



Revolutionary Packaging Technologies



Revolutionary packaging technologies will be incorporated into current and future ration systems to improve material properties, to validate/protect the food supply, to increase survival rates and to improve overall ration quality.

Why Is It Needed?

Combat rations will require innovative material and packaging technologies to provide improved shelf life, logistics, quality and safety to the warfighter.

Technologies:

Nanotechnology in Packaging...the incorporation of nanoparticles into packaging films for improved barrier and mechanical properties.

Dynamic Packaging...embedded antioxidants and odor/aldehyde-scavenging materials for packaging films to reduce off-odors/flavors and rancidity.

Tamper Evident Packaging...mechanical and/or RFID-based sensor technologies to provide protection against bioterrorism and product tampering.

Polychromic Packaging...thermo/photochromic reactive polymers that change color based on the environment.

Ration Packaging Reconfiguration...alternative packing technologies (e.g. aerogels, airliner) to increase survival rates in worst case scenarios such as airdrop.

Key Features/Benefits:

These technologies will benefit all current and future ration packaging systems with:

- Lighter weight and cube
- Enhanced package survivability
- Increased quality, acceptance and shelf life
- Capability to tailor to mission needs
- Improved food safety and security

Point of Contact:

DoD Combat Feeding
Phone: COMM (508) 233-4401, DSN 256-4401
E-Mail: amssb-rcf@natick.army.mil



NATICK SOLDIER CENTER
Kansas St.
Natick, MA
01760
nsc.natick.army.mil