Overall 54% of our 142 control subjects produced methane which is not very different from 50% in Tel-Aviv. Comparing hospital staff and students in this hospital (n=60) with volunteers from a local housing estate (n=82), however, there was a wide difference in percentage methane status, 33% compared with 70% in these respective control populations. From the distribution patterns shown in the Figure, methane concentrations in most producers are greater than 6 ppm and if we are missing some values between 1–2 ppm above room air this would tend to make our incidence rates even higher. A 70% incidence in methane production in a 100 unselected subjects has been quoted by Calloway and Murphy.² Most studies, including ours, have used breath samples taken on a single occasion. Pitt *et al.*,³ have shown that a single breath sample might miss an average of 18% of methane producers in a population study. Hence it is possible that all figures quoted in the literature are underestimating the incidence of methane production.

Figure Methane production in control populations.

We think that methane is produced in the colon of all normal subjects. Studies in methane producers describe a continuum of concentrations in the breath which are dependent upon methane production in the caecum. The definition of a methane producer is arbitrary. The measurement of flatus methane may be more relevant in the basic issue, which is, what dictates the amount of methane produced in the human colon.

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Combined manometry and antimony pH catheter

SIR,—We have recently encountered a problem with a combined manometry and antimony pH catheter (Monocrystant Mod 1010) and felt that others may benefit from our experience.

We had successfully used the catheter on one occasion without problem. During the calibration for a subsequent period of monitoring, however, we noticed that there was a wide variation in the voltage generated when using buffer pH1 (Figure). Subsequent investigations showed that this variation was related to immersion of the opening in the manometry channel and close inspection revealed a small collection of fluid in the catheter tip. This was found to be due to partial separation of the inner manometry channel from the surrounding pH catheter.

Figure Calibration in buffer pH1 showing artefact when manometry channel submersed in the solution.

This artefact disappeared after complete occlusion of the manometry channel which suggested that the leakage provided a short circuit between the central wire within the pH catheter and the external antimony electrode.

We have informed the manufacturers and hope that this will help others to identify the problem more readily.

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