

FOODCHAIN (D)®





Integrating Genesis R&D to Automate Your Innovation Workflow

Presented by

ESHA Research | FoodChain ID | Chick-fil-A

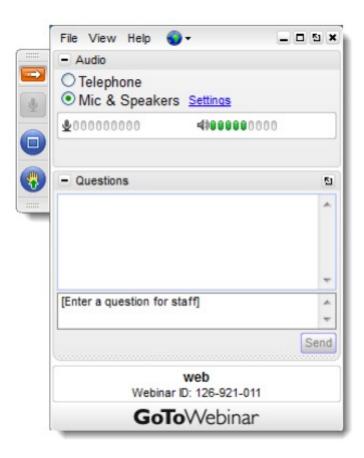
Wednesday, August 24, 2022

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







Speakers for Today

Chris Eakin



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.





About ESHA Research

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.

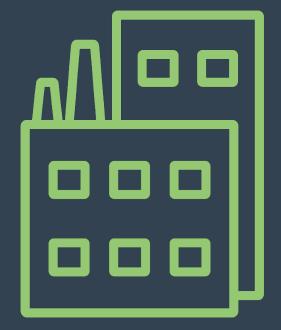




Our Reach



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



18 of the top 20 Restaurants in the U.S.



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

Genesis R&D Food Overview

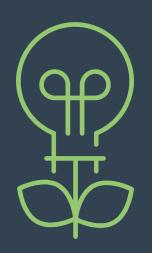
Genesis R&D is designed to help you manage the challenges faced in the food industry.

- 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.



Nutrition Facts

2 servings per container

Serving size 1 cup (140g)

Amount per serving

Calories

160

	% Daily Value*
Total Fat 8g	10%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 60mg	3%
Total Carbohydrate 21g	8%
Dietary Fiber 3g	11%
Total Sugars 15g	
Includes 5g Added Sug	gars 10%
Protein 3g	

2 %
6%
4%

^{*}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.

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

International Labeling

Create country-specific government-compliant nutrition labels.

Available country specific label modules:

- Canada
- European Union
- Mexico
- United States

~	Nutrition Facts 2 servings per container Serving size 1 cup (140g)			
	Amount per serving Calories 1	60		
	% Daily	Value*		
	Total Fat 8g	10%		
	Saturated Fat 3g	15%		
n+	Trans Fat 0g			
ent-	Cholesterol 0mg	0%		
	Sodium 60mg	3%		
	Total Carbohydrate 21g	8%		
	Dietary Fiber 3g	11%		
	Total Sugars 15g			
	Includes 5g Added Sugars	10%		
	Protein 3g			
	Vitamin D 5mcg	25%		
	Calcium 20mg	2%		
	Iron 1mg	6%		
	Potassium 230mg	4%		
trition Information	*The % Daily Value tells you how much a nutries serving of food contributes to a daily diet. 2000 a day is used for general nutrition advice.			
av	497 k.l / 119 kcal 6% RI	6		

					+ iransug	
Nutrition Information	serving of food con	e tells you how much a nutr tributes to a daily diet. 200 eneral nutrition advice.	O colorico	er portion of 1 cu Reference Int		7 14 1
Energy	497 kJ / 11	9 kcal 6% RI		692 kJ / 166 kca	Protein 2 g	
Fat	6 g	9% RI	8	.4 g	Cholesterol 0 mg	
Of which Saturates	2.3 g	12% RI	3	.2 g		
Of which Mono-unsaturates	0.6 g		0	l.9 g	Sodium 5 mg	1
Of which Polyunsaturates	2.6 g		3	i.6 g	Potassium 200 mg	4 '
Carbohydrate	13 g	5% RI	·	18 g	Calcium 20 mg	2 '
Of which Sugars	11 g	12% RI		15 g		
Of which Polyols	0 g			0 g	Iron 0.5 mg	3 '
Of which Starch	0.6 g		0	l.8 g	Thiamine 0.05 mg	4 '
Fibre	2.3 g		3	.2 g	Riboflavin 0.05 mg	4 '
Protein	2 g	4% RI	2	!.8 g	* 5% or less is a little, 15% or mo	ore is a lot
Salt	0.11 g	2% RI	0.1	15 g	370 KI	
Fluoride	2.28 mg	65% RI	3.	18 mg	91% RI	

Salt content is exclusively due to the presence of naturally occurring sodium.

Contains negligible amounts of Polyols, Vitamin A, Vitamin C, Thiamin, Riboflavin, Niacin, Vitamin B6, Folic Acid, Vitamin B12, Biotin, Pantothenic Acid, Potassium, Chloride, Calcium, Phosphorus, Magnesium, Iron, Zinc, Copper, Manganese, Selenium, Chromium, Molybdenum, Iodine.

