# Effects of T-Consciousness Fields on Cell Cycle Progression and ATP Production in Raji and HEK-293 Cell Lines under Microgravity and Earth's Gravity Conditions



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# Center for Consciousness Studies

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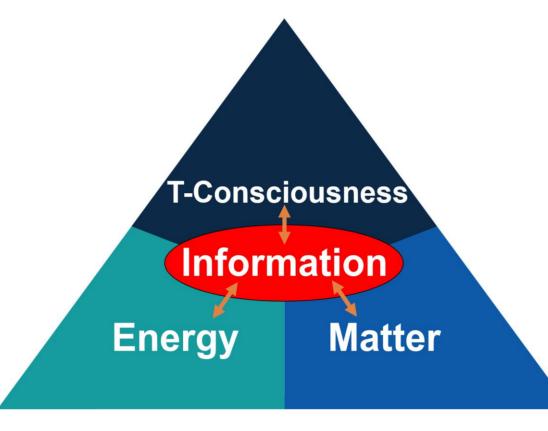
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#### Introduction

In the 1980s, Mohammad Ali Taheri introduced consciousness as a fundamental element of the universe from which information, matter and energy spring forth. There are various T-Consciousness Fields (TCFs) with different functions. According to Taheri, when a sample is exposed to TCFs, its behavior changes as a result of receiving information [1].

The aim of this study was to Investigate the effects of TCFs on cell lines in altered gravities.

- > This study allows us to determine whether the influence of these fields is gravity-dependent or not.
- > It can provide an opportunity to explore the alleviative effects of TCFs on cells under microgravity (MG) stress.



#### Relationship between information, T-Consciousness, matter, and energy

#### Methods

This entire experiment was carried out using a double-blind method, with lab technicians unaware of FCF theory and the individual applying the treatment unaware of the study's details. Two separate experiments were conducted:

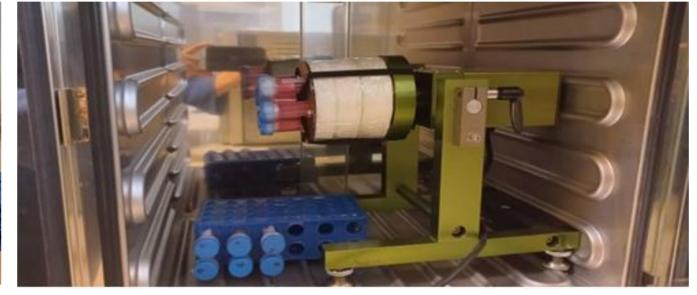
Experiment 1									
Cell line	Clino	rotation treatment	Time						
Raji		30 rpm	48 hours						
Experiment 2									
Cell line		Clinorotation treatment	Time						
HEK-293		30 rpm	24 hours						

#### Methods (Cont.)

- > We used flow cytometry to determine cell cycle stages.
- > ATP production of HEK-293 cell line was evaluated by measuring the luciferase enzyme activity.

Picture of the clinostat provided in this study and the Raji samples under microgravity or 1G condition.





#### Results

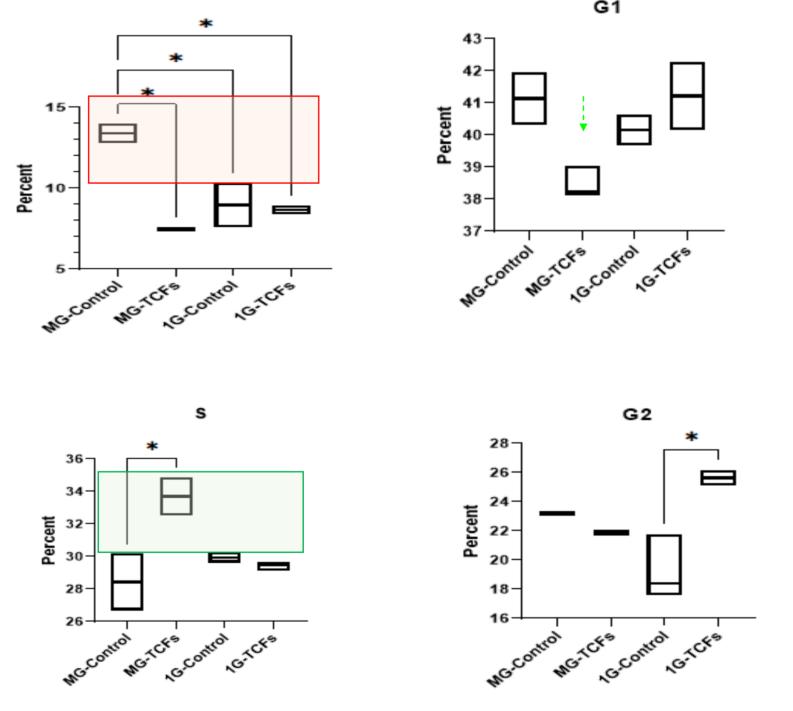
- In Raji cell line, the stress of MG significantly induced the Sub-G1 phase and reduced the percentage of G1 and S phases compared to 1G condition. However, the behavior of FCF-treated samples remained almost unchanged.
- > While MG significantly reduced the cell population, FCF-treated cells under MG showed a similar population as samples in 1G.

