

## Alternative Treatment For Thrombocytopenic Purpura

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### Introduction slide 1

- What are blood platelets?
- What happens when blood platelets are low?
- How to raise blood platelets with corticosteroids?
- Alternative method to increasing platelet counts.

### Introduction slide 2

- Blood platelets are produced in the bone marrow and enable blood to clot. Blood platelets help to form scabs in the event of external wounds, as well as repairing small tears in the blood vessels.
- A low blood platelet count could mean thrombocytopenic purpura. Thrombocytopenia is a blood disorder, resulting in low levels of blood platelets. This happens because the body is producing anti-platelet antibodies.
- There are two levels of thrombocytopenia purpura, acute and chronic. 90% of all cases are acute and can be cured without medication. Where as the remaining 10%, the chronic cases, need medical treatment. A case is determined to be chronic after it has lasted for over six months.
- A common treatment for thrombocytopenic purpura is corticosteroids. Corticosteroids repress the immune response, however they are not a permanent solution because the body can form an immunity to them, so new treatments must be discovered.

### Hypothesis

- Regular intake of spinach, kale, carrot, beet, and ginger juice will increase blood platelets.
- Antioxidants and vitamins which are found in the above vegetables can increase platelet levels by eliminating stray electrons in the blood which destroy blood platelets.

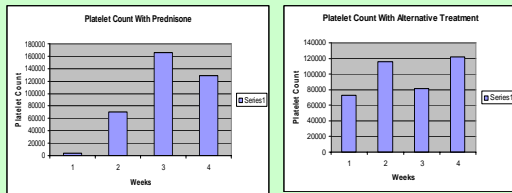
### Methods

- Juice was made using equal parts of carrots, beets, spinach, kale, and ginger.
- The test subject drank one cup of the juice daily for the four weeks of experimentation.
- At the end of each week the subject's blood was drawn and then sent to a diagnostic laboratory so that the platelets could be counted.
- These results were then compared with those from when the same test subject was on corticosteroids.

### Results

- After four weeks of juice intake platelet levels increased slightly however they never reached 140, which is the standard minimum for a healthy platelet count.
- Corticosteroids show more promising results in a shorter period of time than the juice. With 80 mg and 60 mg doses of Prednisone, the subject's blood platelet levels increased

## Results



## CONCLUSION

The results show that the juice definitely did increase the platelet count slightly. This being so, the treatment is probably a good way for people with thrombocytopenic purpura to keep their platelet count stable. But when platelets are dangerously low, the juice probably would not work quickly enough, and corticosteroids are still the best method of treatment.

## Future Studies

- If there were an unlimited amount of resources available I would test each vegetable separately to see their individual effects on platelet levels.
- I would also have more test subjects to ensure that my results were accurate.
- The experiment would be performed over an extended period of time to watch the long term effect the juice on the different test subject.