NewScientist

Home News In-Depth Articles Blogs Opinion TV Galleries Topic Guides Last Word Subscribe

SPACE TECH ENVIRONMENT HEALTH LIFE PHYSICS&MATH SCIENCE IN SOCIETY

#### Home | News

# A dusty home may influence a babies gut

25 April 2012 by Jessica Hamzelou Magazine issue 2862. Subscribe and save

IF YOU thought the bacteria that line our gut were pretty personal, think again. They influence our digestion, risk of disease, and even our behaviour. Now it seems we might be sharing these gut bugs with the people around us - via dust.

James Scott at the University of Toronto in Canada and his colleagues investigated the bacterial make-up of faeces from 20 three-month-old babies, which represents the bacteria in their gut flora. The group then compared the faecal bacteria with bugs found in dust samples collected from each baby's home.

They found a significant overlap in bacterial communities in a baby's faeces and dust from their home. This suggested that a baby may be sharing their gut bacteria with the environment and vice versa. Scott presented the findings at the International Human Microbiome Congress in Paris, France, last month.

"There are lots of skin microbes in dust, but we don't expect gut bacteria to be able to escape," says Scott. This was especially surprising since most known gut bacteria thrive in oxygen-free environments and die in the air, says Scott.

The bacteria may be releasing their DNA in packages called spores. These hardy vessels allow bacteria to survive harsh environments and they only start reproducing when a more suitable habitat turns up. Scott reckons that faecal bacteria may get into the environment via dirty diapers, unwashed hands, or even the spray from a toilet when it is flushed.

The specific collection of bacteria in our guts has been linked to various diseases and might even influence behaviour. So the findings suggest that people living in the same dusty house may also share health and behavioural characteristics, says Pilar Francino at the University of Valencia in Spain, who was not involved with the work.



From issue 2862 of New Scientist magazine, page 12.



#### Latest news

## How to defuse sub-Saharan Africa's population bomb



The fate of global population growth rests largely on the fortunes of Africa. It's not too late to

ensure a stable future, says

### Brain may not be hard wired to link numbers and space



Eliya Zulu

17:41 25 April 2012 Our ability to map numbers onto a physical space such as along a line - must be learned

## Today on New Scientist: 25 April 2012 19.00 25 April 2012

All today's stories on newscientist.com. including: matchmaking scientists with adventurers and the hunt is on for pieces of vansized California meteor

## Technicolour clones reveal how hearts build themselves

18:33 25 April 2012

This zebrafish heart is a work in progress that could one day help to repair of damaged or failing humans hearts

This week's issue





