

Conclusion. It is concluded that the alcohol treatment has had no effect upon the reproduction of the mice studied when judged by the following criteria: (1) age of opening of the vaginal orifice; (2) age at first estrus; (3) length of estrus cycle; (4) number of corpora lutea per ovulation; (5) prenatal and natal mortality; (6) number of living young per litter.

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The food value of intarvin.

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In order to ascertain whether the synthetic fat, intarvin, composed of 17 carbon atom fatty acids, could be used by the body as a food, observations were made on two diabetic patients and four normal individuals. This was done in conjunction with work on dogs reported in another communication.¹ It is the purpose of this paper to present the data obtained from feeding experiments on two of the normal individuals. The other two normals were unable to eat enough intarvin to yield results sufficiently conclusive for interpretation.

Discussion.

The diabetic patients were upon restricted diets for therapeutic reasons. These diets were insufficient in calories to maintain nitrogen equilibrium and weight. They were receiving insulin. Additions of 80 and 100 grams of intarvin showed no increase in ketone bodies and was followed by a lowering in nitrogen excretion. The period during which intarvin was given was for one patient five days, for the other ten days. The results are not decisive enough to make it worth while presenting the protocols. Difficulty was experienced in getting the patients to take the intarvin and it had to be discontinued.

¹ Benedict, E. M., and West, R., Intarvin in phlorhizinized dogs, *Proc. Soc. Exp. Biol. and Med.*, 1924, xxi, 225.

E. M. B. *	Diet	Urine Nitrogen	Ammonia terms 0.1 N HCl	Total Acetone Bodies	Organic acids (corrected) terms 0.1 N HCl	Volume	pH	Body Weight	R. Q.
Feb. 5		gm.	cc.	gm.	cc.	cc.		kg.	
6	100-60-150	9.00	277	0.127	443	930	6.2	62.2	
7	25-60-179	11.25	437	0.488		1500	5.9	60.5	0.76
8	25-60-179	12.68	558	2.060	728	1160	5.4	61.4	
9	25-60-179	12.95	712	4.040	1024	1130	5.5	60.7	
10	25-60-179	12.17	698	5.500	1187	1510	5.6	60.0	0.69
11	+Intarvin 125 25-60-54	11.48	840	1.510	821	1400	5.7	60.6	
12	Intarvin 25-60-54	9.14	461	1.200	726	1465	5.8	60.3	0.71
13	No Intarvin 25-60-54	10.46	671	1.630	701	900	5.8		

*On Feb. 4-5 specimen lost.
M. L. S.

4	100-60-150	10.08	165	0.155	498	480	5.5	67.7	
5									
6	100-60-150	specimen lost				1220		67.7	0.80
7	25-60-179	14.64	398	0.866	675	770	5.4	66.8	
8	25-60-179	15.61	166	5.040	1166	980	5.2	66.2	
9	25-60-179	14.62	754	7.080	1442	1060	5.1	65.8	
10	25-60-179	17.15	830	4.660	1131	900	5.2	65.5	0.73
11	Intarvin 125 25-60-54	12.15	986	2.740	913	795	5.3	65.5	
12	Intarvin 25-60-54	9.97	930	2.080	816	1050	5.3	65.5	0.70
13	No Intarvin 25-60-54	12.50	900	3.430	984	735	5.4		

The normal subjects were placed upon a diet the total caloric value of which was designed to maintain nitrogen equilibrium. After a preliminary period of two days the carbohydrate and fat were shifted isodynamically to produce ketosis. This occurred together with an increase in nitrogen excretion. Upon the fourth day of this high fat-low carbohydrate diet intarvin was substituted for the bulk of the food fat.

From the data of these tables we may conclude that the use of intarvin resulted in:

1. Protein sparing action.
2. Decrease in ketosis.
3. A lowering of the respiratory quotient suggesting that a fat was being burned.

Thus intarvin was used by the body as a food and did not produce ketosis.

There is, however, no proof that intarvin reduces ketosis *per se*, that is, by promoting the complete oxidation of ketone bodies or body fat as does carbohydrate.

Examination of the stools in all cases showed that 92 to 98 per cent of food fat and of intarvin was absorbed.

The experiences of these individuals in taking intarvin should not pass without remark as to its gustatory and esthetic qualities as a food. All individuals found it decidedly unpalatable. Its peculiar odor and physical properties made it distressing for all to take. Some had less difficulty. A great many methods of taking it and combinations with other foods were tried, none of which were satisfactory. Anchovy paste and tomato catsup were the most effective in hiding the taste. The most agreeable methods of taking it were as follows: to eat it dry and wash down with black coffee; to mix with scrambled eggs or with roquefort cheese salad.

In large amounts it caused gastric distress and disagreeable eructations of gas for several hours. This proved to be the case whether taken alone or with condiments.