

# MAKING ALGINATE GUMMY WORMS!

Using chemistry and some special ingredients, we prepare homemade gummy worms; a gastronomical treat!

## MATERIALS

- FOOD GRADE SODIUM ALGINATE
- FOOD GRADE CALCIUM CHLORIDE
- DISTILLED WATER
- BOWL
- FOOD DYE OR KOOL-AID FLAVOUR
- CONTAINER WITH LIDS FOR MIXING THE SODIUM ALGINATE SOLUTION
- SQUIRT BOTTLES OR SYRINGES FOR MAKING OUR WORM SHAPES



## PROCEDURE

1. IN A BIG BOWL, MIX 1 TABLESPOON OF CALCIUM CHLORIDE WITH 1 CUP OF WARM WATER. MIX UNTIL THE SOLUTION IS CLEAR AND THE CALCIUM CHLORIDE IS FULLY DISSOLVED. IT WILL BECOME MURKY BEFORE IT BECOMES CLEAR.
2. IN A SEPARATE CONTAINER, OR MORE IF YOU'RE MAKING DIFFERENT COLOURS OR FLAVOURS, MIX 1/2 TEASPOON OF SODIUM ALGINATE WITH 1/2 CUP OF WARM WATER. MIX UNTIL FULLY DISSOLVED AND YOU MIGHT NEED A BLENDER BECAUSE THE ALGINATE HAS A TENDENCY OF CLUMPING.
3. ADD 1 TABLESPOON OF KOOL-AID FLAVOURING (OR FOOD DYE IF YOU JUST WANT COLOUR) TO YOUR ALGINATE SOLUTION AND MIX WELL.
4. USING A SYRINGE OR SQUEEZE BOTTLE TO ADD YOUR ALGINATE WORM SOLUTION TO YOUR CALCIUM CHLORIDE SOLUTION. TRY TO MAKE IT ONE LONG STREAM FOR A LONGER WORM.
5. LET IT SET FOR A FEW SECONDS THEN GENTLY PULL IT OUT OF THE WATER TO SEE YOUR WORM!
6. IF YOU FLAVOURED IT TO EAT, RINSE IT WITH COLD WATER OR IT WILL BE VERY SALTY. NOW ENJOY YOUR WORMS, THEY GO WELL ON ICE CREAM.

THIS EXPERIMENT USES SPECIAL INGREDIENTS WHICH WILL REQUIRE A SHOPPING TRIP BUT IS GREAT FOR INTERMEDIATE EXPLORERS AND SHOULD BE DONE WITH ADULT SUPERVISION. YOU WILL NEED TO BOIL WATER IN A TEAPOT OR ON THE STOVE.