Reference intake of an average adult (8,400 kJ / 2,000 kcal)

Tamañ	r mación Nutrii o de la Porción 122g es por Envase	mental
Conte	nido Energético	620 kJ (150 kcal)
Proteí	nas	2 g
Grasas	5	8 g
Gras	sa Saturada	3 g
Carbohidratos		17 g
Azú	cares	14 g
Fibra [Dietética	2 g
Sodio		5 mg
		% IDR / IDS*
Vitami	na B6 (Piridoxina)	15%
Magne Cobre	Hatiltonia	cts
*Nutrime		% Daily Value *
	Fat 8 g	11 %
	Saturated 3 g + Trans 0 g	15 %
	Carbohydrate 19 g	
n of 1 cu		7 %
rence Inf 166 kca	Sugars 14 g	14 %

1 %

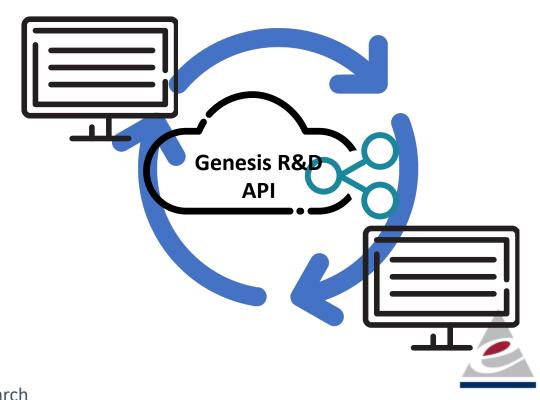
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Improve Your Innovation Workflow With the Genesis R&D API

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





Genesis R&D API Summary

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.

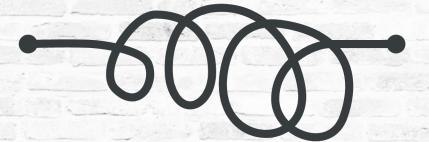
- Unattended export of recipes, ingredients, and labels.
- Filter records to be exported by name, group, creation date, and/or modified date.
- Export specific fields such as ingredient statement, cost, user codes, nutrient, etc.
- Runs as a service in IIS and is available both as a SOAP and REST interface

Streamline Your Integration

With FoodChain ID Intelligent Connections

Without Pre-Built Connectors

With Pre-Built Connectors



FoodChain ID Integrated Nutrition Labeling FOODCHAIN (ID)°

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...

