

NASA Life Sciences Data Archive

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Mission (Payload): STS-58 (SLS-2)

Experiment title (ID): Effects of Zero-Gravity Exposure on Biochemical and Metabolic Properties of Skeletal Muscle (178127)

File name/Inventory ID: Preflight data folder

Original: Table 1

TA mRNA

INDEPENDENT SAMPLES T-TEST ON IIB28S4H GROUPED BY GROUP

GROUP	N	MEAN	SD
1.000	5	65.393	12.137
2.000	6	41.465	10.215

SEPARATE VARIANCES T = 3.496 DF = 7.9 PROB = .008
POOLED VARIANCES T = 3.557 DF = 9 PROB = .006

INDEPENDENT SAMPLES T-TEST ON I28S15H GROUPED BY GROUP

GROUP	N	MEAN	SD
1.000	5	0.584 F (F)	0.335
2.000	6	0.390 C (C)	0.189

SEPARATE VARIANCES T = 1.147 DF = 6.1 PROB = .294
POOLED VARIANCES T = 1.209 DF = 9 PROB = .257

INDEPENDENT SAMPLES T-TEST ON IIA28S15 GROUPED BY GROUP

GROUP	N	MEAN	SD
1.000	5	1.463 F (F)	0.642
2.000	6	0.726 C (C)	0.182

SEPARATE VARIANCES T = 2.482 DF = 4.5 PROB = .061
POOLED VARIANCES T = 2.708 DF = 9 PROB = .024

INDEPENDENT SAMPLES T-TEST ON IIB28S4H GROUPED BY GROUP

GROUP	N	MEAN	SD
1.000	5	65.393 F (F)	12.137
2.000	6	41.465 C (C)	10.215

SEPARATE VARIANCES T = 3.496 DF = 7.9 PROB = .008
POOLED VARIANCES T = 3.557 DF = 9 PROB = .006

INDEPENDENT SAMPLES T-TEST ON IIX28S4H GROUPED BY GROUP

GROUP	N	MEAN	SD
1.000	5	6.216 F (F)	2.950
2.000	6	3.835 C (C)	0.836

SEPARATE VARIANCES T = 1.748 DF = 4.5 PROB = .147
POOLED VARIANCES T = 1.906 DF = 9 PROB = .089

Plan mRNA

INDEPENDENT SAMPLES T-TEST ON I28S15H GROUPED BY GROUP

GROUP	N	MEAN		SD
1.000	5	0.850	F (F)	0.255
2.000	6	0.989	C (C)	0.383

SEPARATE VARIANCES T = -.721 DF = 8.7 PROB = .490
POOLED VARIANCES T = -.693 DF = 9 PROB = .506

I

INDEPENDENT SAMPLES T-TEST ON IIA28S15 GROUPED BY GROUP

GROUP	N	MEAN		SD
1.000	5	1.431	F (F)	0.337
2.000	6	1.238	C (C)	0.441

SEPARATE VARIANCES T = .822 DF = 9.0 PROB = .432
POOLED VARIANCES T = .801 DF = 9 PROB = .444

IIA

INDEPENDENT SAMPLES T-TEST ON IIB28S4H GROUPED BY GROUP

GROUP	N	MEAN		SD
1.000	5	38.582	F (F)	12.881
2.000	6	26.365	C (C)	7.693

SEPARATE VARIANCES T = 1.862 DF = 6.3 PROB = .110
POOLED VARIANCES T = 1.954 DF = 9 PROB = .082

.110
.082

IIB

p<0.05
p<0.05

INDEPENDENT SAMPLES T-TEST ON IIX28S4H GROUPED BY GROUP

GROUP	N	MEAN		SD
1.000	5	37.996	F (F)	9.051
2.000	6	32.203	C (C)	6.297

SEPARATE VARIANCES T = 1.208 DF = 7.0 PROB = .266
POOLED VARIANCES T = 1.251 DF = 9 PROB = .242

IIX

VI mRNA

INDEPENDENT SAMPLES T-TEST ON I28S4H GROUPED BY GROUP

GROUP	N	MEAN	SD
1.000	5	11.721 F (F)	0.957
2.000	6	17.174 C (C)	2.784

SEPARATE VARIANCES T = -4.490 DF = 6.4 PROB = .004
 POOLED VARIANCES T = -4.148 DF = 9 PROB = .002

I
 p < 0.05
 p < 0.05

INDEPENDENT SAMPLES T-TEST ON IIA28S15 GROUPED BY GROUP

GROUP	N	MEAN	SD
1.000	5	13.396 F (F)	2.778
2.000	6	21.939 C (C)	4.421

SEPARATE VARIANCES T = -3.899 DF = 8.5 PROB = .004
 POOLED VARIANCES T = -3.732 DF = 9 PROB = .005

IIA

INDEPENDENT SAMPLES T-TEST ON IIB28S15 GROUPED BY GROUP

GROUP	N	MEAN	SD
1.000	5	25.652 F (F)	13.128
2.000	6	8.902 C (C)	7.073

SEPARATE VARIANCES T = 2.560 DF = 5.9 PROB = .044
 POOLED VARIANCES T = 2.707 DF = 9 PROB = .024

IIB
 p < 0.05
 p < 0.05

INDEPENDENT SAMPLES T-TEST ON IIX28S GROUPED BY GROUP

GROUP	N	MEAN	SD
1.000	5	26.227 F (F)	2.703
2.000	6	11.627 C (C)	4.037

SEPARATE VARIANCES T = 7.143 DF = 8.7 PROB = .000
 POOLED VARIANCES T = 6.874 DF = 9 PROB = .000

IIX
 p < 0.05
 p < 0.05

SOL mRNA

INDEPENDENT SAMPLES T-TEST ON I28S4H GROUPED BY GROUP

GROUP	N	MEAN	SD
1.000	5	34.788 F (F)	5.996
2.000	6	34.157 C (C)	4.047

I

SEPARATE VARIANCES T = .200 DF = 6.8 PROB = .847
 POOLED VARIANCES T = .208 DF = 9 PROB = .840

INDEPENDENT SAMPLES T-TEST ON IIA28S15 GROUPED BY GROUP

GROUP	N	MEAN	SD
1.000	5	4.536 F (F)	3.712
2.000	6	6.666 C (C)	0.804

IIA

SEPARATE VARIANCES T = -1.259 DF = 4.3 PROB = .272
 POOLED VARIANCES T = -1.381 DF = 9 PROB = .200

INDEPENDENT SAMPLES T-TEST ON IIB28S15 GROUPED BY GROUP

GROUP	N	MEAN	SD
1.000	5	1.253 F (F)	0.973
2.000	6	0.426 C (C)	0.589

IIB

SEPARATE VARIANCES T = 1.662 DF = 6.3 PROB = .145
 POOLED VARIANCES T = 1.743 DF = 9 PROB = .115

INDEPENDENT SAMPLES T-TEST ON IIX28S4H GROUPED BY GROUP

GROUP	N	MEAN	SD
1.000	5	28.528 F (F)	7.841
2.000	6	2.935 C (C)	4.250

IIX

SEPARATE VARIANCES T = 6.541 DF = 5.9 PROB = .001
 POOLED VARIANCES T = 6.915 DF = 9 PROB = .000

p < 0.05
 p < 0.05