

# Effect of Cernitin on Rat Physiology

## Endocrinologic tests

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### Male rats, 8-day trial period

#### *Comparative tests with Normal Feed, D Feed and C Feed.*

Normal Feed: Pellets used as rat food at the present laboratory.  
D Feed: Neutral feed pellets; do not contain Cernitin.  
C Feed: Cernitin D30 UK. Tablets containing 10 % dehydrated extract.

The tests were performed on immature male rats (21 days old at commencement of tests). The rats were sacrificed after 8 days. The prostate, adrenals, pituitary, thyroid, thymus, the testes and the levator ani muscle were excised and weighed.

#### *Supplements:*

1. Weights of levator ani, prostate gland and testes of animals on all diets.
2. Weights of pituitary, thyroid, thymus and adrenal glands of animals on all diets.
3. The increase in body weight of the animals during the 8-day trial period, and the body weight at the end of experiment.

## Lev. ani, testes and prostate weights

*Normal Feed*

	<i>Lev. ani</i>	<i>Prostate</i> mg			<i>Total</i>	<i>Testes</i> mg
		<i>V.L.</i>	<i>D.L.</i>	<i>S.V.</i>		
1.	27.8	78.9	34.4	23.3	136.6	895.4
2.	17.4	49.7	26.7	10.4	86.8	653.0
3.	34.6	47.3	30.3	14.7	92.3	809.9
4.	68.0	56.4	32.7	25.2	114.3	1104.9
5.	29.7	69.2	29.6	18.9	117.7	891.3
6.	43.8	61.6	47.8	20.0	129.4	1056.9
Mean:	36.9	60.5	33.6	18.8	112.9	901.9

*D Feed:*Neutral, no *Cernitin* in the tablets

	<i>Lev. ani</i>	<i>Prostate</i> mg			<i>Total</i>	<i>Testes</i> mg
		<i>V.L.</i>	<i>D.L.</i>	<i>S.V.</i>		
1.	28.1	56.8	27.7	22.8	107.3	1029.4
2.	25.5	39.3	34.6	17.8	91.7	1007.3
3.	39.5	—	—	—	—	1022.4
4.	23.0	43.5	35.3	12.0	90.8	967.1
5.	28.6	50.5	29.0	16.6	96.1	1094.0
6.	29.0	34.1	30.6	15.6	80.3	752.4
Mean:	29.0	44.8	31.4	17.0	93.2	978.8

*C Feed:*Including *Cernitin D30 UK*, respond. 10 % dehydrated extract in the tablets

	<i>Lev. ani</i>	<i>Prostate</i> mg			<i>Total</i>	<i>Testes</i> mg
		<i>V.L.</i>	<i>D.L.</i>	<i>S.V.</i>		
1.	17.7	50.0	38.4	15.5	103.9	911.9
2.	22.2	47.5	32.1	14.5	94.1	1021.0
3.	14.7	41.2	24.9	14.7	80.8	662.4
4.	25.7	55.6	30.3	13.3	99.2	603.4
5.	31.2	50.6	31.0	19.0	100.6	953.0
6.	56.3	50.1	32.0	17.9	100.0	872.5
7.	15.2	53.4	35.7	16.3	105.4	830.9
Mean:	20.3	49.8	32.1	15.9	97.7	836.4

**Pituitary, thyroid, thymus and adrenals weights**      Suppl. 2

*Normal Feed*

	<i>Pituitary</i> mg	<i>Thyroid</i> mg	<i>Thymus</i> mg	<i>Adrenals</i> mg
1.	4.2	8.2	373.4	21.8
2.	4.2	9.0	258.6	24.6
3.	5.0	6.6	234.4	24.7
4.	3.5	9.6	193.2	23.3
5.	5.0	6.6	235.4	24.2
6.	4.5	5.5	231.4	25.4
Mean:	4.4	7.6	254.4	24.0

*D Feed:*

Neutral, no Cernitin in the tablets

	<i>Pituitary</i> mg	<i>Thyroid</i> mg	<i>Thymus</i> mg	<i>Adrenals</i> mg
1.	3.2	7.0	305.1	21.0
2.	2.4	6.2	240.2	21.0
3.	3.2	6.8	282.7	19.1
4.	2.2	5.5	271.1	23.0
5.	4.0	7.0	216.2	20.8
6.	2.4	6.4	249.9	18.8
Mean:	2.9	6.5	260.9	20.6

