

‘Living magnets’ for medicine

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SPANISH scientists are claiming a world first after developing probiotics that are modelled on naturally occurring magnetic bacteria.

Researchers from the University of Granada say they have created “living magnets”, which can be added to food.

The artificial bacteria could be used in magnetic resonance imaging to help diagnose digestive diseases, such as stomach cancer, the university said.

It could also be used to destroy tumours by heating up malignant cells, and as an edible iron supplement.

The university said the findings, published in the journal *Advanced Functional Materials*, constituted “the first use of a food as a natural drug and aid in diagnosing illness, anywhere in the world”.

The experimental research used common probiotic bacteria as “bioplatfroms”. Magnetic nanoparticles, inspired by naturally magnetic bacteria, were packed on to their surfaces.

Magnetic bacteria have organelles containing tiny crystals that align them with the earth’s magnetic field. Biologists believe this helps the bacteria achieve optimal oxygen uptake.