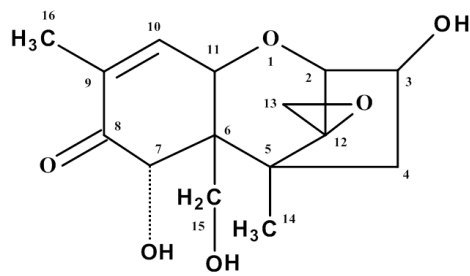


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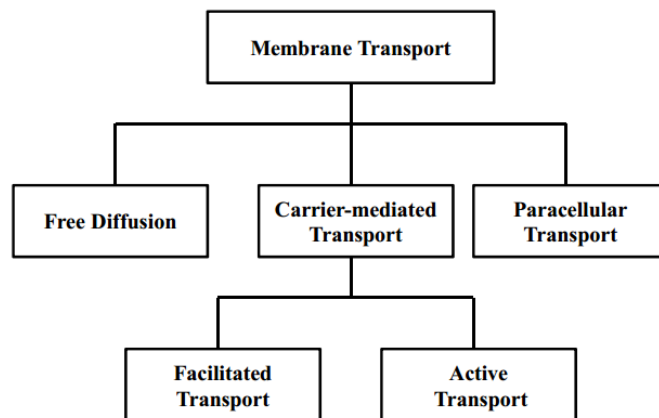
# Carrier-Mediated and Energy-Dependent Uptake and Efflux of Deoxynivalenol in Mammalian Cells

**Authors:** Xiaoming Li, Peiqiang Mu, Jikai Wen and Yiqun Deng

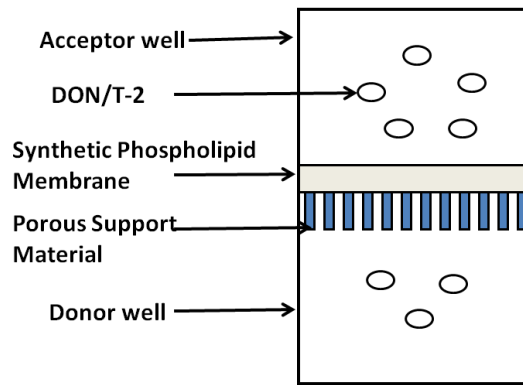
## Supplementary Data



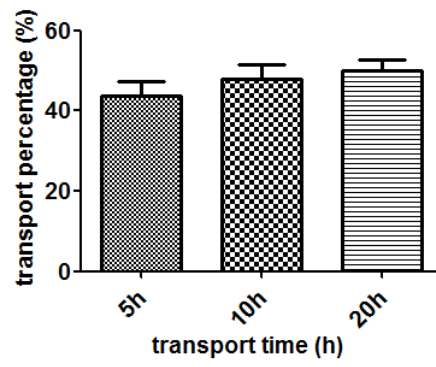
**Supplemental Figure s1.** Chemical structure of Deoxynivalenol (DON)



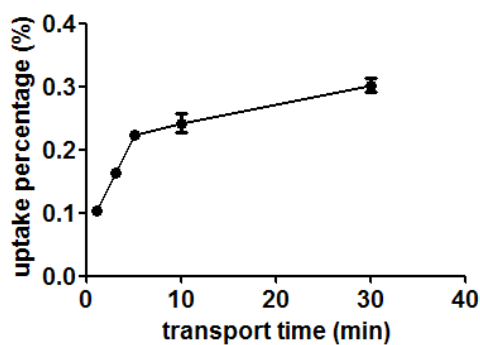
**Supplemental Figure s2.** Possible transport modes of the DON toxin in mammalian cells.



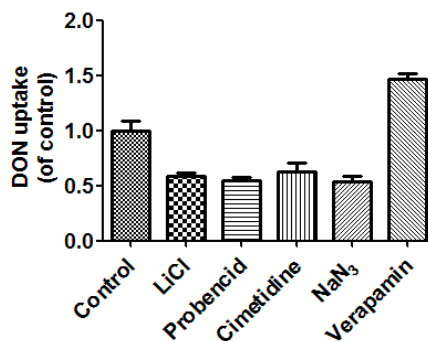
**Supplemental Figure s3.** Parallel Artificial Membrane Permeability (PAMPA) model.



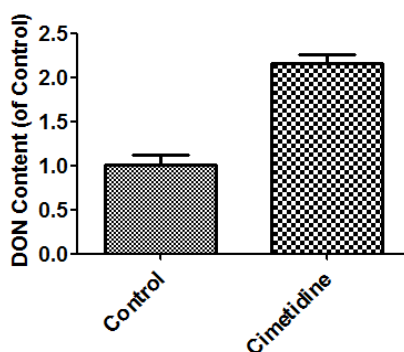
**Supplemental Figure s4.** Percentage of 1 µg/ml T-2 toxin transported in the PAMPA model.



**Supplemental Figure s5.** Percentage of the DON content taken up by the whole cell compared with the total initial DON content in the medium. The initial DON concentration was 5  $\mu\text{g/ml}$ .



**Supplemental Figure s6.** Effects of various transporter inhibitors on the uptake of 5  $\mu\text{g/ml}$  DON in MDCK cells within 10 min.



**Supplemental Figure s7.** Effect of multidrug and toxin extrusion proteins (MATE) inhibitor cimetidine on DON efflux from MDCK cells. MDCK cells were pre-incubated with 5  $\mu\text{g/ml}$  DON, and the medium was replaced with HBSS buffer or HBSS buffer containing 2 mM Cimetidine after a 10 min incubation with DON to allow uptake; the DON content in the whole cells was measured after 10 min of efflux.

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**Supplemental Table s1.** Accuracy and Precision of DON Concentrations Measured using Each Method at 3 Spiking Levels (Mean).

	Concentration (ng/ml)	Mean Recoveries SD (%)	RSD (%)
HPLC-UV	10000	96.1	2.18
Methods	1000	90.1	3.55
	100	91.3	4.49
ELISA Methods	50	94.1	3.72
	5	92.1	4.56
	1	93.1	4.72