

TDA  
Research

Wheat Ridge

Colorado

# Hot Lunch



**T**DA Research, Inc. (TDA) has developed a FIRE FREE™ Heating system to replace the system the Army previously used to heat field rations. The previous system produced a substantial quantity of flammable and explosive hydrogen gas. The FIRE FREE™ system eliminates hazards while maintaining convenience for the soldier. The safety and effectiveness of this new system have been demonstrated through independent evaluations. All soldiers in the field can benefit from the improved safety offered by the FIRE FREE™ heater.

This system has been adapted for a self-heating beverage package which will heat eight ounces of water by more than 100°F

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*"The size of the potential commercial market for self-heating beverages can be estimated from the fact that Americans drink more than 150 billion cups of coffee per year."*

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in less than seven minutes. For maximum convenience, the water needed to activate the heater can be included in the package, and the heater can be activated by a pull-tab. Examples include a self-heating meal (tray package containing a three-component entree) or beverage (coffee, tea, hot chocolate, soup).

U.S. Army  
Soldier Systems  
Command

AVR20s11

TOC11½

TDM10s10

MFV14

SPP14

## Phase III Impact

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- Expected sales - \$1.4M
- Recipient of 1997 Army Phase II Quality Award
- U.S. patent applied for
- Heaters now in preparation for additional field trials by U.S. Army
- Other organizations have requested samples and test quantities