# 2012.08.23

This report describes data from 2012.08.23 experiment (7 days of D and / or T).

#### day 1 body weight (g)

Treatment	Average (SD; n)
V	24.2 (0.434; n = 6)
D	25 (0.745; n = 6)
${ m T}$	24.4 (0.612; n = 6)
$\mathbf{C}$	23.9 (0.974; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.784

	contrastsfour	dunns.P
5	V vs D	0.1955
1	D vs DT	0.1853

Kruskal-Wallis p value for the three-way comparison is  $0.54\,$ 

	Comparison	P value	Direction
3	V vs D	0.185	V < D
1	D vs DT	0.1578	D > DT

#### day 2 body weight (g)

Treatment	Average (SD; n)
V	24.8 (0.453; n = 6)
D	24.5 (0.596; n = 6)
${ m T}$	24.9 (0.689; n = 6)
$\mathbf{C}$	24.5 (0.861; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.994

	contrasts four	dunns.P
5	V vs D	0.4259
1	D vs DT	0.4074

	Comparison	P value	Direction
3	V vs D	0.4221	V > D
1	D vs DT	0.3765	D > DT

#### day 3 body weight (g)

Treatment	Average (SD; n)
V	24.2 (0.481; n = 6)
D	24.2 (0.632; n = 6)
${ m T}$	25 (0.629; n = 6)
$\mathbf{C}$	24.5 (0.876; n = 5)

Kruskal-Wallis p value for the four-way comparison is  $0.763\,$ 

	contrasts four	dunns.P
5	V vs D	0.3528
1	D vs DT	0.4915

Kruskal-Wallis p value for the three-way comparison is 0.945

	Comparison	P value	Direction
3	V vs D	0.3697	V > D
1	D vs DT	0.4545	D < DT

### day 4 body weight (g)

Treatment	Average (SD; n)
V	24.3 (0.481; n = 6)
D	24.1 (0.596; n = 6)
${ m T}$	25.2 (0.626; n = 6)
$\mathbf{C}$	24.7 (0.964; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.629

	, , c	1 1
	contrastsfour	dunns.P
5	V vs D	0.2061
1	D vs DT	0.4074

	Comparison	P value	Direction
3	V vs D	0.2635	V > D
1	D vs DT	0.3984	D < DT

#### day 5 body weight (g)

Treatment	Average (SD; n)
V	25.1 (0.428; n = 6)
D	24.9 (0.61; n = 6)
${ m T}$	26 (0.56; n = 6)
$\mathbf{C}$	25.6 (1.07; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.682

	contrastsfour	dunns.P
5 1	V vs D D vs DT	0.2335 $0.3909$

Kruskal-Wallis p value for the three-way comparison is 0.802

	Comparison	P value	Direction
3	V vs D	0.256	V > D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.3442	D < DT

### day 6 body weight (g)

Treatment	Average (SD; n)
V	24.6 (0.508; n = 6)
D	23.8 (0.578; n = 6)
${ m T}$	25.6 (0.624; n = 6)
$\mathbf{C}$	25.2 (0.977; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.193

	contrastsfour	dunns.P
5	V vs D	0.0347
1	D vs DT	0.2216

	Comparison	P value	Direction
3	V vs D	0.04381	V > D
1	D vs DT	0.1953	D < DT

#### day 7 body weight (g)

Treatment	Average (SD; n)
V	25.3 (0.528; n = 6)
D	24.6 (0.608; n = 6)
${ m T}$	26.8 (0.668; n = 6)
$\mathbf{C}$	25.6 (1.02; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.211

	contrastsfour	dunns.P
5	V vs D D vs DT	0.1617 $0.2344$
1	D VS D1	0.2344

Kruskal-Wallis p value for the three-way comparison is 0.533

	Comparison	P value	Direction
3	V vs D	0.1523	V > D
1	D vs DT	0.1873	D < DT

### day 8 body weight (g)

Treatment	Average (SD; n)
V	25.7 (0.541; n = 6)
D	25.2 (0.598; n = 6)
${ m T}$	27 (0.633; n = 6)
$\mathbf{C}$	25.9 (0.956; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.364

	contrastsfour	dunns.P
5	V vs D	0.2324
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.2899

	Comparison	P value	Direction
3	V vs D	0.2599	V > D
1	D vs DT	0.2837	D < DT

#### body weight gain after 1 days (g)

Treatment	Average (SD; n)
V	0.55 (0.115; n = 6)
D	-0.5 (0.375; n = 6)
${ m T}$	0.533 (0.133; n = 6)
$\mathbf{C}$	0.6 (0.164; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.036

	contrasts four	dunns.P
5	V vs D	0.005049
1	D vs DT	0.01251

Kruskal-Wallis p value for the three-way comparison is 0.0225

	Comparison	P value	Direction
3	V vs D	0.005821 $0.01477$	V > D
1	D vs DT		D < DT

### body weight gain after 2 days (g)

Treatment	Average (SD; n)
V	0.0167 (0.111; n = 6)
D	-0.85 (0.369; n = 6)
${ m T}$	0.6 (0.121; n = 6)
$\mathbf{C}$	0.56 (0.169; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00123

	contrastsfour	dunns.P
5	V vs D	0.001225
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1204

	Comparison	P value	Direction
3	V vs D	0.0005748	V > D
1	D vs DT	0.07196	D < DT

#### body weight gain after 3 days (g)

Treatment	Average (SD; n)
V	0.117 (0.0703; n = 6)
D	-0.9 (0.458; n = 6)
${ m T}$	0.817 (0.149; n = 6)
$\mathbf{C}$	$0.8 \ (0.0632; \ n = 5)$

Kruskal-Wallis p value for the four-way comparison is 0.000818

	contrastsfour	dunns.P
5 1	V vs D D vs DT	0.0005104 $0.2473$

Kruskal-Wallis p value for the three-way comparison is 0.00432

	Comparison	P value	Direction
3	V vs D	0.0006326	V > D
1	D vs DT	0.1796	D < DT

### body weight gain after 4 days (g)

Treatment	Average (SD; n)
V	0.9 (0.177; n = 6)
D	-0.15 (0.406; n = 6)
${ m T}$	1.65 (0.26; n = 6)
$\mathbf{C}$	1.68 (0.153; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00103

	contrastsfour	dunns.P
5	V vs D	0.0002252
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.09286

	Comparison	P value	Direction
3	V vs D	0.0003026	V > D
1	D vs DT	0.06101	D < DT

#### body weight gain after 5 days (g)

Treatment	Average (SD; n)
V	0.367 (0.15; n = 6)
D	-1.17 (0.438; n = 6)
${ m T}$	1.25 (0.118; n = 6)
$\mathbf{C}$	1.32 (0.575; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.000437

	contrasts four	dunns.P
5	V vs D	0.002078
1	D vs DT	0.05733

Kruskal-Wallis p value for the three-way comparison is 0.00241

	Comparison	P value	Direction
3	V vs D	0.000304	V > D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.01693	D < DT

### body weight gain after 6 days (g)

Treatment	Average (SD; n)
V	$1.13 \ (0.203; n = 6)$
D	-0.383 (0.439; n = 6)
${ m T}$	2.38 (0.185; n = 6)
$\mathbf{C}$	1.66 (0.0927; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.000321

	contrastsfour	dunns.P
5	V vs D	0.00677
1	D vs DT	0.08644

	Comparison	P value	Direction
3	V vs D	0.0005131	V > D
1	D vs DT	0.03359	D < DT

#### body weight gain after 7 days (g)

Treatment	Average (SD; n)
V	1.48 (0.221; n = 6)
D	0.233 (0.268; n = 6)
${ m T}$	2.63 (0.0989; n = 6)
$\mathbf{C}$	2.04 (0.108; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.000298

contrasts four	dunns.P
V vs D	0.006094
D vs DT	0.05475
	V vs D

Kruskal-Wallis p value for the three-way comparison is 0.00341

	Comparison	P value	Direction
3	V vs D	0.0004726	V > D
1	D vs DT	0.01566	D < DT

### body weight gain after 1 days (percent)

Treatment	Average (SD; n)
V	2.28 (0.485; n = 6)
D	-1.86 (1.5; n = 6)
${ m T}$	2.16 (0.544; n = 6)
$\mathbf{C}$	2.61 (0.767; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.039

	contrastsfour	dunns.P
5	V vs D	0.006794
1	D vs DT	0.01202

	Comparison	P value	Direction
3	V vs D	0.007088	V > D
1	D vs DT	0.01289	D < DT

#### body weight gain after 2 days (percent)

Treatment	Average (SD; n)
V	0.0575 (0.453; n = 6)
D	-3.29 (1.45; n = 6)
${ m T}$	2.46 (0.51; n = 6)
$\mathbf{C}$	2.44 (0.854; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00112

	contrastsfour	dunns.P
5	V vs D	0.0009903
1	D vs DT	0.1166

Kruskal-Wallis p value for the three-way comparison is 0.00422

	Comparison	P value	Direction
3	V vs D	0.0004747	V > D
1	D vs DT	0.06848	D < DT

### body weight gain after 3 days (percent)

Treatment	Average (SD; n)
V	0.467 (0.277; n = 6)
D	-3.44 (1.76; n = 6)
${ m T}$	3.36 (0.626; n = 6)
$\mathbf{C}$	3.38 (0.308; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.000677

	contrastsfour	dunns.P
5	V vs D	0.0004507
1	D vs DT	0.2479

	Comparison	P value	Direction
3	V vs D	0.0006503	V > D
1	D vs DT	0.1802	D < DT

#### body weight gain after 4 days (percent)

Treatment	Average (SD; n)
V	3.74 (0.778; n = 6)
D	-0.456 (1.61; n = 6)
${ m T}$	6.84 (1.13; n = 6)
$\mathbf{C}$	7.02 (0.53; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00158

	contrastsfour	dunns.P
5	V vs D	0.0003672
1	D  vs  DT	0.08007

Kruskal-Wallis p value for the three-way comparison is 0.00356

	Comparison	P value	Direction
3	V vs D	0.0003932	V > D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.05473	D < DT

