Waste to Worth: Sustainable Processing Solutions

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USDA

AGRICULTURAL RESEARCH SERVICE MISSION

ARS conducts research to develop and transfer solutions to agricultural problems of high national priority and provides information access and dissemination to:

- **Ensure high-quality, safe food and other agricultural products,**
- **Assess the nutritional needs of Americans,**
- **Sustain a competitive agricultural economy,**
- **Enhance the natural resource base and the environment, and**
- **Provide economic opportunities for rural citizens, communities, and society as a whole.**

WASTE TO WORTH

National Program Leader: Dr. Gene Lester

NP306: Quality and Utilization of Agricultural Products

- **Add Value to Lower Grade Agricultural Products**
- **Utilize Agricultural Co-Products**
- **Enhance Sustainability of Food Supply**
- **Develop Novel Health Promoting Foods**
- **Provide Economic Opportunities for Rural Communities**
- **Reduce Food Insecurity**

Processing Solutions Result in Novel Food and Nonfood Products

FOOD WASTE

Undersized or Blemished Produce

Convert to Puree and Process into Healthy Foods

Forming Technology

100% Fruit Bars

GORGE Delights

100% Fruit Bars

- Sell Just Fruit bars and other labels annually
- Amounts to half million pounds of fresh fruit annually
- Sold around globe – Iran, Japan, Mexico, Canada, Peru, etc.

Casting Technology

Fruit and Vegetable Edible Films

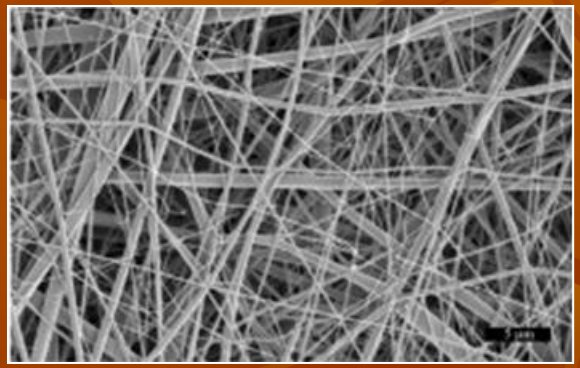
NewGemFoods™

FOOD WASTE

Fish Processing Co-Products

Extract Gelatin and Process into Value Added Products

Fish Gelatin Films and Nanofibers



HPFR and BRU, Albany, CA

FOOD WASTE

Potato Skins

Rice Hulls

Process into Bioproducts

Biodegradable Plates and Utensils

Lin Shu Liu, Wyndmore, PA
Bill Orts, Albany, CA

FOOD WASTE

Wine Grape Pomace

Olive Pomace

Process into Healthy Food Ingredients

WholeVine™ Products

Grape Skin and Seed Flours

Crackers

Grape Seed Oil

Cookies

Wine Grape Pomace

The Washington Post

I'll have the chardonnay

By Lenny Bernstein Updated: April 25 at 7:00 am

WholeVine™ PRODUCTS

Olive Pomace, Leaves and Water

FOREST DAME

McEVOY RANCH

cdfa

UC Davis Olive Center
at the Robert Mondavi Institute

Turning Waste into Worth Through Innovation

Thank you.