













FLOUR SOY PROTEIN

A new way to optimize your formulation cost without compromising performance.

Food made from better means innovating from seed-to-plate. Benson Hill soy flour is made from Ultra-High Protein soybeans delivering 20% higher protein content right out of the ground compared to commodity U.S. soybeans.

Higher protein content at the plant-level offers manufacturers the ability to meet rising consumer demands for affordability, traceability, nutrition & taste with minimal processing and cleaner labels.

	SPC	BH Soy Flour
Cost*		
Ease of use	1:1 Replacement	
Yield		
Taste		
Texture		
Sustainability**		

* Based on comparison to industry standard SPC pricing and 3% inclusion in meat extension sausage links.

** Sustainable protein relative to SPC equivalent - CO² equivalent emissions reductions of around 50% and water consumption reductions of around 70%.

Benson Hill soy flour offers:



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Benson Hill brand soybean products are a perfect ingredient for **meat extension**.

Cost Savings

Enables meat processors to mitigate volatile ingredient costs and supply by providing a value-added meat extender that replaces costly, processed soy protein concentrate – all while preserving, or enhancing, taste for consumers.

With our high protein soy flour, you'll see significant savings, while delivering a better tasting product to consumers – all without sacrificing functionality or yield.

Opportunity to replace lean meat with plant-based protein: 3% Soy Flour and 7+% water replaces at least 10% lean meat.

Versatility:

Available in different sizes and shapes to meet broad application needs. Our team can work with you to create customized formulations to optimize **Benson Hill soy flour** products for your specific needs.

In most applications, it's a 1:1 replacement, with no changes needed to the manufacturing line, and a simplified label.

A Benson Hill® Innovation

Our soy flour products are part of Benson Hill's commitment to providing healthier, more sustainably produced ingredients by unlocking the natural genetic diversity of plants using CropOS®, the company's food innovation engine.

Benson Hill protein products are designed to be better from the start and are made exclusively from our Ultra-High Protein soybean varieties.

You can learn more about Benson Hill protein products here: <https://truvailprotein.com/>

Applications:





TEXTURED SOY PROTEIN

A cost-optimized, sustainable alternative to textured soy protein concentrate

No concentration step needed, readily available

Benson Hill textured soy flour (TSF) delivers the same taste and functionality as textured soy protein concentrate (TSPC) without the concentration step.

Eliminating this costly, resource-intensive step unlocks supply constraints, so our TSF is readily available to meet your near-term protein needs.

Benson Hill TSF is available in a variety of forms including crumbles and flakes.

Replace SPC with BH TSF in meat extension for:

- Cost savings of up to 30%¹
- Improved sustainability: reductions of ~50% in CO₂e emissions and ~70% in water use²
- No impact on yield, taste, texture or moisture³

Benson Hill TSF is the most economical replacement for lean meat, and it's available right now.

	TSPC	BH TSF
Protein level	65%	60-64%
Cost savings		
Sustainability		
Cooked yield		
Taste		
Texture		

Benson Hill textured soy flour benefits in meat extenders



Benson Hill textured soy flour for clean taste and cost savings in a wide range of applications



Our Ultra-High Protein soybeans deliver at least 20% more protein compared to commodity U.S. soybeans. We also choose varieties with optimal flavor profiles. So with Benson Hill TSF, you can give consumers great tasting products with a cleaner label.

Our TSF's meat-like texture promotes an excellent sensory experience with strong moisture retention. It's available in both crumble and flaked forms, with options to meet your color, size, and fortification needs. Benson Hill TSF is suited to all your ground and formed meat applications.

Benson Hill sets the pace of innovation in food

At Benson Hill, we set the pace of innovation in food. It's how we deliver on our promise to enable more nourishing, sustainable food. Our CropOS® food innovation engine combines data science, machine learning, biology and genetics. The result is better varieties; high in protein and with consumer-friendly nutrition and flavor profiles. CropOS takes the guesswork out of breeding so we can

get sustainable protein ingredients to market faster and keep on setting the pace of innovation in food.

Find out more about our protein ingredients, request samples and get in touch with us at ahill@bensohill.com

1 Based on lower cost per unit of gel strength relative to commodity TSPC.
 2 Relative to US sourced, commodity SPC.
 3 Equivalent cooked yield, hydration level, and hydration rates relative to commodity TSPC.



**HOLL
SOY OIL**

Better for consumers, the planet and your business

Better for consumers

Our heart-healthy¹, high oleic, low linolenic (HOLL) soy oil delivers 10 grams of omega-9 fatty acids per serving. It works well in any cooking style that needs oil, including frying, roasting, searing and baking. It's also the ideal oil ingredient for a wide range of food applications. Thanks to a mild flavor profile that lets ingredients shine through, our oil means your consumers no longer have to choose between taste and health. Expeller processed and non-GMO project verified, it supports cleaner labels. And because it's made from soybeans grown in a traceable, transparent supply chain, your consumers get the clarity they want on where and how their food is grown.

Better for the planet

Our HOLL soy oil is a sustainable alternative to canola². It emits 70% less CO₂e, uses 66% less water and takes 15% less land to produce.

Better for your business

Specially designed for high-heat cooking, our oil is stable at high temperatures. And because it reduces sticky polymer build-up on your fryers, it doubles fryer oil life. That cuts your product costs and changeover-related labor costs. And because it's made from soybeans grown by U.S. farmers, our oil also reduces your business's vulnerability to supply chain disruptions.



BENSON HILL[®]
INGREDIENTS

HOLL soy oil from Benson Hill stands up to the heat...



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Contact dmoody@bensonhill.com to learn more about our HOLL soy oil products.

1 HOLL soybean oil is eligible for an FDA Qualified Health Claim that indicates, in part, there is supportive evidence that consumption may reduce the risk of coronary heart disease.

2 Canadian canola: preliminary LCA results from Blonk Consultants based on economic allocation and industry averages.