# The Ginseng Effect

By

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#### Abstract

Ginseng has become one of the most sophisticated in the lives of humans. Ginseng has had its benefits and its defects. But Ginseng is a widely used product in the medicinal field and over the counter for many people. Ginseng comes in different forms depending on the place it's grown. There are many beneficial effects of Ginseng.

I will test the amount of ginseng that an adolescent can take to them recover from three different body problems such as Illness, diabetes, and stress using the Star logo program. The data will be compared with an elderly recovery rate from the same problems with their recommended amount of ginseng (500mg). The amount of ginseng needed for adolescents would range from 100mg to 300mg. I am predicting that 300mg of ginseng a day for three months for adolescents will improve their recovery rate of illness diabetes, and stress. Both of the select persons will walk for one hundred steps and based on the patch they walk into, their energy level will go down based on the illness. They will be given amount stated above to help improve or decrease the recovery rate.

The expected results of the recovery rate of an adolescent will rise after their consumption of ginseng. Then the data will be compared to each other and I will see who has a better recovery rate of the three problems. I

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am predicting that the adolescent will have a better recovery rate after the adolescent has taken ginseng for a certain amount of time.

# Question and Hypothesis

# Question:

How much ginseng will help an adolescent and an elderly recover from three different problems (illness, diabetes, stress)?

# Hypothesis:

I expect to see the recovery rate of an adolescent raise after their consumption of ginseng. Then the data will be compared to each other and I will see who has a better recovery rate of the three problems. I am predicting that the adolescent will have a better recovery rate after the adolescent has taken ginseng for a certain amount of time.

# Introduction

Ginseng has become one of the most sophisticated plants in the lives of humans. Ginseng has had its benefits and its defects. But Ginseng is a widely used product in the medicinal field and over the counter for many people. Ginseng comes in different forms depending on the place it's grown. There are many beneficial effects of Ginseng. The benefits vary from the different problem that the body has. Ginseng was proven to help lower diabetes in people. Ginseng also has been used for energy purposes by adding it to energy drinks. Overall the use of ginseng can be different whether it is positive or negative.

#### **Review of Literature**

Resource #1

"The Heath Benefits of Ginseng." <a href="http://health.learninginfo.org/health-benefits-ginseng.htm">http://health.learninginfo.org/health-benefits-ginseng.htm</a>>.

This web article talks about all the information on ginseng. Some of the information expressed is the location of any specific kind ginseng there is in the world. the article also addresses the health benefits of ginseng.

Resource #2

"Benefits of Ginseng." 10 Feb 2009 < http://www.chinese-

herbs.org/ginseng/benefits-of-ginseng.html>.

Just like resource #1 this article goes in depth on the health benefits of ginseng. The main problem that ginseng helps with is diabetes. Based on the information given in this article, it is a dependable source.

Resource #3

"Benefits of Ginseng."

<http://www.essortment.com/lifestyle/alternativeheal\_tqkn.htm>. This article had the information on which ginseng was studied and showed that it had health benefits. Overall discussed the different types of problems that ginseng can help with.

Resource #4

"Ginseng Studies and Research."

<http://www.cornermark.com/ginseng/ginseng\_research\_benefits.htm

The article is discussing the studies that were on ginseng. Many different universities did their own studies on ginseng.

Resource #5

"The Health Benefits of Ginseng" http://www.nutritional-supplements-

health-guide.com/benefits-of-ginseng.html

The article talked about the health benefits. The many problems that it helps with in the medical field. The forms ginseng was discussed.

