

CROHN'S MAP VACCINE.COM

Crohn's MAP Vaccine is an awareness and support group comprised of members of the Crohn's Community. Our mission is to find a cure for Crohn's Disease (CD). We believe the best hope for that cure lies in the Vaccine developed by Prof. Hermon-Taylor...

Mycobacterium avium subspecies *paratuberculosis* (MAP) is a bacteria which causes Johne's disease (an Inflammatory Bowel Disease very like CD) in cows. Data from the US suggest 91% of dairy herds are infected¹. Not all infected animals show outward signs of disease.

MAP is found in the poo of infected animals. Rain washes it into nearby rivers. MAP can be detected in these waters – it can even be found in tiny droplets of water in the air that aerosols off these rivers.



MAP in animals under the microscope

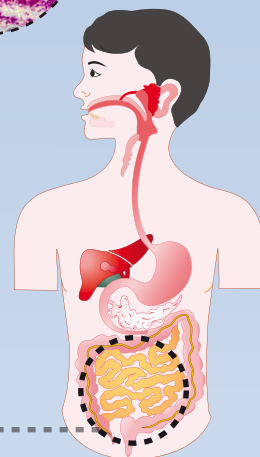
Milk from infected cows contains MAP. Not all MAP is killed by pasteurisation: a study in the UK found 7% of retail milk contained live MAP². MAP has also been detected in meat from infected animals.



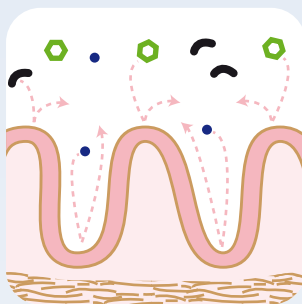
What is CD?

CD is an aggressive form of Inflammatory Bowel Disease affecting probably around 4 million people worldwide; 1.2 million in the USA and reportedly around 250,000 in the UK. Numbers are increasing, especially in children. Symptoms include chronic abdominal pain, bloody diarrhoea and weight loss. Up to 80% of sufferers will need surgery at some point in their lifetime.

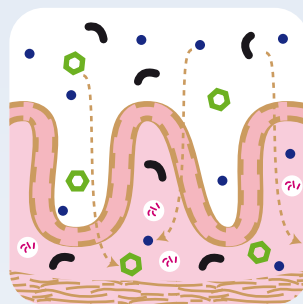
There is currently no cure.



MAP causes immune dysregulation and inflames the gut nervous system. This makes the gut leaky allowing penetration of other gut organisms such as bacteria, yeasts and viruses as well as allergenic food residues. It is the disordered response to these organisms that causes the segments of massive inflammation characteristic of CD.

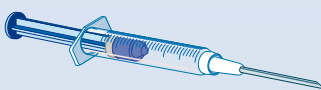


Healthy gut



Leaky gut in CD

People are widely exposed to MAP in the food chain and in the environment... but not everyone who is exposed gets CD. Why? Some people are not susceptible; their immune systems can fight off MAP and they never get sick. Others ARE susceptible; their immune systems cannot fight MAP due to genetic factors and/or 'triggers' (e.g. major physical illness, stress) which alter the immune system – these individuals develop CD. 92% of CD patients test positive for MAP³.



Could this be the cure?

Prof. John Hermon-Taylor has developed a modern Vaccine against MAP, designed to TREAT CD. Studies in animals show it is highly effective with no obvious adverse effects.

Now all we need is the funding to carry out a trial in humans. Visit www.crohnsmapvaccine.com to find out how you could help.

(1) Lombard JE et al. Herd-level prevalence of *Mycobacterium avium* subsp. *paratuberculosis* infection in United States dairy herds 2007. *PREVET* (2012), <http://dx.doi.org/10.1016/j.prevetmed.2012.08.006>
(2) Millar D et al. IS900 PCR to detect *Mycobacterium paratuberculosis* in retail supplies of whole pasteurized cows' milk in England and Wales. *Appl. Environ. Microbiol.* 1996; 62(9): 3446-3452
(3) Bull T et al. Detection and verification of *Mycobacterium avium* subsp. *paratuberculosis* in fresh ileocolonic mucosal biopsy specimens from individuals with and without Crohn's Disease. *J. Clin. Microbiol.* 2003; 41(7): 2915-2923