## CO2 Fresh-Pads



Fresher & Safer Meat, Poultry, Seafood & Produce

Low Cost!
Easy to Use!
Saves You Money!





# CO2 "Fresh-Pads" FDA & USDA Approved Spoilage Resistant Technology



"CO2 Activ Pad Technology"



## CO2 Technologies, Inc.

- ✓ Registered in 2000, CO2 Technologies is a research and marketing company specializing in extending the shelf-life of perishable products.
- ✓ Products feature a patented process that releases carbon dioxide (CO₂) over time to prevent the growth of bacteria on meat, seafood, fruits, vegetables and flowers, allowing perishable items to stay safer and fresher longer.
- ✓ CO2 Technologies is headquartered in Urbandale, Iowa





# CO2 Fresh-Pads Extend the Life of Perishable Products Through:

CO2... An All Natural Anti-Microbial

No Harmful Chemicals or Contaminants

\*FDA & USDA Approved - CO2 Activ Pad\*

(\*2005: US FDA 21 CFR 7.12.12, 317.20 & 381.144; USDA FSIS Dir 7410.1)
(2006 Canada FIA #C609)
(Organic Producers Association 2004)





## Keeps Fresh Food Fresher Longer!



- ✓ Meat
- **✓** Poultry
- √ Seafood
- **✓** Fruits
- √ Vegetables
- √ Flowers, and
- ✓ Other Perishables





## CO2's Fresh-Pads Stop...

- √ Fish From Smelling!
- ✓ Meat From Spoiling!
- ✓ Berries From Molding!
- ✓ Lettuce From Browning!
- ✓ Flowers From Wilting!
- ✓ Bacteria From Spoiling Your Product!
- ✓ Reduced Shelf-Life From Costing You Money!
- ✓ Chargeback's From Eating Your Profits!





# What Makes CO2 Fresh-Pads Different?

- ✓ CO2 Fresh-Pads may look almost exactly like the pads used in grocery foam trays to soak up Juices from meats, seafood and berries, but...
  - √ "Fresh-Pads" use CO2 in a new patented technology
    and process that's significantly different.
  - ✓ For example: One small pad can extend the shelf-life of fresh sliced tomatoes an additional 4 days!





#### How Do CO2 Fresh-Pads Work?

- ✓ CO2 Technologies' patented technology provides a New Delivery System that releases Carbon Dioxide at predictable rates over time to inhibit bacteria growth on perishable items.
- ✓ When CO2, a "Natural Anti-Microbial," comes in contact with the moisture on the surface of food, the atmosphere is affected and bacteria ceases to grow.





# How Do CO2 Fresh-Pads Work, Cont...

- ✓ The heavier CO2 displaces Oxygen & Ethylene, which slows oxidation.
- ✓ The CO2 in Fresh-Pads is scientifically released on a continuous basis altering the atmosphere surrounding the food.





# How Do CO2 Fresh-Pads Work, Cont...

- ✓ The CO2 cools as it expands and heat is absorbed lowering atmospheric temperature.
- ✓ In protein food applications, CO2 significantly reduces the oxidation of proteins and fats.





#### How To Use CO2 Fresh-Pads

- ✓ Place the CO2 Pad on the bottom of your meat, poultry, seafood & produce trays (just like regular pads) or place on the ice bed of your seafood displays and coolers.
- ✓ Also CO2 Pads can be place on top of all meats, seafood, poultry & produce for overnight storage.
- ✓ CO2 Pads can be placed inside seafood, meat, poultry & deli cases to eliminate odor, maintain firmness, reduce water loss and stop bacteria growth.





## How To Use CO2 Fresh-Pads, Cont.

- ✓ CO2 Fresh-Pads can be used in most tray packed products. If frozen, when the product starts to thaw, the pad will activate and immediately begin to retard bacteria growth & stop purge.
- ✓ The Result...CO2 Fresh-Pads retard bacteria growth, maintain texture, color and freshness on tray & container packed meats, poultry, seafood, fruits and vegetables.
- ✓ By reducing shrink, CO2 Fresh-Pads help sell more product, resulting in additional profits to the retailer.





