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The toxicity of skatol.

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Experiments with skatol (Kahlbaum, highest purity) were performed on frogs, cats and dogs. 30–40 mg. of skatol dissolved in 0.3–0.4 c.c. of pure acetone and injected into the ventral lymph sac of frogs weighing 40–45 grams produced symptoms of severe intoxication within a few minutes. Respiratory movements became slow, reflexes gradually disappeared, muscular weakness was followed by complete paralysis. Death occurred in from thirty minutes to three hours. In control experiments with the same or larger amounts of acetone (0.5 c.c.) similar symptoms were observed, but they were much less pronounced and were followed by recovery. When the frogs were examined after 18–20 hours they appeared perfectly normal.

When injected intravenously into cats and dogs, skatol produced a marked and persistent fall in blood pressure, with slow recovery. As in the case of the frogs, these experiments were controlled by injecting equal or larger amounts of acetone, the speed of injection being the same, but the fall in blood pressure produced was not so pronounced and was followed by immediate recovery. In one experiment on a dog (6 kilos) which received 50 mg. skatol in one c.c. acetone intravenously blood pressure fell promptly from 165 to 90 mm. Hg, the recovery occupying seven minutes. One c.c. of acetone injected with the same speed caused a fall in blood pressure from 160 to 120 mm. Hg, and was followed by prompt recovery. In another experiment on a cat (2.2kilos) blood pressure fell thirty-six per cent. after the injection of 30 mg. skatol in one c.c. of fifty per cent. acetone. Four minutes after the injection recovery was still incomplete. Two c.c. of fifty per cent. acetone alone, when injected intravenously into the same cat, produced a fall in blood pressure of only sixteen per cent., which was followed by an immediate rise exceeding the original blood pressure.