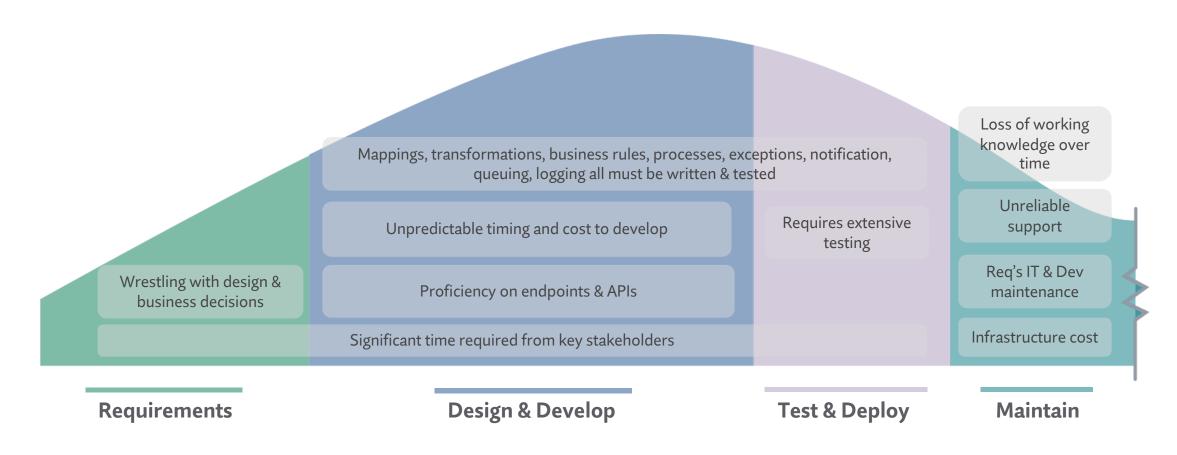


ESHA GENESIS R&D



Traditional Integration Challenges

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





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



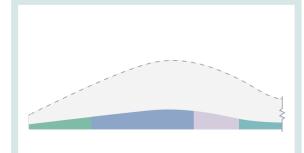
Pre-built and End-to-end



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

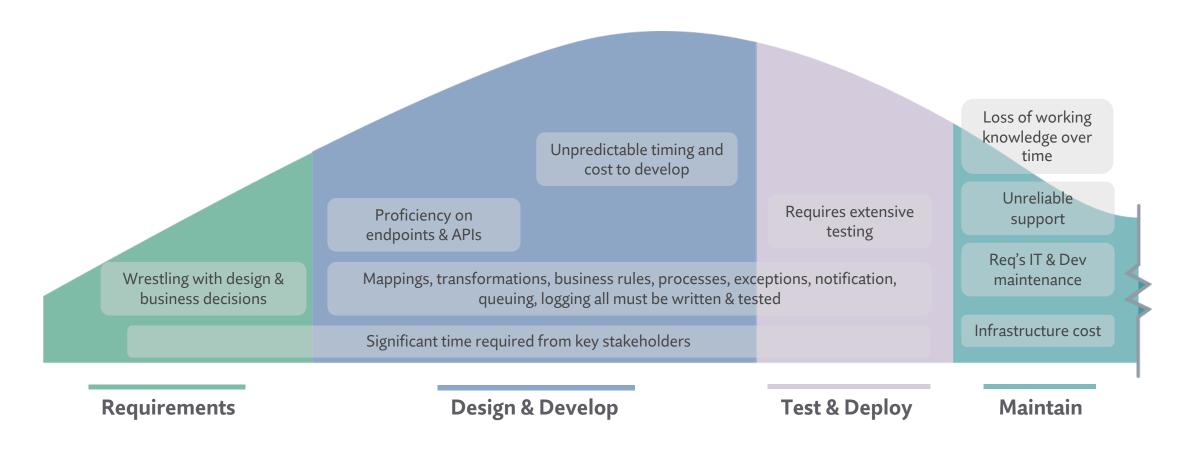


Monitoring & Support

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



Better | Faster | Cost-effective





Better | Faster | Cost-effective

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

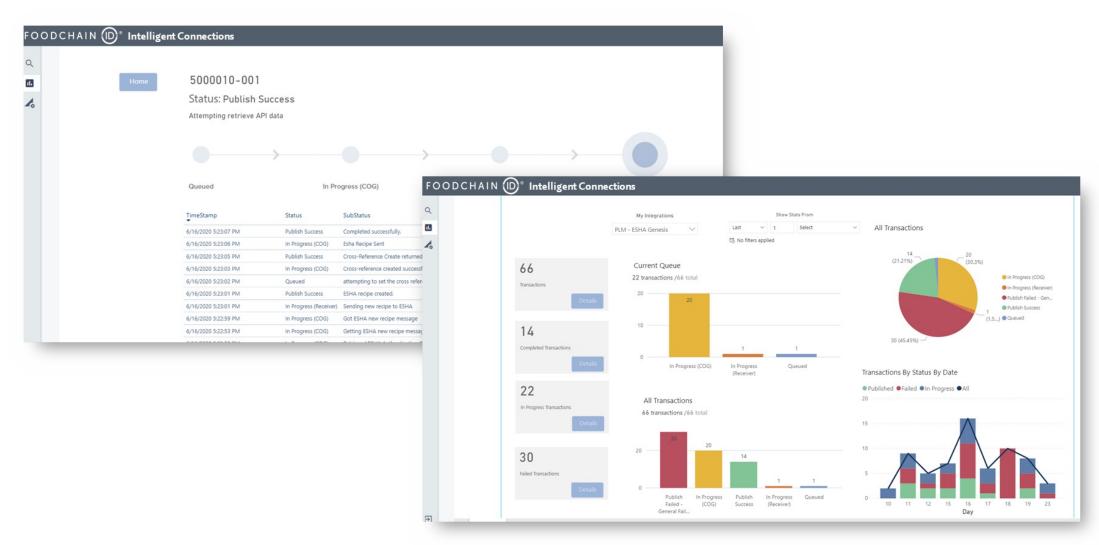
- Automated testing built in
- Efforts focused on acceptance, not quality

Maintain

- Monitoring and support included
- ✓ KPI and status dashboards
- ✓ Managed infrastructure

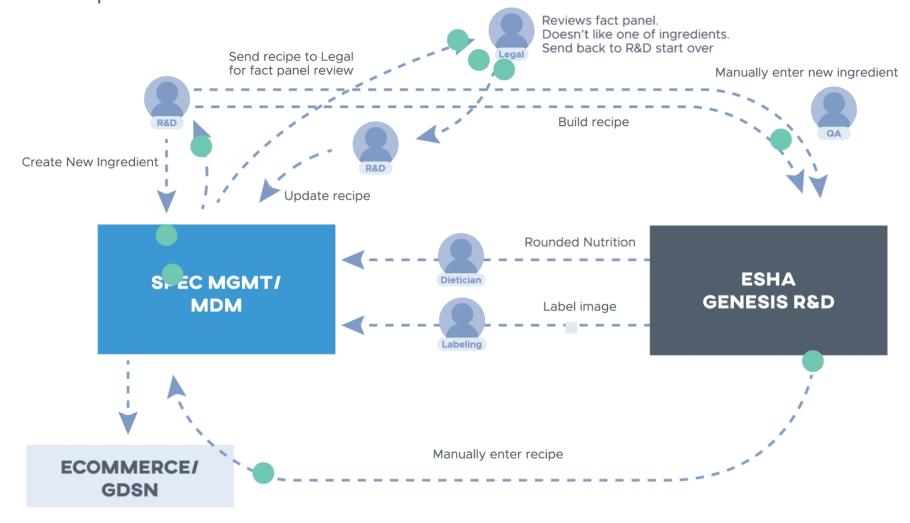


Advanced Insights and Monitoring





Better | Faster | Cost-effective









PLM/Genesis R&D Integration Case Study

Faustine Sonon

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





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