



# EDIBLE WATER BUBBLES

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# WHAT IS THE NEED ?

- ❑ It is a well-known fact that plastic bottles which take hundreds of years to decompose and also harms the environment, so to prevent pollution edible water came into existence
- ❑ To try to combat that *Pierre paslier* and his fellows from *Imperial college of London* have been working on an Innovative solution of water encased inside an edible container made using seaweed . All the customer has to do to quench his/her thirst is poke a hole in the surface layer or better still pop the entire blob into the mouth
- ❑ This is an innovative and incredible edible water bubble known as "OOHO"

THEN



WATER  
BOTTLES

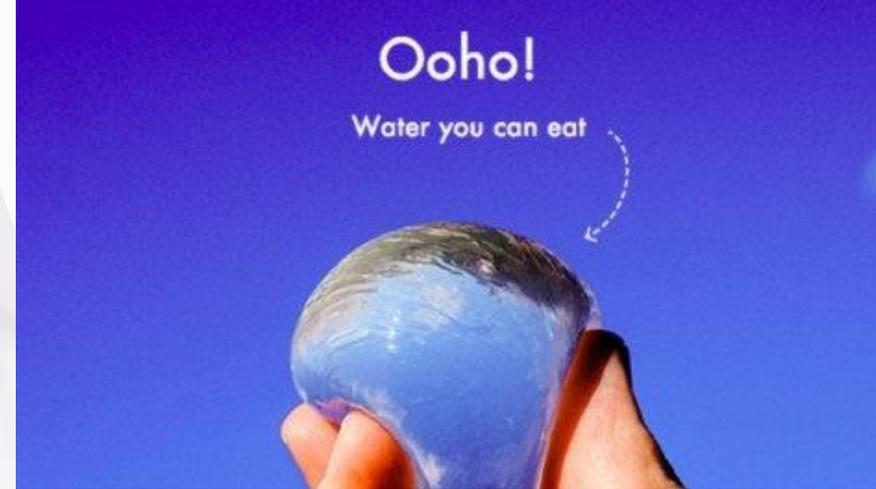
NOW



EDIBLE  
BUB

# FEATURES OF EDIBLE WATER BUBBLE:

- ❑ Ooho is a bubble designed by skipping rocks lab that encircles drinking water within an edible membrane made from a natural seaweed extract .
- ❑ If u don't feel like eating it , the flexible bubble-like packaging biodegrades in jut 4-6 weeks , the same time as it takes for a fruit.
- ❑ The membrane can be flavoured and colored and can also be used for other liquids such as soft drinks , and cosmetics.
- ❑ The jelly-like consistency of the water bubble is accomplished through the process of gelification , which comprises of adding an edible gelling agent to liquids , due to this feature it could quite be a revolution on market

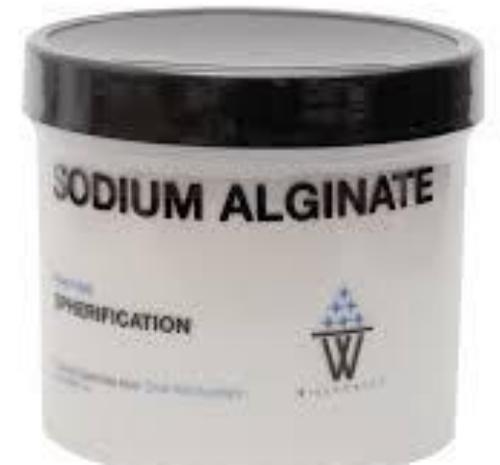
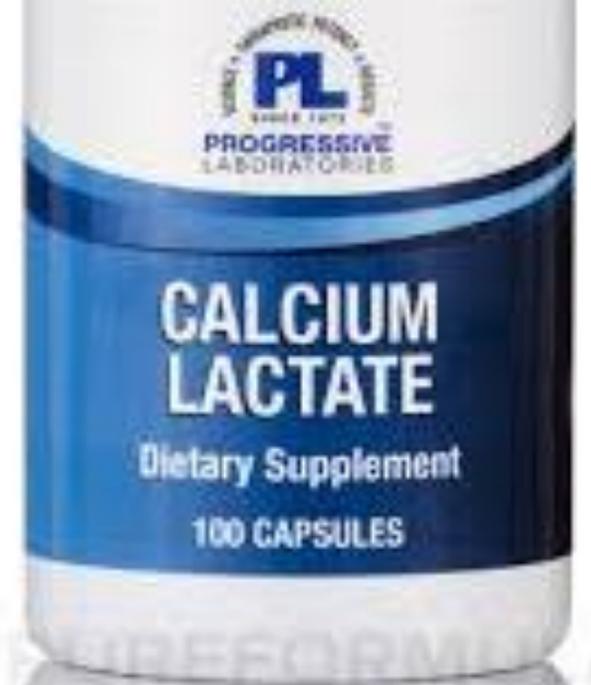


- ❑ The packaging material is cheaper to produce than plastic.
- ❑ The bubbles have a 'bite-size' in three sizes 20,55 and 150ml. The team is developing a commercial machine to produce Ooho quickly and in large quantities . The machine will also be able to make Ooho's that are bigger and in different shapes.
- ❑ If you are not so into the idea of popping a whole water globule into your mouth , you can simply peel off the Outer layer like you would do to a fruit.
- ❑ The intake of non-renewable resources for single-use bottles and the quantity of waste produced is exceptionally unsustainable.
- ❑ Main Goal of Ooho is to supply the convenience of plastic bottles while limiting the environmental effect.
- ❑ Ooho is made 100% from plants and seaweed.
- ❑ It is cheaper than plastic.



