

STUDENT'S T-TEST

V2.60 Dec 91 - by Stanley Kaplan, Ph.D.

DFPT RFA VS RFA DIAPHRAGM LIGHT MUSCLE FIBER RATIO MFarea/bw

Calculated F-ratio= 12.9727 with 4 , 4 degrees of freedom.

The variances are UNEqual since 12.9727 is greater than 6.3900

RAW DATA

	<u>GROUP 1</u>	<u>GROUP 2</u>
1====>	5.3600	3.9200
2====>	4.3000	3.3800
3====>	5.8100	3.2500
4====>	3.4600	3.3300
5====>	3.4500	3.7900

N's	====>	5		5
Total	====>	22.3800		17.6700
Mean	====>	4.4760		3.5340
Sum of squares	====>	4.6769		0.3605
Variances	====>	1.1692		0.0901
Std deviations	====>	1.0813		0.3002

Calculated value of T= 1.8770 with 5 degrees of freedom.

The exact P-value is: 0.1193 or 88.07%

The samples do NOT differ significantly at the 5% level, ONE-TAILED.

The samples do NOT differ significantly at the 1% level, ONE-TAILED.

The samples do NOT differ significantly at the 5% level, TWO-TAILED.

The samples do NOT differ significantly at the 1% level, TWO-TAILED.

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DFPT RFA VS RFA DIAPHRAGM DARK INTERMEDIATE MUSCLE FIBER RATIO

Calculated F-ratio= 1.0793 with 4 , 4 degrees of freedom.

The variances are equal since 1.0793 is greater than 6.3900

RAW DATA

	<u>GROUP 1</u>	<u>GROUP 2</u>
1====>	5.9200	4.1600
2====>	6.1200	5.2100
3====>	5.8600	2.9300
4====>	4.2600	3.9300
5====>	4.5100	4.5800
N's	====> 5	5
Total	====> 26.6700	20.8100
Mean	====> 5.3340	4.1620
Sum of squares	====> 3.0703	2.8447
Variances	====> 0.7676	0.7112
Std deviations	====> 0.8761	0.8433

Calculated value of T= 2.1551 with 8 degrees of freedom.

The exact P-value is: 0.0633 or 93.67%

The samples DO differ significantly at the 5% level, ONE-TAILED.

The samples do NOT differ significantly at the 1% level, ONE-TAILED.

The samples do NOT differ significantly at the 5% level, TWO-TAILED.

The samples do NOT differ significantly at the 1% level, TWO-TAILED.

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DFPT RFA VS RFA DIAPHRAGM DARK MUSCLE FIBER RATIO

Calculated F-ratio= 3.4394 with 4 , 4 degrees of freedom.

The variances are equal since 3.4394 is less than 6.3900

RAW DATA

	<u>GROUP 1</u>	<u>GROUP 2</u>
1====>	10.2100	5.3400
2====>	7.3300	6.6000
3====>	10.6900	5.1200
4====>	7.4800	5.2800
5====>	6.3800	7.4700
N's	====> 5	5
Total	====> 42.0900	29.8100
Mean	====> 8.4180	5.9620
Sum of squares	====> 14.5903	4.2421
Variances	====> 3.6476	1.0605
Std deviations	====> 1.9099	1.0298

Calculated value of T= 2.5310 with 8 degrees of freedom.

The exact P-value is: 0.0352 or 96.48%

The samples DO differ significantly at the 5% level, ONE-TAILED.

The samples do NOT differ significantly at the 1% level, ONE-TAILED.

The samples DO differ significantly at the 5% level, TWO-TAILED.

The samples do NOT differ significantly at the 1% level, TWO-TAILED.

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DFPT RFA VS RFA DIAPHRAGM LIGHT INTERMEDIATE FIBER AREAS

Calculated F-ratio= 1.6958 with 1 , 3 degrees of freedom.

The variances are equal since 1.6958 is less than 10.1300

RAW DATA

	<u>GROUP 1</u>	<u>GROUP 2</u>
1====>	1165.6800	1444.2930
2====>	1618.6000	809.4400
3====>	789.7400	
4====>	1064.8080	

N's	====>	4		2
Total	====>	4638.8280		2253.7330
Mean	====>	1159.7070		1126.8665
Sum of squares	====>	356499.8635		201519.1658
Variances	====>	118833.2878		201519.1658
Std deviations	====>	344.7220		448.9089

Calculated value of T= 0.1015 with 4 degrees of freedom.

