Introduction
Mostly, a disease is diagnosed by doing physical examination of patient’s body. Pulse is one of the traditional ways of detecting certain diseases by sensing different features of the pulse. Pulse is measured by placing three fingers; index finger, middle finger, ring finger of a hand on the patient’s wrist. Pulse is actually the rate at which the heart beats. Rhythmic contraction and expansion of artery anywhere in body is synchronized with the opening and closing of aortic valve of heart. Arteries expand when the heart pumps blood through the body. The number of times the heart beats means pump blood through body per minute is actually the pulse rate. Heart contraction causes increased blood pressure in arteries. Pulse is generated in all arteries, but you can feel a pulse in arteries near to the skin’s surface, such as in your upper arm, wrist and neck region. Resting heart rate is normal heart rate means sufficient to carry day activities. To measure pulse rate, count the number of beats from where you feel it either wrist or neck region for one minute. The quality of the pulse monitors every organ’s status. From left hand wrist, three organs can be checked. By applying light pressure, one organ is detected that is heart, lightly increase the pressure and another organ’s status is monitored that is liver and further increasing pressure kidney’s status is monitored. From right hand wrist, state of lung, spleen and kidney can be monitored. Pulse rate for every subject is different. Pulse rate also depends on factors like age, disease, exercise and resting state. In different physical situations of the body, the pulse rate per minute is different. The pulse rate is measured when the body is in resting condition [1-3].

Materials and Methods
The number of subjects that participated in this project was 219.

Pulse Rate Measurement
The protocol that we followed to measure pulse rate (number of times heart beats in a minute) of subjects was at the radial point. Radial

Abstract
The objective of present project “Bitter Gourd relish and Pulse Rate Relationship” was to investigate the normal pulse rate of subjects and relate with likeliness of bitter gourd. Subjects that took part in this project were 219 in number. Pulse rate is a means of physical examination of patient’s body and diagnosing the problem. Pulse rate is the beats (blood pumping to body) of heart in a minute. The status (regular, fast, low, strong) of pulse indicated the physical state of subject. Bitter gourd, a vegetable enriched in phytonutrient, anti-oxidants, dietary fiber and vitamin C, also disliked by subjects because of its bitterness. A protocol was followed to find a relationship for pulse rate measurement and questionnaire. Assistance of every subject helped in survey completion. Results were obtained by t-Test and relationship was observed that helped in doing conclusion. P-value was non-significant which meant no relation between bitter gourd and pulse rate measurement.

Keywords: Bitter Gourd, Pulse Rate, Relish, Measurement
point is the point inside wrist of the hand. First of all, a watch with second hand or stopwatch and a chart to record pulse was arranged. To start the procedure of measuring pulse, it was made sure that the hands of both subject and the physician were clean to avoid any sort of cross infection. Also it was taken into account that the subjects were comfry and relaxed. The hands of the subject were placed on the table or any support and put tips of fore and middle finger on the inside of wrist. Fingers were pressed gently or lightly increased the pressure. Strong and regular rhythm of pulse was felt. Pulse was counted for 30 seconds by starting the stopwatch and multiplies the number with 2 and that gave the pulse rate in one minute. Also you can count the pulse for 15 seconds and multiply it with 4 factors and pulse in one minute of a subject was measured. At clinics a thermocouple probe is also used to measure the pulse rate. It detects the temperature variations caused by the blood flow pulsations. The probe is placed under the tongue and the output of probe in the form of DC and AC gives the temperature of body in degree and uses for determination of pulse rate respectively [7-17].

**Project Designing**

First of all, we designed the project according to topic. We organized the protocol for measuring pulse rate of subjects. The subjects gave their consent and we mark their pulse rate by radial point method and guarantee that they were not suffering from any disease like blood pressure problem that affects their normal blood pressure. Then we asked every subject having different pulse rate to mark their likeliness of bitter melon. Subjects marked accordingly to their consult and we mark their pulse rate by radial point method. First of all, a watch with second hand or stopwatch and a chart to record pulse was arranged. To start the procedure of measuring pulse, it was made sure that the hands of both subject and the physician were clean to avoid any sort of cross infection. Also it was taken into account that the subjects were comfry and relaxed. The hands of the subject were placed on the table or any support and put tips of fore and middle finger on the inside of wrist. Fingers were pressed gently or lightly increased the pressure. Strong and regular rhythm of pulse was felt. Pulse was counted for 30 seconds by starting the stopwatch and multiplies the number with 2 and that gave the pulse rate in one minute. Also you can count the pulse for 15 seconds and multiply it with 4 factors and pulse in one minute of a subject was measured. At clinics a thermocouple probe is also used to measure the pulse rate. It detects the temperature variations caused by the blood flow pulsations. The probe is placed under the tongue and the output of probe in the form of DC and AC gives the temperature of body in degree and uses for determination of pulse rate respectively [7-17].

**Statistical Analysis**

The results of project were analyzed by t-Test. t-Test was a formula of analyzing the results done by using Microsoft Excel. If p-value of result was less than expected value then it considered as significant. P < 0.05 was considered as significant.

**Results and Discussion**

Results regarding to project is shown in Table 1 and discussion regarding to results is mentioned in following paragraph.

The average pulse rate of subjects that liked the bitter gourd was 80.34 and statistical analysis done by standard deviation was 11.9. The subjects that disliked bitter melon had average pulse rate 81.4 with statistical analysis done by standard deviation was 11.9. P-value according to t-test was 81.39±10.72. The subjects that disliked bitter melon had average pulse rate 80.34 and statistical analysis done by standard deviation was 11.9.

<table>
<thead>
<tr>
<th>Bitter gourd relish and Pulse rate relationship (Table 1)</th>
<th>Yes</th>
<th>81.39±10.72</th>
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<tr>
<td></td>
<td>80.39 ± 11.97</td>
<td>81.39±10.72</td>
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*p<0.05

No recent studies based on questionnaire were done related to our topic [7-17].

**Conclusion**

The present study concluded that p-value (0.55) of our project was greater than significant (0.05) value. So, no relationship was found between the Bitter gourd relish and Pulse rate measurement.

**References**


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