

**A simple and low cost device for saving cooking gas**

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With ever increasing fuel prices, it is an urgent need to invent energy saving devices for practical applications especially for developing countries like ours that heavily depend on imported fuel. An attempt was made to invent a simple gas saving device for cooking pans with round bottoms. The main objective is to reduce the energy loss to the surroundings due to convection, radiation and conduction.

A device is constructed to cover the gap between the burner and the wall of the cooking pan so that the maximum energy is transferred from the heated air to the pan. The device consists of a cylindrical aluminum foil around the pan with an air space between the pot and the foil, a glass wool around the foil as an insulating layer, partially covered bottom layer of insulating material with aluminum foil at the top and an insulating top. The efficiency of the device is compared with that of the bare pan by measuring the time taken to boil a fixed amount of water while keeping the other conditions the same. The variation of the temperature of water with time is measured using a temperature ceñser connected to a computer through a data acquisition unit.

The preliminary result indicates that the device reduces the gas consumption by ~20%. The study is in progress for further improvements and for the determination of optimal values for all parameters for pots of different shapes. However, it is already clear that the simple device invented here can be manufactured locally at low cost for practical applications.

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