



ISOLATION OF DNA FROM PROCESSED FOOD

(ADAPTED FROM BIORAD BIOTECHNOLOGY EXPLORER GMO INVESTIGATOR KIT)

1. Label screw-cap tubes
2. Add 500 μ l Chelex to each tube.
3. Weigh 2.0 g of each food.
4. Add 10 ml of distilled water (5 ml water for each gram of food).
5. Grind with the pestle until a slurry is formed.
6. Add an additional 5 ml of water and grind again.
7. Transfer 50 μ l of the ground slurry to the tube containing the Chelex (10% in H₂O) (It may be necessary to cut the tip of the pipet tip off with scissors to allow the slurry to enter the tip.).
8. Mix the Chelex and slurry by flicking the tube and transfer to a 95-100°C waterbath or temp-block and incubate for 5 minutes.
9. Pellet the Chelex by centrifugation in a microfuge at full speed (12-14,000 rpm) for 5 minutes.
10. Transfer the supernatant (contains the DNA) to a clean 1.7 ml microfuge tube and store at 4°C. Avoid transferring the Chelex with the supernatant. If this occurs, repeat the centrifugation step and transfer the supernatant to another clean 1.7 ml microfuge tube.

Materials

Scale	Scissors
Weigh boats	Chelex (10% in H ₂ O)
Screw-cap tubes (1.7 ml)	Temp-block (100°C)
Sterile/Distilled H ₂ O	Microcentrifuge
Mortar & Pestle	Microfuge racks
Micropipets	Pipet aids
Micropipet tips	gloves
Ice bucket	goggles
1.7 ml microfuge tubes	
10 ml pipets	