The exact P-value is: 0.9240 or 7.60%

The samples do NOT differ significantly at the 5% level, ONE-TAILED.

The samples do NOT differ significantly at the 1% level, ONE-TAILED.

The samples do NOT differ significantly at the 5% level, TWO-TAILED.

The samples do NOT differ significantly at the 1% level, TWO-TAILED.

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DFPT RFA VS RFA DIAPHRAGM DARK INTERMEDIATE MUSCLE FIBER AREAS

Calculated F-ratio= 3.3483 with 4 , 4 degrees of freedom.

The variances are equal since 3.3483 is less than 6.3900

RAW DATA

	<u>GROUP 1</u>	<u>GROUP 2</u>
1====>	1893.9550	1371.8590
2====>	2290.6000	1610.6880
3====>	1968.2060	1121.4550
4====>	1422.5030	1245.0530
5====>	1508.0830	1493.5250

N's	====>	5		5
Total	====>	9083.3470		6842.5800
Mean	====>	1816.6694		1368.5160
Sum of squares	====>	504139.3359		150567.9534
Variances	====>	126034.8340		37641.9884
Std deviations	====>	355.0139		194.0154

Calculated value of T= 2.4770 with 8 degrees of freedom.

The exact P-value is: 0.0383 or 96.17%

The samples DO differ significantly at the 5% level, ONE-TAILED.

The samples do NOT differ significantly at the 1% level, ONE-TAILED.

The samples DO differ significantly at the 5% level, TWO-TAILED.

The samples do NOT differ significantly at the 1% level, TWO-TAILED.

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DFPT RFA VS RFA DIAPHRAGM DARK MUSCLE FIBER AREAS

Calculated F-ratio= 3.9260 with 4 , 4 degrees of freedom.

The variances are equal since 3.9260 is less than 6.3900

RAW DATA

	<u>GROUP 1</u>	<u>GROUP 2</u>
1====>	3268.3280	1763.1710
2====>	2744.0490	2038.3990
3====>	3593.4220	1955.8590
4====>	2497.9700	1673.3150
5====>	2130.2130	2434.8630

N's	====>	5		5
Total	====>	14233.9820		9865.6070
Mean	====>	2846.7964		1973.1214
Sum of squares	====>	1380867.3311		351727.5086
Variances	====>	345216.8328		87931.8772
Std deviations	====>	587.5516		296.5331

Calculated value of T= 2.9684 with 8 degrees of freedom.

The exact P-value is: 0.0179 or 98.21%

The samples DO differ significantly at the 5% level, ONE-TAILED.

The samples DO differ significantly at the 1% level, ONE-TAILED.

The samples DO differ significantly at the 5% level, TWO-TAILED.

The samples do NOT differ significantly at the 1% level, TWO-TAILED.

STUDENT'S T-TEST

V2.60 Dec 91 - by Stanley Kaplan, Ph.D.

DFPT RFR VS RFR DIAPHRAGM LIGHT MUSCLE FIBER RATIOS ANIMALS 6-10

Calculated F-ratio= 2.4816 with 4 , 4 degrees of freedom.

The variances are equal since 2.4816 is less than 6.3900

RAW DATA

	<u>GROUP 1</u>	<u>GROUP 2</u>
1====>	3.9200	3.4400
2====>	4.0300	4.3000
3====>	6.0100	4.6000
4====>	5.6100	3.3800
5====>	5.1700	3.3300
N's	====> 5	5
Total	====> 24.7400	19.0500
Mean	====> 4.9480	3.8100
Sum of squares	====> 3.5149	1.4164
Variances	====> 0.8787	0.3541
Std deviations	====> 0.9374	0.5951

Calculated value of T= 2.2918 with 8 degrees of freedom.

The exact P-value is: 0.0511 or 94.89%

The samples DO differ significantly at the 5% level, ONE-TAILED.

The samples do NOT differ significantly at the 1% level, ONE-TAILED.

The samples do NOT differ significantly at the 5% level, TWO-TAILED.

The samples do NOT differ significantly at the 1% level, TWO-TAILED.

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V2.60 Dec 91 - by Stanley Kaplan, Ph.D.

DFPT RFR VS RFR DIAPHRAGM DARK INTERMEDIATE MF RATIOS ANIMALS 6-10

Calculated F-ratio= 15.3556 with 4 , 4 degrees of freedom.

