Protocol for importation of food after setting up an isolator

To bring food into the isolator, it needs to be autoclaved within the transport drum and following this an aseptic connection needs to be made with the isolator in question. The autoclaving of food is one of the most critical stages in the running of a gnotobiotic facility, as it is likely that any break in sterility will be traceable to the food.

Materials for transport cylinder preparation for food importation

A. Inside the drum

- 1. Supply of autoclavable food.
- 2. 6x 100ml Duran flasks with gauze swabs inside contained within bottle holder each marked with serial number¹
- 3. Pestle and mortar.
- 4. 15 paper bags to hold the food inside the isolator.
- 5. 135°C chemical indicator strip

B. Additional materials required

- 1. Transport drum and all trays as base
- 2. Mylar film
- 3. Vinyl tape²
- 4. Free autoclave time (make reservation ahead of time)
- 5. Spray gun and hose
- 6. Swab loaded into swab holder
- 7. 250ml Duran flask to hold 10ml of peracetic acid.
- 8. Access to electronic form for cylinder connection (e.g. GnotoformABC.xls, where ABC is the three-digit isolator code³—see **Gnoto1010** for codes)

Procedure for transport cylinder preparation and connection

- 1. Clean out the transport drum and remove any old tape.
- 2. Put the all trays into the drum to provide a platform for the materials.
- 3. Put one scoop of food into a cotton bag and loosely tie the bag.
- 4. Put bags on shelves and spread out so that food pellets are flat and in one layer.
- 5. Load the drum with the pestle and mortar, the paper bags and the sample bottles.
- 6. Seal the drum with Mylar film as per **Gnoto1023**.
- 7. Autoclave the drum on appropriate program (see Gnoto1011).

Red - Cages & Equipment

Blue - Water

Green - Bedding & Food

¹ Coding for the sample bottles. These are in groups of 6 and **coded in the standard fashion** with sample labels (format is 020520051 where the tube was prepared on 02 of May (05) Year (2005) and number (1);

² Colour Codes for Vinyl Tape

³ For example, Gnotoform101.xls refers to isolator 101, Gnotoform102.xls refers to isolator 102, and so on.

- 8. Remove the drum from the autoclave and bring into the gnotobiotic unit (see Gnoto1007).
- 9. Connect the drum to the isolator as per **Gnoto1024**.
- 10. Remove food from each tray in sequence and place in the paper bags.
- 11. Take two pellets from any paper bag and crush them to a powder with the pestle and mortar; tip the powder into one of the 100ml sample bottles.
- 12. Repeat step 11 for each of 5 different sample bottles, using a different bag containing food pellets each time.
- 13. One sample bottle should remain unopened, and all sample bottles are then transferred back to the transport cylinder.
- 14. Close inner quadralock door.
- 15. Detach the sleeve and place it to be cleaned prior to next use.
- 16. Complete GnotoformABC.xls online, print off a copy and file it in the appropriate file for the isolator.
- 17. Place the sample bottles in the tray in the corridor.
- 18. Store the transport cylinder.