

AUTHOR'S CORRECTION

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McINTYRE, T. D. AND H. P. ALPERN. *Differential convulsive susceptibility of high-activity and low-activity selected mice in response to GABA antagonists*. PHARMACOL BIOCHEM BEHAV 26(1) 71-75, 1987.—

The authors wish to correct an error which appears in the right column, line 9 of the Introduction. The text is reprinted below:

TWO separate bidirectional selective-breeding programs have established lines of mice that display similar differences in open-field maze activity [8, 9, 17, 18], even though one program employed duration of ethanol-induced hypnosis as the selection criterion [17,18]. The Long-Sleep (LS) and Short-Sleep (SS) lines that were selected for different hypnotic reactions to a sedative dose of ethanol are interesting because recent evidence suggests that they also display similar reactions to a wide variety of CNS hypnotic-depressants, and thus, they may have been selected for an attribute other than specific sensitivity to alcohol. The hypothesis that the hypnotic reactions displayed by these lines are alcohol-specific originated with a study that examined how these lines responded to the soporific effects of ethanol, methanol, n-butanol, pentobarbital, paraldehyde, chloral hydrate and trichloroethanol [11], and showed that only the aliphatic alcohols separated the two lines. In a reanalysis of those data, however, it was shown that every CNS depressant employed actually differentiated the two lines [3]. Further, several other studies show that the LS line is more sensitive to the soporific effects of alcohols [11,14], barbiturates [3, 4, 21], benzodiazepines [21], general anesthetics [20], and other

miscellaneous agents such as L-phenylisopropyl adenosine [10]. The conclusion, therefore, that these lines display a unique sensitivity to aliphatic alcohols is no longer tenable. Another avenue of investigation supporting this interpretation shows that these mouse lines can also be differentiated by their reaction to a number of convulsive agents. Specifically, the analeptics flurothyl, methyl- β -carboline and pentylenetetrazol all induce myoclonus more rapidly in SS mice than in LS mice, but clonus more rapidly in LS mice. Bicuculline, however, induces both myoclonus and clonus more rapidly in the SS line in comparison to the LS line. Additionally, caffeine, picrotoxin and strychnine induce only clonus, and always more rapidly in SS mice than LS mice [22]. As argued in more detail elsewhere [20], the cumulative evidence supports the conclusion that these lines were probably selected for differences in some general aspect of brain excitability. For what follows it is important to note that the LS and SS lines were derived from a heterogeneous strain (HS) that was created by systematically intercrossing mice from eight inbred strains (A, AKR, BALB/c, C3H/2, C57/BL, DBA, Is/Bi and RIII) and subsequently maintained by random mating [19]. Animals from this stock population were