The variances are UNEqual since 15.3556 is greater than 6.3900

RAW DATA

	<u>GROUP 1</u>	<u>GROUP 2</u>
1====>	4.8600	4.7100
2====>	6.4900	4.6000
3====>	6.2200	4.5700
4====>	5.8100	4.2600
5====>	6.9200	4.7800
N's	====> 5	5
Total	====> 30.3000	22.9200
Mean	====> 6.0600	4.5840
Sum of squares	====> 2.4526	0.1597
Variances	====> 0.6131	0.0399
Std deviations	====> 0.7830	0.1998

Calculated value of T= 4.0840 with 5 degrees of freedom.

The exact P-value is: 0.0095 or 99.05%

The samples DO differ significantly at the 5% level, ONE-TAILED.

The samples DO differ significantly at the 1% level, ONE-TAILED.

The samples DO differ significantly at the 5% level, TWO-TAILED.

The samples DO differ significantly at the 1% level, TWO-TAILED.

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DFPT RFR VS RFR DIAPHRAGM DARK MUSCLE FIBER RATIOS ANIMALS 6-10

Calculated F-ratio= 1.3868 with 4 , 4 degrees of freedom.

The variances are equal since 1.3868 is less than 6.3900

RAW DATA

	<u>GROUP 1</u>	<u>GROUP 2</u>
1====>	8.7400	8.4000
2====>	7.8200	9.0200
3====>	11.4700	5.6800
4====>	10.4200	8.7300
5====>	8.1200	7.9300
N's	====> 5	5
Total	====> 46.5700	39.7600
Mean	====> 9.3140	7.9520
Sum of squares	====> 9.8587	7.1091
Variances	====> 2.4647	1.7773
Std deviations	====> 1.5699	1.3331

Calculated value of T= 1.4787 with 8 degrees of freedom.

The exact P-value is: 0.1775 or 82.25%

The samples do NOT differ significantly at the 5% level, ONE-TAILED.

The samples do NOT differ significantly at the 1% level, ONE-TAILED.

The samples do NOT differ significantly at the 5% level, TWO-TAILED.

The samples do NOT differ significantly at the 1% level, TWO-TAILED.

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DFPT RFR VS RFR DIAPHRAGM LIGHT MUSCLE FIBER AREAS ANIMALS 6-10

Calculated F-ratio= 2.0495 with 4 , 4 degrees of freedom.

The variances are equal since 2.0495 is less than 6.3900

RAW DATA

	<u>GROUP 1</u>	<u>GROUP 2</u>
1====>	1337.3100	1153.1060
2====>	1300.9280	1418.4610
3====>	1959.5250	1582.9050
4====>	1743.5960	1096.6300
5====>	1885.8720	1122.6220
N's	====> 5	5
Total	====> 8227.2310	6373.7240
Mean	====> 1645.4462	1274.7448
Sum of squares	====> 379724.1490	185279.2809
Variances	====> 94931.0373	46319.8202
Std deviations	====> 308.1088	215.2204

Calculated value of T= 2.2055 with 8 degrees of freedom.

The exact P-value is: 0.0585 or 94.15%

The samples DO differ significantly at the 5% level, ONE-TAILED.

The samples do NOT differ significantly at the 1% level, ONE-TAILED.

The samples do NOT differ significantly at the 5% level, TWO-TAILED.

The samples do NOT differ significantly at the 1% level, TWO-TAILED.

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DFPT RFR VS RFR DIAPHRAGM DARK INTERMEDIATE MFA ANIMALS 6-10

Calculated F-ratio= 13.0354 with 4 , 4 degrees of freedom.

The variances are UNEqual since 13.0354 is greater than 6.3900

RAW DATA

	<u>GROUP 1</u>	<u>GROUP 2</u>
1====>	1657.8800	1577.6520
2====>	2096.5040	1517.8620
3====>	2026.5080	1573.3260
4====>	1807.9810	1378.8530
5====>	2525.3030	1610.1010
N's	====> 5	5
Total	====> 10114.1760	7657.7940
Mean	====> 2022.8352	1531.5588
Sum of squares	====> 437269.0969	33544.6299
Variances	====> 109317.2742	8386.1557
Std deviations	====> 330.6316	91.5760

Calculated value of T= 3.2020 with 5 degrees of freedom.

The exact P-value is: 0.0239 or 97.61%

The samples DO differ significantly at the 5% level, ONE-TAILED.

The samples do NOT differ significantly at the 1% level, ONE-TAILED.

The samples DO differ significantly at the 5% level, TWO-TAILED.

The samples do NOT differ significantly at the 1% level, TWO-TAILED.