

# Investigation into the effect of chocolate on blood pressure – By Dr Denver

## Abstract

The effect of dark, milk and white chocolate on blood pressure was measured over a month. It was found that people who ate the chocolate with the higher cocoa levels had lower blood pressure as a result.

## Introduction

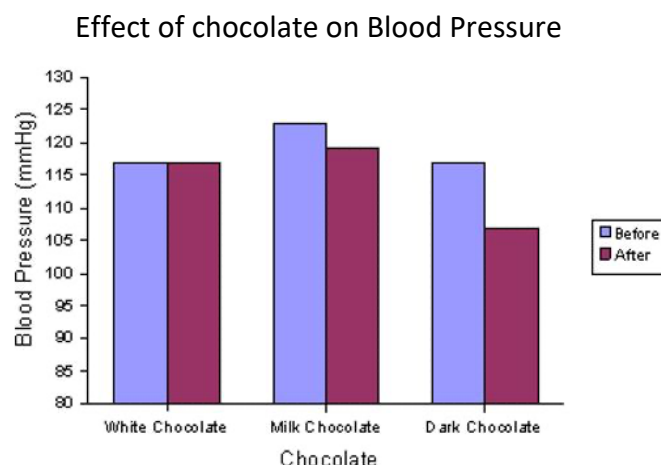
Cocoa has been thought to have health benefits ever since studies showed Kuna Indians, from the island of San Blas off the coast of Panama reported less heart conditions than the rest of the world. Cocoa is an important part of the Kuna Indians' diet, so this study set out to measure how different types of chocolate with varying cocoa levels affected blood pressure. Grassi *et al* first showed that dark chocolate might cause a decrease in blood pressure when they looked at how eating it affected blood pressure compared to eating white chocolate. Previous studies have shown the presence of special types of chemicals called flavonoids in cocoa, which might be the reason for this effect.

## Method

The sample group contained 36 people. The sample group taken for the study should all be of the same sex, similar level of physical activity daily, similar age groups and people who are not suffering from any disease. This is to ensure uniformity in the people taken for the study.

Their blood pressure was measured for one week before the start of the study, and then every day, at the same time each day, for the duration of the study. The volunteers were split into three groups, each containing 12 volunteers. Each day the groups of volunteers ate either 50g dark chocolate, 50g milk chocolate or 50g white chocolate. The volunteers were told to follow a similar diet and exercise regime (i.e. one volunteer should not be an athlete and another one a completely sedentary worker). After 4 weeks, the volunteers stopped eating the chocolate. Their blood pressure was monitored every day for a week after they stopped eating chocolate. During this time, they continued the similar diet and exercise regime.

## Results



## Conclusion

White chocolate, which contains no cocoa, had no effect on blood pressure. The milk chocolate (30% cocoa) caused a moderate decrease in blood pressure. The dark chocolate (50% cocoa) caused a significant decrease in blood pressure.