

Dietetic Benefits of Simple Carbohydrates and Bovine Byproduct in Low Earth Orbit

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Abstract

Kraft Macaroni & Cheese™ has been the Delphic mealtime adjunct for decades. The creamy chain of monosaccharides has, in cases, been the only source of nutrition for struggling engineering students and starving artists due to its ease of preparation and optimal quantities of protein, carbohydrates, creams, fats, tubes, and nostalgia. This present study aimed to assess the neurological and physiological impacts of eating only microwave Easy Mac in Low Earth Orbit. The analysis intent was to determine a holistic net positive or net negative result of the diet utilizing kinesiological, mental, and logistical metrics with the current astronaut diet of congealed-Tang and freeze-dried ice cream as a control. It was determined that the dietetic shift yielded a net positive effect on our space crusaders and outperformed in every metric except for the beta-ray binomial press, quark re-distribution puzzle, and effluvium rating.

Keywords: Tang, Low Earth Orbit, Easy Mac, Astro-nutrition, Phase-shift Treadmill

1. Introduction

The matter of this thesis is explained simply as; we made spacey food, overfed astronauts with said food, then ruthlessly judged their physical and mental performance with nebula exercises and fun brightly colored puzzles. Congealed-Tang and dehydrated ice cream, being readily available and in copious quantities from United States space race stockpiles, yielded the necessity to craft only one of the three test meals, Macaroni and Cheese. Our item under test was made from scratch using a recipe from the ClicheCook.com. See the recipe below:

It's that time of year again, FALL! a time for warm blankets next to the fire in your cabin sharing a hot coco (with marshmallows, whipped cream, sprinkles, and a dash of nutmeg) [PINTEREST LINK REMOVED]. But, it's also the best time of year for everyone's favorite fall meal, MACARONI & CHEESE!

[ADVERTISEMENT REMOVED]

I have five kids and a husband with a taste palate of a 12-year-old-boy, which means we eat a lot of mac and cheese in our house. A lot of mac and cheese. So much mac and cheese that we've dedicated an entire shelf in our pantry for that creamy cheese box of joy.

[ADVERTISEMENT REMOVED]

So, of course I made a super easy homemade mac and cheese recipe so that I can save money and time buying cases at the local Costco (but sssshhh, don't tell my husband).

[ADVERTISEMENT REMOVED]

The unpaid graduate research students at the Cranberry-Lemon University laboratory of Clinical Nutrition never did scroll long enough to make it to the ingredient section of the recipe, so the team opted for the box based variety.

Three groups of astronaut trainees, currently in the Hazing stage of the National Aeronautics and Space Administration (NASA) and the Roscosmos State Corporation for Space Activities (Roscosmos) programs, were fed only the nourishment under test, thus each group (pledges) was only fed either Congealed-Tang, dehydrated ice cream, and macaroni and cheese respectively. After a week of each diet, when the gastro and sphincter adaptation had completed, each trainee was tested using multiple measures of performance. These measures fell into three categories; Kinesthetic, Mental, and Bioexcreta.

2. Kinesthetic Metrics

The kinesthetic results are listed below. To ensure consistency amongst the groups, each was assigned a Space Force Drill-Instructor to motivate through each complex exercise. Though Space Force Drill-Instructors only speak a mixed dialect of C++ with Klingon (a language taught in later stages of astronaut training), the contextual usage of the commands were understood by all trainees. It's been shown in Bertson and Jargon in [1] that such confusing and loud instructions put the right amount of physical and mental stress on candidates to increase the speed of space cadet training by 52% on median cadets and 55% on cadets who are afraid of a conflict at the Romulan neutral zone (92% of cadets).

Exercise (average per group)	Congealed-Tang	Dehydrated ice cream	Macaroni and Cheese
Beta-ray Binomial Press(dram)	12805	13550	13068
Heliocentric Fowler Position Holds(rod-minute)	10.0	12.5	13.1
Zero-G Burpees(third-hour)	82	74	85
10 Min Phase-Shift Treadmill(femto-parsec)	526	582	687

Table 1: Kinesthetic Metrics Results

The macaroni and cheese exceeded in all categories except for the beta-ray binomial press. That exercise maximizes the use of the brachioradialis, pronator teres, and tibialis anterior muscles and thus liver glycogen plays a key role in its execution. Therefore, higher glycemic foods, dehydrated ice cream in this comparison, should naturally allow for better performance. In the testing of astronaut food such performance in the Zero-G burpees category had not been so positively measured since the introduction of the five-stage-compressed-liver-gramble breathing technique developed in [2].