*C Feed:*

Including Cernitin D30 UK, respond. 10 % dehydrated extract in the tablets

	<i>Pituitary</i> mg	<i>Thyroid</i> mg	<i>Thymus</i> mg	<i>Adrenals</i> mg
1.	3.5	7.5	265.7	20.6
2.	3.6	5.6	304.4	20.2
3.	5.0	10.9	295.2	17.1
4.	4.5	5.4	301.0	19.7
5.	4.8	7.0	287.0	21.6
6.	3.5	6.1	349.8	22.0
7.	2.0	5.4	329.7	21.3
Mean:	3.8	6.8	304.7	20.4

**Suppl. 3**

	<i>Normal Feed</i>		<i>D Feed</i>		<i>C Feed</i>	
	(weight incr.	final weight)	(weight incr.	final weight)	(weight incr.	final weight)
1.	35.4	94.2	31.8	93.6	21.6	81.2
2.	25.0	78.4	26.4	87.8	26.9	86.4
3.	34.0	84.4	29.7	88.5	20.0	72.8
4.	35.4	93.2	28.4	89.6	18.8	75.0
5.	13.4	76.2	30.0	90.8	31.2	91.2
6.	35.8	95.8	20.7	79.5	24.2	80.2
7.	—	—	—	—	28.0	85.2
Mean:	29.8	87.0	27.8	88.3	24.4	81.7

Quantity:                      472 g                      750 g                      465 g  
    (78.7 g/rat)                      (125 g/rat)                      (66.3 g/rat)

Final weight:                      weight on day of sacrifice  
 Weight increase:                      per 8 days.

## Hypophysectomized male rats, 8-day trial period

### *Comparative Tests with Normal Feed, D Feed and C Feed.*

- Normal Feed: In this test = white bread, milk, oranges.  
D Feed: Neutral food pellets, not containing Cernitin.  
C Feed: Cernitin D30 UK. 10 % dehydrated extract in the tablets.

The D and C diets were supplemented with milk.

The tests were performed on immature, hypophysectomized male rats. The animals were 21 days old when operated on and the tests commenced 4 days later. The rats were sacrificed after 8 days. The prostate, testes, adrenals, thyroid and thymus glands, and the levator ani were excised and weighed.

#### *Supplements:*

1. Weights of levator ani, prostate gland and testes.

#### Abbreviations:

V.L. = ventral prostate lobe

D.L. = dorsal prostate lobe

S.V. = seminal vesicles

Total = total weight of accessory reproductive organs

Lev. ani = Levator ani.

2. Weights of thyroid, thymus and adrenal glands, weight of animals on day of sacrifice, and weight increase or weight decrease.

Suppl. 1

*Normal Feed* (white bread, milk, oranges)

	<i>Lev. ani</i>	V.L.	D.L.	<i>Prostate</i> mg	S.V.	Total	<i>Testes</i> mg
	mg						
1.	8.7	4.8	11.9	4.6	21.3	138.2	
2.	8.0	7.1	11.9	7.3	26.3	130.4	
3.	6.0	4.2	8.5	6.3	19.0	117.2	
4.	8.0	3.5	5.1	5.4	14.0	101.8	
5.	12.0	5.9	12.0	4.6	22.5	140.9	
6.	10.4	5.4	11.7	4.5	21.6	127.7	
7.	9.2	4.2	11.0	4.0	19.2	124.7	
Mean:	8.9	5.0	10.3	5.2	20.5	125.8	

*D Feed* = Neutral diet, no *Cernitin* in the tablets

	<i>Lev. ani</i>	V.L.	D.L.	<i>Prostate</i> mg	S.V.	Total	<i>Testes</i> mg
	mg						
1.	8.2	4.6	9.6	3.8	18.0	89.2	
2.	8.4	6.0	11.5	5.5	23.0	94.4	
3.	18.2	6.5	10.5	4.4	21.4	87.8	
4.	9.6	4.7	12.7	4.7	22.1	118.2	
5.	13.0	7.2	13.7	5.7	26.6	228.8	
6.	8.4	2.3	11.9	5.2	19.4	87.7	
7.	13.8	5.3	11.9	5.6	22.8	88.3	
Mean:	11.4	5.2	11.7	5.0	21.9	113.5	

