Trends in Barley Foods in the U.S.

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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 β-glucan.

2. Barley must contain a certain percentage of β-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

<table>
<thead>
<tr>
<th>Raw materials</th>
<th>Processes</th>
<th>Min. β-glucan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole grain Barley</td>
<td>Hulless, dehulled</td>
<td>&gt;4%</td>
</tr>
<tr>
<td>Dry milled Barley</td>
<td>Meal, grits, flour, pearled and flakes</td>
<td>&gt;4%</td>
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<tr>
<td>Extracts</td>
<td>Barliv</td>
<td>&gt;70%</td>
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