### body weight gain after 5 days (percent)

Treatment	Average (SD; n)
V	1.5 (0.602; n = 6)
D	-4.51 (1.68; n = 6)
${ m T}$	5.14 (0.501; n = 6)
$\mathbf{C}$	5.66 (2.58; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.000563

	contrastsfour	dunns.P
5	V vs D	0.002368
1	D vs DT	0.07393

	Comparison	P value	Direction
3	V vs D	0.0004253	V > D
1	D vs DT	0.02597	D < DT

#### body weight gain after 6 days (percent)

Treatment	Average (SD; n)
V	4.67 (0.81; n = 6)
D	-1.38 (1.75; n = 6)
${ m T}$	9.79 (0.749; n = 6)
$\mathbf{C}$	6.96 (0.344; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.000346

	contrastsfour	dunns.P
5	V vs D	0.006356
1	D vs DT	0.0866

Kruskal-Wallis p value for the three-way comparison is 0.00439

	Comparison	P value	Direction
3	V vs D	0.0005167	V > D
1	D vs DT	0.03368	D < DT

### body weight gain after 7 days (percent)

Treatment	Average (SD; n)
V	6.12 (0.879; n = 6)
D	1.05 (1.14; n = 6)
${ m T}$	10.8 (0.454; n = 6)
С	8.62 (0.674; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.000467

= 0.00	4376 $529$

	Comparison	P value	Direction
3	V vs D	0.0005581	V > D
1	D vs DT	0.01492	D < DT

### levator (mg)

Treatment	Average (SD; n)
V	68.8 (1.32; n = 6)
D	61 (2.29; n = 6)
${ m T}$	81.5 (2.15; n = 6)
$\mathbf{C}$	67.2 (2.62; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00105

	contrastsfour	dunns.P
$\frac{5}{1}$	V vs D D vs DT	0.1027 $0.03692$

Kruskal-Wallis p value for the three-way comparison is 0.0459

	Comparison	P value	Direction
3	V vs D	0.04451	V > D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.008176	D < DT

# tibialis (mg)

Treatment	Average (SD; n)
V	52.4 (1.52; n = 6)
D	49.1 (1.69; n = 6)
${ m T}$	53.1 (2.59; n = 6)
$\mathbf{C}$	47.6 (1.44; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.188

	contrastsfour	dunns.P
5	V vs D	0.2108
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1252

	Comparison	P value	Direction
3	V vs D	0.1743	V > D
1	D vs DT	0.1265	D > DT

### gastrocnemius (mg)

Treatment	Average (SD; n)
V	117 (4.65; n = 6)
D	97.8 (1.78; n = 6)
${ m T}$	126 (6.27; n = 6)
$\mathbf{C}$	107 (6.37; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00992

	contrastsfour	dunns.P
5	V vs D	0.08635
1	D vs DT	0.006016

Kruskal-Wallis p value for the three-way comparison is 0.0348

	Comparison	P value	Direction
3	V vs D	0.06624	V > D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.005049	D < DT

### quadriceps (mg)

Treatment	Average (SD; n)
V	170 (4.05; n = 6)
D	132 (4.14; n = 6)
${ m T}$	177 (5.23; n = 6)
$\mathbf{C}$	152 (7.34; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00118

	contrastsfour	dunns.P
5	V vs D	0.1591
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.001658

	Comparison	P value	Direction
3	V vs D	0.08999	V > D
1	D vs DT	0.000684	D < DT

### triceps (mg)

Treatment	Average (SD; n)
V	94.1 (5.04; n = 6)
D	77.2 (2.22; n = 6)
${ m T}$	101 (4.32; n = 6)
$^{\mathrm{C}}$	80.3 (3.01; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00276

	contrastsfour	dunns.P
5	V vs D	0.4548
1	D vs DT	0.008574

Kruskal-Wallis p value for the three-way comparison is 0.0249

	Comparison	P value	Direction
3	V vs D	0.4394	V > D
1	D vs DT	0.006983	D < DT

### heart (mg)

Treatment	Average (SD; n)
V	131 (10.4; n = 6)
D	126 (7.82; n = 6)
${ m T}$	129 (11.9; n = 6)
$\mathbf{C}$	140 (13.2; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.831

	contrastsfour	dunns.P
5	V vs D	0.1753
1	D vs DT	0.3198

	Comparison	P value	Direction
3	V vs D	0.1857	V > D
1	D vs DT	0.3035	D < DT

### levator (permille)

Treatment	Average (SD; n)
V	2.68 (0.0761; n = 6)
D	2.42 (0.0892; n = 6)
${ m T}$	3.03 (0.12; n = 6)
$\mathbf{C}$	2.61 (0.14; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0144

	contrastsfour	dunns.P
$5 \\ 1$	V vs D D vs DT	0.161 0.06815

Kruskal-Wallis p value for the three-way comparison is 0.207

	Comparison	P value	Direction
3	V vs D	0.1743	V > D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.03818	D < DT

# tibialis (permille)

Treatment	Average (SD; n)
V	2.04 (0.0721; n = 6)
D	1.95 (0.0842; n = 6)
${ m T}$	1.96 (0.073; n = 6)
$^{\mathrm{C}}$	1.84 (0.0312; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.204

	contrastsfour	dunns.P
5	V vs D	0.09565
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1973

	Comparison	P value	Direction
3	V vs D	0.09727	V > D
1	D vs DT	0.1656	D > DT

#### gastrocnemius (permille)

Treatment	Average (SD; n)
V	4.56 (0.18; n = 6)
D	3.88 (0.044; n = 6)
${ m T}$	4.67 (0.205; n = 6)
$\mathbf{C}$	4.1 (0.114; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00459

	contrastsfour	dunns.P
5	V vs D	0.1057
1	D vs DT	0.001256

Kruskal-Wallis p value for the three-way comparison is 0.00834

	Comparison	P value	Direction
3	V vs D	0.09916	V > D
1	D vs DT	0.001011	D < DT

### quadriceps (permille)

Treatment	Average (SD; n)
V	6.64 (0.124; n = 6)
D	5.22 (0.104; n = 6)
${ m T}$	6.55 (0.103; n = 6)
$\mathbf{C}$	5.85 (0.116; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.000424

	contrastsfour	dunns.P
5	V vs D	0.08258
1	D vs DT	9.001e-05

	Comparison	P value	Direction
3	V vs D	0.03115	V > D
1	D vs DT	0.0001013	D < DT

### triceps (permille)

Treatment	Average (SD; n)
V	3.67 (0.184; n = 6)
D	3.07 (0.114; n = 6)
${ m T}$	3.74 (0.116; n = 6)
$\mathbf{C}$	3.11 (0.165; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0129

	contrasts four	dunns.P
5 1	V vs D D vs DT	0.4612 0.01344
_	2 .021	0.01011

Kruskal-Wallis p value for the three-way comparison is 0.069

	Comparison	P value	Direction
3	V vs D	0.4783	V > D
1	D vs DT	0.0198	D < DT

### heart (permille)

Treatment	Average (SD; n)
V	5.11 (0.383; n = 6)
D	4.99 (0.249; n = 6)
${ m T}$	4.76 (0.376; n = 6)
$\mathbf{C}$	5.39 (0.435; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.733

	contrastsfour	dunns.P
5	V vs D	0.2529
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4157

	Comparison	P value	Direction
3	V vs D	0.253	V > D
1	D vs DT	0.4096	D < DT

### fat mass before (g)

Treatment	Average (SD; n)
V	3.13 (0.181; n = 6)
D	3.42 (0.363; n = 6)
${ m T}$	3.09 (0.0999; n = 6)
$\mathbf{C}$	2.95 (0.097; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.909

	contrastsfour	dunns.P
5	V vs D	0.235
1	D vs DT	0.3829

Kruskal-Wallis p value for the three-way comparison is 0.798

	Comparison	P value	Direction
3	V vs D	0.253	V < D
1	D vs DT	0.4096	D > DT

# lean mass before (g)

Treatment	Average (SD; n)
V	19.8 (0.58; n = 6)
D	20.2 (0.545; n = 6)
${ m T}$	20 (0.546; n = 6)
$\mathbf{C}$	19.9 $(1.04; n = 5)$

Kruskal-Wallis p value for the four-way comparison is 0.963

	contrastsfour	dunns.P
5	V vs D	0.3514
1	D vs DT	0.3048

	Comparison	P value	Direction
3	V vs D	0.3235	V < D
1	D vs DT	0.2838	D > DT

### total water before (g)

Treatment	Average (SD; n)
V	15.7 (0.56; n = 6)
D	16.2 (0.679; n = 6)
${ m T}$	15.5 (0.492; n = 6)
$\mathbf{C}$	15.8 (1.14; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.862

	contrastsfour	dunns.P
$egin{array}{c} 5 \\ 1 \end{array}$	V vs D D vs DT	0.2933 0.3198

Kruskal-Wallis p value for the three-way comparison is 0.833

	Comparison	P value	Direction
3	V vs D	0.3004	V < D
1	D vs DT	0.3035	D > DT

# fat mass after (g)

Treatment	Average (SD; n)
V	4.63 (0.0679; n = 6)
D	5.65 (0.171; n = 6)
${ m T}$	4.48 (0.149; n = 6)
$^{\mathrm{C}}$	5.38 (0.159; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.000868

	contrastsfour	dunns.P
5	V vs D	0.2795
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.001658

	Comparison	P value	Direction
3	V vs D	0.2359	V < D
1	D  vs  DT	0.0005601	D > DT

### lean mass after (g)

Treatment	Average (SD; n)
V	19.5 (0.613; n = 6)
D	17 (0.429; n = 6)
${ m T}$	21.3 (0.658; n = 6)
$\mathbf{C}$	18.3 (0.964; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00561

	contrasts four	dunns.P
5	V vs D	0.1591
1	D vs DT	0.01851

Kruskal-Wallis p value for the three-way comparison is 0.056

	Comparison	P value	Direction
3	V vs D	0.1262	V > D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.008176	D < DT