*C Feed* = *Cernitin* D30UK. 10% dehydrated extract in the tablets

	<i>Lev. ani</i>	V.L.	D.L.	<i>Prostate</i> mg	S.V.	Total	<i>Testes</i> mg
	mg						
1.	14.4	—	15.8	6.7	—	114.5	
2.	7.6	—	14.7	4.4	—	89.4	
3.	11.9	5.1	12.7	5.5	23.3	105.8	
4.	10.6	2.6	12.2	4.6	19.4	88.2	
5.	12.6	4.3	12.5	4.8	21.6	103.2	
6.	6.2	4.3	14.5	4.9	23.7	107.7	
Mean:	10.6	4.1	13.7	5.1	22.0	101.5	

Suppl. 2

*Normal Feed* (white bread, milk, oranges)

	<i>Thyroid</i>	<i>Thymus</i>	<i>Adrenals</i>	<i>Weight on day of sacrifice</i>	<i>Weight increase 8 days</i>
	mg	mg	mg	g	g
1.	5.2	142.8	4.6	47.4	+1.6
2.	5.0	147.2	7.0	48.2	+2.0
3.	3.4	132.8	5.0	47.3	+0.5
4.	4.2	142.8	7.8	51.8	+4.4
5.	5.5	138.2	8.5	51.6	+2.6
6.	4.0	60.3	8.2	42.9	+2.7
7.	4.5	121.3	8.0	45.0	+0.0
Mean:	4.5	126.5	7.0	47.7	

*D Feed* = Neutral diet, no *Cernitin* in the tablets

	<i>Thyroid</i>	<i>Thymus</i>	<i>Adrenals</i>	<i>Weight on day of sacrifice</i>	<i>Weight increase 8 days</i>
	mg	mg	mg	g	g
1.	5.0	79.3	8.0	46.0	+0.8
2.	12.5	86.7	9.0	43.4	-3.0
3.	7.3	100.4	13.8	45.2	+3.8
4.	5.8	63.2	8.4	46.5	-2.3
5.	4.8	105.2	10.2	50.4	-0.6
6.	6.5	99.7	7.0	45.6	+1.2
7.	4.8	53.6	7.6	43.0	-11.8
Mean:	6.7	84.0	9.1	45.7	

Food consumption for 7 animals during 8 days: 220 g.  
Initial number of animals = 12. 5 deaths during the experiment.

*C Feed* = *Cernitin* D30 UK. 10 % dehydrated extract in the tablets

	<i>Thyroid</i>	<i>Thymus</i>	<i>Adrenals</i>	<i>Weight on day of sacrifice</i>	<i>Weight increase 8 days</i>
	mg	mg	mg	g	g
1.	4.0	56.0	8.2	45.2	-1.4
2.	4.5	92.4	6.6	44.8	-2.6
3.	6.8	72.0	8.0	44.0	-4.4
4.	6.2	42.8	6.0	42.0	-0.8
5.	5.5	74.6	6.5	41.5	-1.9
6.	3.4	40.0	6.8	41.0	-7.6
Mean:	5.1	63.0	7.0	43.1	

Food consumption per 8 days: 45 g (6 animals died during the experiment).

## Female rats, 8-day trial period

### *Comparative Tests with Normal Feed, D Feed and C Feed.*

Normal Feed = Pellets as used in this laboratory.

D Feed: Neutral food pellets, no Cernitin in the tablets.

C Feed: Cernitin D30 UK. 10 % dehydrated extract in the tablets.

The tests were performed on immature female rats aged 21 days at the commencement. The rats were sacrificed after 8 days. The ovaries, uteri, pituitary, thyroid, thymus and adrenal glands, were excised and weighed.

Vaginal smears were taken on the 6th, 7th and 8th days.

### *Supplements*

1. Weights of ovaries and uteri, results of vaginal smears, the weight increase and the final weight.

Abbreviation: V-smear = vaginal smear.

