

# Quiescence: a mechanism for escaping the effects of drug on cell populations

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## Abstract

We point out that a simple and generic strategy to lower the risk for extinction consists in the developing a dormant stage in which the organism is unable to multiply but may die. The dormant organism is protected against the poisonous environment. The result is to increase the survival probability of the entire population by introducing a type of zero reproductive fitness. This is possible, because the reservoir of dormant individuals act as a buffer that can cushion fatal fluctuations in the number of births and deaths which without the dormant population would have driven the entire population to extinction.

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