### total water after (g)

Treatment	Average (SD; n)
V	15.3 (0.788; n = 6)
D	13.5 (0.901; n = 6)
${ m T}$	16.4 (0.715; n = 6)
$\mathbf{C}$	14 (0.917; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.126

	contrastsfour	dunns.P
5 1	V vs D D vs DT	0.382 0.09351
_	DVSDI	0.03331

	Comparison	P value	Direction
3	V vs D	0.3433	V > D
1	D vs DT	0.07648	D < DT

### fat mass before (percent of BW)

Treatment	Average (SD; n)
V	13 (0.817; n = 6)
D	13.6 (1.19; n = 6)
${ m T}$	12.7 (0.185; n = 6)
$\mathbf{C}$	12.5 (0.749; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.946

	contrasts four	dunns.P
5	V vs D	0.285
1	D vs DT	0.3667

Kruskal-Wallis p value for the three-way comparison is 0.762

	Comparison	P value	Direction
3	V vs D	0.2393	V < D
1	D vs DT	0.3035	D > DT

### lean mass before (percent of BW)

Treatment	Average (SD; n)
V	81.9 (1.07; n = 6)
D	81 (1.63; n = 6)
${ m T}$	81.9 (0.239; n = 6)
$\mathbf{C}$	83 $(1.04; n = 5)$

Kruskal-Wallis p value for the four-way comparison is 0.682

	contrastsfour	dunns.P
5	V vs D	0.1438
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.3829

	Comparison	P value	Direction
3	V vs D	0.1687	V > D
1	D vs DT	0.3237	D < DT

#### total water before (percent of BW)

Treatment	Average (SD; n)
V	65 (2; n = 6)
D	64.8 (1.71; n = 6)
${ m T}$	63.5 (1.93; n = 6)
$\mathbf{C}$	66 (3.02; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.946

	contrastsfour	dunns.P
$egin{array}{c} 5 \\ 1 \end{array}$	V vs D D vs DT	0.4516 0.4492

Kruskal-Wallis p value for the three-way comparison is 0.972

	Comparison	P value	Direction
3	V vs D	0.448	V > D
1	D vs DT	0.4545	D < DT

# fat mass after (percent of BW)

Treatment	Average (SD; n)
V	18.1 (0.581; n = 6)
D	22.4 (0.512; n = 6)
${ m T}$	16.6 (0.545; n = 6)
$\mathbf{C}$	20.8 (0.883; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00108

	contrastsfour	dunns.P
5	V vs D	0.2062
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.003665

	Comparison	P value	Direction
3	V vs D	0.1502	V < D
1	D vs DT	0.0008329	D > DT

#### lean mass after (percent of BW)

Treatment	Average (SD; n)
V	75.9 (0.785; n = 6)
D	67.4 (0.652; n = 6)
${ m T}$	78.7 (0.816; n = 6)
$\mathbf{C}$	70.4 (1.35; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.000418

	contrastsfour	dunns.P
5	V vs D	0.2227
1	D vs DT	0.004159

Kruskal-Wallis p value for the three-way comparison is 0.00336

	Comparison	P value	Direction
3	V vs D	0.1528	V > D
1	D vs DT	0.0004572	D < DT

### total water after (percent of BW)

Treatment	Average (SD; n)
V	59.5 (2.97; n = 6)
D	53.4 (3.06; n = 6)
${ m T}$	60.8 (1.51; n = 6)
$\mathbf{C}$	53.7 (2.64; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0626

	contrasts four	dunns.P
5	V vs D	0.4838
1	D vs DT	0.0529

	Comparison	P value	Direction
3	V vs D	0.4957	V > D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.03818	D < DT

### fat mass gain (g)

Treatment	Average (SD; n)
V	1.5 (0.188; n = 6)
D	2.23 (0.227; n = 6)
${ m T}$	1.39 (0.169; n = 6)
$\mathbf{C}$	2.42 (0.134; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00934

	contrastsfour	dunns.P
$egin{array}{c} 5 \\ 1 \end{array}$	V vs D D vs DT	0.2822 0.02512

Kruskal-Wallis p value for the three-way comparison is 0.0271

	Comparison	P value	Direction
3	V vs D	0.2672	V < D
1	D vs DT	0.02271	D < DT

### lean mass gain (g)

Treatment	Average (SD; n)
V	-0.327 (0.203; n = 6)
D	-3.21 (0.166; n = 6)
${ m T}$	1.31 (0.188; n = 6)
$\mathbf{C}$	-1.57 (0.133; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.000125

	contrastsfour	dunns.P
5	V vs D	0.09025
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.002484

	Comparison	P value	Direction
3	V vs D	0.03603	V > D
1	D vs DT	8.066e-05	D < DT

#### total water gain (g)

Treatment	Average (SD; n)
V	-0.461 (1.04; n = 6)
D	-2.71 (1.04; n = 6)
${ m T}$	0.977 (0.599; n = 6)
$\mathbf{C}$	-1.87 (1.24; n = 5)

Kruskal-Wallis p value for the four-way comparison is  $0.122\,$ 

	contrastsfour	dunns.P
$egin{array}{c} 5 \\ 1 \end{array}$	V vs D D vs DT	$0.2132 \\ 0.05765$

Kruskal-Wallis p value for the three-way comparison is 0.302

	Comparison	P value	Direction
3	V vs D	0.2037	V > D
1	D vs DT	0.06136	D < DT

# fat mass gain (percent of BW)

Treatment	Average (SD; n)
V	5.13 (0.726; n = 6)
D	8.83 (0.896; n = 6)
${ m T}$	3.95 (0.627; n = 6)
С	8.37 (0.427; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0026

	contrastsfour	dunns.P
5	V vs D	0.4548
1	D vs DT	0.009617

	Comparison	P value	Direction
3	V vs D	0.418	V < D
1	D vs DT	0.005049	D > DT

### lean mass gain (percent of BW)

Treatment	Average (SD; n)
V	-6.02 (0.713; n = 6)
D	-13.6 (1.21; n = 6)
${ m T}$	-3.17 (0.708; n = 6)
$^{\mathrm{C}}$	-12.6 (0.571; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00045

	contrastsfour	dunns.P
5	V vs D	0.4291
1	D vs DT	0.007631

Kruskal-Wallis p value for the three-way comparison is 0.00397

	Comparison	P value	Direction
3	V vs D	0.4052	V > D
1	D  vs  DT	0.001224	D < DT

# total water gain (percent of BW)

Treatment	Average (SD; n)
V	-5.53 (4.33; n = 6)
D	-11.4 (3.95; n = 6)
${ m T}$	-2.75 (2.41; n = 6)
$\mathbf{C}$	-12.3 (4.87; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.391

	contrastsfour	dunns.P
5	V vs D	0.4387
1	D vs DT	0.1857

	Comparison	P value	Direction
3	V vs D	0.4052	V > D
1	D vs DT	0.1956	D > DT

# fat mass gain (percent)

Treatment	Average (SD; n)
V	12.2 (2.15; n = 6)
D	17.9 (3.31; n = 6)
${ m T}$	11.1 (1.43; n = 6)
$\mathbf{C}$	19.8 $(1.82; n = 5)$

Kruskal-Wallis p value for the four-way comparison is 0.0489

	contrastsfour	dunns.P
5	V vs D	0.1993
1	D vs DT	0.09351

Kruskal-Wallis p value for the three-way comparison is 0.121

	Comparison	P value	Direction
3	V vs D	0.2227	V < D
1	D  vs  DT	0.09428	D < DT

# lean mass gain (percent)

Treatment	Average (SD; n)
V	-0.397 (0.249; n = 6)
D	-3.96 (0.175; n = 6)
${ m T}$	1.6 (0.228; n = 6)
$\mathbf{C}$	-1.89 (0.151; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.000125

	contrastsfour	dunns.P
5	V vs D	0.09025
1	D vs DT	0.002484

	Comparison	P value	Direction
3	V vs D	0.03603	V > D
1	D vs DT	8.066e-05	D < DT

#### total water gain (percent)

Treatment	Average (SD; n)
V	-0.517 (1.58; n = 6)
D	-4.05 (1.54; n = 6)
${ m T}$	1.64 (0.891; n = 6)
$\mathbf{C}$	-2.56 (1.73; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0807

	contrastsfour	dunns.P
<u>5</u>	V vs D	0.2301
1	D vs DT	0.0529

Kruskal-Wallis p value for the three-way comparison is 0.278

	Comparison	P value	Direction
3	V vs D	0.2227	V > D
1	D vs DT	0.05473	D < DT

#### gastrocnemius cathepsin activity (rel.u.)

Treatment	Average (SD; n)
V	30800 (629; n = 6)
D	19600 (1270; n = 6)
${ m T}$	22900 (2200; n = 6)
$\mathbf{C}$	20600 (522; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00365

	contrastsfour	dunns.P
5	V vs D	0.3904
1	D vs DT	0.0003643

	Comparison	P value	Direction
3	V vs D	0.3931	V > D
1	D vs DT	0.001216	D < DT

#### quadricepscathepsin activity (rel.u.)

Treatment	Average (SD; n)
V	39000 (2030; n = 6)
D	21500 (2340; n = 6)
${ m T}$	28100 (911; n = 6)
$\mathbf{C}$	20200 (2140; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00104

	contrastsfour	dunns.P
5	V vs D	0.3247
1	D vs DT	0.000524

Kruskal-Wallis p value for the three-way comparison is 0.00383

	Comparison	P value	Direction
3	V vs D	0.3595	V > D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.003035	D > DT

# triceps cathepsin activity (rel.u.)

Treatment	Average (SD; n)
V	36100 (3350; n = 5)
D	20100 (1460; n = 6)
${ m T}$	21200 (2270; n = 5)
$\mathbf{C}$	14900 (795; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00237

	contrastsfour	dunns.P
5	V vs D	0.05614
1	D vs DT	0.009361

	Comparison	P value	Direction
3	V vs D	0.0809	V > D
1	D vs DT	0.01622	D > DT

#### gastrocnemius proteasome activity (rel.u.)

Treatment	Average (SD; n)
V	3840 (858; n = 6)
D	3490 (643; n = 6)
${ m T}$	3880 (595; n = 6)
$\mathbf{C}$	3240 (630; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.902

	contrasts four	dunns.P
5	V vs D	0.4806
1	D vs DT	0.3352

Kruskal-Wallis p value for the three-way comparison is 0.913

	Comparison	P value	Direction
3	V vs D	0.4437	V > D
1	D vs DT	0.3875	D > DT

### quadriceps proteasome activity (rel.u.)

Treatment	Average (SD; n)
V	19200 (2720; n = 6)
D	14800 (1440; n = 6)
${ m T}$	27800 (4510; n = 6)
$\mathbf{C}$	12800 (1620; n = 5)