2. Weights of pituitary, thyroid, thymus and adrenal glands.

Suppl. 1

*Normal Feed*

	<i>Ovaries</i>	<i>Uterus</i>	<i>V-smear</i> (6th-8th day)	<i>Weight increase</i> g	<i>Final weight</i> g
	mg	mg			
1.	18.0	25.9	negative	23.4	75.2
2.	23.1	33.6	negative	31.7	82.3
3.	19.8	21.6	negative	17.0	67.8
4.	28.2	35.4	negative	26.8	78.8
5.	25.7	45.2	negative	27.8	79.4
6.	20.9	31.8	negative	27.3	79.8
7.	23.3	36.6	negative	32.0	83.2
8.	22.2	27.2	negative	31.0	81.2
Mean:	22.7	32.2	—	27.2	78.5

*Food consumed: 574 g (71.8 g/rat)*

*D Feed: Neutral diet, no Cernitin in the tablets*

	<i>Ovaries</i>	<i>Uterus</i>	<i>V-smear</i> (6th-8th day)	<i>Weight increase</i> g	<i>Final weight</i> g
	mg	mg			
1.	18.7	28.8	negative	18.0	69.3
2.	21.3	33.3	negative	26.0	74.2
3.	21.1	27.3	negative	24.3	76.5
4.	18.6	41.7	negative	26.6	82.8
5.	17.0	25.7	negative	12.0	64.5
6.	17.8	26.3	negative	17.2	65.6
7.	22.6	23.4	negative	18.0	69.2
Mean:	19.6	28.4	—	20.3	71.7

*Food consumed: 773 g (110.4 g/rat)*

*C Feed: Cernitin D30 UK, respond. 10 % dehydrated extract in the tablets*

	<i>Ovaries</i>	<i>Uterus</i>	<i>V-smear</i> (6th-8th day)	<i>Weight increase</i> g	<i>Final weight</i> g
	mg	mg			
1.	22.8	24.0	negative	16.0	69.2
2.	27.0	—	negative	17.4	65.2
3.	18.2	39.7	negative	8.2	59.0
4.	18.5	26.1	negative	17.5	65.5
5.	23.5	49.5	negative	23.8	77.8
6.	22.4	32.7	negative	23.2	75.0
7.	20.3	38.2	negative	16.2	66.6
Mean:	21.8	35.0	—	17.4	68.3

*Food consumed: 497 g (71 g/rat)*

	<i>Normal Feed</i>			
	<i>Pituitary</i>	<i>Thyroid</i>	<i>Thymus</i>	<i>Adrenals</i>
	mg	mg	mg	mg
1.	—	13.7	142.2	18.7
2.	4.0	10.4	332.0	23.2
3.	2.0	6.0	211.8	24.3
4.	3.8	6.8	232.6	26.9
5.	2.8	5.4	192.0	22.2
6.	4.0	9.4	227.6	25.1
7.	2.8	6.2	289.4	26.8
8.	4.1	5.4	282.2	23.2
Mean:	3.4	7.9	238.7	23.8

*D Feed: Neutral diet, no Cernitin in the tablets*

	<i>Pituitary</i>	<i>Thyroid</i>	<i>Thymus</i>	<i>Adrenals</i>
	mg	mg	mg	mg
1.	3.3	8.5	199.2	27.2
2.	2.5	8.0	219.6	24.9
3.	2.6	8.8	223.8	22.7
4.	1.8	5.2	277.2	25.2
5.	2.2	4.6	132.9	20.7
6.	2.5	6.2	232.0	20.0
7.	2.5	5.2	166.8	17.2
Mean:	2.5	6.6	207.4	22.6

*C Feed: with Cernitin D30 UK, respond. 10 % dehydrated extract in the tablets.*

	<i>Pituitary</i>	<i>Thyroid</i>	<i>Thymus</i>	<i>Adrenals</i>
	mg	mg	mg	mg
1.	3.2	5.8	262.4	23.8
2.	3.0	6.5	203.0	23.6
3.	2.8	6.8	209.8	22.4
4.	2.2	5.2	234.2	23.1
5.	3.2	5.6	336.4	22.8
6.	3.5	7.0	245.0	23.3
7.	3.2	5.3	259.6	24.0
Mean:	3.0	6.0	250.1	23.3

### **Immature male rats, 21-day trial period**

*Comparative tests with Normal Feed, D Feed and C Feed.*

Normal Feed:   Pellers as used in this laboratory.  
D Feed:         Neutral food pellets, no Cernitin in the tablets.  
C Feed:         Cernitin D30 UK. 10 % dehydrated extract in the tablets.

