

sitivity.³ Furthermore, it is hardly possible to draw clear conclusions from the rather fragmentary data reported for man (see cases reviewed in the Addendum by Ablett,⁴ case report by Wilson⁵ and review by Green⁶), which are greatly complicated by polypharmacy and grave illness, particularly tetanus and leukemia. There appears to be a lack of information about the safety of prolonged exposure to nitrous oxide under other conditions in man, and it may be that we are overlooking a drug that would be valuable in preventing needless suffering in patients undergoing prolonged artificial ventilation. The problem will be resolved only by careful study of patients under the relevant clinical conditions.

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In reply:—It is a pleasure to respond to the letter of Drs. Nunn and Sturrock. Their studies of the cellular effects of anesthetics have established the standard for all workers in this exciting field.

They raise three concerns: The first is the lack of details in our recent publication on the use of intermittent nitrous oxide.¹ In that paper, we cited our earlier publication as a reference for the method.² The second concern relates to our citation of their paper suggesting an effect of nitrous oxide on the growth of bone marrow stem cells in culture.³ After rereading their paper, I remain with the impression that cell suppression by nitrous oxide alone was nearly significant, suggesting a subthreshold concentration for this model. Thus, when mixed with subthreshold halothane, the occurrence of an additive effect was not surprising. Nevertheless, I will accept their statement that "nitrous oxide, 75 per cent, had no significant effect on growth. . . ." The third relates to fear, possibly needless, of prolonged use of nitrous oxide in man. Some of our experiences regarding its safety for prolonged use as an analgesic in man were pre-

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Anesthesia Does Not Cause Metabolic Stress

To the Editor:—In their otherwise excellent review, Drs. Blackburn, Maini and Pierce state that: "the induction of anesthesia initiates the (metabolic) response to injury, while most surgical procedures 60 to 90 min in duration do not augment this stress further."¹

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viously reported.⁴ We concur that the safety of nitrous oxide for prolonged use should be reviewed.

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We believe that this statement is not correct. First, the documentation given for the above statement is incorrect, since the article referred to deals with the extent and composition of postoperative weight loss. Second, several studies have shown that anesthetic