hours after injection, but tests made one or more days later indicated considerable improvement, and in some cases, recovery.

4. After the subcutaneous injection of sodium tartrate into rabbits on a diet of oats the time of appearance of the phenol-sulphonephthalein injected was shorter and the duration of the elimination longer than in rabbits which had been receiving carrots.

5. When sodium tartrate was injected subcutaneously in gradually increasing amounts, no impairment of renal function was observed even with very large doses (4 and 6 grams per kilo) if the diet consisted of carrots exclusively, but the efficiency of the kidney was markedly decreased if oats alone were fed, although the amounts of tartrate administered was only one fourth or one sixth of that given to rabbits on a diet of carrots.

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Experiments with an isomer of caffein.

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Physiological tests were made with 1 : 7 : 9-trimethyl-2 : 8-dioxy-purine. Its action was in every respect weaker than that of caffein. The toxicity was about one tenth that of caffein, the minimum fatal dose of 1 : 7 : 9-trimethyl-2 : 8-dioxy-purine for frogs being 4.0 to 4.5 grams per kilo. Renal activity as shown by experiments on rabbits, was only moderately stimulated in some cases and was very feeble in others although large doses were given intravenously. Perfusion experiments on the isolated frog heart indicated that an increase in force of cardiac action without altering the frequency may be caused by concentrations of 0.1 and 0.2 per cent. in Ringer's solution, but this effect was never very pronounced.

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