Integrating Genesis R&D to Automate Your Innovation Workflow

Presented by
ESHA Research | FoodChain ID | Chick-fil-A

Wednesday, August 24, 2022
9:00 AM PDT | 11:00 PM CDT | Noon EDT
Please Note!

• The webinar is being recorded
• All webinars available on our website
• Submit your questions in the GoToWebinar control panel
• We’ll email a copy of the recording and the slides following the webinar
ESHA's Genesis R&D Product Development and Labeling Software assists users in all aspects of food-product development, from recipe development and virtual food creation to nutrition facts panels creation & compliance.

FoodChain ID is a leading provider of software, testing, and certification solutions to enable the global food supply chain to meet compliance and transparency requirements as well as accelerate product innovation.

Known for its chicken sandwiches and signature hospitality, Chick-fil-A is one of the largest American fast food restaurant chains with over 2,700 locations in the US, Puerto Rico and Canada.
ESHA Research was established in 1981 as one of the very first nutrition software solutions. Today, ESHA’s suite of nutritional software products, services, and databases are recognized as the industry’s top choice for food and supplement formulation, recipe development, labeling, nutritional analysis, and regulatory compliance.

- ESHA Solutions
- Genesis R&D® Food Formulation
- Genesis R&D® Supplement Formulation
- REX® Regulations Expert Document Search Portal
- Food Processor® Nutrition & Diet Analysis
- Consulting Services

Our mission is to help remove the complexity of product development and regulatory compliance for the food, beverage, and supplement industries through software, services, and nutritional databases.
Trusted Nutrition Database

- 130,000 raw foods, ingredients and recipes, plus processing materials, chemicals/additives, and other industry ingredients from more than 1,800 reputable sources:
  - USDA
  - Manufacturers
  - Restaurants
- Meticulous research, data checks and continual updates.
- Nutrition breakdown for 172 nutritional components, including mandatory and voluntary label nutrients.
Our Reach

900 Colleges and Universities with 10,000 students accessing our programs annually

75 of the top 100 Food Manufacturers in the U.S.

18 of the top 20 Restaurants in the U.S.
Genesis R&D Food Overview

Genesis R&D is designed to help you manage the challenges faced in the food industry.

• Nutrition Analysis
• Reformulation and Conceptualization
• Nutrition Facts Label
• Ingredient Lists and Allergen Declarations
• Nutrient Content Claims
• And More!
Formulation Made Easy

- Create recipes and formulas using ESHA database items or user-added ingredients.
- Simulate formulation changes in real time – no waiting for a lab result.
- Calculate moisture, fat, and processing adjustments: subtract or add water/fat and view results on-screen immediately.
- View line-item detailed nutritional breakdown of your formulation.
- Monitor changes with built-in audit tracking.

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# Nutrition Facts Labels

- Customize your label by utilizing the myriad of built-in preferences and layout options
- Generate ingredient statements
- Track and declare allergens
- Identify qualifying nutrient content claims

## Nutrition Facts

<table>
<thead>
<tr>
<th>Serving size</th>
<th>1 cup (140g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td>160</td>
</tr>
<tr>
<td>Total Fat</td>
<td>8g 10%</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>3g 15%</td>
</tr>
<tr>
<td>Trans Fat</td>
<td>0g</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>0mg 0%</td>
</tr>
<tr>
<td>Sodium</td>
<td>60mg 3%</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>21g 8%</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>3g 11%</td>
</tr>
<tr>
<td>Total Sugars</td>
<td>15g</td>
</tr>
<tr>
<td>Includes 5g Added Sugars</td>
<td>10%</td>
</tr>
<tr>
<td>Protein</td>
<td>3g</td>
</tr>
<tr>
<td>Vitamin D</td>
<td>5mcg 25%</td>
</tr>
<tr>
<td>Calcium</td>
<td>20mg 2%</td>
</tr>
<tr>
<td>Iron</td>
<td>1mg 6%</td>
</tr>
<tr>
<td>Potassium</td>
<td>230mg 4%</td>
</tr>
</tbody>
</table>

*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.
Create country-specific government-compliant nutrition labels.

Available country specific label modules:
- Canada
- European Union
- Mexico
- United States
Improve Your Innovation Workflow

*With the Genesis R&D API*

The Genesis R&D API allows real-time data streaming between Genesis R&D and common ERP, PLM, and MDM vendor solutions.

- Get BOMs and send to Genesis R&D for nutrient analysis and label creation
- Send back recipe data analysis and nutrition facts labels
Data from Genesis R&D can be sent to external and internal interfaces such as webpages, point-of-sales systems, inventory management systems, and QC or document controls.

