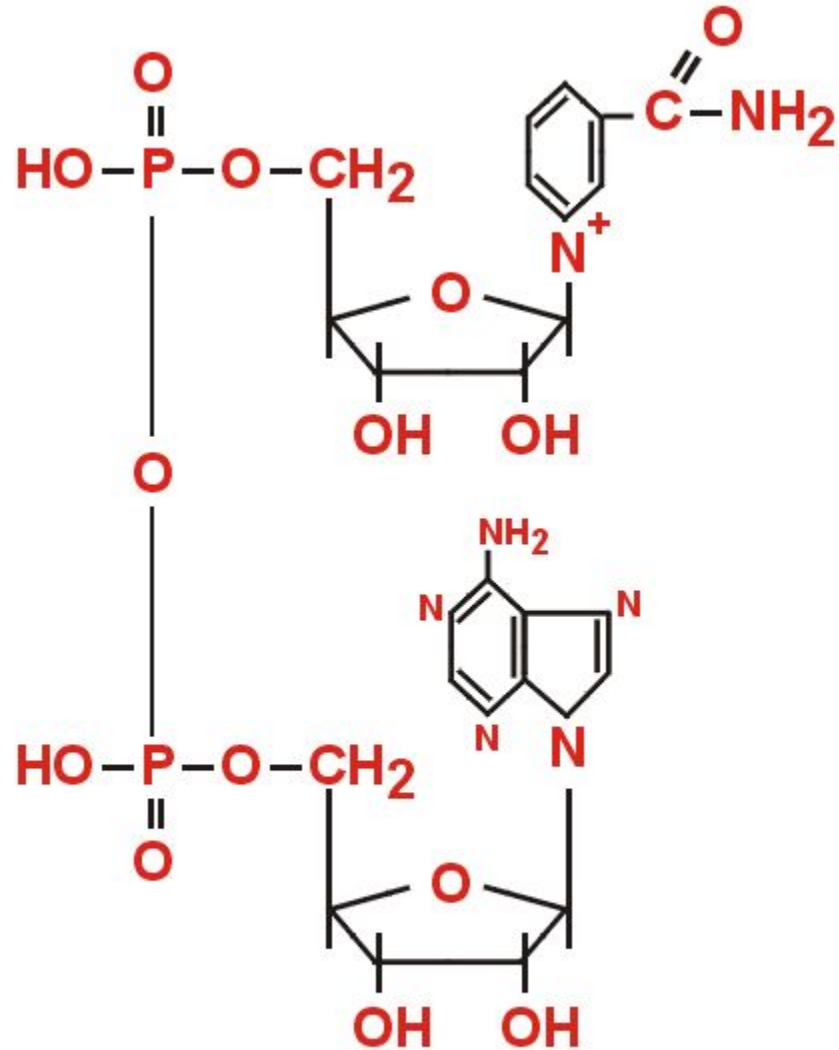


*Восстановленная форма*





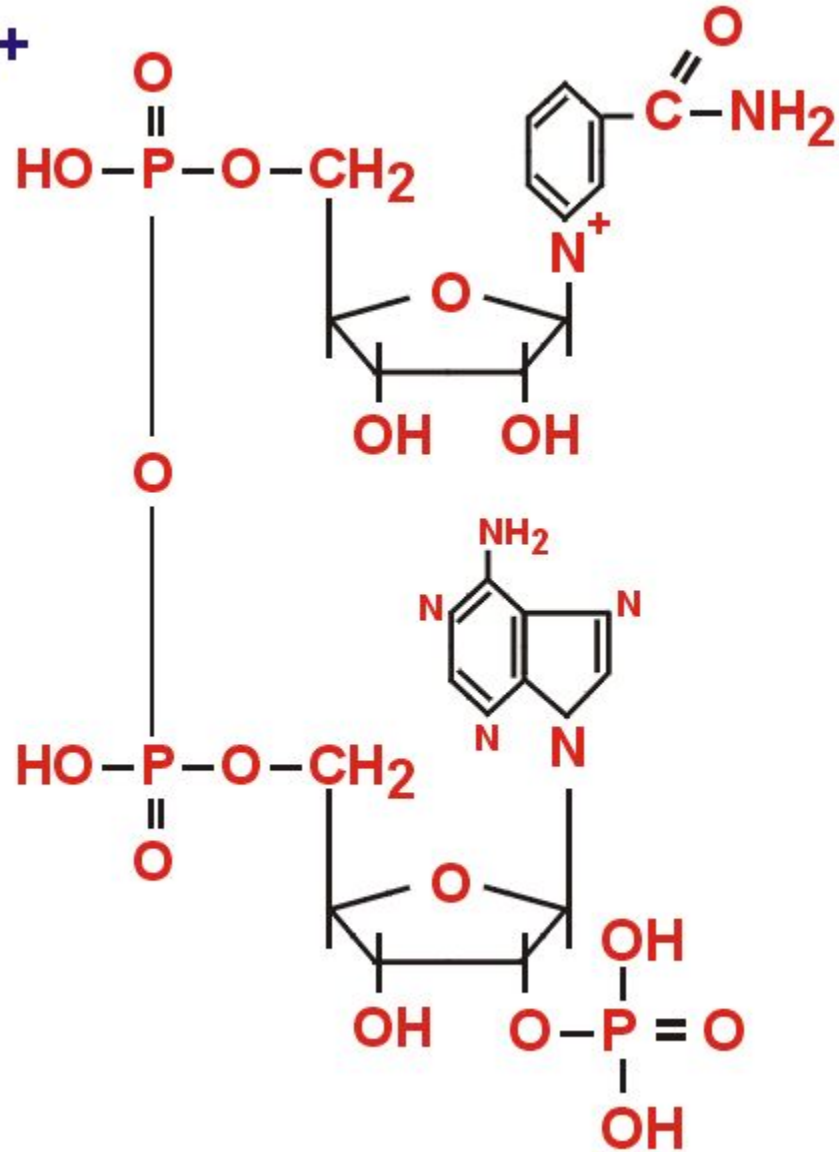