The tests were carried out on immature male rats (21 days old at the commencement). The rats were weighed twice weekly and sacrificed after 21 days. The prostate, adrenals, pituitary, thyroid and thymus glands, and the levator ani, were excised and weighed.

The tests were performed on litter-mate controlled animals, each animal in the same litter having the same number in the different diet tables. Each litter consisted of six animals, and three litters were used, the animals being numbered 1A, 1B, 2A, 2B, etc.

#### *Supplements:*

- 1 A, 1 B = weights of organs of animals on normal diet.
- 2 A, 2 B = weights of organs of animals on D Feed.
- 3 A, 3 B = weights of organs of animals on C Feed.
- 4       = weight increase during 21-day period and food consumption.
- 5       = weight of animal on day of sacrifice.

Suppl. 1 A

*Normal Feed*  
(Testes and Prostate weights)

<i>Litter No.</i>	<i>Prostate</i> mg			<i>Total</i>	<i>Testes</i> mg
	<i>V.L.</i>	<i>D.L.</i>	<i>S.V.</i>		
1. A	93.8	92.0	34.0	219.8	1.845.3
1. B	104.3	62.3	57.2	223.8	1.868.1
2. A	83.0	59.6	60.0	202.6	1.844.0
2. B	54.7	61.3	47.5	163.5	2.034.8
3. A	96.9	94.8	83.0	274.7	1.981.3
3. B	113.3	86.8	71.4	271.5	2.080.7
4.	104.9	89.5	80.2	274.6	2.025.0
5.	106.8	61.1	43.1	211.0	1.793.1
6.	128.6	94.6	88.8	312.0	1.786.1
7.	85.7	83.7	47.2	216.6	1.805.6
8.	86.8	98.4	82.1	267.3	1.905.6
9.	101.5	91.0	74.7	267.2	1.901.0
10.	85.7	97.0	55.1	237.8	1.956.0
11.	111.0	89.0	84.0	284.0	2.135.9
12.	61.4	89.3	65.2	215.9	1.706.4
Mean:	94.6	83.4	64.9	242.8	1.911.3

Abbreviations: V.L. = Ventral prostate lobe  
D.L. = Dorsal prostate lobe  
S.V. = Seminal Vesicles  
Total = total weight of accessory reproductive organs (=V.L. + D.L. + S.V.)

Suppl. 1 B

*Normal Feed*  
(Adrenals, pituitary, thyroid, thymus and levator ani weights)

<i>Litter No.</i>	<i>Adrenals</i>	<i>Pituitary</i>	<i>Thyroid</i>	<i>Thymus</i>	<i>Levator ani</i>
	mg	mg	mg	mg	mg
1. A	27.3	6.3	10.3	393.0	12.7
1. B	23.2	6.6	12.8	396.5	42.2
2. A	19.6	4.1	8.5	489.9	44.6
2. B	28.6	4.7	6.1	304.8	37.5
3. A	26.8	—	13.4	408.1	35.0
3. B	23.5	5.6	9.4	483.8	27.8
4.	26.2	5.1	12.8	380.3	44.9
5.	24.3	5.4	9.0	352.4	36.8
6.	19.2	5.6	7.5	375.2	38.4
7.	27.2	7.2	10.4	338.4	54.1
8.	28.0	6.8	10.0	384.4	51.1
9.	26.1	6.3	12.1	463.8	56.7
10.	22.3	4.4	10.5	334.7	42.5
11.	28.4	4.6	8.5	315.7	60.3
12.	24.3	4.6	8.0	273.9	43.6
Mean:	25.0	5.5	9.95	379.7	41.9

Suppl. 2 A

*D Feed: Neutral diet, no Cernitin in the tablets*  
(Weights of testes and prostate)

Litter No.	Prostate mg			Total	Testes mg
	V.L.	D.L.	S.V.		
1. A	70.8	40.7	25.7	137.2	1.893.0
1. B	54.5	49.1	20.8	124.4	1.605.0
2. A	62.2	55.4	36.3	153.9	1.834.2
2. B	37.3	39.7	19.3	96.3	1.272.2
3. A	69.0	61.7	30.0	160.7	1.945.4
3. B	57.5	44.4	23.5	125.4	1.608.9
4.	32.6	34.6	12.8	80.0	1.120.7
5.	43.8	42.0	17.5	103.3	1.152.4
6.	36.6	39.1	10.2	85.9	1.225.7
7.	40.0	36.7	10.1	86.8	1.416.3
8.	49.6	46.8	22.2	118.6	1.543.0
9.	56.3	42.2	19.7	118.2	1.513.2
10.	43.5	40.1	16.9	100.5	1.484.0
11.	63.4	58.0	28.1	149.5	1.828.7
12.	—	—	—	—	1.407.0
Mean:	51.2	45.0	20.9	117.2	1.523.3

