Olha V Storchylo, J Gastrointest Dig Syst 2018, Volume 8
DOI: 10.4172/2161-069X-C1-064

Membrane digestion and absorption of some nutrients *in vitro* and *in vivo*: Revision and analysis of own data

Olha V Storchylo
Odessa National Medical University, Ukraine

Revision of the own data of experimental studies of membrane hydrolysis and absorption of mono- and dimeric nutrients in the small intestine of rats for the last 30 years are presented. The results of investigations of digestion and absorption of carbohydrates (glucose and maltose) *in vitro* by the preparations of accumulating mucous and *in vivo* in the chronic experiments on isolated and functioning portions of the small intestine of the rats are analyzed. *In vitro* test determined a concentration-dependent relationship between the protein and carbohydrate origin substrates with varying degrees of polymerization. The peculiarities of absorption of different concentrations of glucose and maltose in the presence of equimolar solutions of glycine and glycyl-glycine respectively were discussed. Analysis of the data of hydrolysis of different concentrations of maltose *in vitro* and *in vivo* was made, and the coefficients of conjugation of digestion of maltose and absorption of produced M-glucose were compared. The high stability of the free glucose transport system both *in vitro* and *in vivo* was found.

Biography

Olha V Storchylo graduated Odessa State University (Ukraine) in Biochemistry in 1983. She completed her Postgraduation in Human and Animal Physiology and Biochemistry at the Pavlov Institute of Physiology Russian Academy of Sciences, USSR in 1988 and joined the Human and Animal Physiology Department of Odessa State University as an Assistant Professor. From 2008 until now, she is an Associate Professor of Medical Chemistry Department of Odessa National Medical University. Her fields of interests are nutrition, digestion and absorption in the small intestine and effects of milk thistle fruits on it, total body irradiation, radio pharmacology, nutrigenomics, pharmacogenomics.

olha.storchylo@ukr.net

Notes: