# 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)
C	23.9 (0.974; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	1
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.4734	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.5549	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)
C	24.5 (0.861; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	1
<b>2</b>	V vs T	1

	Comparison	P value	Direction
1	V vs D	1	V > D
3	D vs DT	1	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.adjusted
1	V vs D	1
5	D vs DT	1
2	V vs T	1

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

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
<b>5</b>	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	1	V > D
3	D vs DT	0.7904	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

	contrasts four	dunns.P.adjusted
1	V vs D	1
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	1	V > D
3	D vs DT	0.768	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)
С	25.2 (0.977; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
<b>5</b>	D vs DT	0.2082
2	V vs T	0.8897

	Comparison	P value	Direction
1	V vs D	0.5859	V > D
3	D vs DT	0.1314	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.adjusted
1	V vs D	1
<b>5</b>	D vs DT	0.9704
<b>2</b>	V vs T	0.518

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

	Comparison	P value	Direction
1	V vs D	0.562	V > D
3	D vs DT	0.4569	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.adjusted
1	V vs D	1
5	D vs DT	1
2	V vs T	0.699

	Comparison	P value	Direction
1	V vs D	0.851	V > D
3	D vs DT	0.7798	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.adjusted
1	V vs D	0.07504
5	D vs DT	0.0303
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.0443	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.01746	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.adjusted
1	V vs D	0.7226
5	D vs DT	0.007352
<b>2</b>	V vs T	0.06753

	Comparison	P value	Direction
1	V vs D	0.2159	V > D
3	D vs DT	0.001725	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.adjusted
1	V vs D	1
<b>5</b>	D  vs  DT	0.003062
2	V vs T	0.05046

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

	Comparison	P value	Direction
1	V vs D	0.5388	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.001898	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.adjusted
1	V vs D	0.5571
<b>5</b>	D vs DT	0.001351
2	V vs T	0.2089

	Comparison	P value	Direction
1	V vs D	0.183	V > D
3	D vs DT	0.0009078	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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.344
5	D  vs  DT	0.01247
2	V vs T	0.04526

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

	Comparison	P value	Direction
1	V vs D	0.0508	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.000912	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.adjusted
1	V vs D	0.5186
<b>5</b>	D vs DT	0.04062
2	V vs T	0.01582

	Comparison	P value	Direction
1	V vs D	0.1008	V > D
3	D vs DT	0.001539	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.adjusted
1	V vs D	0.3285
5	D vs DT	0.03656
2	V vs T	0.02601

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

	Comparison	P value	Direction
1	V vs D	0.04698	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.001418	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)
C	2.61 (0.767; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.07214
5	D  vs  DT	0.04076
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.03867	V > D
3	D vs DT	0.02126	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.adjusted
1 5	V vs D D vs DT	0.6997 $0.005942$
2	V vs T	0.07214

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

	Comparison	P value	Direction
1	V vs D	0.2054	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.001424	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.adjusted
1	V vs D	1
<b>5</b>	D vs DT	0.002704
2	V vs T	0.04579

	Comparison	P value	Direction
1	V vs D	0.5406	V > D
3	D vs DT	0.001951	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.adjusted
1	V vs D	0.4804
5	D vs DT	0.002203
2	V vs T	0.2429

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

	Comparison	P value	Direction
1	V vs D	0.1642	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.00118	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.adjusted
1	V vs D	0.4436
<b>5</b>	D vs DT	0.01421
2	V vs T	0.04069

	Comparison	P value	Direction
1	V vs D	0.07791	V > D
3	D vs DT	0.001276	D < DT

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

Average (SD; n)
4.67 (0.81; n = 6)
-1.38 (1.75; n = 6)
9.79 (0.749; n = 6)
6.96 (0.344; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.5196
<b>5</b>	D  vs  DT	0.03814
<b>2</b>	V vs T	0.01699

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

	Comparison	P value	Direction
1	V vs D	0.101	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.00155	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)
C	8.62 (0.674; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.3174
<b>5</b>	D vs DT	0.02626
2	V vs T	0.04069

	Comparison	P value	Direction
1	V vs D	0.04475	V > D
3	D  vs  DT	0.001674	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)
$^{\mathrm{C}}$	67.2 (2.62; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V  vs  D	0.2215
5	D vs DT	0.6164
<b>2</b>	V vs T	0.08986

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

	Comparison	P value	Direction
1	V vs D	0.02453	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1335	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)
C	47.6 (1.44; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.7514
<b>5</b>	D  vs  DT	1
<b>2</b>	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.3794	V > D
3	D vs DT	0.5228	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

	contrasts four	dunns.P.adjusted
1	V vs D	0.0361
5	D vs DT	0.5181
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.01515	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1987	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)
C	152 (7.34; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.009947
5	D vs DT	0.9544
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.002052	V > D
3	D vs DT	0.27	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)
$\mathbf{C}$	80.3 (3.01; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.05144
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.02095	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1	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)
С	140 (13.2; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
<b>5</b>	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.9104	V > D
3	D vs DT	0.5571	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

	contrasts four	dunns.P.adjusted
1	V vs D	0.4089
5	D vs DT	0.9662
2	V vs T	0.266

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

	Comparison	P value	Direction
1	V vs D	0.1146	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.5228	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)
$\mathbf{C}$	1.84 (0.0312; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
<b>5</b>	D vs DT	0.5739
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.4967	V > D
3	D vs DT	0.2918	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.adjusted
1	V vs D	0.007534
5	D vs DT	0.634
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.003033	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.2975	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)
С	5.85 (0.116; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.00054
<b>5</b>	D vs DT	0.4955
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.0003038	V > D
3	D vs DT	0.09346	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.adjusted
1	V vs D	0.08064
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.05939	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1	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.adjusted
1	V vs D	1
<b>5</b>	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	1	V > D
3	D vs DT	0.7591	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

	contrasts four	dunns.P.adjusted
1	V vs D	1
5	D vs DT	1
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	1	V < D
3	D vs DT	0.7591	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)
С	19.9 $(1.04; n = 5)$

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
<b>5</b>	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.8513	V < D
3	D vs DT	0.9706	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.adjusted
1	V vs D	1
<b>5</b>	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.9104	V < D
3	D vs DT	0.9012	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.adjusted
1	V vs D	0.009947
<b>5</b>	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.00168	V < D
3	D vs DT	0.7078	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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.1111
5	D vs DT	0.9544
2	V vs T	0.5611

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

	Comparison	P value	Direction
1	V vs D	0.02453	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.3785	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)
C	14 (0.917; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.5611
<b>5</b>	D  vs  DT	1
<b>2</b>	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.2294	V > D
3	D vs DT	1	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.adjusted
1	V vs D	1
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.9104	V < D
3	D vs DT	0.7179	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)
С	83 (1.04; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	0.863
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.9712	V > D
3	D vs DT	0.5061	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)
$^{\mathrm{C}}$	66 (3.02; n = 5)

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

	contrasts four	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	1	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1	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)
С	20.8 (0.883; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.02199
<b>5</b>	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.002499	V < D
3	D vs DT	0.4506	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.adjusted
1	V vs D	0.02495
5	D vs DT	1
2	V vs T	0.6512

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

	Comparison	P value	Direction
1	V vs D	0.001372	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4583	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)
С	53.7 (2.64; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.3174
<b>5</b>	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.1146	V > D
3	D vs DT	1	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.adjusted
1	V vs D	0.1507
<b>5</b>	D vs DT	1
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.06812	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.8015	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.adjusted
1	V vs D	0.0149
<b>5</b>	D vs DT	0.5415
2	V vs T	0.3764

	Comparison	P value	Direction
1	V vs D	0.000242	V > D
3	D vs DT	0.1081	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

	contrasts four	dunns.P.adjusted
1	V vs D	0.3459
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.1841	V > D
3	D vs DT	0.6111	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.adjusted
1	V vs D	0.0577
5	D vs DT	1
<b>2</b>	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.01515	V < D
3	D vs DT	1	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)
$\mathbf{C}$	-12.6 (0.571; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.04579
5	D vs DT	1
2	V vs T	0.7001

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

	Comparison	P value	Direction
1	V vs D	0.003671	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1	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.adjusted
1	V vs D	1
<b>5</b>	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.5868	V > D
3	D vs DT	1	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.adjusted
1	V vs D	0.5611
5	D vs DT	1
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.2829	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.6681	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.adjusted
1	V vs D	0.0149
<b>5</b>	D vs DT	0.5415
2	V vs T	0.3764

	Comparison	P value	Direction
1	V vs D	0.000242	V > D
3	D vs DT	0.1081	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.adjusted
1	V vs D	0.3174
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.1642	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.6681	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)
$^{\mathrm{C}}$	20600 (522; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.002186
5	D vs DT	1
2	V vs T	0.04911

	Comparison	P value	Direction
1	V vs D	0.003648	V > D
3	D vs DT	1	D < DT

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

Average (SD; n)
39000 (2030; n = 6)
21500 (2340; n = 6)
28100 (911; n = 6)
20200 (2140; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.003144
5	D vs DT	1
<b>2</b>	V vs T	0.1664

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

	Comparison	P value	Direction
1	V vs D	0.009105	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1	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)
C	14900 (795; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.05616
5	D  vs  DT	0.3368
2	V vs T	0.11

	Comparison	P value	Direction
1	V vs D	0.04865	V > D
3	D vs DT	0.2427	D > DT

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

Average (SD; n)
3840 (858; n = 6)
3490 (643; n = 6)
3880 (595; n = 6)
3240 (630; n = 5)

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

	contrasts four	dunns.P.adjusted
1	V vs D	1
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	1	V > D
3	D vs DT	1	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)
C	12800 (1620; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.8619
5	D vs DT	1
2	V vs T	0.6049

	Comparison	P value	Direction
1	V vs D	0.4161	V > D
3	D vs DT	0.7383	D > DT

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

Average (SD; n)
14000 (1150; n = 6)
10100 (1270; n = 6)
13400 (1300; n = 6)
11800 (3140; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.09998
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.07791	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1	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)
C	4500 (1650; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.001916
<b>5</b>	D  vs  DT	1
2	V vs T	0.6137

	Comparison	P value	Direction
1	V vs D	0.008731	V > D
3	D vs DT	1	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

	contrasts four	dunns.P.adjusted
1	V vs D	0.6117
5	D vs DT	0.9639
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.3705	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.504	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.adjusted
1	V vs D	0.4125
5	D vs DT	1
<b>2</b>	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.1433	V < D
3	D vs DT	0.9359	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

	contrasts four	dunns.P.adjusted
1	V vs D	1
5	D vs DT	0.09382
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.8344	V > D
3	D  vs  DT	0.0279	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.adjusted
1	V vs D	1
5	D  vs  DT	1
2	V vs T	0.02804

	Comparison	P value	Direction
1	V vs D	0.6492	V > D
3	D vs DT	0.7387	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

	contrasts four	dunns.P.adjusted
1	V vs D	0.7043
5	D vs DT	0.544
2	V vs T	0.3069

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

	Comparison	P value	Direction
1	V vs D	0.2547	V > D
3	D  vs  DT	0.3036	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.adjusted
1	V vs D	1
<b>5</b>	D  vs  DT	1
2	V vs T	0.05245

	Comparison	P value	Direction
1	V vs D	0.4211	V > D
3	D vs DT	1	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.adjusted
1	V vs D	1
<b>5</b>	D vs DT	1
<b>2</b>	V vs T	0.06399

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

	Comparison	P value	Direction
1	V vs D	0.5662	V > D
3	D vs DT	0.359	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)
С	8.96 (0.483; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
<b>5</b>	D vs DT	0.544
2	V vs T	0.1128

	Comparison	P value	Direction
1	V vs D	1	V > D
3	D vs DT	0.1163	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.adjusted
1	V vs D	1
5	D vs DT	1
<b>2</b>	V vs T	0.3069

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

	Comparison	P value	Direction
1	V vs D	0.359	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.8344	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)
С	6.95 (0.324; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.2629
5	D  vs  DT	0.7043
2	V vs T	0.3069

	Comparison	P value	Direction
1	V vs D	0.03617	V < D
3	D vs DT	0.175	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)
$^{\mathrm{C}}$	8.31 (0.517; n = 4)

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

	contrasts four	dunns.P.adjusted
1	V vs D	1
<b>5</b>	D vs DT	1
2	V vs T	0.2629

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

	Comparison	P value	Direction
1	V vs D	0.5662	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.5662	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)
C	7.94 (0.422; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	0.4748
2	V vs T	0.4748

	Comparison	P value	Direction
1	V vs D	1	V < D
3	D vs DT	0.09367	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)
$^{\mathrm{C}}$	3.38 (0.32; n = 4)

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

	contrasts four	dunns.P.adjusted
1	V vs D	1
5	D vs DT	1
<b>2</b>	V vs T	0.2241

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

	Comparison	P value	Direction
1	V vs D	1	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4902	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)
С	4.49 (0.188; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
<b>5</b>	D  vs  DT	1
2	V vs T	0.07768

	Comparison	P value	Direction
1	V vs D	1	V < D
3	D vs DT	0.6492	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)
$\mathbf{C}$	0.252 (0.181; n = 4)

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

	contrasts four	dunns.P.adjusted
1	V vs D	1
5	D vs DT	1
2	V vs T	0.1349

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

	Comparison	P value	Direction
1	V vs D	0.4211	V < D
3	D vs DT	0.7387	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)
С	4.99 (0.147; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.1901
<b>5</b>	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.04648	V < D
3	D vs DT	1	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)
$\mathbf{C}$	1.34 (0.488; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	0.4125
2	V vs T	0.544

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

	Comparison	P value	Direction
1	V vs D	0.8344	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1163	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)
С	7.71 (0.0944; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.04278
5	D vs DT	1
<b>2</b>	V vs T	0.7959

	Comparison	P value	Direction
1	V vs D	0.09367	V < D
3	D vs DT	0.4902	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

	contrasts four	dunns.P.adjusted
1	V vs D	1
5	D vs DT	0.7959
2	V vs T	0.7959

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

	Comparison	P value	Direction
1	V vs D	0.4902	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4902	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)
С	4.93 (0.103; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	0.1349
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.9359	V < D
3	D vs DT	0.07479	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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	0.2241
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	1	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1433	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)
C	3.78 (0.457; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	1
2	V vs T	0.7043

	Comparison	P value	Direction
1	V vs D	1	V > D
3	D vs DT	1	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.adjusted
1	V vs D	1
5	D vs DT	0.2629
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.7387	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.175	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)
С	9.95 (0.233; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.1605
5	D vs DT	0.7043
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.175	V < D
3	D vs DT	0.3036	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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.06399
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.09367	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4902	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)
С	10.4 (0.395; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.05245
<b>5</b>	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.02134	V < D
3	D vs DT	0.4211	D > DT

### $quadriceps\ Ct(Igf1r)\ \hbox{-}\ Ct(Gapdh)$

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

	contrasts four	dunns.P.adjusted
1	V vs D	0.06399
5	D vs DT	0.8955
2	V vs T	0.7043

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

	Comparison	P value	Direction
1	V vs D	0.1163	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.359	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.adjusted
1	V vs D	0.7959
<b>5</b>	D vs DT	0.09382
2	V vs T	0.09382

	Comparison	P value	Direction
1	V vs D	0.359	V < D
3	D vs DT	0.1163	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.adjusted
1	V vs D	0.2629
5	D vs DT	0.2629
2	V vs T	0.4748

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

	Comparison	P value	Direction
1	V vs D	0.2547	V < D
3	D vs DT	0.1433	D < DT

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

Treatment	Average (SD; n)
	Twerage (SD, II)
V	2.77 (0.624; n = 4)
D	3.98 (0.482; n = 4)
${ m T}$	3.65 (0.185; n = 4)
$\mathbf{C}$	4.13 (0.448; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.3566
5	D  vs  DT	1
<b>2</b>	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.2547	V < D
3	D vs DT	1	D < DT

### $quadriceps\ Ct(Odc)\ \hbox{-}\ Ct(Gapdh)$

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.adjusted
1	V vs D	0.544
5	D vs DT	1
2	V vs T	0.7959

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

	Comparison	P value	Direction
1	V vs D	0.2547	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4902	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)
$\mathbf{C}$	7.25 (0.177; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.03472
5	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.07479	V < D
3	D vs DT	0.6492	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

	contrasts four	dunns.P.adjusted
1	V vs D	1
5	D vs DT	0.09382
2	V vs T	0.4748

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

	Comparison	P value	Direction
1	V vs D	0.9359	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.07479	D < DT

## 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)
C	6.97 (0.0771; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.05245
<b>5</b>	D vs DT	0.7043
2	V vs T	0.7043

	Comparison	P value	Direction
1	V vs D	0.175	V < D
3	D vs DT	0.175	D < DT

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

Treatment	Average (SD; n)
V	0.2 (0.295; n = 4)
D	1.34 (0.118; n = 4)
${ m T}$	1.32 (0.561; n = 4)
$\mathbf{C}$	1.66 (0.558; n = 4)

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

	contrasts four	dunns.P.adjusted
1	V vs D	0.1128
5	D vs DT	1
2	V vs T	0.1901

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

	Comparison	P value	Direction
1	V vs D	0.04648	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1	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)
C	6.06 (0.0848; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
<b>5</b>	D vs DT	0.05245
2	V vs T	0.4125

	Comparison	P value	Direction
1	V vs D	0.8344	V < D
3	D vs DT	0.05921	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.adjusted
1	V vs D	1
5	D vs DT	0.05245
2	V vs T	0.4125

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

	Comparison	P value	Direction
1	V vs D	0.5662	V > D
3	D vs DT	0.0279	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)
C	2.43 (0.262; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	1
2	V vs T	0.2241

	Comparison	P value	Direction
1	V vs D	1	V > D
3	D vs DT	0.5662	D < DT

### triceps Ct(Foxo1) - Ct(Gapdh)

Average (SD; n)
6.9 (0.547; n = 4)
6.96 (0.345; n = 4)
7.95 (0.235; n = 4)
8.25 (0.259; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D vs DT	0.1128
<b>2</b>	V vs T	0.544

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

	Comparison	P value	Direction
1	V vs D	1	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.07479	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.adjusted
1	V vs D	1
<b>5</b>	D vs DT	0.03472
2	V vs T	0.1128

	Comparison	P value	Direction
1	V vs D	0.4902	V < D
3	D vs DT	0.09367	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.adjusted
1	V vs D	0.03472
5	D vs DT	1
<b>2</b>	V vs T	0.4748

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

	Comparison	P value	Direction
1	V vs D	0.07479	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.6492	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)
C	7.75 (0.149; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
<b>5</b>	D vs DT	0.4748
2	V vs T	0.2629

	Comparison	P value	Direction
1	V vs D	0.8344	V < D
3	D vs DT	0.212	D > DT

### $triceps\ Ct(Igf1r)\ \hbox{-}\ Ct(Gapdh)$

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)
$^{\mathrm{C}}$	9.61 (0.168; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.2241
5	D vs DT	0.2241
<b>2</b>	V vs T	0.2241

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

	Comparison	P value	Direction
1	V vs D	0.175	V < D
3	D vs DT	0.175	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.adjusted
1	V vs D	1
<b>5</b>	D vs DT	0.03472
2	V vs T	0.07768

	Comparison	P value	Direction
1	V vs D	0.359	V < D
3	D vs DT	0.1163	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.P.adjusted
1	V vs D	0.544
5	D  vs  DT	0.09382
<b>2</b>	V vs T	0.06399

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

	Comparison	P value	Direction
1	V vs D	0.175	V < D
3	D  vs  DT	0.175	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)
С	5.95 (0.285; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.1605
5	D  vs  DT	1
<b>2</b>	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.09367	V < D
3	D vs DT	1	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.adjusted
1	V vs D	0.7043
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.4211	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.7387	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)
С	6.14 (0.129; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.03472
5	D vs DT	1
2	V vs T	0.8955

	Comparison	P value	Direction
1	V vs D	0.09367	V < D
3	D vs DT	0.4902	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)
$\mathbf{C}$	2.53 (0.145; n = 4)

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

	contrasts four	dunns.P.adjusted
1	V vs D	0.4748
5	D vs DT	0.4748
2	V vs T	0.2629

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

	Comparison	P value	Direction
1	V vs D	0.3036	V < D
3	D  vs  DT	0.3036	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)
C	1.05 (0.00882; n = 2)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.9223
<b>5</b>	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.4276	V < D
3	D vs DT	0.4276	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)
С	1.29 (0.0743; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.01801
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.006689	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4902	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)
$\mathbf{C}$	1.31 (0.0778; n = 2)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.1986
5	D  vs  DT	1
<b>2</b>	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.09205	V < D
3	D vs DT	0.8895	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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.4591
5	D vs DT	0.9223
2	V vs T	0.9223

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

	Comparison	P value	Direction
1	V vs D	0.09205	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.2722	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)
С	0.241 (0.0628; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.3566
5	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.3036	V > D
3	D vs DT	1	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.adjusted
1	V vs D	0.662
5	D vs DT	1
2	V vs T	0.3074

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

	Comparison	P value	Direction
1	V vs D	0.4276	V > D
3	D  vs  DT	0.4276	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)
C	0.254 (0.0131; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	1
2	V vs T	0.7043

	Comparison	P value	Direction
1	V vs D	0.4902	V < D
3	D vs DT	0.6492	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.adjusted
1	V vs D	0.3074
5	D vs DT	1
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.04876	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4276	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)
$\mathbf{C}$	2.12 (0.464; n = 4)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
<b>5</b>	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	1	V < D
3	D vs DT	1	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.adjusted
1	V vs D	1
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	1	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1	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)
$\mathbf{C}$	0.253 (0.0362; n = 2)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.1986
5	D  vs  DT	0.1986
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.1632	V < D
3	D vs DT	0.1632	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

	contrasts four	dunns.P.adjusted
1	V vs D	0.662
5	D vs DT	0.4591
<b>2</b>	V vs T	0.9223

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

	Comparison	P value	Direction
1	V vs D	0.1632	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1632	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)
C	0.649 (0.11; n = 2)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.9223
5	D  vs  DT	1
2	V vs T	0.662

	Comparison	P value	Direction
1	V vs D	0.2722	V < D
3	D vs DT	0.4276	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.adjusted
1	V vs D	1
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	1	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1	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.adjusted
1	V vs D	1
5	D vs DT	1
<b>2</b>	V vs T	0.3069

	Comparison	P value	Direction
1	V vs D	1	V < D
3	D vs DT	0.9359	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.adjusted
1	V vs D	0.3764
5	D  vs  DT	1
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.3128	V > D
3	D vs DT	1	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)
C	1.64 (0.0866; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D vs DT	0.6703
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.4552	V < D
3	D vs DT	0.2347	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)
С	1.33 (0.211; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	0.3188
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.9104	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.153	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.adjusted
1	V vs D	1
<b>5</b>	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	1	V > D
3	D vs DT	0.9824	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

	contrasts four	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	1	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1	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)
C	0.225 (0.094; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.3459
5	D  vs  DT	1
2	V vs T	0.1833

