CURRENT RESPONSIBILITIES

- + Founder/President of Midwest Elderberry Cooperative
 - 26 members / 100 growers
 - Bulk frozen, thermally dried, freeze dried berries
 - Thermally & freeze dried flowers
 - Raw frozen and reconstituted juice
- President, River Hills Harvest Marketers, LLC
 - Wholesales River Hills Harvest brand nationally: food coops, Hy-Vee, Fresh Thyme
 - Face-to-face with ~100,000 consumers
 - 2018 Business Leadership Award by the Specialty Food Association





ELDERBERRY AS FUNCTIONAL FOOD

- + History as a healing herb: leaves, flowers, berries
 - Indigenous peoples in North America & around the world
 - Traditional Uses: from Hippocrates to various EU cultures
 - Cultural cues from Arsenic & Old Lace to Monty Python / Elton John
- Particularly dense & varied package of nutrients/antioxidants
 - + Polyphenols, flavonols: rutin, quercetin and isoquercetin, chlorogenic acid
 - + Vitamins A, C, B6 / K, P, Fe, amino acids low in sugars but not as bitter as cranberry
- Native Midwestern elderberry (Sambucus canadensis) tastes better than dominant European (Sambucus nigra)
- + Technical challenges to harvesting & crop handling
 - Over 30,000 acres cultivated in Europe (95% US ingredients from EU)
 - About 1,000 acres in USA issues of scale impact supply contracts, processing, etc.



ACADEMIC PERSPECTIVE

- MA: Near Eastern Archaeology & Old World Prehistory
 - The Hebrew University, Jerusalem, Israel 1974
 - Broad scope of human history, economy, social structure
 - Paleo-environments, impact of human civilization vs. natural cycles
 - Cultural food preferences, impact of agriculture, famine & disease
- + MBA & 14 of last 20 yr. teaching adults at night, undergrad & masters
 - University of St. Thomas 2000
 - History of Western Civilization, business history
 - Cultural anthropology and diversity: economic & belief systems
 - Marketing & management theory and case studies, seminars, capstone



RELEVANT WORK EXPERIENCE

- + Info Tech Pillsbury International R&D
 - Haagen-Dazs International product development support
 - Multiple product line research & ingredient data management
 - Export ingredient management support-multiple product lines
- + Info Tech/ Notes Development: Pillsbury Engineering
 - Project engineering & contract management support
 - Grands! biscuit product development support
- Exec. VP Crowley & Company Advertising/Marketing
- Six years small business financial and investment management/tax services



WHAT IS A FUNCTIONAL FOOD?

- + Specific buyer desired function identifiable & wanted -> action
 - Consume for well-being, prevention
 - Consumed to alleviate or improve a diagnosed medical condition
- + A consumable beverage, snack or meal or food product component instead of a supplement/medication purchased and consumed apart from a meal context
- + Quality control: crop, ingredient processing & final product
- Requires documented research that can be used in educating the consumer - directly or indirectly, budget to do so
- + Challenges of production & distribution
- Most US grown elderberry used in foods, then supplements: syrups, infusions, pills, gummies...