НАД<sup>+</sup>



METABURG media

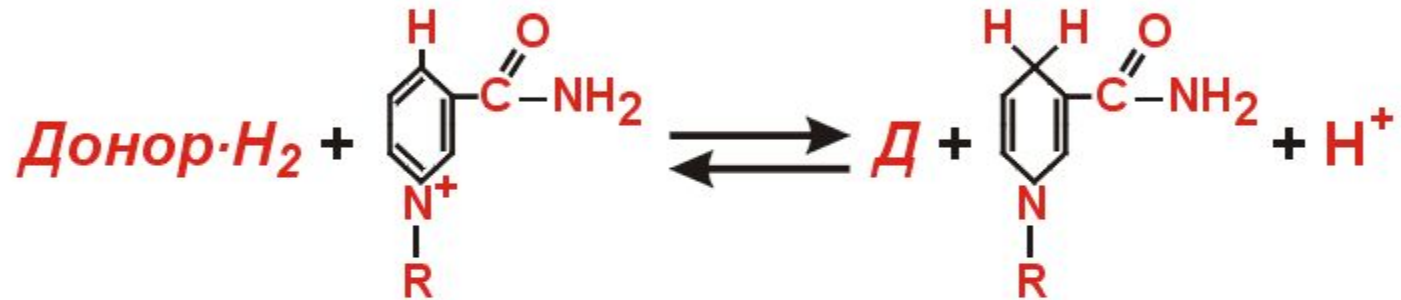


НАДФ<sup>+</sup>



