

Gluten Content of Labeled Gluten-Free Foods Sold in the U.S.

Tricia Thompson, MS, RD* and Thomas Grace**

*Gluten Free Watchdog, LLC **Bia Diagnostics, LLC

Objective

To assess the gluten content of labeled gluten-free foods sold in the U.S.

Background

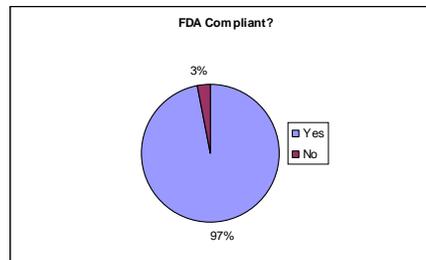
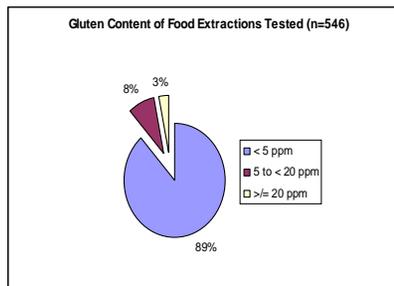
- ✓ Food labeled gluten-free and sold in the U.S. must contain less than 20 parts per million of gluten under the Food and Drug Administration's gluten-free labeling rule (1).
- ✓ There is very little published data on the gluten content of labeled gluten-free foods sold in the U.S.
- ✓ The amount of gluten in labeled gluten-free foods is unknown.

Methods

- ✓ Between April 2011 and December 2012 foods labeled gluten-free were purchased by Gluten Free Watchdog, LLC from retail establishments in the U.S., including grocery stores and online merchants (2).
- ✓ Products purchased included breads, cookies, flours, grains, hot cereals, baking mixes, pastas, ready-to-eat cereals, snack bars, crackers, soups, and tortillas.
- ✓ Each product was purchased in triplicate and sent unopened to Bia Diagnostics, LLC.
- ✓ Each product sample was tested in duplicate using the formally validated R5 ELISA (Ridascreen Gliadin R7001) and extracted with the cocktail solution (Art. No. R7006) following the kit manufacturer's instructions (3-5).

Results

- ✓ 273 packages of food representing 91 different products were tested in duplicate for a total of 546 extractions.
- ✓ Of the 546 extractions 483 or 88.5% tested below the lower limit of quantification for the assay used of 5 parts per million gluten.
- ✓ 46 or 8.4% tested between 5 and < 20 parts per million gluten (range 6 to 19).
- ✓ 17 or 3.1% tested \geq 20 parts per million gluten
- ✓ Only four products from three manufacturers tested at or above 20 parts per million gluten.



Conclusions

The vast majority of manufacturers of labeled gluten-free are already in compliance with the Food and Drug Administration's gluten-free labeling rule with 97% of products testing below 20 parts per million gluten. Of the products in compliance 91% tested below 5 parts per million gluten.

References

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