- Unattended export of recipes, ingredients, and labels.
- Filter records to be exported by name, group, creation date, and/or modified date.
- Export specific fields such as ingredient statement, cost, user codes, nutrient, etc.
- Runs as a service in IIS and is available both as a SOAP and REST interface
Streamline Your Integration

*With FoodChain ID Intelligent Connections*

**Without** Pre-Built Connectors

**With** Pre-Built Connectors
FoodChain ID
Integrated Nutrition Labeling
## What’s Driving Integrated Nutrition & Labeling

### Market Demands
- Market expansion opportunities
- More trials and experimentation
- Increasingly complex and shifting regulatory environment

### Digital Demands
- Importance of robust, **digital** product definition
- Early feedback and “design for compliance” are must have capabilities

### Demand for Agility
- React to disruptions
- Resource efficiency
- Speed, with standards
- Reduce burden of change maintenance
A Typical Flow...

...Without Integration
Traditional Integration Challenges

What prevents companies from enjoying the enormous benefits of connected data and processes?

- Significant time required from key stakeholders
- Wrestling with design & business decisions
- Proficiency on endpoints & APIs
- Mappings, transformations, business rules, processes, exceptions, notification, queuing, logging all must be written & tested
- Unpredictable timing and cost to develop
- Requires extensive testing
- Loss of working knowledge over time
- Unreliable support
- Req's IT & Dev maintenance
- Infrastructure cost

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Intelligent Connections

A unique cloud-based integration service that:

- Is designed to **overcome the common barriers** that prevent companies from investing in valuable integrations
- Allows you to **easily integrate** your key systems to popular solutions like ESHA’s Genesis R&D
Intelligent Connections

Pre-built and End-to-end

Pre-Built Accelerators & Applications
- Connectors for common endpoints
- Orchestrations pre-built for common use cases
- Apps and analytics that add value and flexibility

Compatible with Genesis R&D On-Prem and Cloud versions using the API

Implementation Methodology
- Template-based
- Fast but flexible
- Predictable with rapid time to value

Monitoring & Support
- End-to-end, US-based support with SLAs
- No infrastructure required
- Dashboards for monitoring and status

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Intelligent Connections
Better | Faster | Cost-effective

Requirements
- Significant time required from key stakeholders
- Wrestling with design & business decisions
- Proficiency on endpoints & APIs

Design & Develop
- Unpredictable timing and cost to develop
- Mappings, transformations, business rules, processes, exceptions, notification, queuing, logging all must be written & tested

Test & Deploy
- Requires extensive testing

Maintain
- Loss of working knowledge over time
- Unreliable support
- Req's IT & Dev maintenance
- Infrastructure cost
Intelligent Connections
Better | Faster | Cost-effective

![Diagram of Traditional Integration]

**Requirements**
- Validate vs create approach
- Turnkey methodology
- Best practice process flows and templates

**Design & Develop**
- Configure vs development approach
- Pre-built connectors and process flows
- Safe extensibility if needed
- Predictable duration

**Test & Deploy**
- Automated testing built in
- Efforts focused on acceptance, not quality

**Maintain**
- Monitoring and support included
- KPI and status dashboards
- Managed infrastructure
Advanced Insights and Monitoring
Intelligent Connections

Better | Faster | Cost-effective
## Key Drivers for Decision
- Reduce risk while preserving existing processes, PLM & ESHA platforms, and core deliverables
- Why Intelligent Connections?
  - 10+ years of PLM management partnership between the two companies
  - Solution was highly recommended

## Key Drivers for Success
- Deep understanding of business case and how Intelligent Connections solved the problem
- Cross-functional planning and alignment between internal DTT (IT), Nutrition, PLM, and FoodChain ID teams
- Rigorous UAT

## Benefits for Chick-fil-A
- Eliminated manual error via automation
- Overall reduced risk to the brand
- Gained capacity by automating previously manual step in process
Q&A

Questions can be submitted by typing your questions into the “Questions” dialog

Want more information?

✔ You will receive a follow up email
  • Links to recording & contact info will be included

✔ Contact us directly at:
  • sales@foodchainid.com
  • sales@esha.com

Intelligent Connections Advantage

Accelerated Deployment
- Off the shelf connectors for popular vendor tools (like ESHA’s Genesis R&D)
- Proven process orchestrations and transformations that can be extended and tailored
- Turnkey, template-based methodology

Low Total Cost of Ownership (TCO)
- Subscription-based service
- No new infrastructure needed
- End-to-end support – monitored & fully supported

Enterprise-grade
- Modern & scalable
- Monitoring