



Emily Kaufman

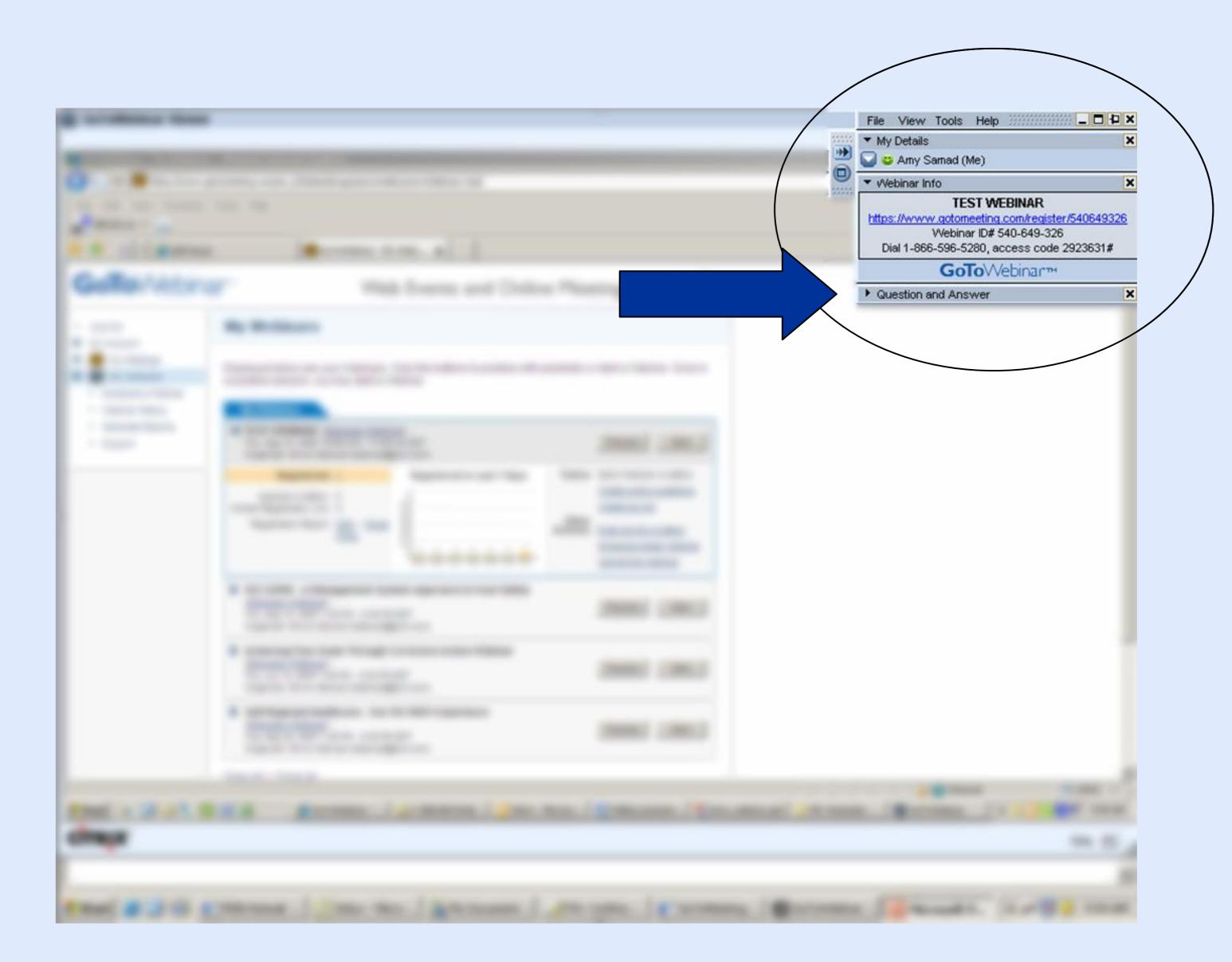
President

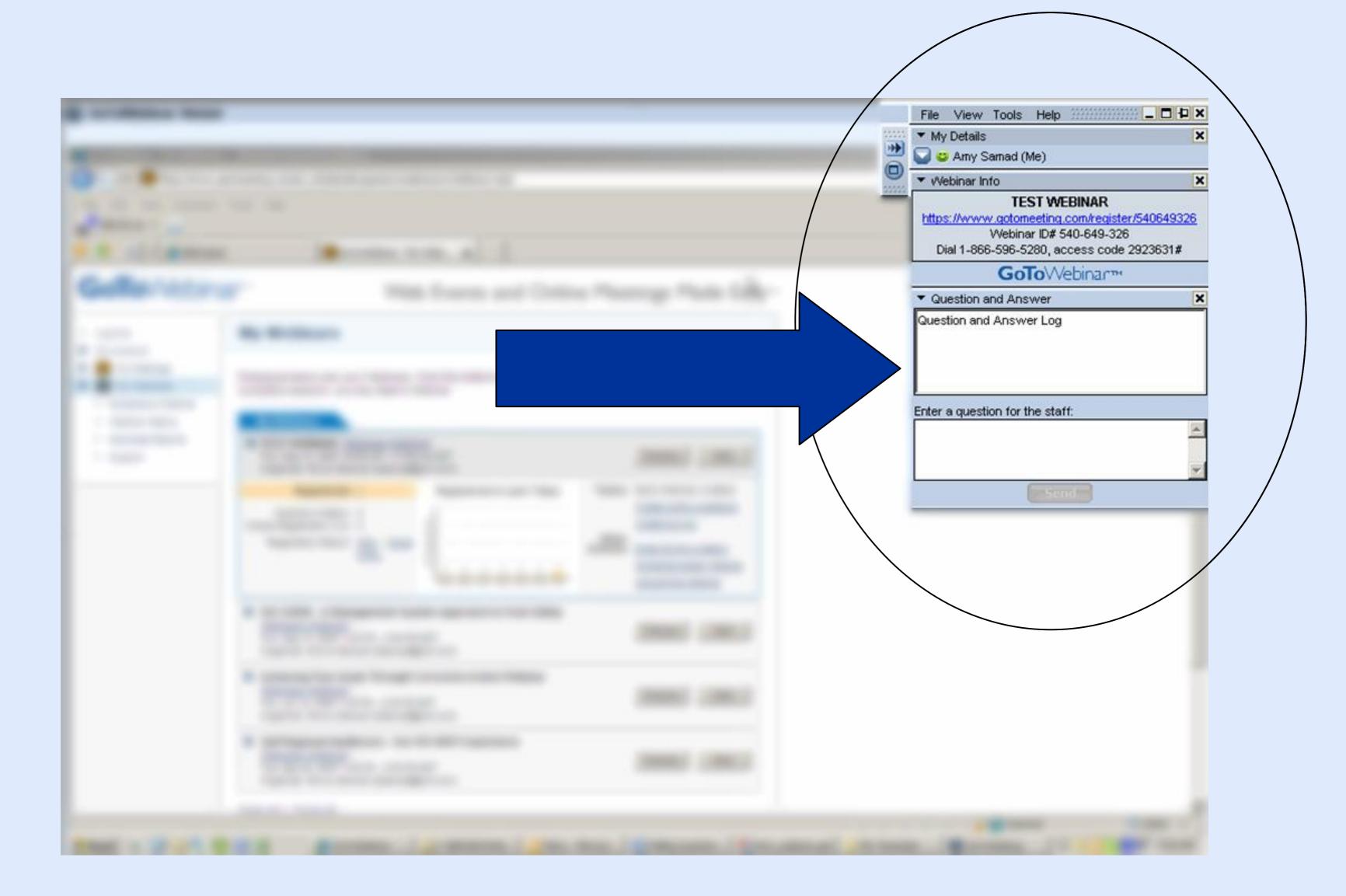
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PJRFSI – Your Partner for Food Safety

Allergen Management in 2021: Rules and Tools for Safe Foods









Paul Damaren

Senior Vice President of Food Safety & Supply Chain, PJRFSI

PJRFSI – Your Partner for Food Safety



Emily Kaufman, Founder, President, Emport LLC.

