



WESMAR
COMPANY, INC.

BASIC CLEANING & ALLERGEN CLEANING

Presented by:

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01

WHAT IS SANITATION?

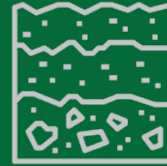


What is Sanitation?



Cleaning

Removing Soils
from a Surface.



Soil

Any Unwanted,
Undesirable Material
on a Given Surface.



Sanitizing

Treating a **Cleaned**
Surface to Reduce
Total Bacteria to a
Safe Level.

02

TYPES OF SOIL



Organic Soils

Fats

Oils

Grease

Protein

Starch

Inorganic Soils

Rust

Scale

03

CHEMISTRY OF CLEANING



Primary Types Chemicals used in Cleaning

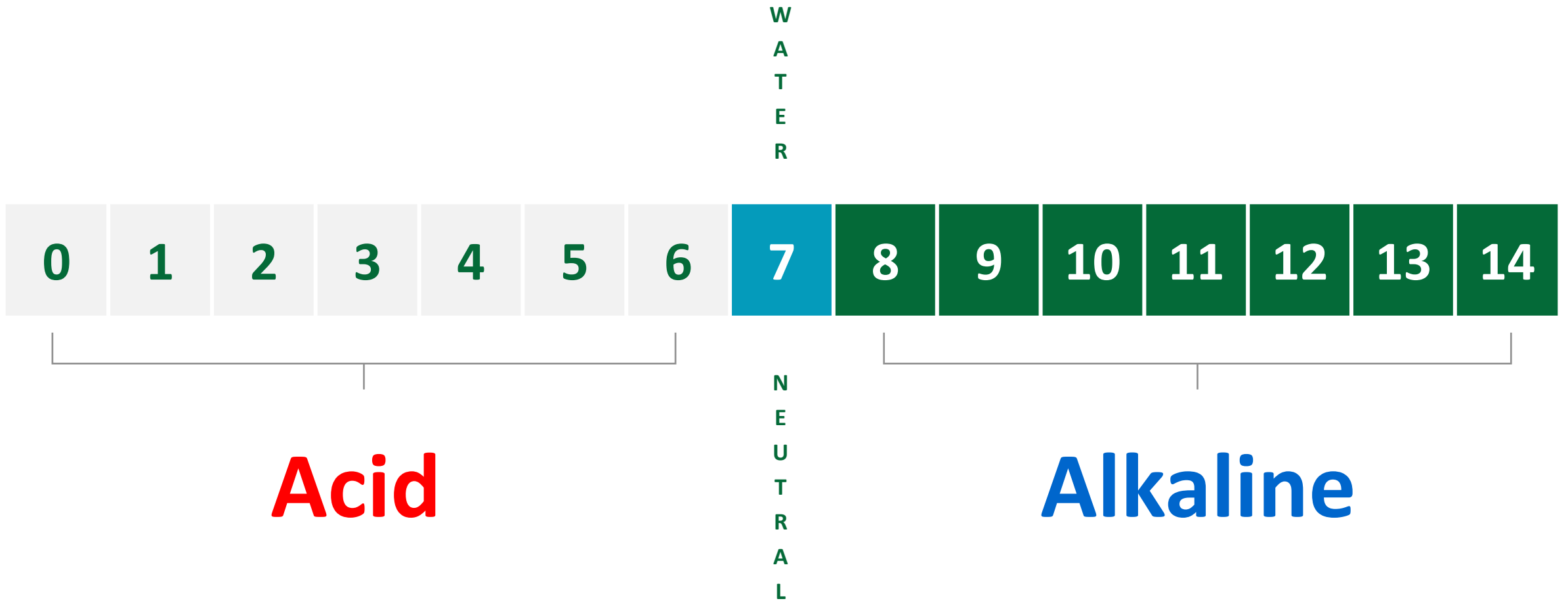


Alkaline



Acid

The pH Scale



Alkaline Cleaners

Remove Organic Soils
(Fats, Oils, Greases,
Proteins, Starches)



Role of Chlorine as a Cleaner

Used with an Alkaline Product:

- Removes Protein
- It is Just a Good Cleaning Additive



Food Processing Plant - Degreaser

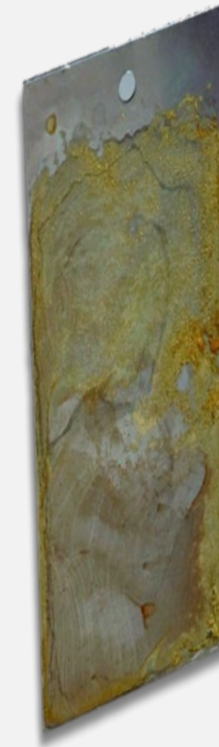
Formulated for Food Plants – FDA / USDA

Usually - Low Alkalinity

Soft Metal Sale – “Buffered”

Acid Cleaners

**Remove Inorganic Soils
(Rust, Scale)**



04

PRINCIPLES OF CLEANING



T.A.C.T.

