

Biochemical Profile: Homozygous Twin control for a 12 month Space Flight Exposure



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Specific Aims

To provide a database of biochemical analyses from blood and urine samples. The analyses reflect a broad set of nutritional and physiological variables that may be altered as a result of the space flight environment (including diet, stress, weightlessness). Collecting data on the Ground twin will allow for a more direct comparison of the effects of space flight on human biochemistry and physiology.

Blood and urine collections

Preflight:

L-180, L-45, L-10

In-flight:

FD15, 30, 60, 120, 180, 240, 300, 360

Post flight:

R+0, R+30

Implications of the Research for Space & Earth



Space:

Improve understanding and time course of biochemical changes during flight and how the changes relate to diet during flight.



Earth:

Improve understanding of how diet can impact different biological systems.

