Save Water and Save Money in Asian Restaurant Kitchens

How?

When you use less water, you save money and help the environment.

There are a number of ways to save water and money in Asian style cooking restaurants.

Why?

Asian style cooking restaurants use 2 to 4 times as much water as other styles of kitchens. Commercial wok stoves and steamers use approximately 75 per cent of total water used in Asian style kitchens.

1 Leaks

One drip per second equates to 7,000 litres of water per year. To prevent leaks ensure that your restaurant taps have regular maintenance checks.

2 Traditional wok stoves

These wok stoves use 5,500 litres of water per day for cooling and cleaning but only 10 per cent is used for cleaning and food preparation. A water efficient stove can save 5000 litres of water per day per wok stove and achieve savings up to $4,500 per year. (See 'Waterless' wok stove brochure at www.sydneywater.com.au)

3 Commercial steamers

Commercial steamers use water for equipment cooling and food process cooking. Like wok stoves, the potential to reduce water use through alternative equipment is significant. Recent developments in equipment design have resulted in an average saving of 2,500 litres of water per day per steamer and an annual saving of $2,300* per year per steamer.

(Based on 2004/05 Sydney Water charges. Assumes Sewer Usage Discharge Factors of 90 per cent, Trade Waste Discharge Factor of 100 per cent on water saved and 364 days per year operation.)*

4 Food thawing

Studies have shown that Asian style kitchens use running water to thaw frozen food prior to cooking – up to 6,000 litres per day – a significant waste. Methods of thawing that do not require water include:

- using a microwave oven.
- placing frozen food in a refrigerator the night before using it. This will allow the food to thaw while remaining cool.

5 Sinks and basins

The amount of water used in sinks and basins can often be halved simply and cost effectively. Flow control regulators or tap aerators fitted to existing tapware, or new

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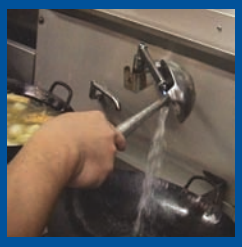
water saving fixtures and fittings, such as AAA-rated tapware and pre-wash spray rinse units, all save water and money.

The following table identifies the water and energy cost savings achieved by reducing existing sink and basin flows to best practice.

	Best practice	Existing use	Saving per fixture		Purchase & Installation cost	Payback period years
			Kl/year	$/year		
Sinks	12 L/min	25 L/min	40	122	$40	0.4
Basins	6 L/min	12 L/min	6 – 9	17 – 26	$40	1.5 – 2.3



6 Hand washing dishes

The amount of water used when hand washing dishes can be greatly reduced if the water is not left running. It is more water efficient to put the plug in the sink or basin and fill it with water, release the plug when the water is too dirty to use and then refill the sink with clean water.

7 Vegetable cleaning

The amount of water used when washing vegetables can be greatly reduced if the water is not left running. It is more water efficient to put the plug in the sink or basin and fill it with water to clean the vegetables, release the plug when the water is too dirty and then refill the sink with clean water.

8 Dishwashers

Operating your dishwasher efficiently and ensuring that it is properly maintained can achieve significant water savings in the following ways:

Train your staff to operate the dishwasher correctly by

- Adhering to the manufacturer's recommended equipment flow rate.
- Installing flow control to the rinse line (where applicable).
- Using an auto timer or electronic sensor to prevent rinse water running when dishes are not passing through the system (rack conveyor type).
- Replacing scrapping trough systems with a conveyor system, that does not require water to carry waste from the base of the dishwasher to the disposal unit.

9 Garbage disposal

Minimise the use of garbage disposal units as they can consume up to 30 litres of water per day.

Consider using wastewater from dishwashers for use in garbage disposal units where water quality is not important.

10 Cleaning

Sweep or mop floors instead of hosing down with water next time you clean the kitchen.

This brochure is based on information provided by Sydney Water