Are You Prepared?



Allergen Management in 2021: **Rules and Tools** for Safe Foods

Emport LLC

Emport LLC: More Safe Food, More Happy People emilyk@emportllc.com







Today's Topics

- How do allergen rules differ between Canada and the USA?
- Alphabet Soup: What testing tools are available?
 - What are their strengths and ideal uses?
- Questions to consider when you're making a test plan
- What's all this about validation vs. verification?
- Proficiency Testing: Do I have to? How?

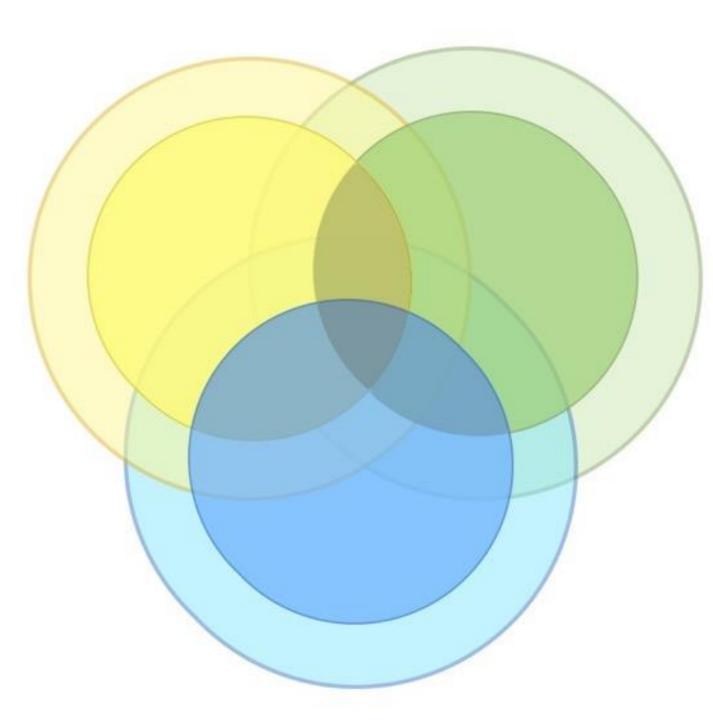


Allergen Labeling Laws

- Required labeling for all packaged foods
- No stated permissible ppm/ppb thresholds
- "May Contain" statements are not for CYA use
- "Free From X" statements are unregulated/voluntary
- "Allergen" refers to many foods: use your terms carefully
- Accidental cross-contact was not explicitly addressed, however: processors should implement cGMP controls that prevent allergen cross-contact.



Allergen Rules in Canada and the USA



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- Shared: Sesame*, Egg, Fish, Milk, Peanut, Shellfish (Crustacean), Soy, Wheat
- Only in Canada: Mustard, Shellfish (Mollusc)
- - In Canada, tree nuts covers 9 specific nuts (almond, Brazil nut, cashew, hazelnut, macadamia nut, pecan, pine nut, pistachio, and walnut)
 - In the US there are many more, most notably coconut and chestnut
- Gluten and Sulfites are Complicated

Tree Nuts are Complicated:

Allergens, Gluten, and Sulfites

• **Sulfites** must be labeled if \geq 10ppm.

- A "priority allergen" in Canada
- Not a "major allergen" in the US (but can still trigger a recall)
- Gluten
 - Mandatory in Canada (a priority allergen)
 - Voluntary in the US (not FALCPA)
 - Oats are treated differently
 - Gluten is not (always) from wheat, wheat does not (always) contain gluten





Food Safety Modernization Act (FSMA) / Safe Food for Canadians Regulations (SFCR)

- Logical evolution covers unintentional allergen cross-contact
- Hazards require Preventative Controls (HARPC > HACCP)
 - Broader understanding of hazards now includes allergens
 - Since you've identified the hazard, you must also identify the fix
- Greatly expanded need for documentation
 - If it isn't documented, it isn't done
- Umbrella plans: your suppliers' plans are your problem too.

Steps to proactively mitigate these hazards be documented.



Now, 'reasonably likely' undeclared allergen hazards must be identified.