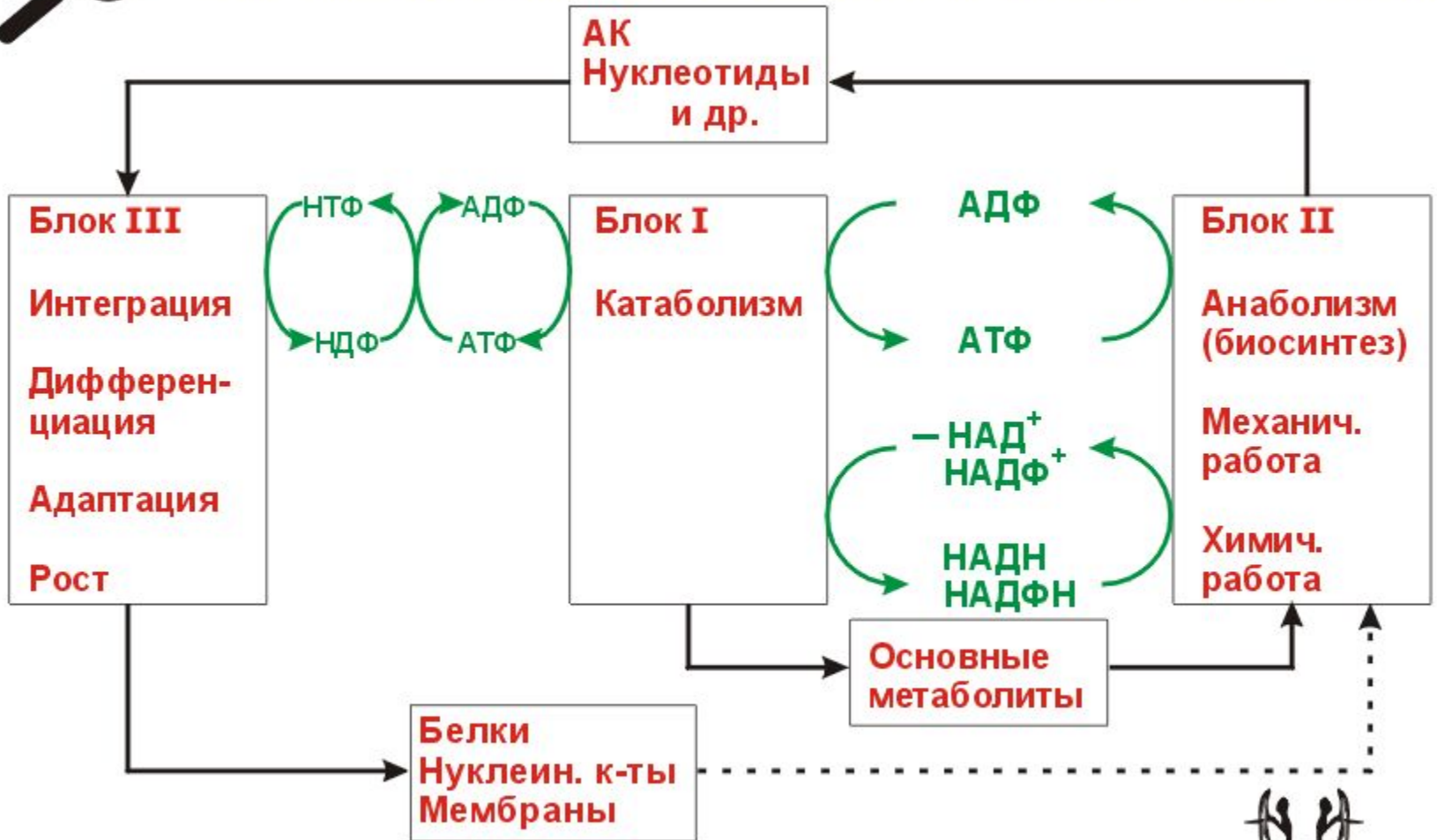
METABURG media







# Блок-схема функциональных элементов клеточного метаболизма





2004