

MINT FLAVORED CALCIUM TABLETS FROM EGG SHELLS

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ABSTRACT:

Keeping the fact in mind that calcium is very essential in our daily diets especially for young kids and pregnant women, we have tried to make calcium supplements from natural sources like eggshells and tried to make it tastier by converting them into mint tablets.

The intention behind making these supplements from eggshells and not from oyster unlike the other commercial manufacturers is that the powder from eggshell is more soluble than powder from oyster. Also, nowadays many people tend to have nutritional diet but lack of taste makes it less interesting for kids and many other people.

Hence, our attempt is to make mint flavored calcium supplements which makes the calcium source refreshing and also keep its nutritional values intact.

Keywords : *Calcium, Eggshells, Peppermint^[5], Natural ingredients, Tablets, Refreshment, Nutritional.*

I] INTRODUCTION ^[4]:

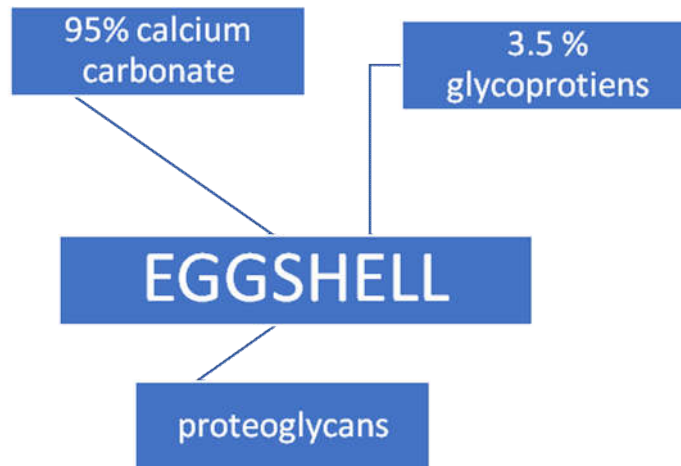
The project started with the problem of young generation lacking calcium in their bones. Lack of calcium leads to weakening of bones and they become porous. Children who don't get enough calcium may not grow to their full potential height as adults. Many commercial companies have made calcium supplements before but a study shows that many of those products fail to complete the requirements of consumers. Even if the companies fulfil the requirements of consumers, many kids stop consuming them after some time because they don't find it tasty enough. This research project will give the consumer a perfect blend of Health and Taste.

II] PROCEDURE ^[3]:

- 1] Take eggshells. Start out by rinsing 12 discarded eggshell in colander.
- 2] Wash well, but make sure you leave the membrane in the eggshell. Eggshells are now rinsed.
- 3] Use a slotted spoon to put Eggshells into a big pot of boiling water. Make sure eggshells stay inside Boiling water.
- 4] Boil eggshells for 10 minutes to remove possible bad bacteria and pathogens.
- 5] Remove them from pot, Put the eggshells in the oven and set the temperature to 200 F.
- 6] After 10 minutes, remove the eggs and put them into cookie sheet.

- 7] Wait till the eggshells cool down.
- 8] Put them in the blender till the eggshells are completely converted to fine powder.
- 9] Add few drops of the peppermint oil and sugar to the powder and turn the powder into a paste .
- 10] Put this paste in desired shape of capsule plate and compress it till it gets solidified.
- 11] Hence the desired mint flavored calcium tablets are formed.

III] DATA AND IMAGES:



IV] BENEFITS:

- 1] Powder from eggshell is more soluble than powder from oysters which is the main ingredient of many calcium ^[1] supplements in market.
- 2] Eggshells contain Strontium ^[2] as an additional value in it. It helps in increasing the calcium absorption of bones and recovering the bones faster, making it resists the bone fractures.
- 3] It also has calcium citrate along with calcium carbonate. Basically, calcium citrate has more nutritional value than calcium carbonate.
- 4] Peppermint if added in appropriate proportion helps in reducing body heat and is a great source of refreshment.
- 5] No side effects to the body since all the natural sources are considered in the procedure.
- 6] It is helpful in prevention and treatment of osteoporosis.

V] OBSERVATIONS:

- 1] A fine white powder is formed at first after cooling of grinded eggshells.
- 2] The peppermint oil when added turns the mixture in pale yellow color.
- 3] The peppermint adds a fresh and sharp methanol smell to the mixture.

VI] CONCLUSION:

- 1] Rich in calcium.
- 2] Helps in building and maintaining of bones.
- 3] Helps in the proper functioning of heart, muscles and nerves.
- 4] A good way to help kids intake calcium.
- 5] Helpful in refreshment.
- 6] Maintains the heat level of the body.

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