

Good nutrition link to spread of disease

INFECTIONS could spread faster in animals that eat well, a study has suggested.

Scientists at Edinburgh University said research into water fleas has shown increasing the supply of food can accelerate the rate in which bacterial infections are passed.

They found when a population of parasite-infected water fleas was well fed, some became highly contagious, compared with when food was limited.

The research could help inform ways to monitor and control the spread of infections, such as epidemics, in large populations.

Some well-fed water fleas were more infectious than others because they were able to survive for longer with the parasite, giving it more time to multiply, the team said.

Among those that were

well fed, some were found to be carrying more parasites than others, and so were more prone to spreading the disease.

Researchers said their study highlights the need to consider the impact of environmental conditions, such as nutrition, on individuals in large populations at risk of disease.

Dr Pedro Vale, from the university's School of Biological Sciences, led the study. "If we have an idea of which individuals transmit a lot of disease, we will be better able to stop its spread," he said. "We know contact between individuals is important; but now we know that, for some animals at least, nutrition may also play an important role in the spread of disease."

The research is published in *Biology Letters*.

