ASSIGNMENT

1)Observe and record the effect of addition of acid (citric acid, vinegar) on chlorophyll, carotenoids, betalains and flavonoids using food sources that are rich in these pigments. Observe for change in color, brightness, leaching and bleaching of the pigments.

2)Observe and record the effect of addition of alkali (salt) on chlorophyll, carotenoids, betalains and flavonoids by using food sources that are rich in these pigments.

3)Observe and record the effect of temperature (boiling, steaming and microwave heating) on chlorophyll, carotenoids, betalains and flavonoids by using food sources that are rich in these pigments.

4)Observe the process of formation of different caramel colors by heating sugar under anhydrous condition, with acid and alkali.

5)What are the different sources of carotenoids? Explain in detail the basic structure and different forms of carotenoids.

6)Explain in detail the basic structure and different forms of chlorophyll.

7)Write a report on different food technologies that are employed to retain unstable food pigments.

8)Use natural sources of food pigments and categorize them based on their solubility in different solvent systems.

9)Use natural sources of food pigments and separate them using different chromatographic techniques.

10)Write an overview on pigments used in food industry as food colorants.