



**GOLD SHIELD™**  
PetFoodSolutions.com

“A BRAND’S BEST FRIEND”

KEY EXPERIMENTAL RESULTS



*Better*  
**SAFETY**



*Better*  
**QUALITY**



*Better*  
**TASTE**



# GOLD SHIELD™ – Key Benefits

- **Reduces Risk:** GOLD SHIELD™ RCF reduces risk of *Salmonella* contamination of pet food (post extrusion)
- **Clean Process:** GOLD SHIELD™ uses NO CHEMICALS!
- **GOLD SHIELD™ key benefits\*:**
  - *Bacteriostatic*
  - *Improved palatability*
  - *Better operability*
  - *Higher Purity*

\*Proven through extensive experimentation



# Results From *Salmonella* Challenge Experiments

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## ***Salmonella* grows in standard chicken fat**

- *Salmonella* multiplication and growth occurs when standard chicken fat is exposed to *Salmonella* cells in water
- *Salmonella* uses non-fat components in chicken fat to facilitate growth

## ***Salmonella* does NOT grow in GOLD SHIELD™ RCF**

- No multiplication or growth when RCF is exposed to *Salmonella* cells in water.
- *Salmonella* cells lack nutrients = No Growth
- Bacteriostatic

**Contact us to learn more about our research!**

# Results from Palatability Studies

DESIGN: Dog food was produced at a commercial facility using their standard formulation with either **GOLD SHIELD™** RCF or CF (both containing antioxidant) added to the kibble post-extrusion

- Food consumption and first choice preference for twenty male and female beagles were recorded for each dog.
- Dog food was tested 3 and 10 weeks after production

## RESULTS:

- After 3 weeks: 17 dogs prefer dog food with **GOLD SHIELD™** RCF, 1 dog shows slight **GOLD SHIELD™** RCF preference, and 2 dogs prefer dog food with CF
- After 10 weeks: 9 dogs had no preference, 8 dogs prefer dog food with **GOLD SHIELD™** RCF, and 3 dogs prefer dog food with CF
- Strong first choice preference for dog food with **GOLD SHIELD™** RCF at both time points

**Contact us to learn more about our research!**



# Results from Shelf Life Studies

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## Results from 8-week shelf life study:

- Significant oxidation (as measured by PV) in standard chicken fat (CF)
- No oxidation (as measured by PV) in **GOLD SHIELD™** Refined Chicken Fat with or without AOX
- Induction time (as measured by OSI) about 2X greater in **GOLD SHIELD™** Refined Chicken Fat compared to CF
- Similar OSI ( $\geq 72$ h) of RCF with 500 ppm AOX to CF with 3000 ppm AOX

## Bottom Line:

- RCF resistant to oxidative aging

**Contact us to learn more about our research!**



# Operational Advantages of RCF

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## **GOLD SHIELD™** RCF process reduces non-fat compounds

### Customer Values:

- **Product is easier to handle**, pump – Less agitation, monitoring
- **Reduced solids buildup** in the manufacturing process
- **Reduced sludge in storage tanks** enabling fewer cleanouts
- **Safety** with significantly reduced foreign materials

### Customer Feedback:

- **Better smell:** Like fried chicken - whole plant smells better
- **Better appearance:** Color and clarity
- **Lower labor costs:** Less maintenance (sludge removal, line blockages, etc.)
- **Product savings:** Use ALL of the product by not having to pull off sludge (5 Gals+) daily from storage tank prior to line starts



## Bottom Line: **GOLD SHIELD™** RCF

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- *Salmonella* contamination is a significant risk in pet food
- Best ways to reduce the risk are through a well-maintained high-quality manufacturing process and pure ingredients
- **GOLD SHIELD™** RCF has higher purity and offers many benefits
  - Bacteriostatic (reduced *Salmonella* risk)
  - Better palatability
  - Superior Stability / Shelf Life
  - Operationally beneficial
- Depending on the formulation, AOX and maintenance savings, and reduced salmonella hits, this may pay for itself...and more.

***May we be your brand's best friend?***



**GOLD SHIELD**™  
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**Contact us to Schedule a Technical Discussion**

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# Thank You!

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