

## 7. Cost Comparisons

### 7.1 Cost Reduction

#### 7.1.1 Chemical Usage



Pamela Youde Nethersole Eastern Hospital (Hong-Kong)

56% reduction in detergent cost

Acute Care Hospital with 1800 beds

Cook-chill CPU site serving 15 hospitals, total 18,000 meals/day

<u>2001/ 2002</u> Before using electrolyzed water	<u>2002/2003</u> * Started to use electrolyzed water in Sep 2002	<u>2003/2004</u> **
<u>13 varieties</u> of detergents/cleansers	<u>7 varieties</u> of detergents/cleansers	<u>5 varieties</u> of detergents/cleansers
HK\$125,816/year	HK\$78,323/year	HK\$70,584/year

\* SARS (Mar - Jun 2004)

\*\* Salt usage = 672 kg/year = HK\$604.80/year

Reduction in chemical usage after using electrolyzed water

Dishwasher detergents:

- Optimum 102 power detergent
- Optimum 163 rinse aid
- Optimum 281 lime remover
- Dishware soaking detergent → Eliminated
- Mikro Chlor → Eliminated
- Mikro Quat → Eliminated
- Optimum pre-soak destainer → Eliminated

Other detergents/cleansers:

- Optimum oven & grill cleaner
- General detergent (Bulk)
- Oasis 266 → Eliminated
- Oasis 144, Quat sanitizer → Eliminated
- Bleach → Eliminated
- General detergent (Unit) → Eliminated
- Soap, toilet liquid → Eliminated



### 7.1.2 User Voices

- Dirt and grease are easily cleanable just by soaking in alkaline water.
- It is easy to remove fishy smells by washing hands with acidic water after touching fish.
- After-hours cleaning has become easier after installing the water electrolyzer.
- Discolored plastic tableware recovered the original color after soaked in acidic water.
- Electrolyzed water causes less irritation than other chemicals and is safe to use.
- Electrolyzed water leaves less residue than sodium hypochlorite and provides safe disinfection.