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| **Glucose flux** | **GLU-->G3P** | **GLU-->Glycerol** | **GLU-->3PG** | **GLU-->Lac** | **GLU-->ALA** |
| Control | 5.49±0.13 | 5.08±1.91 | 59.46±1.27 | 48.52±4.76 | 67.84±1.92 |
| Tg | 2.76±0.07\*\* | 3.36±0.28 | 71.77±2.09\*\* | 75.34±3.68\*\* | 83.78±1.93\*\* |
| Tg+PAG | 1.74±0.14\*\* | 2.17±0.15\*\* | 62.91±2.27\* | 65.95±2.01\* | 46.02±2.59\*\* |

GLU: glucose, G3P: glycerol-3-phosphate, 3PG: 3-phosphoglycerate, Lac: lactate, ALA: alanine. *p<0.05*\*, *p<0.*01\*\*.

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| **TCA flux** | **Citrate/acetylCoA** | **Citrate/OAA** | **Succinate** | **Fumarate** | **Malate** |
| Control | 42.65±1.08 | 48.59±0.86 | 16.39±2.73 | 25.03±0.66 | 27.73±0.43 |
| Tg | 33.65±0.15\*\* | 38.14±0.27\* | 13.26±0.57 | 22.08±0.18\*\* | 13.69±0.72\*\* |
| Tg+PAG | 43.24±0.38\*\* | 51.98±0.68\* | 19.93±1.12\*\* | 35.23±0.44\*\* | 31.37±0.32\*\* |

Citrate/acetylCoA: acetylCoA moiety of citrate, Citrate/OAA: oxaloacetate moiety of citrate. *p<0.05*\*, *p<0.*01\*\*.

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| **AA flux** | **GLU-->Glycine** | **GLU-->Serine** | **GLU--> Proline** | **GLU--> Aspartate** | **GLU-->Glutamine** |
| Control | 32.90±1.40 | 5.24±0.25 | 6.55±0.17 | 12.04±0.14 | 11.94±0.26 |
| Tg | 36.99±2.54 | 1.72±0.10\*\* | 5.82±0.09\*\* | 8.68±0.06\*\* | 8.86±0.13\*\* |
| Tg+PAG | 21.20±0.79\*\* | 1.88±0.13 | 12.31±0.04\*\* | 13.33±0.07\*\* | 15.90±0.12\*\* |

AA: amino acid, GLU: glucose. *p<0.05*\*, *p<0.*01\*\*.

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| **Concentration** | **G3P** | **Glycerol** | **3PG** | **Lactate** | **Alanine** | **Valine** |
| Control | 0.046±0.001 | 0.091±0.003 | 0.673±0.104 | 0.556±0.044 | 1.461±0.110 | 0.224±0.014 |
| Tg | 0.112±0.013\*\* | 0.086±0.011 | 0.756±0.104 | 0.364±0.043\* | 2.032±0.193\* | 0.170±0.014\* |
| Tg+PAG | 0.078±0.008 | 0.074±0.006 | 0.545±0.055 | 0.443±0.018 | 0.410±0.025\*\* | 0.166±0.010 |

Relative concentrations of glycolysis metabolites. GLU: glucose, G3P: glycerol-3-phosphate, 3PG: 3-phosphoglycerate, Lac: lactate, ALA: alanine *p<0.05*\*, *p<0.*01\*\*

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| **Concentration** | **Citrate** | **Succinate** | **Fumarate** | **Malate** |
| Control | 0.016±0.002 | 7.609±1.611 | 0.030±0.002 | 0.048±0.002 |
| Tg | 0.017±0.002 | 4.993±0.514 | 0.047±0.006\* | 0.084±0.008\*\* |
| Tg+PAG | 0.011±0.001\* | 4.738±0.870 | 0.017±0.001\*\* | 0.026±0.003\*\* |

Relative concentrations of TCA metabolites. *p<0.05*\*, *p<0.*01\*\*.

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| **Concentration** | **Glycine** | **Serine** | **Proline** | **Aspartate** | **Glutamine** |
| Control | 2.17±0.19 | 0.14±0.01 | 2.01±0.10 | 3.84±0.18 | 0.53±0.01 |
| Tg | 2.51±0.18 | 0.33±0.03\*\* | 2.19±0.22 | 2.66±0.29\* | 0.66±0.10 |
| Tg+PAG | 2.66±0.12 | 0.19±0.01\*\* | 1.63±0.11 | 2.81±0.14 | 0.75±0.07 |

Relative concentrations of amino acids *p<0.05*\*, *p<0.*01\*\*.