Figure 1. Pre-plied Muscle Man (qumpapilla sinephallus)

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The largest performance increase was in the 10 minute Phase-Shift Treadmill spurt. Though not a weighted category in this study, it is argued by most space professionals to be the most important measure of physical health for astronauts as discussed in [3]. The research team attributes the performance increase on the Phase-Shift Treadmill to the optimal sphincter normalization that occurs from eating only macaroni and cheese for one week; particularly in the Delight of Neptune phase of the exercise (see figure 2 for reference for the six phases).

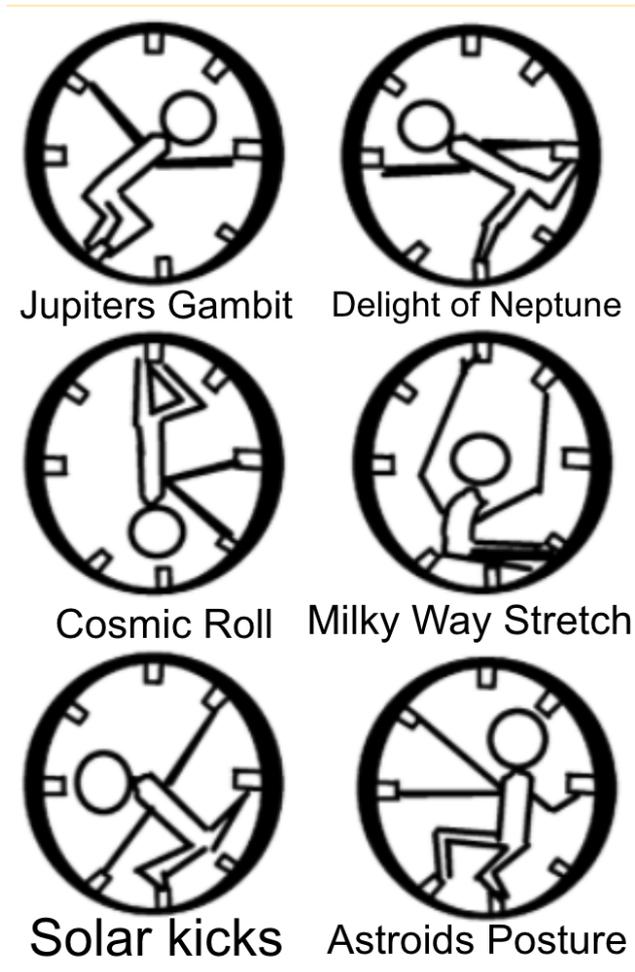


Figure 2. Phase-Shift Treadmill (Orthographic View)

3. Mental Impacts

Though seemingly obvious and proven in the widely accepted paper by Dr. Denklever [4], there is a direct correlation between the number of neuron-axon generations and the number of tube shaped foods consumed by any subject. The mental tests performed in this study add to this ever increasing body of work.

The research team employed a myriad of standardized mental tests, listed below, that NASA and Roscosmos have used for decades to determine the mental acuity of their astronaut hopefuls.

1. Word Associations
2. Candy Crush Saga
3. 4-Dimensional Rubix Cubes
4. Lego Minecraft
5. Pride and Prejudice Literary Analysis
6. Quark Redistribution Puzzle

After one week of the respective diets, the groups were subjected to the strenuous mental exams. The macaroni and

cheese group outperformed the congealed-Tang and dehydrated ice cream group in all exams (average score of 54/100) except for the quark redistribution puzzle. This failure to perform baffles the research team as it was hypothesized that since creamed-nostalgia was the primary ingredient of the macaroni and cheese under test the group would have easily channel their inner toddler and excel in this test.