US Gluten Labeling Laws (2014/2020)

- Entirely voluntary only applies if product labeled "gluten-free"
- Product must have < 20ppm gluten
- Any detectable gluten present must be from unavoidable crosscontact (despite following cGMP) – not from intentional inclusion
- Fermentation/Hydrolyzation/Distillation guidance
 - Items must be demonstrably GF pre-fermentation/hydrolyzation
 - No exemptions for products/enzymes grown on gluten-containing media
 - cGMPs make distillation safe protein tests can confirm
 - Records records records



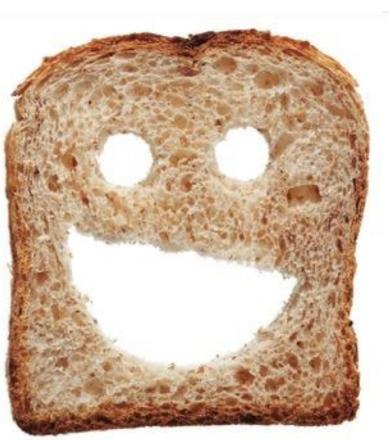
So there's no rule about testing foods?

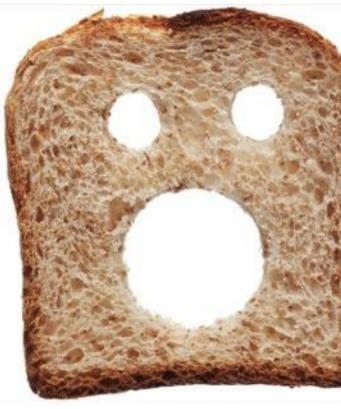
There is not.

- In theory you could produce compliant items without running a single allergen / gluten test.
- In reality:
 - If you look for hazards, you will find them
 - Many customers like to see CoA paperwork
 - Budgeting time and money for testing can save you time and money in the long run

"The final rule does not specifically require manufacturers to test for the presence of gluten However, manufacturers are responsible for ensuring that foods bearing a gluten-free claim meet the requirements of the final rule." (fda.gov)

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The alphabet soup of allergen testing

Most allergen/gluten tests use antibodies to look for protein •ELISAs are the quantitative gold standard •But require time, gear, volume, and skill

- - Best to leave these to the labs
- Lateral Flow Devices (LFDs) are ideal for day-to-day
 - •Quicker, cheaper and easier than ELISA testing
 - Clear yes/no answer
 - Often can test both foods and surfaces



Not all kits are suitable for all foods – you need to validate. Your test kit vendor should be VERY happy to look at your unique situation and provide guidance.







The alphabet soup of allergen testing con't.

- General Protein Swabbing is a good supplement • Cheaper, easier, less sensitive than LFDs • Not specific (lots of foods have protein)

 - Surfaces only

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- PCR testing checks for DNA, not protein
 - More suited to lab setting
 - Can be really helpful, or useless
 - Milk looks like a hamburger, egg looks like chicken
 - Can help identify food at the species level (eg wheat vs barley)

certification bodies accept it as a gluten/allergen management tool



ATP swabbing is a popular way to measure general cleanliness, but not all

On-site testing: why?

Confirm your ingredients are free of X Test volume will vary based on your supplier's risk level • "We know it is because it just is" = **RED FLAG!**

Confirm your environment is free of X

- Both surfaces and rinsewater are worth testing
- Positive result? Reclean, retest, reevaluate

- Confirm your finished products are free of X • First-off product = additional environmental validation May be required by your third-party certification program





Questions to ask before testing:

- If I don't test for it, why am I so confident that it's not there?
- Has the product been tested already?
 - When? Why then? Why only then?
- Am I responsible for moving this product from one area to another, and does that transition come with contamination risk?
- Do I need to for my third-party certification program?
- Has this product or others like it been recalled before?



Proactive Mitigation!

How do I pick a good in-house test?

