Update note:

Abstract) (iMedPub Journals)

The bacterium S. pneumoniae responsible for the increasingly high mortality rate of children and the elderly from the disease pneumonia has become resistant to penicillin and their derivatives. In addition to antibiotics resistance crisis, the recently developed vaccines against the same pathogen and newer expensive antibiotics are no longer reducing the mortality rate of children. An alternative preventive therapy is now absolutely necessary and based on our recent publications it appears that the five-carbon sugar alcohol, xylitol has high potential to provide such an alternative. The xylitol derivative (xylitol phosphate?) produced by the genetic ability of these diplococcic streptococci inhibits biological continuity of both antibiotic sensitive and resistant diplococcic bacteria regardless of patient's immune response. In this article, diplococcic Gram-positive bacterial growth curve and the inhibitory effect of xylitol derivative on their bio-communication and reproduction are presented.

Once Again Xgel is not just a toothpaste!