Suppl. 2 B

*D Feed: Neutral diet, no Cernitin in the tablets*  
(Weights of adrenals, pituitary, thyroid and thymus glands and the levator ani.)

Litter No.	Adrenals mg	Pituitary mg	Thyroid mg	Thymus mg	Levator ani mg
1. A	23.4	3.9	11.1	348.3	30.8
1. B	24.1	3.0	8.7	228.2	27.1
2. A	22.0	4.5	8.2	260.1	26.5
2. B	24.3	3.0	7.5	121.5	22.7
3. A	26.9	3.2	10.2	305.4	41.5
3. B	20.0	3.5	7.6	226.8	24.4
4.	17.7	3.4	7.5	215.0	16.0
5.	23.1	3.0	6.0	173.5	23.7
6.	19.1	3.1	5.8	216.8	20.0
7.	18.5	3.6	9.9	188.2	35.0
8.	18.2	3.7	7.7	167.4	34.5
9.	19.8	3.1	7.9	186.3	34.3
10.	20.7	3.6	7.6	184.5	25.4
11.	21.7	4.0	5.8	210.4	41.5
12.	15.3	3.5	5.8	108.2	13.1
Mean:	21.0	3.5	8.0	209.4	27.8

Suppl. 3 A

C Feed: With Cernitin D30 UK, respond. 10 % dehydrated extract in the tablets.

(Weights of testes and prostate glands)

Litter No.	Prostate					Total	Testes mg
	V.L.	D.L.	S.V.	mg			
1. A	81.3	45.6	80.6	207.5		1.882.7	
1. B	52.1	37.9	24.8	114.8		1.257.7	
2. A	67.7	76.1	36.4	180.2		1.401.2	
2. B	29.3	41.9	20.8	92.0		1.221.7	
3. A	71.0	73.6	50.0	194.6		1.991.1	
3. B	45.6	49.1	22.5	117.2		1.157.5	
4.	47.0	44.5	28.2	119.7		1.437.7	
5.	43.9	41.8	21.1	106.8		1.163.1	
6.	66.0	55.2	31.9	153.1		1.315.2	
7.	28.7	38.6	16.4	83.7		803.5	
8.	36.3	41.9	20.6	98.8		956.1	
9.	67.9	54.2	28.7	150.8		1.528.0	
10.	52.4	50.9	28.1	131.4		1.351.4	
11.	73.0	58.3	30.0	161.3		1.530.9	
12.	39.3	46.5	18.9	104.7		1.325.7	
Mean:	54.4	50.4	30.6	134.4		1.354.9	

Suppl. 3 B

C Feed: With Cernitin D30 UK, respond. 10 % dehydrated extract in the tablets.

(Weight extract of adrenals, pituitary, thyroid, thymus glands and levator ani.)

Litter No.	Thymus					Lev. ani
	Adrenals	Pituitary	Thyroid	mg		
1. A	24.2	4.7	9.8	315.7		28.0
1. B	29.0	4.4	8.9	231.5		24.3
2. A	31.3	6.8	11.8	298.2		42.8
2. B	27.3	3.3	8.0	196.4		22.4
3. A	22.5	6.8	10.6	324.9		25.8
3. B	21.7	3.3	6.7	270.3		25.2
4.	25.7	4.3	6.9	257.8		26.4
5.	26.4	5.6	7.3	242.6		24.2
6.	19.8	4.9	8.4	234.5		26.7
7.	21.3	4.4	8.2	223.9		21.3
8.	23.3	4.5	8.8	217.2		19.2
9.	26.8	4.6	9.0	230.5		20.2
10.	20.8	3.7	4.9	232.8		25.4
11.	24.6	4.0	8.1	343.6		35.3
12.	22.5	3.4	6.9	210.0		26.7
Mean:	24.5	4.6	8.3	255.3		26.3