T	ime
A	ction
C	concentration
T	emperature

**The Principles We
have Control Over.**

**Interdependent –
Changing one
affects the others.**

Time



T	ime
A	ction
C	oncentration
T	emperature

Time Availability

Soil Type

Soil Amount

Process Temperature

Equipment Being Cleaned

Action



T ime

A ction

C oncentration

T emperature

CIP

COP

Foam Cleaning

High Pressure Cleaning

Manual/Brush Cleaning

Concentration



T	ime
A	ction
C	oncentration
T	emperature

Depends On:

- Nature of the Soil
- Chemical Type

Testing Is Critical:

- Test Kits
- Test Strips

Temperature



T	ime
A	ction
C	oncentration
T	emperature

Cleaning Enhanced with Correct Temp:

- Clean at 10°F Higher Than Process Temp.
- For Every 18°F - 20°F Increase in Temp - Double the Activity of the Cleaner.

Chlorinated – Alkaline – Acid

W.I.N.S.

W	ater
I	ndividual
N	ature of Soil
S	urface

**Factors are the Specific
Components of Cleaning
that Change Infrequently.**

Water



W	ater
I	ndividual
N	ature of Soil
S	urface

Hard Water

Soft Water

Sea Water

Hot Water

Cold Water

Individual



W	ater
I	ndividual
N	ature of Soil
S	urface

Who?

How Many?

How Long?

Training?

Nature of Soil



W ater

I ndividual

N ature of Soil

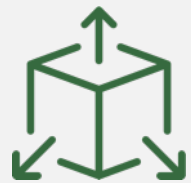
S urface

Organic

Inorganic

Combination

Surface



W	ater
I	ndividual
N	ature of Soil
S	urface

Stainless

Plastic

Concrete

Aluminum

Painted Surface

Process - Steps

1

Prior to Rinse

Remove Trash, Packaging, Chunks and Pieces of Product. Protect Anything That Cannot Get Wet.

2

Rinse

Use Water, Shovels, Fingers, or Brushes to Remove as Much of the Debris as Possible.

3

Wash

Apply Detergent: Foam - CIP - COP - Manual

4

Rinse

Use Water to Remove Detergent and Soils from Surfaces.

5

Inspect

Visually Inspect Equipment/Area Cleaned to Make Sure There is Nothing On It.

6

Sanitize

Flood the Equipment and Surrounding Area with an Adequate Solution of Sanitizer.

Rinse – Rinse – Rinse

Pre-Rinse Removes 90% - 98% of the Gross Soils.

Should be Ambient Temperature to 120°F – Not Hot Water

Reduces Cleaning Chemical Usage

05

DRY CLEANING



Dry Cleaning



Cleaning Without Water:

Vacuum Cleaning

Scraping

Brushing

Sweeping

Blowing*

Blasting: Sand / CO2*

Limited Damp Cloth

Dry Cleaning

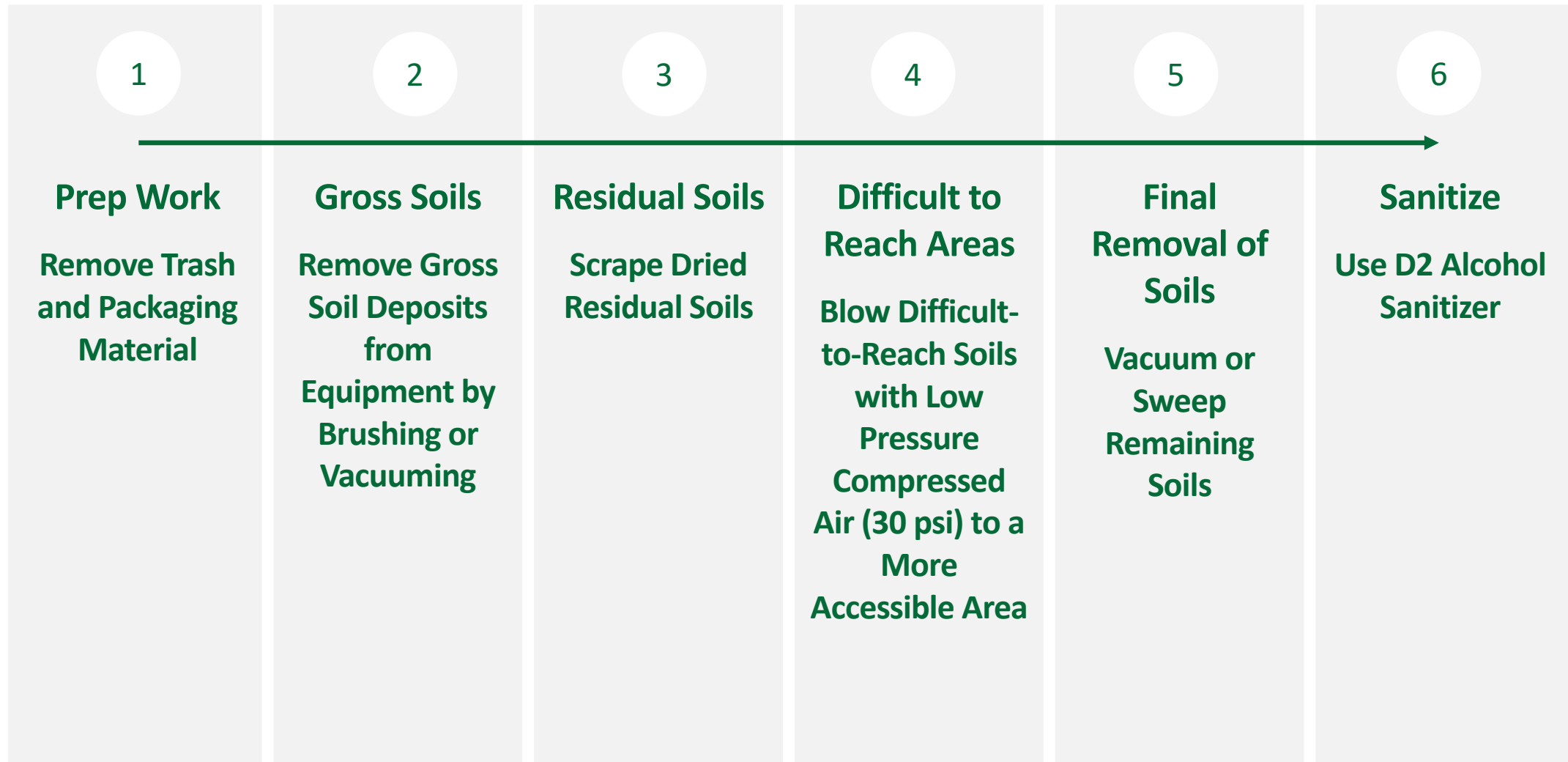
Dry Cleaning Methods are Associated with:

