

# The Efficacy of Apple Consumption in the Prevention of Gravitational Mishaps

Sir Isaac Newton

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## Abstract

This comprehensive investigation delves into the intricate relationship between apple consumption and its potential to offer mild resistance against Earth's gravitational pull. Pioneering experiments, exhaustive mathematical proofs, and detailed analyses lead us towards affirming this astonishing hypothesis.

## 1 Introduction

An apple's fall, having inspired centuries of gravitational studies, finds itself at the heart of another profound query: can the ingestion of apples deter the very force it once elucidated? This paper traverses this tantalizing trail.

## 2 Mathematical Model

Consider the gravitational force  $G$  and the apple-induced repulsion  $A$ . A direct relationship is proposed:

$$F = G - kA \tag{1}$$

Where  $F$  is the effective gravitational force and  $k$  denotes the efficacy of apple-consumption-based resistance.

### 2.1 Deriving Apple's Resistance

Starting with the Newtonian law:

$$G = \frac{GM_1M_2}{r^2}$$

When an apple is consumed, a unique energy,  $E_a$ , emanates from the individual, disturbing the gravitational field. This energy is quantified as:

$$E_a = \frac{\delta A}{\delta t}$$

The integration of which, over a day, gives:

$$A = \int E_a dt$$

Substituting this into (1), we obtain:

$$F = G - k \int E_a dt$$

### 3 Experimental Modelling

1. **Scenario 1:** A person stands on a weighing scale before and after consuming an apple. A noticeable weight difference, if apple theory holds true, should be observed due to altered gravitational pull.
2. **Scenario 2:** Objects, when dropped, should exhibit a slower descent in the proximity of a recent apple consumer.

Detailed experimentation was conducted under both scenarios with fascinating outcomes.

### 4 Results and Discussion

For Scenario 1, after ingesting a ripe apple, subjects displayed an average weight drop of 0.002%, a statistically significant value. Scenario 2 outcomes were even more revelatory. Objects dropped near apple consumers took 1.003 times longer to reach the ground. These results hint at an apple's potential to modulate gravitational effects. However, the apple type, ripeness, and the consumer's digestion rate present variables requiring deeper scrutiny.

### 5 Further Research Directions

1. **Varietal Analysis:** Does a Granny Smith influence gravity differently than a Fuji?
2. **Apple Products:** Do apple pies, juices, or ciders exhibit similar gravitational resistances?
3. **Temporal Effects:** Does the resistance diminish as the apple is digested? If so, at what rate?

### 6 Conclusion

While audacious in its claim, this paper lays foundational evidence for the apple's capacity to resist gravity. Beyond merely keeping doctors at bay, apples might just redefine gravitational physics.

## References

- [1] Sir Isaac Newton, *Philosophiæ Naturalis Principia Mathematica*, 1687.
- [2] A. Orchard, *The wonders of apple consumption*, Apple Press, 1650.
- [3] J. Honeycrisp, *Modern Apple Varieties and their Mystical Properties*, Fruit Physics Journal, 2020.