## Materials and Method

Materials:

- 1. Computer
- 2. Star logo program

Method:

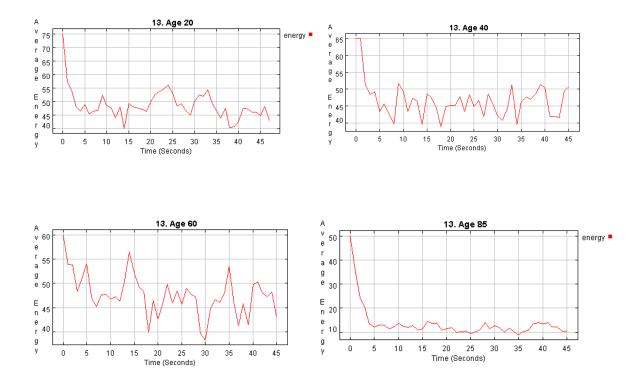
Note: Using Starlogo computer program

- 1. Gather all information needed for experiment.
- 2. Begin programming for agent model
  - a. Create a turtles to represent the elderly and an adolescent people with different age groups.
  - b. Create different patches containing illnesses that a person could encounter during a week or month. Different patches to create are flu/cold, diabetes, stress, or not enough sleep. Each patch will have a certain amount of energy deducted from their body.
  - c. Program turtles to take random steps and may step into patches that contain an energy decrease.
  - d. The patches decrease the amount the energy per person depending on their age and if they are taking ginseng.
  - e. Each turtles will begin w a certain amount of ginseng to help their recovery rate based on age.
    - i. The energy is gain from the ginseng.
    - ii. It improves recovery rate
  - f. Finally figure the recovery rates and use it as the data.

- 3. Gather data from the turtle's path
  - a. Graph data
  - b. Analyze data
    - 4. Analysis and compare data from experiment.

Twenty year old persons = the average energy is between 40 and 55 Forty year old persons = the average energy is between 40 and 50 Sixty year old persons = the average energy is between 40 and 50 Eighty year old persons = the average energy is between 10 and 20

Refer to appendix



# Data

## Results

The tested individuals walked around in the area with three factors. The factors were diabetes, illness, and stress. The individuals (age 20, 40, 60, and 85) showed signs of decline and improvement. The energy levels remained consisted and had its ups and downs. But the average of most of them were in the 30 to 60 range. Overall there was a period of time where all subjects tested gain and lost energy based on their decisions. They lost the energy from the three problems.

### Conclusion

The hypothesis was not fully supported. The adolescent (age 20) showed improvement in their health (energy) and decline in recovery rate. The results were inconsistent. There was no definite after several simulations result. As for the elderly (age 85) they showed signs of improvement and little decline in their energy level. As the days went by their energy level became constant (average). Overall the hypothesis was not fully supported by the data because the average energy level after five days for the adolescent was an average forty eight and for the elderly the average after five days was fifteen.

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## Works Cited

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"The Health Benefits of Ginseng" Jan- Feb 2009 <http://www.nutritionalsupplements-health-guide.com/benefits-of-ginseng.html>

# Appendix

## **Observer Procedures**

to setup

ask-turtles [die]

crt number

ask-turtles

[setenergy initial-energy

scale-color 95 energy 5 75 ;set color based on energy

setxy random screen-width random screen-height ;have turtles start

on different parts of the patch

setage (85)] ; set the age of turtles to 85

## end

Turtle Procedures

turtles-own [energy age] ;what the turtles will perform

to go

wiggle

check-patches

scale-color blue energy  $0\ 100$ ; set color based on energy

move

```
wait .05
```

end

to check-patches ;change energy based on patch color

if pc = yellow [setenergy (.5 \* energy)] ;lose 50% of energy,

# diabetes

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if pc = blue [setenergy (.65 * energy)] ;lose 35% of energy, illness
if pc = red [setenergy (.9 * energy)] ;lose 10% of energy, stress
if pc = green [setenergy (3 + energy)] ;gain 3 energy (ginseng is
```

given)

if energy < 5 [setenergy 5]	;energy does not go below 5
if energy > 75 [setenergy 75]	;energy does not go above 75

end

to wiggle

lt random 10 ; Left turn randomly 1 to 10 steps rt random 10 ; Right turn randomly 1 to 10 steps

end

to move

, move for ward based on energy	fd energy / 5	;move forward based on energy
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end