Kruskal-Wallis p value for the four-way comparison is  $0.0261\,$ 

	contrastsfour	dunns.P
5	V vs D	0.2961
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1436

	Comparison	P value	Direction
3	V vs D	0.2461	V > D
1	D vs DT	0.1387	D > DT

#### triceps proteasome activity (rel.u.)

Treatment	Average (SD; n)
V	14000 (1150; n = 6)
D	10100 (1270; n = 6)
${ m T}$	13400 (1300; n = 6)
$\mathbf{C}$	11800 (3140; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.116

	contrastsfour	dunns.P
$egin{array}{c} 5 \\ 1 \end{array}$	V vs D D vs DT	0.3851 $0.01666$

Kruskal-Wallis p value for the three-way comparison is 0.106

	Comparison	P value	Direction
3	V vs D	0.4265	$\overline{ m V} > { m D}$
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.02597	D < DT

#### triceps calpain activity (rel.u.)

Treatment	Average (SD; n)
V	17900 (1320; n = 5)
D	3650 (921; n = 5)
${ m T}$	12900 (1030; n = 6)
$\mathbf{C}$	4500 (1650; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.000841

	contrastsfour	dunns.P
5	V vs D	0.4392
1	D vs DT	0.0003193

	Comparison	P value	Direction
3	V vs D	0.416	V > D
1	D vs DT	0.00291	D < DT

#### gastrocnemius calpain activity (rel.u.)

Treatment	Average (SD; n)
V	30700 (2800; n = 4)
D	35200 (2340; n = 5)
${ m T}$	31900 (1800; n = 6)
$\mathbf{C}$	40000 (3470; n = 3)

Kruskal-Wallis p value for the four-way comparison is 0.167

	contrastsfour	dunns.P
$egin{array}{c} 5 \\ 1 \end{array}$	V vs D D vs DT	$0.1607 \\ 0.1019$

Kruskal-Wallis p value for the three-way comparison is 0.149

	Comparison	P value	Direction
3	V vs D	0.168	V < D
1	D  vs  DT	0.1235	D < DT

### gastrocnemius Ct(Becn1) - Ct(Gapdh)

Treatment	Average (SD; n)
V	3.85 (0.691; n = 4)
D	5.42 (0.301; n = 4)
${ m T}$	2.31 (0.323; n = 4)
$\mathbf{C}$	5.73 (0.282; n = 4)

Kruskal-Wallis p value for the four-way comparison is  $0.0158\,$ 

	contrastsfour	dunns.P
5	V vs D	0.3552
1	D vs DT	0.06874

	Comparison	P value	Direction
3	V vs D	0.312	V < D
1	D vs DT	0.04776	D < DT

### gastrocnemius Ct(Bnip3) - Ct(Gapdh)

Treatment	Average (SD; n)
V	0.185 (0.528; n = 4)
D	-0.216 (0.402; n = 4)
${ m T}$	-1.11 (1.08; n = 4)
$\mathbf{C}$	1.43 (0.157; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0667

	contrastsfour	dunns.P
5 1	V vs D D vs DT	$0.01564 \\ 0.3016$

Kruskal-Wallis p value for the three-way comparison is 0.0498

	Comparison	P value	Direction
3	V vs D	0.009301	V > D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.2781	D < DT

#### gastrocnemius Ct(Ctsl) - Ct(Gapdh)

Treatment	Average (SD; n)
V	6.09 (0.409; n = 4)
D	5.62 (0.263; n = 4)
${ m T}$	4.08 (0.321; n = 4)
С	5.8 (0.188; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0308

	contrastsfour	dunns.P
5	V vs D	0.3016
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.2762

	Comparison	P value	Direction
3	V vs D	0.2462	V > D
1	D vs DT	0.2164	D < DT

### gastrocnemius Ct(Ddit4) - Ct(Gapdh)

Treatment	Average (SD; n)
V	5.9 (0.834; n = 4)
D	4.5 (0.23; n = 4)
${ m T}$	4.33 (0.375; n = 4)
$\mathbf{C}$	6 (0.573; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.201

	contrastsfour	dunns.P
5 1	V vs D D vs DT	$0.09066 \\ 0.1174$

Kruskal-Wallis p value for the three-way comparison is 0.309

	Comparison	P value	Direction
3	V vs D	0.1012	V > D
1	D  vs  DT	0.08491	D < DT

### gastrocnemius Ct(Fbxo32) - Ct(Gapdh)

Treatment	Average (SD; n)
V	1.91 (0.505; n = 4)
D	0.852 (0.034; n = 4)
${ m T}$	0.156 (0.312; n = 4)
$\mathbf{C}$	1.54 (0.871; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.121

	contrastsfour	dunns.P
5	V vs D	0.5
1	D vs DT	0.1864

	Comparison	P value	Direction
3	V vs D	0.4609	V > D
1	D vs DT	0.1404	D < DT

### gastrocnemius Ct(Foxo1) - Ct(Gapdh)

Treatment	Average (SD; n)
V	6.66 (0.352; n = 4)
D	6.32 (0.168; n = 4)
${ m T}$	5.45 (0.167; n = 4)
$\mathbf{C}$	7.18 (0.688; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0496

	contrastsfour	dunns.P
5	V vs D	0.207
1	D vs DT	0.2762

Kruskal-Wallis p value for the three-way comparison is 0.472

	Comparison	P value	Direction
3	V vs D	0.1197	V > D
1	D vs DT	0.1887	D < DT

### gastrocnemius Ct(Foxo3a) - Ct(Gapdh)

Treatment	Average (SD; n)
V	7.96 (0.341; n = 4)
D	7.91 (0.221; n = 4)
${ m T}$	6.52 (0.192; n = 4)
$\mathbf{C}$	8.96 (0.483; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0146

	contrastsfour	dunns.P
5	V vs D	0.09066
1	D vs DT	0.4119

	Comparison	P value	Direction
3	V vs D	0.03878	V > D
1	D vs DT	0.3843	D < DT

### gastrocnemius Ct(Foxo4) - Ct(Gapdh)

Treatment	Average (SD; n)
V	5.16 (0.379; n = 4)
D	5.59 (0.277; n = 4)
${ m T}$	3.13 (0.335; n = 4)
$\mathbf{C}$	5.97 (0.4; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.016

	contrastsfour	dunns.P
$\frac{-}{5}$ $1$	V vs D D vs DT	0.328 $0.1864$

Kruskal-Wallis p value for the three-way comparison is 0.199

	Comparison	P value	Direction
3	V vs D	0.2781	V < D
1	D  vs  DT	0.1197	D < DT

### gastrocnemius Ct(Igf1) - Ct(Gapdh)

Treatment	Average (SD; n)
V	6.67 (0.245; n = 4)
D	7.84 (0.334; n = 4)
${ m T}$	4.78 (0.383; n = 4)
$\mathbf{C}$	6.95 (0.324; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00915

	contrastsfour	dunns.P
5	V vs D	0.1174
1	D vs DT	0.04382

	Comparison	P value	Direction
3	V vs D	0.05833	V < D
1	D vs DT	0.01206	D > DT

# gastrocnemius Ct(Igf1r) - Ct(Gapdh)

Treatment	Average (SD; n)
V	7.09 (0.463; n = 4)
D	7.91 (0.441; n = 4)
${ m T}$	5.38 (0.139; n = 4)
$\mathbf{C}$	8.31 (0.517; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0165

	contrastsfour	dunns.P
$\frac{5}{1}$	V vs D D vs DT	$0.252 \\ 0.252$

Kruskal-Wallis p value for the three-way comparison is 0.211

	Comparison	P value	Direction
3	V vs D	0.1887	V < D
1	D  vs  DT	0.1887	D < DT

## gastrocnemius Ct(Klf15) - Ct(Gapdh)

Treatment	Average (SD; n)
V	6.8 (0.435; n = 4)
D	6.97 (0.218; n = 4)
${ m T}$	5.93 (0.112; n = 4)
$\mathbf{C}$	7.94 (0.422; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0314

	contrastsfour	dunns.P
5	V vs D	0.07913
1	D vs DT	0.441

	Comparison	P value	Direction
3	V vs D	0.03122	V < D
1	D vs DT	0.4223	D < DT

### gastrocnemius Ct(Map1lc3b) - Ct(Gapdh)

Treatment	Average (SD; n)
V	2.74 (0.558; n = 4)
D	2.89 (0.246; n = 4)
${ m T}$	1.34 (0.173; n = 4)
$\mathbf{C}$	3.38 (0.32; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0284

	contrasts four	dunns.P
5	V vs D	0.2289
1	D vs DT	0.3552

Kruskal-Wallis p value for the three-way comparison is 0.368

	Comparison	P value	Direction
3	V vs D	0.1634	V < D
1	D vs DT	0.3474	D < DT

### gastrocnemius Ct(Nr3c1) - Ct(Gapdh)

Treatment	Average (SD; n)
V	4.6 (0.49; n = 4)
D	4.9 (0.325; n = 4)
${ m T}$	2.3 (0.557; n = 4)
$\mathbf{C}$	4.49 (0.188; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0432

	contrastsfour	dunns.P
5	V vs D	0.2762
1	D vs DT	0.3552

	Comparison	P value	Direction
3	V vs D	0.2164	V < D
1	D vs DT	0.3474	D > DT

## gastrocnemius Ct(Odc) - Ct(Gapdh)

Treatment	Average (SD; n)
V	-0.0212 (0.423; n = 4)
D	$0.473 \ (0.286; n = 4)$
${ m T}$	-1.94 (0.28; n = 4)
$^{\mathrm{C}}$	0.252 (0.181; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0273

