## **Background**

Concern has been raised by some that the production of oral polio vaccine involves materials of porcine origin and that this might make the vaccine not halal for use by Muslims.

The following is a description of stepwise production of the oral polio vaccine (OPV) which demonstrates that OPV does not contain any products of porcine origin or any other substance considered haram.

## **OPV** production steps

- 1. There are no products of porcine origin in the seed materials (cell lines and other biological reagents) used to make the oral polio vaccine.
  - 2. There are no products of porcine origin in the oral polio vaccine itself.
  - 3. A specific cell line is used to grow the polio vaccine virus to make the final vaccine.
- 4. In the preparation of these cells, a special product called Trypsin is needed to remove the cells from their container. The trypsin is an enzyme of porcine origin.
- 5. After the removal of the cells and before the virus for the vaccine is added, the Trypsin is completely washed and cleaned off from the cells.
- 6. The polio vaccine virus is then added to the cells to grow the virus for the vaccine. When the virus is ready, it is taken from the cells further cleaned and purified, and put into the vaccine vials.
- 7. At no time the final polio vaccine virus which is in the vaccine vial comes in contact with Trypsin nor any other porcine product.

## Conclusion

There are no products, materials or contents of porcine origin in the oral polio vaccine.

Friday 25th of April 2025 07:10:04 PM