Crohn's Disease and MAP Links Still Unproven

Date, St Albans, Herts. An expert review group set-up by NACC to look into the question of a link between *Mycobacterium avium paratuberculosis* (MAP) and Crohn's disease has found that the evidence for MAP causing Crohn's Disease is inconclusive. The members of the group, senior professors from relevant medical and scientific disciplines / specialties reviewed the published medical evidence for a link between Crohn's and MAP; considered the likelihood of MAP being a causative agent for Crohn's and advised on what research could be undertaken to answer definitively the question of the relationship between MAP and Crohn's.

MAP is a bacterium present in the environment and is found in large numbers of cattle. The organism is transmitted via the milk and faeces of infected animals – making it a possibility that MAP could be entering water and milk supplies. There are two main reasons for the suggested link between MAP and Crohn's: in the first place, MAP is known to cause an infection called Johne's disease in cattle, which has symptoms similar to Crohn's; in the second, low levels of MAP DNA have been found in tissue samples taken from some people who have Crohn's.

These two reasons are not enough to prove that MAP causes Crohn's as MAP has also been found in tissue samples taken from people who do not have Crohn's. Furthermore, although a small group of people with Crohn's who have been treated with anti-mycobacterial drugs have shown improvement in their symptoms, the improvement has not in the main been long-lasting.

Published this week on the NACC website, www.nacc.org.uk, the report from the NACC Review Group gives the following conclusions:

- evidence shows that MAP is present in milk and, possibly, water supplies
- it should now be accepted that MAP DNA is present in the tissues of some people with Crohn's Disease, but it is also present in the tissues of a smaller number of people who do not have Crohn's and the significance of the presence of the DNA in terms of the cause of Crohn's Disease is unknown

- based on the available evidence, there is no proof at present that MAP causes Crohn's Disease
- DEFRA's precautionary strategy to reduce the incidence of MAP in the food chain is to be welcomed
- any future research into the link between MAP and Crohn's should take account of clinical and genetic sub-sets of Crohn's patients
- further evidence is needed from epidemiological studies which include data on the sub-types of Crohn's Disease
- clearer evidence for the role of MAP in Crohn's should become available in 2005 with the completion of the Australian trial of treating Crohn's Disease with antibiotics targeted at MAP.

Commenting on these findings, the Chairman of the NACC Review Group Professor Ken Welsh, Professor in Clinical Genomics at Imperial College, London explains, "The members of the review group welcome the fact that the Food Standards Agency and DEFRA are already implementing guidance directed towards eliminating MAP from milk supplies and have funded research to investigate the possibility of links between Crohn's Disease and the water supply. We are also aware of a large controlled trial of anti-mycobacterial therapy for Crohn's that is currently being undertaken in Australia which may add to our understanding of the role of MAP in Crohn's."

"The review group believes that the hypothesis that Crohn's is a collection of different conditions with differing causes, genetic and environmental, is likely to be correct. If MAP were causative, it could be causative to only one clinical subset of the disease and perhaps to one genetic sub-type. We recommend further research through epidemiological studies to take account of the clinical and genetic sub-sets."

The full report appears on the NACC website www.nacc.org.uk or for a printed copy, write to Richard Driscoll (MAP) at NACC, 4 Beaumont House, Sutton Road, St Albans, Herts AL1 5HH enclosing an A4 self-addressed envelope with stamps to the value of 34p. **ENDS**

For further information please contact Sarah Rogers or Pam French at Healthcare Solutions on Tel: 01428 604444 or email sarah@healthcare-pr.co.uk