	contrastsfour	dunns.P
$\frac{5}{1}$	V vs D D vs DT	$0.3016 \\ 0.207$

Kruskal-Wallis p value for the three-way comparison is 0.551

	Comparison	P value	Direction
3	V vs D	0.2462	V < D
1	D vs DT	0.1404	D > DT

## gastrocnemius Ct(Stk11) - Ct(Gapdh)

Treatment	Average (SD; n)
V	3.48 (0.42; n = 4)
D	4.86 (0.452; n = 4)
${ m T}$	2.57 (0.227; n = 4)
$\mathbf{C}$	4.99 (0.147; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0132

	contrastsfour	dunns.P
5	V vs D	0.441
1	D vs DT	0.03169

	Comparison	P value	Direction
3	V vs D	0.4223	V < D
1	D vs DT	0.01549	D < DT

### gastrocnemius Ct(Trim63) - Ct(Gapdh)

Treatment	Average (SD; n)
V	0.406 (0.428; n = 4)
D	0.262 (0.117; n = 4)
${ m T}$	-0.401 (0.373; n = 4)
$^{\mathrm{C}}$	1.34 (0.488; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.104

	contrasts four	dunns.P
5	V vs D	0.06874
1	D vs DT	0.3552

Kruskal-Wallis p value for the three-way comparison is 0.199

	Comparison	P value	Direction
3	V vs D	0.03878	V > D
1	D  vs  DT	0.2781	D < DT

## quadriceps Ct(Becn1) - Ct(Gapdh)

Treatment	Average (SD; n)
V	5.66 (0.211; n = 4)
D	7.28 (0.217; n = 4)
${ m T}$	6.42 (0.29; n = 4)
$\mathbf{C}$	7.71 (0.0944; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00583

	contrastsfour	dunns.P
5	V vs D	0.207
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.007131

	Comparison	P value	Direction
3	V vs D	0.1634	V < D
1	D vs DT	0.03122	D < DT

## quadriceps Ct(Bnip3) - Ct(Gapdh)

Treatment	Average (SD; n)
V	2.79 (0.166; n = 4)
D	3.12 (0.295; n = 4)
${ m T}$	3.1 (0.158; n = 4)
$\mathbf{C}$	3.44 (0.229; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.226

	contrastsfour	dunns.P
$egin{array}{c} 5 \\ 1 \end{array}$	V vs D D vs DT	$0.1327 \\ 0.1672$

Kruskal-Wallis p value for the three-way comparison is 0.146

	Comparison	P value	Direction
3	V vs D	0.1634	V < D
1	D vs DT	0.1634	D < DT

## quadriceps Ct(Ctsl) - Ct(Gapdh)

Treatment	Average (SD; n)
V	4.17 (0.139; n = 4)
D	4.24 (0.284; n = 4)
${ m T}$	4.44 (0.255; n = 4)
$\mathbf{C}$	4.93 (0.103; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.078

	contrastsfour	dunns.P
5	V vs D	0.02248
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.328

	Comparison	P value	Direction
3	V vs D	0.02493	V < D
1	D vs DT	0.312	D < DT

## quadriceps Ct(Ddit4) - Ct(Gapdh)

Treatment	Average (SD; n)
V	6.92 (0.688; n = 4)
D	7.07 (0.466; n = 4)
${ m T}$	7.52 (0.17; n = 4)
$\mathbf{C}$	7.96 (0.383; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.346

V vs D Vs DT	0.03735 $0.2762$

Kruskal-Wallis p value for the three-way comparison is 0.219

	Comparison	P value	Direction
3	V vs D	0.04776	V < D
1	D  vs  DT	0.3474	D < DT

## quadriceps Ct(Fbxo32) - Ct(Gapdh)

Treatment	Average (SD; n)
V	3.58 (0.297; n = 4)
D	3.57 (0.143; n = 4)
${ m T}$	4.14 (0.335; n = 4)
$\mathbf{C}$	3.78 (0.457; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.642

	contrastsfour	dunns.P
5	V vs D	0.3832
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.441

	Comparison	P value	Direction
3	V vs D	0.3474	V > D
1	D vs DT	0.4609	D < DT

### quadriceps Ct(Foxo1) - Ct(Gapdh)

Treatment	Average (SD; n)
V	6.68 (0.51; n = 4)
D	7.3 (0.449; n = 4)
${ m T}$	7.45 (0.19; n = 4)
$\mathbf{C}$	8.46 (0.258; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0795

_		
	contrastsfour	dunns.P
5	V vs D	0.04382
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.207

Kruskal-Wallis p value for the three-way comparison is 0.069

	Comparison	P value	Direction
3	V vs D	0.05833	V < D
1	D  vs  DT	0.2462	D < DT

## quadriceps Ct(Foxo3a) - Ct(Gapdh)

Treatment	Average (SD; n)
V	7.65 (0.282; n = 4)
D	8.92 (0.361; n = 4)
${ m T}$	8.18 (0.251; n = 4)
$\mathbf{C}$	9.95 (0.233; n = 4)

Kruskal-Wallis p value for the four-way comparison is  $0.0125\,$ 

	contrastsfour	dunns.P
5	V vs D	0.1174
1	D vs DT	0.02675

	Comparison	P value	Direction
3	V vs D	0.1012	V < D
1	D vs DT	0.05833	D < DT

### quadriceps Ct(Foxo4) - Ct(Gapdh)

Treatment	Average (SD; n)
V	4.98 (0.355; n = 4)
D	6.68 (0.294; n = 4)
${ m T}$	5.2 (0.126; n = 4)
$\mathbf{C}$	7.44 (0.205; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00673

	contrasts four	dunns.P
5	V vs D D vs DT	0.2289 0.01066
1	D VS D1	0.01000

Kruskal-Wallis p value for the three-way comparison is 0.0154

	Comparison	P value	Direction
3	V vs D	0.1634	V < D
1	D vs DT	0.03122	D < DT

## quadriceps Ct(Igf1) - Ct(Gapdh)

Treatment	Average (SD; n)
V	9.67 (0.247; n = 4)
D	10.9 (0.264; n = 4)
${ m T}$	9.37 (0.263; n = 4)
$\mathbf{C}$	10.4 (0.395; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.029

	contrastsfour	dunns.P
5	V vs D	0.1672
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.008742

	Comparison	P value	Direction
3	V vs D	0.1404	V < D
1	D vs DT	0.007114	D > DT

### quadriceps Ct(Igf1r) - Ct(Gapdh)

Treatment	Average (SD; n)
V	7.88 (0.17; n = 4)
D	9.48 (0.307; n = 4)
${ m T}$	8.51 (0.268; n = 4)
$\mathbf{C}$	10.2 (0.186; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00608

	contrastsfour	dunns.P
5	V vs D	0.1493
1	D vs DT	0.01066

Kruskal-Wallis p value for the three-way comparison is 0.0125

	Comparison	P value	Direction
3	V vs D	0.1197	V < D
1	D vs DT	0.03878	D < DT

## quadriceps Ct(Klf15) - Ct(Gapdh)

Treatment	Average (SD; n)
V	5.69 (0.322; n = 4)
D	6.74 (0.182; n = 4)
${ m T}$	7.21 (0.242; n = 4)
$\mathbf{C}$	7.88 (0.244; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00826

	contrastsfour	dunns.P
5	V vs D	0.01564
1	D vs DT	0.1327

	Comparison	P value	Direction
3	V vs D	0.03878	V < D
1	D vs DT	0.1197	D < DT

### quadriceps Ct(Map1lc3b) - Ct(Gapdh)

Treatment	Average (SD; n)
V	1.72 (0.16; n = 4)
D	2.39 (0.199; n = 4)
${ m T}$	2.3 (0.148; n = 4)
$\mathbf{C}$	3 (0.0777; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0081

	contrasts four	dunns.P
5 1	$\begin{array}{c} V \text{ vs D} \\ D \text{ vs DT} \end{array}$	$0.04382 \\ 0.04382$

Kruskal-Wallis p value for the three-way comparison is 0.00971

	Comparison	P value	Direction
3	V vs D	0.04776	V < D
1	D  vs  DT	0.08491	D < DT

## quadriceps Ct(Nr3c1) - Ct(Gapdh)

Treatment	Average (SD; n)
V	2.77 (0.624; n = 4)
D	3.98 (0.482; n = 4)
${ m T}$	3.65 (0.185; n = 4)
С	4.13 (0.448; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.303

	contrastsfour	dunns.P
5	V vs D	0.441
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.05944

	Comparison	P value	Direction
3	V vs D	0.4223	V < D
1	D vs DT	0.08491	D < DT

### quadriceps Ct(Odc) - Ct(Gapdh)

Treatment	Average (SD; n)
V	2.53 (0.228; n = 4)
D	3.05 (0.171; n = 4)
${ m T}$	1.89 (0.358; n = 4)
$\mathbf{C}$	2.67 (0.373; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.104

	contrastsfour	dunns.P
$egin{array}{c} 5 \\ 1 \end{array}$	V vs D D vs DT	0.1672 $0.09066$

Kruskal-Wallis p value for the three-way comparison is 0.368

	Comparison	P value	Direction
3	V vs D	0.1634	V < D
1	D  vs  DT	0.08491	D > DT

## quadriceps Ct(Stk11) - Ct(Gapdh)

Treatment	Average (SD; n)
V	4.56 (0.238; n = 4)
D	6.64 (0.411; n = 4)
${ m T}$	5.33 (0.257; n = 4)
С	7.25 (0.177; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00602

	contrastsfour	dunns.P
5	V vs D	0.2762
1	D vs DT	0.005787

	Comparison	P value	Direction
3	V vs D	0.2164	V < D
1	D vs DT	0.02493	D < DT

## quadriceps Ct(Trim63) - Ct(Gapdh)

Treatment	Average (SD; n)
V	5.11 (0.114; n = 4)
D	5.26 (0.354; n = 4)
${ m T}$	5.72 (0.209; n = 4)
$\mathbf{C}$	6.35 (0.261; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0369

	contrastsfour	dunns.P
5	V vs D	0.01564
1	D vs DT	0.2762

Kruskal-Wallis p value for the three-way comparison is 0.0345

	Comparison	P value	Direction
3	V vs D D vs DT	0.02493 $0.312$	V < D D < DT
T	DVSDI	0.512	דת > ת