Groups	Samples description	The average percentage of live cells in selected gate	Sub G1	G1	S	G2	Super G2
FCF-/MG	MG condition without FCF	64\$	42.10****±2.4 4	20.33***±0.80	28.27**±0.92	11.17±1.88	0.70±0.31
FCF+/MG	MG condition with FCF	78	6.29±0.79	47.78±0.05	40.85 <sup>€</sup> ±1.96	10.17±1.13	0.57±0.33
<u>FCF-/1G</u>	1G condition without FCF	77	6.90±2.90	47.78±6.37	39.12€±1.61	9.10±1.44	0.41±0.02
FCF+/1G	1G condition with FCF	78	6.79±1.41	42.66±1.79	42.21 <sup>#</sup> ±2.43	11.62±1.61	0.59±0.22

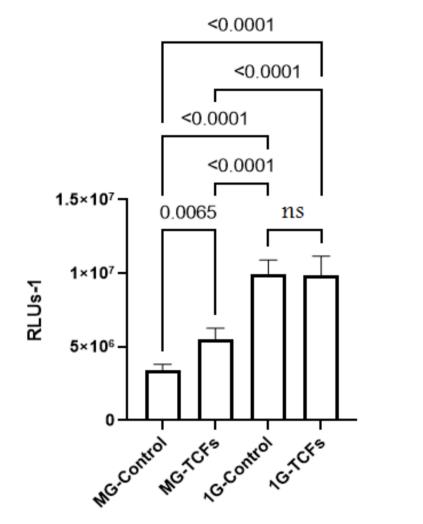
MG: microgravity; 1G: Earth's gravity. \*\*\*\*: difference with other experimental groups p-value<0.00001, \*\*\*: difference with other experimental groups p-value<0.0001, \*\*: difference with TCF-/1G p-value<0.001. \$: difference with other experimental groups pvalue<0.00001, #: difference with TCF-/MG p-value<0.0001, €: difference with TCF-/MG p-value<0.0001,

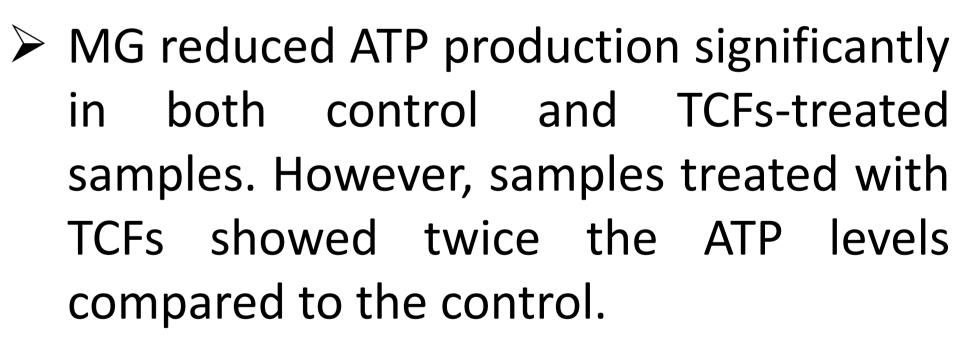
## Results (Cont.)

- In HEK-293 cell line, MG caused a notable rise in the sub-G1 phase compared to the 1G. However, TCFs prevented this impact of MG on this portion of the cell cycle.
- > The S phase in TCFs-treated cells was significantly higher compared to their clinorotated counterparts.
- > Under Earth's gravity, TCFs increased the G2 phase compared to the control.









#### Conclusions

- > TCFs altered sample behavior in both normal gravity (1G) and microgravity (MG) conditions. This indicates that TCFs operate independently of gravity.
- In this study, TCFs treatment inhibits the adverse impact of MG.
- > It appears that the application of these fields may lead to the transfer of information that compensates for the absence of gravity.

### References

1. Taheri, M. A. (2013). Human from Another Outlook. Interuniversal Press. ISBN 9781939507006 and ISBN 1939507006

