





Operational Efficiency and Preventative Maintenance

Taking Cost Out of Healthcare



Oct-13 @directsupply.com

Operational Efficiency

- Selecting the Right Product
- Energy Efficiency
- Preventative Maintenance


Labor Savings



Selecting the Right Product




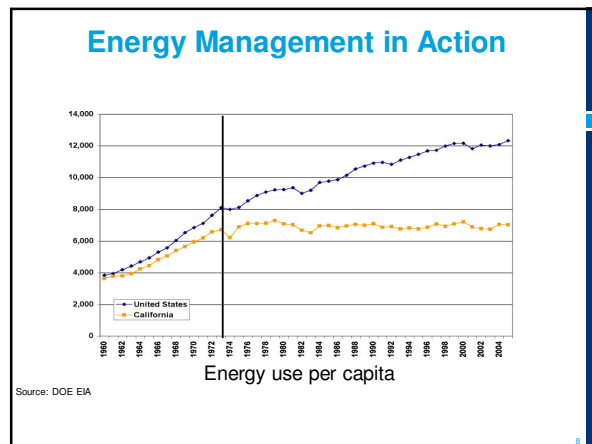
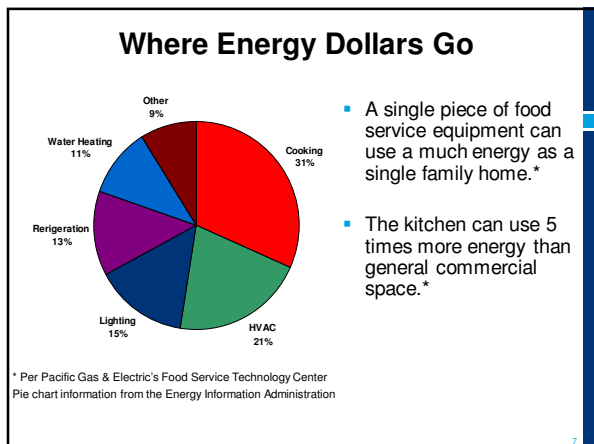
Energy Savings



Energy Savings

- What is Energy Star?
 - www.energystar.gov
 - Energy savings calculators
- Joint program
 - EPA and US Department of Energy
- Avoid greenhouse gas emissions
 - Equivalent to 30 million cars
- Saving on energy costs
 - \$17 billion in 2010





Energy Savings: Dollars per Year

Dishwashers	\$850
Gas Fryers	\$600
Hot food holding cabinets	\$430
Ice machines	\$100
Solid door refrigerators	\$170
Solid door freezers	\$120
Steam cookers	\$550
Total annual savings	\$2,820

Ideas for Conserving Energy?

Not in Use? Shut it Off

- Identify usage patterns

Annual Savings per Hour of Daily Shut Off	
Steam cooker	Up to \$80
Pasta cooker	Up to \$300
Broilers	Up to \$200
Griddles	Up to \$80

- ### Use the Right Equipment for the Job
- Certain equipment cooks more efficiently
 - Steamers and Combi ovens are extremely efficient
 - Induction is most efficient
 - Gas is 40%
 - Electric is 60%
 - Induction is 90%

Keep the Heat in

- Cooking with a lid
- Keep oven door closed when possible
- Check Seals

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Keep it Clean

- Build up makes equipment work harder
- Clean...
- Recalibrate

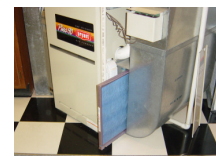
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Preventative Maintenance