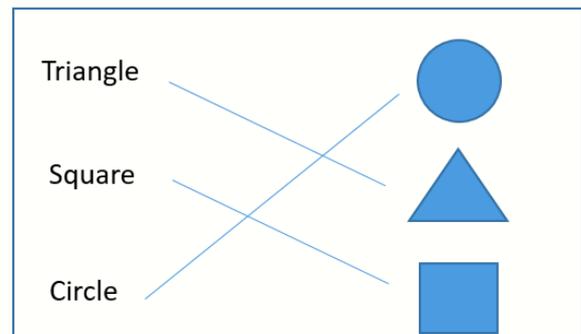


Figure 3. Quark Redistribution Puzzle, NASA

4. Logistical Application

The most important but often least discussed part of acquiring and implementing a new space food is the logistics. In between supply missions, cooking requirements, shelf life, spillage, and even space debris creation the logistical approach to supplying, cooking and disposing of food in space can take years to perfect. Many within the space culinary field all remember what happened in the Jiffy Pop disaster aboard the 1984 space shuttle Intrepid. Please take a moment of silence.

The drive to implement a heavy mac and cheese diet on the space station was highly driven by the resupply missions. months of pushy mothers have been bothering the resupply missions to include their own homemade macaroni and cheese since the early 00's. Planning around the change in diet would only grow easier if the dish was already included in the regular meal plans.

Testing in [5] shows that the unknown substance non cheese existing in the box of Kraft Mac has an incredibly long shelf life. In [5] it was shown that a Bugs Bunny and Friends happy 50th Birthday Marvin special edition of kraft mac and cheese was still edible after 23 years. The noodles even retained their festive cartoon shapes. Background research has shown that ingredients have not changed since the 80s and should be reliable in the future.

Kraft mac should also be able to be easily disposable upon consumption. This may not be what you would normally expect in a disposal engineering problem. For example in [6] it was documented when a captains chair of a resupply vehicle became irreversibly damaged after being coated by

goldfish crumbs. While mac and cheese noodles are easily disposable and rarely lost, the powdered cheese did not always work in a zero-G environment. In our first field test, missing powdered cheese escaped the endothermic meal pouch and eventually caused three million dollars of damage to the air filtration system. Our engineers are currently working on creating a safer cooking method to contain and dispose of all of the powdered cheese.

5. Bioexcreta Analysis

The bioexcreta (BE) variation is the most crucial consideration to any dietetic modification. Variation of parameters such as girth, length, curic-mass, density, reflectivity (gloss), chromaticity, tincture, and effluvium are tightly controlled by teams of scientists and operational engineers at the world's space agencies. Aside from the impacts to the space mission, these control teams are typically the largest, costliest, and most educated in each respective beuro, thus it is crucial to get BE correct. The NASA Annual Budget Report attributes 31% of all expenditures to BE and its support agencies, with the international exchange program to the European Fecal Standards and Measurements Institute (EFSMI) in Zurich being the most expensive program.

In the pursuit of the common leitmotif of this research, the Cranberry-Lemon University board of Regents funded a BE PhD body from cutting edge programs at NASA, EFSMI, and Roscomos to conduct the BE analysis. Although all BE parameters are important, the body narrowed them down to three critical for space operations; effluvium, curic-mass, and girth. After three months and \$300,000 of high fidelity analysis of the BE from the three groups of trainees, the body released their empirical results [7].

BE Parameter (average per group)	Congealed-Tang	Dehydrated ice cream	Macaroni and Cheese
Effluvium(durian)	68	42	41
Curic-mass(g ⁴)	1.1	2.3	5.0
Girth (cm)	2.0	1.4	2.9

Table 2: Cranberry-Lemon Body on Bioexcreta Analysis Empirical Results

The macaroni and cheese group outperformed in two of the three critical BE categories, curic-mass and girth. However, it underperformed in the durian rating to both congealed-Tang and dehydrated ice cream. This underperformance is attributed to the naturally occurring acidic substrate in Tang, citric acid, reacting with other internal acids. This is similar to the metabolization of apple juice with an effluvium rating of 92 durian. Since effluvium is an egopositive parameter and only affects the source, a potential solution to the low durian rating of macaroni and

cheese is to channel effluvium from the breach to the olfactory nerves to saturate the subject [8].

6. Conclusion

There are many options to nourish our space explorers as they take our species to new heights. For years we have happily supplied our astronauts with economy crushing quantities congealed-Tang and dehydrated ice cream. However, modern research and cutting edge technology from the European Fecal Standards and Measurements Institute have proven that there is more efficient sustenance, macaroni and cheese.

These orange tubes have outperformed the legacy meals in a statistically significant way in matters of physical, mental, and excremental performance.

7. References

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