**Dry Processing
Equipment**

**Structural
Cleaning**
Overheads
Walls
Outside Areas
Bulk Receiving
Compactor Area

**Grain Handling
Equipment**

Dry Cleaning Process - Steps



Dry Cleaning

Micro Issues & Sanitizing

Water = Micro Issues
Salmonella Potential

**Be Aware of All
Potential Water
Sources**

**D2 Sanitizers &
Wipes**
Alcohol

Misting Sanitizers

06

SANITATION CONTROL FOR ALLERGENS



FALCPA* Required Food Allergen Labeling

Milk

Eggs

Peanut



Tree Nuts

Wheat

Soy



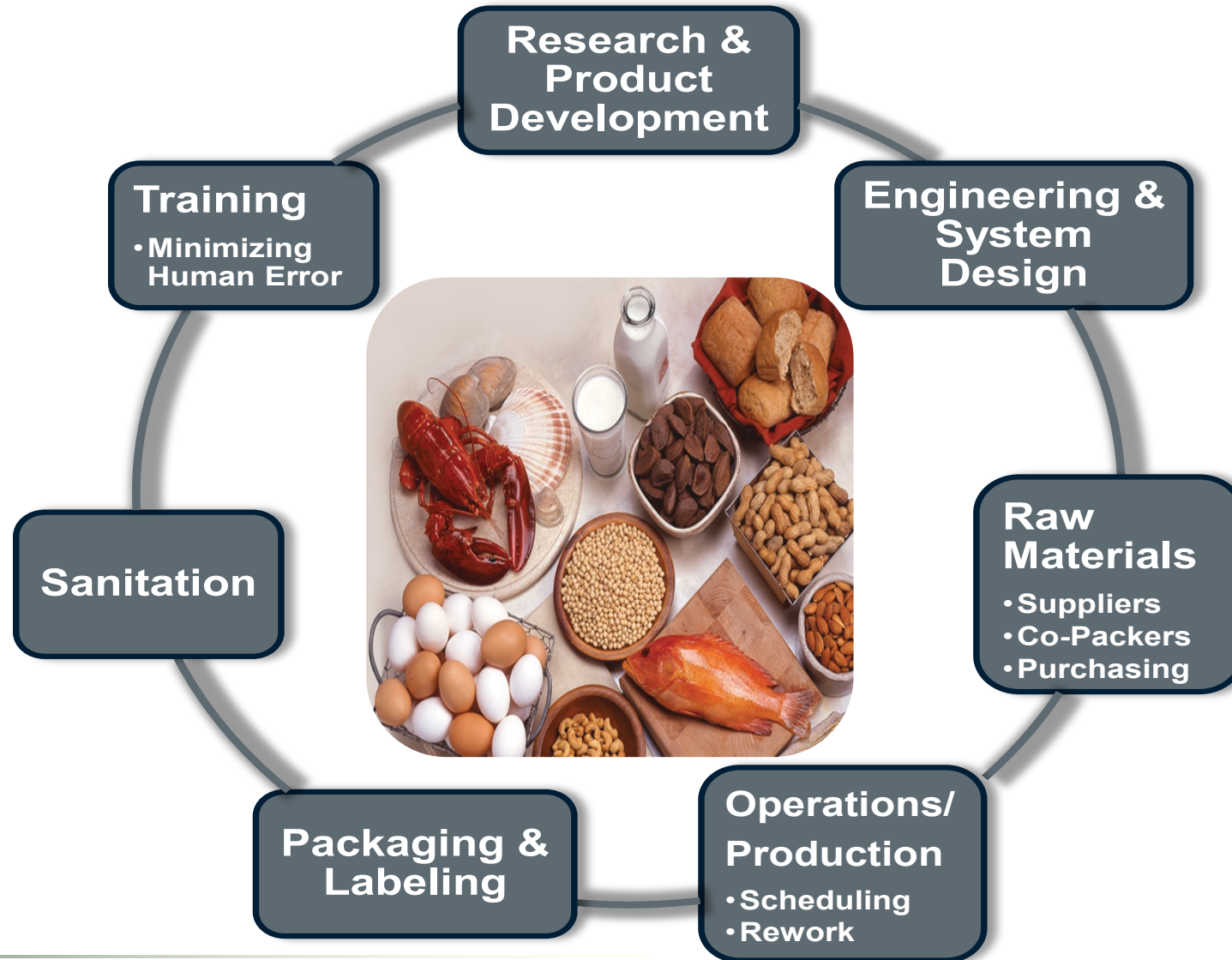
Fish

**Crustacean
Shellfish**

Sesame



FALCPA* Required Food Allergen Labeling



Sanitation Control for Allergens

Clean Equipment to Remove Allergens

- Water and/or Sanitizers Will Not Remove Protein
- Have Written Procedures

Validate Procedures

- Test to Ensure cleaning Method Will Work

Verify

- Verify Employees are Cleaning According to the Written Procedure
- Verify Through Testing of Equipment and Finished Product

Allergen Cleaning

- **Visually Clean – 1st Step**
- **Dry Cleaning (without Dusting in the Air)**
- **Wet Cleaning – (Chemistry - Removes Protein)**
- **Document Cleaning Procedures (cGMP)**
- **Residual Testing – Recommended**

Sanitation Verification

- **Visual Results (Inspections)**
- **Allergen Protein Test Kits**
- **General Protein Test Kits**
- **Complex Tests**



Other Dry-Cleaning Techniques

It May be Necessary to PUSH Residues Out of the System

Scour/Purge

- Sugar
- Maltodextrin
- Salt

Flush

- Vegetable Oil
- Cocoa Butter (Chocolate Production)



WESMAR
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THANK YOU

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