- Equipment selection
- Preventative Maintenance
- Water Treatment

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Preventative Maintenance



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Estimated Service Life

- | | |
|--|--|
| <ul style="list-style-type: none"> ▪ Ranges <ul style="list-style-type: none"> ◦ 25 years ▪ Steamers <ul style="list-style-type: none"> ◦ 15 years ▪ Convection ovens <ul style="list-style-type: none"> ◦ 20 years ▪ Fryers <ul style="list-style-type: none"> ◦ 15 years | <ul style="list-style-type: none"> ▪ Dishmachines <ul style="list-style-type: none"> ◦ 7 to 10 years ◦ High vs. Low temp <ul style="list-style-type: none"> ▪ 20% longer life for high ▪ Ice Machines <ul style="list-style-type: none"> ◦ 7 to 10 years ▪ Cook/hold ovens <ul style="list-style-type: none"> ◦ 25 years |
|--|--|

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Food Prep – Slicer

- Selection Criteria
 - Number of hours slicing per day
 - Products being sliced
 - Construction
 - Clean-ability



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Food Prep – Slicer


- Cleaning and PM



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Mixers


- Selection Criteria
 - Size and capacity needed
 - Construction
 - Features



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Mixers


- Cleaning and PM
 - Wash bowl immediately after use-
 - Rinse with cold water first if egg mixtures or flour batters used, before washing with hot



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Food Processor


- Selection Criteria
 - Bowl and/or Continuous Feed
 - Importance of sizing unit
 - Proper usage
- Benefits
 - Consistency
 - Speed
 - Advantages of Bulk



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Food Processor

- Cleaning and PM
 - Do NOT overfill
 - Clean after each use
 - Wash blades carefully
 - Hand wash rubber and plastic components



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Cooking Equipment – Steamers

- Selection criteria
- Applications
- Energy Star rating
- Warranty and filters



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Steamers

- Cleaning and PM



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Cooking Equipment- Ranges

- Selection criteria
 - Light duty or medium duty
 - # burners, griddle
 - Countertop or freestanding
 - Features



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Cooking Equipment- Ranges


- Cleaning and PM
 - Open top burners
 - Painted finish



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Convection Ovens


- Selection criteria
 - Size
 - Features
 - Deluxe options?
 - BTU's



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Convection Ovens

- Cleaning and PM
 - Allow unit to cool
 - Remove all racks and guides



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Steamtables

- Selection Criteria



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Steamtable

Tips for general operation:

- Fill well with **two quarts of water**
- Turn the control to "HIGH" and pre-heat the warmer for 30 minutes.
- Set the control to desired serving temperature
- Never pour water into a well that has been heated dry

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Steamtables

- Cleaning and PM
- Daily
- Monthly



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Ice Machines


- Selection Criteria
 - Sizing
 - Air Cooled vs. Water Cooled
 - New Electronic Controls
 - Easier to clean



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Ice Machines


- Cleaning and PM



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Refrigeration


- Selection Criteria
 - Point of use refrigeration
 - Refrigerant system
 - Design and construction
 - Compressor location



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Refrigeration


- Cleaning and PM



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Fryers

- Pitfalls of Fryers?
 - Labor
 - Energy Efficient



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Dishmachines

- Selection Criteria
 - Space/Hood
 - Hi Temp or Low Temp
 - Capacity
 - Wash cycles
 - Energy Star rating



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Dishmachines


- Cleaning and PM



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General Cleaning & PM

1. **Read the operation manual**
 - Filters (water and air)
 - Stainless Steel
 - Calibrate equipment




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Water Solutions

70% of failures on water-using equipment = Hard Water

- Scale Eliminator




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Water Solutions

Terry Products

- Problems that result from scale build up



Scale Thickness	Efficiency Loss (%)
1/16"	11%
1/8"	18%
1/4"	38%
3/8"	48%
1/2"	60%


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Dishwasher heating elements before TERRY water treatment installation
No de-liming procedure before installing the TERRY unit




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Dishwasher heating elements two weeks after TERRY unit installed



Dishwasher heating elements 5 months after TERRY unit installed.



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Operational Efficiency

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Disclaimer

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This information **is not** and **not intended** as legal or other advice, and each situation may vary depending on the particular facts and circumstances.

You should not act upon this information without first consulting with qualified legal counsel.

Thank you.

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Thank You for Your Time!
Questions??

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