## triceps Ct(Becn1) - Ct(Gapdh)

Treatment	Average (SD; n)
V	4.84 (0.218; n = 4)
D	6.41 (0.12; n = 4)
${ m T}$	5.57 (0.0703; n = 4)
$\mathbf{C}$	6.97 (0.0771; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00275

	contrastsfour	dunns.P
5	V vs D	0.1174
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.008742

	Comparison	P value	Direction
3	V vs D	0.05833	V < D
1	D vs DT	0.05833	D < DT

### triceps Ct(Bnip3) - Ct(Gapdh)

Treatment	Average (SD; n)
V	0.2 (0.295; n = 4)
Ď	1.34 (0.118; n = 4)
${f T}$	1.32 (0.561; n = 4)
$^{\mathrm{C}}$	1.66 (0.558; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.115

	contrastsfour	dunns.P
$\frac{-5}{1}$	V vs D D vs DT	$0.4704 \\ 0.01879$

Kruskal-Wallis p value for the three-way comparison is 0.0581

	Comparison	P value	Direction
3	V vs D	0.4223	V < D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.01549	D < DT

## triceps Ct(Ctsl) - Ct(Gapdh)

Treatment	Average (SD; n)
V	4.95 (0.171; n = 4)
D	5.25 (0.11; n = 4)
${ m T}$	5.37 (0.0505; n = 4)
$\mathbf{C}$	6.06 (0.0848; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0136

	contrastsfour	dunns.P
5	V vs D	0.008742
1	D vs DT	0.2289

	Comparison	P value	Direction
3	V vs D	0.01974	V < D
1	D vs DT	0.2781	D < DT

## triceps Ct(Ddit4) - Ct(Gapdh)

Treatment	Average (SD; n)
V	6.92 (0.964; n = 4)
D	6.83 (0.254; n = 4)
${ m T}$	8.55 (0.188; n = 4)
$\mathbf{C}$	8.51 (0.205; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0411

	contrastsfour	dunns.P
5 1	V vs D D vs DT	$0.008742 \\ 0.1864$

Kruskal-Wallis p value for the three-way comparison is 0.0592

	Comparison	P value	Direction
3	V vs D	0.009301	V > D
1	D vs DT	0.1887	D < DT

## triceps Ct(Fbxo32) - Ct(Gapdh)

Treatment	Average (SD; n)
V	2.25 (0.331; n = 4)
D	2 (0.265; n = 4)
${ m T}$	3.06 (0.188; n = 4)
$\mathbf{C}$	2.43 (0.262; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.135

	contrastsfour	dunns.P
5	V vs D	0.1864
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.328

	Comparison	P value	Direction
3	V vs D	0.1887	V > D
1	D vs DT	0.3843	D < DT

## $triceps\ Ct(Foxo1)\ \hbox{-}\ Ct(Gapdh)$

Treatment	Average (SD; n)
V	6.9 (0.547; n = 4)
D	6.96 (0.345; n = 4)
${ m T}$	7.95 (0.235; n = 4)
$\mathbf{C}$	8.25 (0.259; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.104

	contrasts four	dunns.P
$\frac{-}{5}$ $1$	V vs D D vs DT	0.01879 0.4119

Kruskal-Wallis p value for the three-way comparison is 0.087

	Comparison	P value	Direction
3	V vs D	0.02493	V < D
1	D vs DT	0.4609	D < DT

# triceps Ct(Foxo3a) - Ct(Gapdh)

Treatment	Average (SD; n)
V	8.4 (0.311; n = 4)
D	9.24 (0.27; n = 4)
${ m T}$	10 (0.13; n = 4)
С	10.6 (0.199; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00495

	contrastsfour	dunns.P
5	V vs D	0.005787
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.207

	Comparison	P value	Direction
3	V vs D	0.03122	V < D
1	D vs DT	0.1634	D < DT

### triceps Ct(Foxo4) - Ct(Gapdh)

Treatment	Average (SD; n)
V	5.24 (0.337; n = 4)
D	6.82 (0.224; n = 4)
${ m T}$	6.22 (0.185; n = 4)
$\mathbf{C}$	7.09 (0.221; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00843

	contrastsfour	dunns.P
$\frac{5}{1}$	V vs D D vs DT	0.252 $0.005787$

Kruskal-Wallis p value for the three-way comparison is 0.0183

	Comparison	P value	Direction
3	V vs D	0.2164	V < D
1	D  vs  DT	0.02493	D < DT

# triceps Ct(Igf1) - Ct(Gapdh)

Treatment	Average (SD; n)
V	7.94 (0.151; n = 4)
D	8.09 (0.117; n = 4)
${ m T}$	7.14 (0.358; n = 4)
$\mathbf{C}$	7.75 (0.149; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.1

	contrastsfour	dunns.P
5	V vs D	0.07913
1	D vs DT	0.252

	Comparison	P value	Direction
3	V vs D	0.07066	V < D
1	D vs DT	0.2781	D > DT

### triceps Ct(Igf1r) - Ct(Gapdh)

Treatment	Average (SD; n)
V	6.88 (0.238; n = 4)
D	8.4 (0.269; n = 4)
${ m T}$	8.31 (0.164; n = 4)
$\mathbf{C}$	9.61 (0.168; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00532

	${\rm contrasts four}$	dunns.P
5 1	V vs D D vs DT	$0.03735 \\ 0.03735$

Kruskal-Wallis p value for the three-way comparison is 0.00728

	Comparison	P value	Direction
3	V vs D	0.05833	V < D
1	D  vs  DT	0.05833	D < DT

## triceps Ct(Klf15) - Ct(Gapdh)

Treatment	Average (SD; n)
V	5.82 (0.397; n = 4)
D	6.87 (0.275; n = 4)
${ m T}$	8.18 (0.0934; n = 4)
$\mathbf{C}$	8.64 (0.0573; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00367

	contrastsfour	dunns.P
5	V vs D	0.005787
1	D vs DT	0.1864

	Comparison	P value	Direction
3	V vs D	0.03878	V < D
1	D vs DT	0.1197	D < DT

### triceps Ct(Map1lc3b) - Ct(Gapdh)

Treatment	Average (SD; n)
V	2.86 (0.123; n = 4)
D	3.51 (0.18; n = 4)
${ m T}$	3.92 (0.133; n = 4)
$\mathbf{C}$	4.3 (0.0759; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00437

contrastsfour dunns.I  V vs D 0.01564			
5 V vs D 0.01564		contrasts four	dunns.P
1 D vs DT 0.09066	5 1	, ,,,,,	0.01564 $0.09066$

Kruskal-Wallis p value for the three-way comparison is 0.00728

	Comparison	P value	Direction
3	V vs D	0.05833	V < D
1	D  vs  DT	0.05833	D < DT

## triceps Ct(Nr3c1) - Ct(Gapdh)

Treatment	Average (SD; n)
V	4.37 (0.427; n = 4)
D	5.75 (0.376; n = 4)
${ m T}$	4.64 (0.395; n = 4)
$\mathbf{C}$	5.95 (0.285; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0415

	contrastsfour	dunns.P
5	V vs D	0.3552
1	D vs DT	0.02675

	Comparison	P value	Direction
3	V vs D	0.3474	V < D
1	D vs DT	0.03122	D < DT

## $triceps\ Ct(Odc)\ -\ Ct(Gapdh)$

Treatment	Average (SD; n)
V	1.1 (0.236; n = 4)
D	1.7 (0.183; n = 4)
${ m T}$	1.14 (0.334; n = 4)
$\mathbf{C}$	1.19 (0.473; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.657

	contrastsfour	dunns.P
$\frac{-}{5}$ $1$	V vs D D vs DT	0.207 $0.1174$

Kruskal-Wallis p value for the three-way comparison is 0.551

	Comparison	P value	Direction
3	V vs D	0.2462	V < D
1	D vs DT	0.1404	D > DT

# triceps Ct(Stk11) - Ct(Gapdh)

Treatment	Average (SD; n)
V	3.85 (0.155; n = 4)
D	5.65 (0.23; n = 4)
${ m T}$	4.62 (0.201; n = 4)
$\mathbf{C}$	6.14 (0.129; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0048

	contrastsfour	dunns.P
5	V vs D	0.2289
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.005787

	Comparison	P value	Direction
3	V vs D	0.1634	V < D
1	D vs DT	0.03122	D < DT

### triceps Ct(Trim63) - Ct(Gapdh)

Treatment	Average (SD; n)
V	1.14 (0.299; n = 4)
D	1.94 (0.309; n = 4)
${ m T}$	2.08 (0.244; n = 4)
$^{\mathrm{C}}$	2.53 (0.145; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0441

	contrasts four	dunns.P
5	V vs D	0.07913
1	D vs DT	0.07913

Kruskal-Wallis p value for the three-way comparison is 0.0388

	Comparison	P value	Direction
3	V vs D	0.1012	V < D
1	D vs DT	0.1012	D < DT

### gastrocnemius 4E-BP protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.788 (0.0127; n = 2)
D	0.99 (0.0252; n = 2)
${ m T}$	0.76 (0.0203; n = 2)
$\mathbf{C}$	1.05 (0.00882; n = 2)

Kruskal-Wallis p value for the four-way comparison is 0.104

	contrastsfour	dunns.P
5	V vs D	0.2071
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1537

	Comparison	P value	Direction
3	V vs D	0.1425	V < D
1	D vs DT	0.1425	D < DT

### gastrocnemius phospho-4E-BP protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.878 (0.0731; n = 4)
D	1.43 (0.0356; n = 4)
${ m T}$	0.925 (0.126; n = 4)
$\mathbf{C}$	1.29 (0.0743; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0103

	contrastsfour	dunns.P
5	V vs D	0.207
1	D vs DT	0.003001

Kruskal-Wallis p value for the three-way comparison is 0.0154

	Comparison	P value	Direction
3	V vs D	0.1634	V < D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.00223	D > DT

