



*Connecting in the Global Marketplace*

# Trends in Barley Foods in the U.S.

Natsuki Fujiwara

Food Technologist

Northern Crops Institute (NCI)

October 4, 2012



# Background of the Heart Health Claim

- *National Barley Foods Council* submitted a petition to FDA based on the experiment of human clinical study conducted for over 6 years.
  - 10 Participants were fed food containing 1) whole wheat or brown rice, 2) 60g of barley or 3) 120g of barley for 5 weeks.
  - Blood samples were collected and tested for blood lipid and cholesterol level.
  - Total and LDL cholesterol were reduced as a result of barley consumption.
- Petition was finalized and approved in 2006.





## Heart Health Claim: 21 CFR 101.81

- Sample Claim
  - “Soluble fiber from foods such as (name of food), as part of a diet low in saturated fat and cholesterol, may reduce the risk of heart disease. A serving of (name) supplies (x) g of the soluble fiber necessary per day to have this effect”.
  - There are requirements to use the claim...





# Requirements of the Claim

1. Food must supply **3g/day** or **0.75g/serving** of  $\beta$ -glucan.
2. Barley must contain a certain percentage of  $\beta$ -glucan depending on the processing method (Shown in next slide).
3. Food has to be **low in fat, saturated fat, cholesterol** and **sodium** to use the claim.



# Restriction of Heart Health Claim

- Raw material requirement

Raw materials	Processes	Min. $\beta$ -glucan
Whole grain Barley	Hulless, dehulled	>4%
Dry milled Barley	Meal, grits, flour, pearled and flakes	>4%
Extracts	Barliv	>70%