	Comparison	P value	Direction
1	V vs D	0.146	V > D
3	D vs DT	0.8232	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.adjusted
1	V vs D	0.4089
5	D vs DT	1
2	V vs T	0.266

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

	Comparison	P value	Direction
1	V vs D	0.2294	V > D
3	D vs DT	1	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)
C	0.492 (0.0212; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.9712	V < D
3	D vs DT	0.3785	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

	contrasts four	dunns.P.adjusted
1	V vs D	0.0577
5	D vs DT	0.3691
2	V vs T	0.266

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

	Comparison	P value	Direction
1	V vs D	0.1146	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.2117	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)
C	0.681 (0.0844; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D vs DT	0.1858
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	1	V < D
3	D vs DT	0.07461	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.adjusted
1	V vs D	0.7419
5	D vs DT	0.2726
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.2839	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1566	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)
С	0.141 (0.0279; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.9341
5	D vs DT	0.5655
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.3908	V < D
3	D vs DT	0.1843	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

	contrasts four	dunns.P.adjusted
1	V vs D	0.9828
<b>5</b>	D vs DT	0.004038
2	V vs T	0.6049

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

	Comparison	P value	Direction
1	V vs D	0.4161	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.006889	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.adjusted
1	V vs D	0.8139
<b>5</b>	D vs DT	1
2	V vs T	0.7684

	Comparison	P value	Direction
1	V vs D	0.4005	V < D
3	D vs DT	0.8927	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

	contrasts four	dunns.P.adjusted
1	V vs D	0.1626
5	D vs DT	0.7866
2	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.09158	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.5286	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)
C	0.312 (0.0197; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.5406	V < D
3	D vs DT	1	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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.2683
5	D vs DT	1
2	V vs T	0.7726

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

	Comparison	P value	Direction
1	V vs D	0.03802	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.5566	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)
С	7.2 (1.26; n = 3)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.7726
5	D  vs  DT	1
<b>2</b>	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.4451	V < D
3	D vs DT	0.8265	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.adjusted
1	V vs D	1
5	D vs DT	1
<b>2</b>	V vs T	1

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

	Comparison	P value	Direction
1	V vs D	0.6841	V > D
3	D vs DT	0.4451	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.adjusted
1	V vs D	1
5	D vs DT	0.5227
2	V vs T	0.01974

	Comparison	P value	Direction
1	V vs D	0.6841	V > D
3	D vs DT	0.1516	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.adjusted
1	V vs D	0.05225
<b>5</b>	D vs DT	1
2	V vs T	0.6388

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

	Comparison	P value	Direction
1	V vs D	0.07895	V > D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1	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)
C	0.0154 (0.00459; n = 3)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	0.03821
5	D vs DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.05533	V > D
3	D vs DT	1	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

	contrasts four	dunns.P.adjusted
1	V vs D	1
5	D vs DT	1
<b>2</b>	V vs T	0.6512

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

	Comparison	P value	Direction
1	V vs D	1	V > D
3	D vs DT	1	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)
С	0.701 (0.0829; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D  vs  DT	1
2	V vs T	1

	Comparison	P value	Direction
1	V vs D	0.5406	V < D
3	D vs DT	0.9356	D < DT

# tibialis GR protein (normalized to GAPDH)

Average (SD; n)
2.99 (0.399; n = 6)
3.11 (0.292; n = 6)
2.41 (0.213; n = 6)
2.81 (0.253; n = 5)

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

	contrastsfour	dunns.P.adjusted
1	V vs D	1
5	D vs DT	1
2	V vs T	0.7514

	Comparison	P value	Direction
1	V vs D	1	V < D
3	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.9589	D > DT