

## Homemade Microbial Media

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## **MATERIALS**

Containers: tin-foil muffin tins, clear deli containers (containers must be heat-resistant)
Measuring cup (heat resistant)
Mixing bowl / container (microwavable)
Aluminum foil / plastic wrap
Spoon

Gelatin (Knox brand or equivalent)

Water

Bouillon cube (beef)

Table sugar

## **PROCEDURE**

- 1. Mix together 250ml (1 cup) of water with 2 packets (~12g) gelatin into a mixing container.
- 2. Mix in 1 bouillon cube.
- 3. Mix in 10g sugar (~10ml or 2tsp)
- 4. Stir to dissolve/mix all contents thoroughly
- 5. Bring the mixture to a boil in a microwave by repeated heating (use 1-minute intervals), and watching carefully until the gelatin (or agar) is completely dissolved.
- 6. Let the mixture cool for 15 minutes. (WARNING: HOT LIQUID!)
- 7. Carefully pour the hot medium into clean containers until 1/2 or 1/3 full.
- 8. Carefully cover (wrap) each container with either aluminum foil or plastic wrap.
- 9. Allow to cool and harden. Do not agitate the containers while cooling/hardening is taking place.
- 10. Use the microbe food within 3 days. Store in a refrigerator or other cool, dry location.

## **NOTES**

- 1 ) Gelatin will melt if it gets too warm (depending upon the grade)  $\sim$  35  $^{\circ}$  C). Some microbe strains will liquefy gelatin (that's why agar agar is used in formulations). Agar Agar can be found in most Asian grocery stores or baking supply stores & is the better choice of a solidification medium.
- 2) One envelope of powdered gelatin, ~7g is ~35ml or ~2.5 tsp
- 3) 5g (~1 tsp) bouillon granules can be used in place of cube