### gastrocnemius phospho-4E-BP / total 4E-BP

Treatment	Average (SD; n)
V	0.957 (0.0143; n = 2)
D	1.4 (0.0752; n = 2)
${ m T}$	1.03 (0.186; n = 2)
С	1.31 (0.0778; n = 2)

Kruskal-Wallis p value for the four-way comparison is 0.139

	contrastsfour	dunns.P
5	V vs D	0.3415
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.0331

	Comparison	P value	Direction
3	V vs D	0.2965	V < D
1	D vs DT	0.03068	D > DT

### gastrocnemius Akt protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.583 (0.013; n = 2)
D	0.53 (0.0142; n = 2)
${ m T}$	0.655 (0.0311; n = 2)
$\mathbf{C}$	0.57 (0.00015; n = 2)

Kruskal-Wallis p value for the four-way comparison is 0.104

	contrasts four	dunns.P
5	V vs D	0.1537
1	D vs DT	0.07652

Kruskal-Wallis p value for the three-way comparison is 0.156

	Comparison	P value	Direction
3	V vs D	0.09072	V > D
1	D  vs  DT	0.03068	D < DT

### gastrocnemius phospho-Akt-Ser473 (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.371 (0.075; n = 4)
D	0.239 (0.045; n = 4)
${ m T}$	0.302 (0.0259; n = 4)
C	$0.241 \ (0.0628; \ n=4)$

Kruskal-Wallis p value for the four-way comparison is 0.368

	contrastsfour	dunns.P
5	V vs D	0.4704
1	D vs DT	0.05944

	Comparison	P value	Direction
3	V vs D	0.4609	V > D
1	D vs DT	0.1012	D < DT

### gastrocnemius phospho-Akt-Ser473 / total Akt

Treatment	Average (SD; n)
V	0.702 (0.0606; n = 2)
D	0.587 (0.00161; n = 2)
${ m T}$	0.552 (0.0891; n = 2)
$\mathbf{C}$	0.522 (0.0418; n = 2)

Kruskal-Wallis p value for the four-way comparison is 0.198

	contrasts four	dunns.P
5 1	$\begin{array}{c} V \text{ vs D} \\ D \text{ vs DT} \end{array}$	$0.2071 \\ 0.1103$

Kruskal-Wallis p value for the three-way comparison is 0.102

	Comparison	P value	Direction
3	V vs D	0.1425	V > D
1	D vs DT	0.1425	D > DT

#### gastrocnemius hyperphosphorylated Akt (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.249 (0.0295; n = 4)
D	0.284 (0.0307; n = 4)
${ m T}$	0.181 (0.0366; n = 4)
$\mathbf{C}$	0.254 (0.0131; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.205

	contrastsfour	dunns.P
5	V vs D	0.2762
1	D vs DT	0.1864

	Comparison	P value	Direction
3	V vs D	0.2164	V < D
1	D vs DT	0.1634	D > DT

#### gastrocnemius hyperphosphorylated Akt / total Akt

Treatment	Average (SD; n)
V	0.343 (0.00318; n = 2)
D	0.457 (0.0303; n = 2)
${ m T}$	0.223 (0.0705; n = 2)
$\mathbf{C}$	0.384 (0.0174; n = 2)

Kruskal-Wallis p value for the four-way comparison is 0.0833

	contrastsfour	dunns.P
5	V vs D	0.2071
1	D vs DT	0.05124

Kruskal-Wallis p value for the three-way comparison is 0.102

	Comparison	P value	Direction
3	V vs D	0.1425	V < D
1	D vs DT	0.01625	D > DT

#### gastrocnemius phospho-eIF2alpha (normalized to GAPDH)

Treatment	Average (SD; n)
V	1.93 (0.24; n = 4)
D	2.16 (0.632; n = 4)
${ m T}$	1.69 (0.118; n = 4)
C	2.12 (0.464; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.892

	contrastsfour	dunns.P
5	V vs D	0.3832
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.441

	Comparison	P value	Direction
3	V vs D	0.4609	V < D
1	D vs DT	0.4609	D > DT

### gastrocnemius GR protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	2.64 (0.427; n = 4)
D	3.71 (1.31; n = 4)
${ m T}$	2.45 (0.187; n = 4)
$\mathbf{C}$	2.82 (0.735; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.999

	contrasts four	dunns.P
5	V vs D	0.441
1	D vs DT	0.4704

Kruskal-Wallis p value for the three-way comparison is 0.981

	Comparison	P value	Direction
3	V vs D	0.4223	V < D
1	D vs DT	0.4609	D > DT

### gastrocnemius IGF1R protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.264 (0.0111; n = 2)
D	0.385 (0.00985; n = 2)
${ m T}$	0.282 (0.0129; n = 2)
С	0.253 (0.0362; n = 2)

Kruskal-Wallis p value for the four-way comparison is 0.212

	contrastsfour	dunns.P
5	V vs D	0.0331
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.0331

	Comparison	P value	Direction
3	V vs D	0.0544	V < D
1	D vs DT	0.0544	D > DT

### gastrocnemius phospho-IGF1R (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.188 (0.0133; n = 2)
D	0.312 (0.0163; n = 2)
${ m T}$	0.108 (0.0202; n = 2)
$\mathbf{C}$	0.168 (0.0513; n = 2)

Kruskal-Wallis p value for the four-way comparison is 0.16

	contrastsfour	dunns.P
5	V vs D	0.07652
1	D  vs  DT	0.1103

Kruskal-Wallis p value for the three-way comparison is 0.18

	Comparison	P value	Direction
3	V vs D	0.0544	V < D
1	D vs DT	0.0544	D > DT

### gastrocnemius phospho-IGF1R / total IGF1R

Treatment	Average (SD; n)
V	0.712 (0.0206; n = 2)
D	$0.813 \ (0.0633; n = 2)$
${ m T}$	0.386 (0.0893; n = 2)
С	0.649 (0.11; n = 2)

Kruskal-Wallis p value for the four-way comparison is 0.16

	contrastsfour	dunns.P
5	V vs D	0.2071
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1537

	Comparison	P value	Direction
3	V vs D	0.1425	V < D
1	D vs DT	0.09072	D > DT

### gastrocnemius LC3-II (normalized to GAPDH)

Treatment	Average (SD; n)
V	1.3 (0.39; n = 4)
D	2.49 (1.04; n = 4)
${ m T}$	1.53 (0.348; n = 4)
$\mathbf{C}$	1.74 (0.617; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.967

	contrasts four	dunns.P
$\frac{-5}{1}$	V vs D D vs DT	$0.3832 \\ 0.328$

Kruskal-Wallis p value for the three-way comparison is 0.944

	Comparison	P value	Direction
3	V vs D	0.3843	V < D
1	D vs DT	0.3843	D > DT

### gastrocnemius LC3-II / LC-I

Treatment	Average (SD; n)
V	0.502 (0.121; n = 4)
D	0.503 (0.0826; n = 4)
${ m T}$	0.789 (0.184; n = 4)
$\mathbf{C}$	0.628 (0.16; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.385

	contrastsfour	dunns.P
5	V vs D	0.328
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.3832

	Comparison	P value	Direction
3	V vs D	0.312	V < D
1	D vs DT	0.4223	D < DT

# gastrocnemius mu-calpain protein (normalized to historical actin)

Treatment	Average (SD; n)
V	1.43 (0.0748; n = 6)
D	1.18 (0.125; n = 6)
${ m T}$	1.32 (0.111; n = 6)
$\mathbf{C}$	1.19 (0.299; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.424

	contrasts four	dunns.P
$\frac{-5}{1}$	V vs D D vs DT	0.4323 $0.06273$

Kruskal-Wallis p value for the three-way comparison is 0.371

	Comparison	P value	Direction
3	V vs D	0.4826	V > D
1	D vs DT	0.1043	D < DT

### levator 4EBP protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	1.84 (0.186; n = 6)
D	2.1 (0.251; n = 6)
${ m T}$	1.83 (0.347; n = 6)
$\mathbf{C}$	1.64 (0.0866; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.625

	contrastsfour	dunns.P
5	V vs D	0.1117
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1973

	Comparison	P value	Direction
3	V vs D	0.07822	V < D
1	D vs DT	0.1517	D > DT

### levator phospho-4EBP (normalized to GAPDH)

Treatment	Average (SD; n)
V	1.6 (0.112; n = 6)
D	1.8 (0.195; n = 6)
${ m T}$	1.48 (0.0685; n = 6)
$\mathbf{C}$	1.33 (0.211; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.423

	contrasts four	dunns.P
5	V vs D	0.05314
1	D vs DT	0.3198

Kruskal-Wallis p value for the three-way comparison is 0.251

	Comparison	P value	Direction
3	V vs D	0.05101	V < D
1	D  vs  DT	0.3035	D > DT

## levator phospho-4EBP / total 4EBP

Treatment	Average (SD; n)
V	0.882 (0.0299; n = 6)
D	0.877 (0.082; n = 6)
${ m T}$	0.972 (0.173; n = 6)
$\mathbf{C}$	0.797 (0.0902; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.934

	contrastsfour	dunns.P
5	V vs D	0.3635
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.3992