## Suppl. 4

Quantity consumed per 21 days. (12 animals)	<i>Weight Increase per 21-day period</i>		
	<i>Normal Feed</i> 4.388 g (292.5 g/rat)	<i>D Feed</i> 3.758 g (250.5 g/rat)	<i>C Feed</i> 3.327 g (221.8 g/rat)
<i>Litter No.</i>	g	g	g
1. A	138.6	90.2	77.2
1. B	92.4	40.0	55.6
2. A	142.8	92.5	87.0
2. B	87.7	33.2	53.4
3. A	120.2	90.5	89.4
3. B	85.4	35.5	46.5
4.	108.0	37.5	53.2
5.	91.4	34.6	50.6
6.	94.5	34.0	59.1
7.	98.2	41.6	45.5
8.	89.5	42.0	51.2
9.	103.3	45.6	56.0
10.	84.2	36.6	49.8
11.	92.0	41.6	49.6
12.	86.2	21.0	37.0
Mean:	101.0	47.8	57.4

## Suppl. 5

<i>Litter No.</i>	<i>Weight of animals on day of sacrifice</i>		
	<i>Normal Feed</i>	<i>D Feed</i>	<i>C Feed</i>
	g	g	g
1. A	200.0	148.0	138.0
1. B	155.0	99.0	112.0
2. A	200.0	148.0	152.0
2. B	144.0	87.0	115.0
3. A	180.0	149.0	148.0
3. B	144.0	95.0	95.0
4.	168.0	92.0	109.0
5.	150.0	92.0	108.0
6.	144.0	85.0	110.0
7.	154.0	96.0	97.0
8.	144.0	100.0	104.0
9.	152.0	98.0	112.0
10.	140.0	97.0	105.0
11.	154.0	110.0	114.0
12.	139.0	74.0	92.0

*Feed C:*

Including Cernitin D 30 UK, corresponding to 10 % dehydrated extract in the tablets.

Cernitin D 30 UK = 90 % Cernitin T 60 + 10 % Cernitin GBX1.

*Contents:*

Cernitin D 30 UK	1.000	g
Pellets, ground (AB Fors, Helsingborg)	6.500	g
Dextrin-maltose	2.000	g
Talc	500	g
Total	10.000	g

corresponding to approx. 7.000 tablets à 1.4 g/tablet.

*Feed D:*

Neutral, no Cernitin in the tablets.

*Contents:*

Pellets, ground (AB Fors, Helsingborg)	6.500	g
Dextrin-maltose	2.000	g
Modocoll E 600 FF, (Mo & Domsjö AB, Örnsköldsvik)	1.000	g
Talc	500	g
Total	10.000	g

corresponding to approx. 7.000 tablets à 1.4 g/tablet.

*Comments:*

Dextrin-maltose: hydrolyzed starch, heterogenous.  
Modocoll E 600 FF: aethyl-para-hydroxycellulose  
(= Tylose, Cellugel, etc.).

Dated: Vegeholm,  
20th November, 1963

*Statistical evaluation*

In a study of immature male rats using litter-mate control, it was found that the addition of Cernitin to the diet increased the weight of various organs, the differences from controls being significant at the following P-values:

Prostate D.L.	+12 %	$0.05 > P > 0.01$
Prostate S.V.	+46 %	$0.01 > P > 0.001$
Total accessory repr. organs	+14 %	$0.05 > P > 0.01$
Adrenals	+17 %	$0.01 > P > 0.001$
Pituitary	+31 %	$0.01 > P > 0.001$
Thymus	+22 %	$0.01 > P > 0.001$
Body weight	+20 %	$0.001 > P > 0.0001$
Sacrificial weight	+15 %	$0.05 > P > 0.01$

The addition of Cernitin did not give any significant reduction of the mean value in any of the aspects observed.

A comparison between the C and D diets showed significant differences in three respects only:

Thymus weight in infant female rats.

21 % increase ( $t=6.50$ ;  $P < 0.001$ )

Body weight of infant male rats.

7 % decrease ( $t=3.73$ ;  $0.01 > P > 0.001$ )

Adrenals in hypophysectomized male rats.

23 % decrease ( $t=2.19$ ;  $0.05 > P > 0.01$ )

17.9.64

Rune Cederlöf