0.6 gm. per kilo weight while the animal may recover from 0.5 gm. per kilo. In connection with experiments on the belladonna alkaloids on the behavior of rats, published elsewhere, the author found that rats are extremely sensitive to atropin so far as toxic effects on the brain are concerned. Thus it was found that 1 mg. of atropin sulfate was very toxic for a rat weighing 150 gm. as indicated by its behavior in the circular maze and its neuromuscular responses. It was found that the smallest dose of atropin sulfate which produced a deterioration in the cerebro-spinal responses of rats was 0.05 mg. per 150 gm. weight of animal. It is thus evident that while the absolute lethal dose of atropin for rats may be very great as stated by other authors, the dose required to impair certain physiological functions is very small. Fuller details appear elsewhere.[1]

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The feeding of odd carbon fatty acid fats to diabetic patients.

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This artificially prepared fat (glyceryl ester of margaric acid) is absorbed to the extent of ninety-five per cent. If a psychologic distaste for it is not induced in the patient by the physician (who thinks it his duty to warn the patient of the supposed non-palatability of the fat), the patient will have little trouble in partaking of this artificial food. An experience with very many patients has convinced the author that all patients can easily develop a liking for this food. It may be administered with hot coffee or rubbed up with butter milk.

It has been found that the administration of this fat to phlorhizinized dogs causes a marked increase in the glucose

[1] Macht, D. I., *J. Pharm. and Exp. Ther.*, 1923, xxii, 25.

elimination in the urine, showing that *in the dog* it is broken down to propionic acid and is then converted to glucose, according to the theory of Ringer and his collaborators.

To those individuals on whom insulin appears to have no effect, or to those patients who refuse insulin, or to patients on whom insulin produces a moderate effect, the odd carbon fat may be safely administered in portions that yield as high as 1,000 calories daily. If, for example, a patient's diet has been increased by means of insulin to an intake of 1500 calories daily, we can add 1000 calories to his diet by means of this fat and thus establish an approach to a maintenance diet.

Moderately severe cases of diabetes who altogether refuse insulin medication, or become discouraged with this medication after a period of months, may be kept in normal weight and their appetite sated by the administration in liberal amounts of this "odd carbon" fat.

The accompanying table shows the effect of feeding this "odd carbon" fat to a diabetic and tubercular individual.

TABLE I.

Date	Food				Urine		Blood	
	P.	C.	F.	Odd Fat	Glucose	Ketones	Glucose	CO_2
2/20	40	20	42	0	Traces	++	0.224	44
2/22	40	35	40		1.4 per cent	++	0.227	46
2/24	37	13	31	0	0	0	0.185	48
3/2	40	20	42	0	Traces	++	0.195	42
3/6	37	13	31	0	0	0	0.175	48
3/10	42	15	37	0	0	0	0.162	48
3/14	42	15	37	100	0	0	0.151	54
3/20	42	15	37	100	0	0	0.148	54
5/24	42	15	37	150	0	0	0.113	58
6/2	44	17	37	150	0	0	0.134	58