# RAW MATERIALS REQUIRED ARE:

- WATER
- CALCIUM LACTATE
- SODIUM ALGINATE



## PROCEDURE FOR MAKING EDIBLE WATER BUBBLE:

### INGREDIENTS:

- 1 gram sodium alginate
- 5 grams food-grade calcium lactate
- 5 cups ( 1.2 L) water, divided

### STEPS:

1. Mix 1 gram of sodium alginate with 1 cup (240 mL) of water. Use a kitchen or a digital scale to measure out 1 gram of sodium alginate. Place it into a bowl, then add 1 cup (240 mL) of water. Mix the 2 ingredients together using an immersion blender until the sodium alginate dissolves.



2. Mix 5 grams of calcium lactate with 4 cups (950 mL) of water.

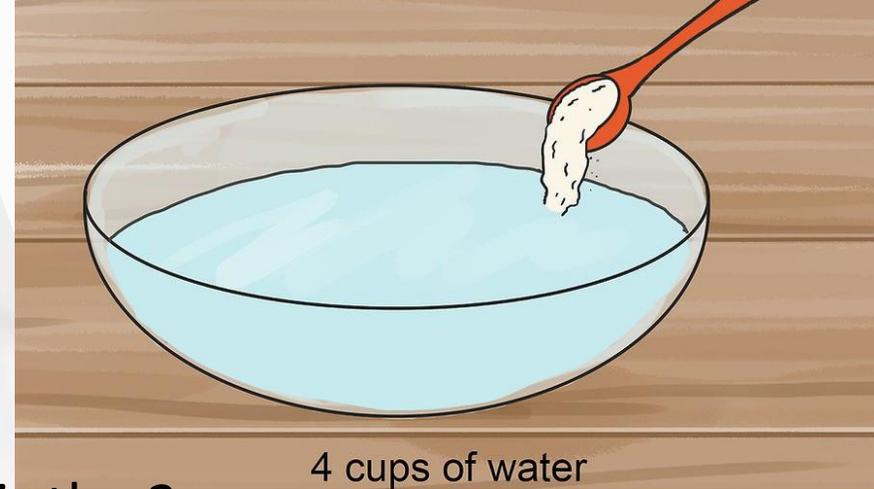
Pour 4 cups (950 mL) of water into a large bowl, separate from

the first bowl. Add 5 grams of calcium lactate. Stir the 2 ingredients together with a spoon until the calcium lactate dissolves.

3. Add spoonfull of sodium alginate water into the calcium lactate water.

Take a deep spoon, such as a sauce ladle, and scoop up some of the sodium alginate mixture.

Hold the spoon over the surface of the calcium lactate mixture, then carefully tip its contents in. Do this a few more times until the bowl is filled.



4. Stir the mixture for 3 minutes. Use a slender spoon to gently stir the contents in the large bowl. Keep stirring for 3 minutes. This will help activate the ingredients, and cause the sodium alginate to condense into "bubble" shapes.

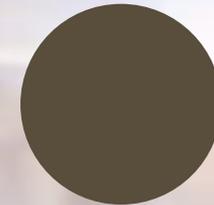
5. Transfer the bubbles with a slotted spoon into a bowl of water. Fill a large bowl with plain water; the exact amount does not matter, as long as it is filled. Use a slotted spoon to remove the sodium alginate bubbles 1 by 1, and transfer them into the water. This will help stop the reaction.

6. Scoop the bubbles from the water with a slotted spoon. Set them down onto a plate or into a bowl. At this point, you can eat, drink, or slurp the bubbles up. You can also give them to young children to play with as a sensory activity!



# LET US DISCUSS ,WHAT WILL BE THE STRATERGIES FOR MARKETING,COST,PLANNING,TARGET AUDIENCE AND FUTURE PROSPECTS OF OUR PRODUCT

- Strategic Design and design thinking in general ideally address large-scale and complex issues, relative to environment, social innovation or economic challenges.
- Also, from an article “A set of principles good at making people interactions with new products, technologies or other complex systems simple and pleasurable” [*Harvard Business Review*]
- The consumer always wants a product with less cost but good quality.so initially the cost of the product should be maintained as low but as soon as the products demand increases the cost will also be increased so as to fullfill the consumer demands and making available resources as per the demand



- As far as target customer is concerned we should advertise about the product where there is a large public get together. For eg, In a marathon race we will make small stalls at some distances between the starting and final point of marathon and the participants will get this edible water bubble to consume between the race hence a large amount of people will consume and will get to know about it.
- At various areas which do not have much literate peoples , we will make awareness amongst people that how the plastic can be replaced easily and substantially by edible water bubble .
- Also if future prospects are considered then the main reason of creation of edible water bubble is to eliminate usage of plastics as it takes a large amount of time to get decompose . As the idea is innovative various funds are also provided across the world and a positive response has been recorded by people.



# CONCLUSION

- So, from the topic it can be concluded that in future there will be supermarkets that wont have plastic water bottles.
- To conclude my topic I would like to show you a short video to get the concept more clear about edible water bubbles.
- So Ooho is 100% natural and extracted from seaweeds and cheaper than plastic



# REFERENCES

Wikipedia , YouTube and different technological magazine.

# SPECIAL THANKS TO

*Sayali madam and Tejal madam* for guiding me throughout the project.