- •Know your team don't set them up to fail.
- •Know your products. Some are easier for testing than others.
- •AOAC and similar certification schemes are important, but....
- •Whatever tests you decide to buy, get them from someone who can help you use them.
- •I'm a little biased, but:

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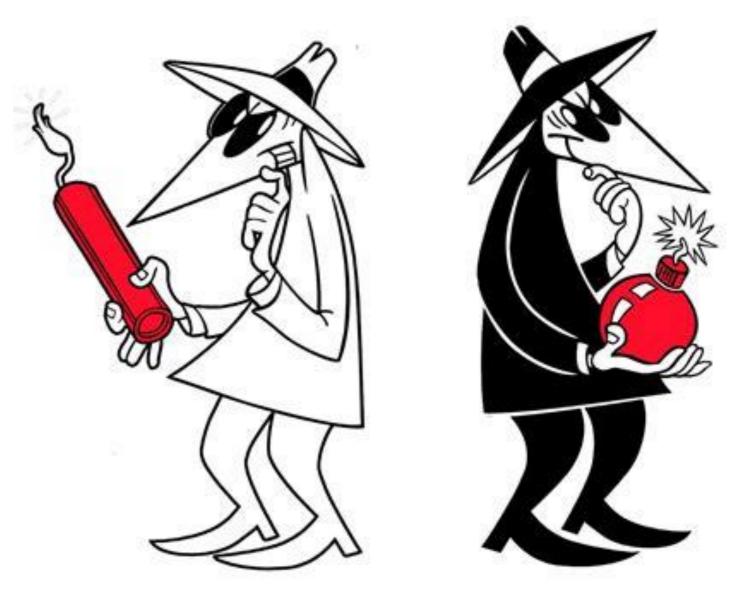
GlutenTox[®] AlerTox[®] Sticks

Validation vs. Verification

Program Validation

- How do I know my program works? \bullet
- How do I know my tools work? \bullet
- Prove your kit can detect your allergens
- Prove your cleaning removes your allergens \bullet
- Verification (day to day)
 - Now that you know you have the right tools and the right plan: did \bullet your team implement the plan correctly today?
 - Records, records, records





- Validation doesn't have to be expensive (but it can be)
- Ask your suppliers for ideas
- Whatever you decide to do: document it!
- Repeat your validation
 - Yearly, or more often if:
 - Ingredients* change, or
 - Processes change, or
 - Personnel change (maybe)



Validation: Keep in mind

*Could be ingredients in your products, processing aids, or cleaning materials!

And proficiency testing?

- You may be required to run PT for in-house tests Even if not – there may be a benefit
- Much like validation: PT helps confirm that your team is using equipment correctly
- There are a number of accredited PT studies for a variety of allergen matrices
- You can design a PT study on your own (but there are limits)









Upcoming Webinars





The Growth, Challenges, Certification and Sustainability of CBD in 2021

& Beyond

October 5, 2021 – 2:00 pm EST

Speakers: Allyn Shultis, Executive Director from the Global Retailer, Manufacturers

Association (GRMA), CEO & President, Neshat Soofi of JIT Experts Hive, Brett McMillen,

Cannabis & Hemp Division Manager, PJR, Jennifer Knaack, Sr. Director of

Compliance and Science, KOI CBD

October 12, 2021 – 2:00 pm EST

Speaker: Fiona Humphries PIEMA, Technical Manager, Ethical Trade & Responsible

Sourcing, BRCGS

Food Industry

October 21, 2021 – 2:00 pm EST

Speaker: Jennifer Crandall, CEO of Safe Food En Route, Jill Stuber, The Food Safety

Coach and President, Evan Rosen of Excelsior Food Safety Solutions LLC

<u>The Importance of ESG in the Food Industry</u>

<u>2022 – A In-Depth Look at Emerging Challenges & Risk Factors in the</u>

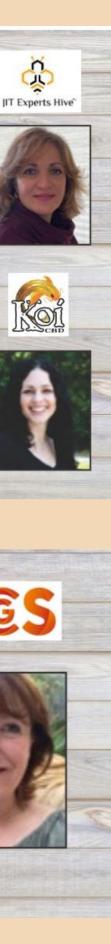














emilyk@emportllc.com 866-509-4482 emportllc.com

Audience Q&A

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