	Comparison	P value	Direction
3	V vs D	0.3275	V > D
1	D vs DT	0.4096	D > DT

### levator Akt protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.519 (0.0867; n = 6)
D	0.466 (0.0503; n = 6)
${ m T}$	0.569 (0.0985; n = 6)
$\mathbf{C}$	0.389 (0.0131; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.974

	contrastsfour	dunns.P
5	V vs D	0.3697
1	D vs DT	0.5

Kruskal-Wallis p value for the three-way comparison is 0.909

	Comparison	P value	Direction
3	V vs D	0.3354	V > D
1	D vs DT	0.4545	D > DT

#### levator phospho-Akt-Ser473 (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.627 (0.144; n = 6)
D	0.337 (0.0727; n = 6)
${ m T}$	0.284 (0.024; n = 6)
$\mathbf{C}$	0.225 (0.094; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.119

	contrastsfour	dunns.P
5	V vs D	0.2375
1	D vs DT	0.05765

	Comparison	P value	Direction
3	V vs D	0.2744	V > D
1	D vs DT	0.04868	D > DT

#### levator phospho-Akt-Ser473 / total Akt

Treatment	Average (SD; n)
V	1.26 (0.293; n = 6)
D	0.72 (0.146; n = 6)
${ m T}$	0.604 (0.127; n = 6)
$\mathbf{C}$	0.568 (0.23; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.196

	contrasts four	dunns.P
5	V vs D	0.2989
1	D vs DT	0.06815

Kruskal-Wallis p value for the three-way comparison is 0.184

	Comparison	P value	Direction
3	V vs D	0.3677	V > D
1	D vs DT	0.07648	D > DT

# levator eIF3f protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.519 (0.0228; n = 6)
D	0.549 (0.0425; n = 6)
${ m T}$	0.433 (0.0821; n = 6)
$\mathbf{C}$	0.492 (0.0212; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.692

	contrastsfour	dunns.P
5	V vs D	0.1671
1	D vs DT	0.3829

	Comparison	P value	Direction
3	V vs D	0.1262	V < D
1	D vs DT	0.3237	D > DT

### levator GR protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.267 (0.0224; n = 6)
D	0.201 (0.0352; n = 6)
${ m T}$	0.213 (0.00529; n = 6)
$\mathbf{C}$	0.165 (0.024; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00205

	contrastsfour	dunns.P
$egin{array}{c} 5 \ 1 \end{array}$	V vs D D vs DT	0.06152 $0.009617$

Kruskal-Wallis p value for the three-way comparison is 0.00646

	Comparison	P value	Direction
3	V vs D	0.07056	V > D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.03818	D > DT

#### levator IGF1R protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.992 (0.117; n = 6)
D	1.02 (0.106; n = 6)
${ m T}$	1.02 (0.142; n = 6)
$\mathbf{C}$	0.681 (0.0844; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.159

	contrastsfour	dunns.P
5	V vs D	0.03097
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4157

	Comparison	P value	Direction
3	V vs D	0.02487	V < D
1	D vs DT	0.4096	D > DT

### levator phospho-IGF1R (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.114 (0.0446; n = 3)
D	0.261 (0.071; n = 5)
${ m T}$	0.104 (0.00557; n = 4)
$\mathbf{C}$	0.111 (0.0339; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.295

	contrasts four	dunns.P
$\frac{-}{5}$ $1$	V vs D D vs DT	0.04544 $0.1236$

Kruskal-Wallis p value for the three-way comparison is 0.213

	Comparison	P value	Direction
3	V vs D	0.05219	V < D
1	D vs DT	0.09465	D > DT

### levator phospho-IGF1R / total IGF1R

Treatment	Average (SD; n)
V	0.14 (0.0585; n = 3)
D	0.272 (0.0832; n = 5)
${ m T}$	0.0988 (0.0131; n = 4)
$\mathbf{C}$	$0.141 \ (0.0279; n = 5)$

Kruskal-Wallis p value for the four-way comparison is 0.282

	contrastsfour	dunns.P
<b>5</b>	V vs D	0.09424
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1557

	Comparison	P value	Direction
3	V vs D	0.06144	V < D
1	D vs DT	0.1303	D > DT

### levator total LC3 protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.198 (0.0128; n = 6)
D	0.224 (0.0159; n = 6)
${ m T}$	0.168 (0.00809; n = 6)
$^{\mathrm{C}}$	0.135 (0.0164; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00765

	contrastsfour	dunns.P
5	V vs D	0.000673
1	D vs DT	0.1638

Kruskal-Wallis p value for the three-way comparison is 0.0172

	Comparison	P value	Direction
3	V vs D	0.002296	V < D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1387	D > DT

## levator LC3-II (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.667 (0.194; n = 6)
D	1.18 (0.306; n = 5)
${ m T}$	0.334 (0.068; n = 5)
$\mathbf{C}$	1.83 (0.958; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.185

	contrastsfour	dunns.P
5	V vs D	0.2538
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1356

	Comparison	P value	Direction
3	V vs D	0.2976	V < D
1	D vs DT	0.1335	D < DT

### levator LC3-II / LC-I

Treatment	Average (SD; n)
V	0.267 (0.0903; n = 6)
D	0.88 (0.28; n = 5)
${ m T}$	$0.16 \ (0.026; n = 5)$
$\mathbf{C}$	2.25 (1.49; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.081

	contrastsfour	dunns.P
$egin{array}{c} 5 \\ 1 \end{array}$	V vs D D vs DT	0.1311 0.0271

Kruskal-Wallis p value for the three-way comparison is 0.173

	Comparison	P value	Direction
3	V vs D	0.1762	V < D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.03053	D < DT

### levator mu-calpain protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.293 (0.0125; n = 6)
D	0.306 (0.0254; n = 6)
${ m T}$	0.311 (0.0343; n = 6)
$\mathbf{C}$	0.312 (0.0197; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.893

	contrastsfour	dunns.P
5	V vs D	0.4806
1	D vs DT	0.2616

	Comparison	P value	Direction
3	V vs D	0.4739	V < D
1	D vs DT	0.1802	D < DT

### tibialis 4EBP protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	2.1 (0.192; n = 3)
D	3.54 (0.394; n = 3)
${ m T}$	1.41 (0.00372; n = 3)
$\mathbf{C}$	2.82 (0.367; n = 3)

Kruskal-Wallis p value for the four-way comparison is 0.0273

	contrasts four	dunns.P
5	V vs D	0.2485
1	D  vs  DT	0.04471

Kruskal-Wallis p value for the three-way comparison is 0.0794

	Comparison	P value	Direction
3	V vs D	0.1855	V < D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.01267	D > DT

### tibialis phospho-4EBP (normalized to GAPDH)

Treatment	Average (SD; n)
V	5 (0.897; n = 3)
D	6.79 (1.55; n = 3)
${ m T}$	5.61 (1.93; n = 3)
$\mathbf{C}$	7.2 (1.26; n = 3)

Kruskal-Wallis p value for the four-way comparison is 0.34

	contrastsfour	dunns.P
5	V vs D	0.3253
1	D vs DT	0.1288

	Comparison	P value	Direction
3	V vs D	0.2755	V < D
1	D vs DT	0.1484	D < DT

### tibialis phospho-4EBP / total 4EBP

Treatment	Average (SD; n)
V	2.47 (0.591; n = 3)
D	1.98 (0.561; n = 3)
${ m T}$	3.96 (1.35; n = 3)
$\mathbf{C}$	2.68 (0.701; n = 3)

Kruskal-Wallis p value for the four-way comparison is 0.536

	contrasts four	dunns.P
5	V vs D	0.214
1	D vs DT	0.2485

Kruskal-Wallis p value for the three-way comparison is 0.561

	Comparison	P value	Direction
3	V vs D	0.1484	V > D
1	D vs DT	0.228	D < DT

## tibialis Akt protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	1.74 (0.11; n = 3)
D	1.49 (0.132; n = 3)
${ m T}$	0.953 (0.042; n = 3)
$\mathbf{C}$	1.12 (0.0783; n = 3)

Kruskal-Wallis p value for the four-way comparison is 0.0261

	contrastsfour	dunns.P
5	V vs D	0.08712
1	D  vs  DT	0.2856

	Comparison	P value	Direction
3	V vs D	0.05053	V > D
1	D vs DT	0.228	D > DT

### tibialis phospho-Akt-Ser473 (normalized to GAPDH)

Treatment	Average (SD; n)
V	0.394 (0.199; n = 3)
D	0.0181 (0.00594; n = 3)
${ m T}$	0.0401 (0.01; n = 3)
$^{\mathrm{C}}$	$0.018 \ (0.0064; \ n = 3)$

Kruskal-Wallis p value for the four-way comparison is 0.0434

	contrastsfour	dunns.P
5	V vs D	0.4549
1	D vs DT	0.008709

Kruskal-Wallis p value for the three-way comparison is 0.0665

	Comparison	P value	Direction
3	V vs D	0.4407	V > D
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.02632	D > DT

### tibialis phospho-Akt-Ser473 / total Akt

Treatment	Average (SD; n)
V	0.215 (0.0984; n = 3)
D	0.0127 (0.0049; n = 3)
${ m T}$	0.0414 (0.0086; n = 3)
$\mathbf{C}$	$0.0154 \ (0.00459; \ n = 3)$

Kruskal-Wallis p value for the four-way comparison is 0.03

	contrastsfour	dunns.P
5	V vs D	0.4549
1	D vs DT	0.006369

	Comparison	P value	Direction
3	V vs D	0.4407	V > D
1	D vs DT	0.01844	D < DT

### tibialis LC3-II (normalized to GAPDH)

Treatment	Average (SD; n)
V	4.39 (0.488; n = 6)
D	4.3 (0.714; n = 6)
${ m T}$	3.47 (0.556; n = 6)
$^{\mathrm{C}}$	4.22 (0.657; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.575

	contrastsfour	dunns.P
$\frac{1}{5}$	V vs D D vs DT	$0.4644 \\ 0.4661$

Kruskal-Wallis p value for the three-way comparison is 0.993

	Comparison	P value	Direction
3	V vs D	0.4523	V > D
1	D vs DT	0.4772	D > DT

### tibialis LC3-II / LC-I

Treatment	Average (SD; n)
V	0.565 (0.0419; n = 6)
D	0.604 (0.0791; n = 6)
${ m T}$	0.515 (0.071; n = 6)
$\mathbf{C}$	$0.701 \ (0.0829; \ n = 5)$

Kruskal-Wallis p value for the four-way comparison is 0.386

	contrastsfour	dunns.P
5	V vs D	0.2607
1	D vs DT	0.2347

	Comparison	P value	Direction
3	V vs D	0.3119	V < D
1	D vs DT	0.1802	D < DT

# tibialis GR protein (normalized to GAPDH)

Treatment	Average (SD; n)
V	2.99 (0.399; n = 6)
D	3.11 (0.292; n = 6)
${ m T}$	2.41 (0.213; n = 6)
$\mathbf{C}$	2.81 (0.253; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.459

	contrasts four	dunns.P
5	V vs D	0.3365
1	D vs DT	0.3508

	Comparison	P value	Direction
3	V vs D	0.3196	V < D
1	D vs DT	0.3445	D > DT