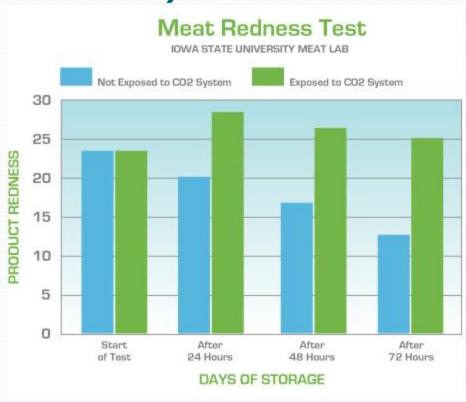
#### How You Benefit:

- ✓ Safer Fresher Meat & Poultry!
  - Retards Bacteria Growth Immediately
  - Keeps Ground Beef & Steaks Bright, Red & Fresh Longer
  - Reduces Purge & Maintains Color
  - Extends Shelf-Life of Poultry 20%
  - Extends Shelf-Life of Sausage up to 50%
- ✓ Longer Shelf-Life, Less Purge, Fewer Markdowns = More Profit!





✓ Laboratory Tests







- ✓ Safer Fresher Seafood!
  - Eliminates Odors From Fresh Fish & Seafood
  - Increased pH Maintains Firmness & Texture
  - Stops Purge, Retains Moisture for Less Shrink
  - 50% Less Bacteria Growth in Tray Pack Salmon
- ✓ Less Shrink, Less Bacteria, Less Odor, Eliminate Early Pulls = More Profit!





#### ✓ Laboratory Tests – King Salmon

DAY #	<b>SAMPLE</b>	WITHOUT PAD	WITH PAD
1	King Salmon	2400*	2400*
4	King Salmon	8800	4400
5	King Salmon	12200	7800
6	King Salmon	32000	15600
7	King Salmon	54000	22000
8	King Salmon	96000	37200
9	King Salmon	556000	123000
10	King Salmon	940000	232000

When King Salmon reaches a plate count of approximately 500,000, it is considered spoiled. As you can see, CO2 pads help greatly inhibit bacteria growth found on fish.

Lovejoy Laboratory Services – CO2 Pads VS Control Sample \*Day 1 prior to application of CO2 pad.





- ✓ Safer Fresher Fruits & Vegetables!
  - Edges of Lettuce Won't Rust
  - Fruit Stays Firmer & Retains Juices
  - Vegetables Maintain Color & Quality
  - Reduces Risk of Food Contamination
- ✓ No More Early Discards, Keeps Fresh Thru Sell-By-Date = More Profit!





#### ✓ Fruit & Vegetable Applications

- Strawberries CO2 pads manage the growth of botrytis without dehydrating the strawberries which stops the growth of mold. That means redder, fresher strawberries (and other berries) at a lower cost.
- **Tomatoes** CO2 pads used in tray packed whole or sliced tomatoes will inhibit bacteria growth, preserve freshness and provide brighter, more appealing coloration.
- **Broccoli** Our unique CO2 pads allow you to keep broccoli without using ice.
- Clean & Core Lettuce Eliminates pinking and rust, making lettuce look greener and crisper.





- ✓ Fresher, Longer Lasting Flowers!
  - Plant metabolism slows down & water intake increases.
  - Aerobic bacteria & mold growth are inhibited.
  - Lighter ethylene gas and oxygen are displaced with heavier CO2, inhibiting shedding and senescence.
  - Increased vase life up to 4 times longer.
  - Example: Roses last up to 4 weeks!
- ✓ Decrease cooling cost, Reduce Throwaways.

  Sell more of what you buy = More Profit!





## CO2 Fresh-Pads



Pays for Itself Through Reduced Spoilage & Longer Shelf-Life!



