

**P007** Transport of external sterols in anaerobic yeast is affected by Nonidet P-40 (Tergitol)  
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Yeast *Saccharomyces cerevisiae* is incompetent to take up external sterols in aerobiosis. Under conditions excluding molecular oxygen or heme synthesis however cells rely on external sterol sources and import sterols efficiently. It has been shown recently that this uptake of sterols involves two members of ABC transporters family Aus1p and Pdr11p. We have analysed process of external sterol uptake in growing and non-growing cells. Our results show that sterol import and subsequent metabolism are affected by mild non-ionic detergent Nonidet P-40 (NP-40 or Tergitol). This effect of NP-40 is significant at concentrations much lower than generally used for solubilisation of sterols and other hydrophobic compounds. NP-40 effect is concentration-dependent and is not associated with major changes in plasma membrane permeability. On the contrary NP-40 has no effect on intracellular transport or metabolism of internally synthesized sterol. This implies specific interference of NP-40 with sterol uptake and hence Aus1p and Pdr11p. Although we did not prove direct interaction of NP-40 with Aus1 and Pdr11 transporters, several observations from other laboratories support this possibility. Alternatively NP 40 could cause more general changes in plasma membrane leading to alteration of intracellular cell signalling and regulation of sterol metabolism.

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