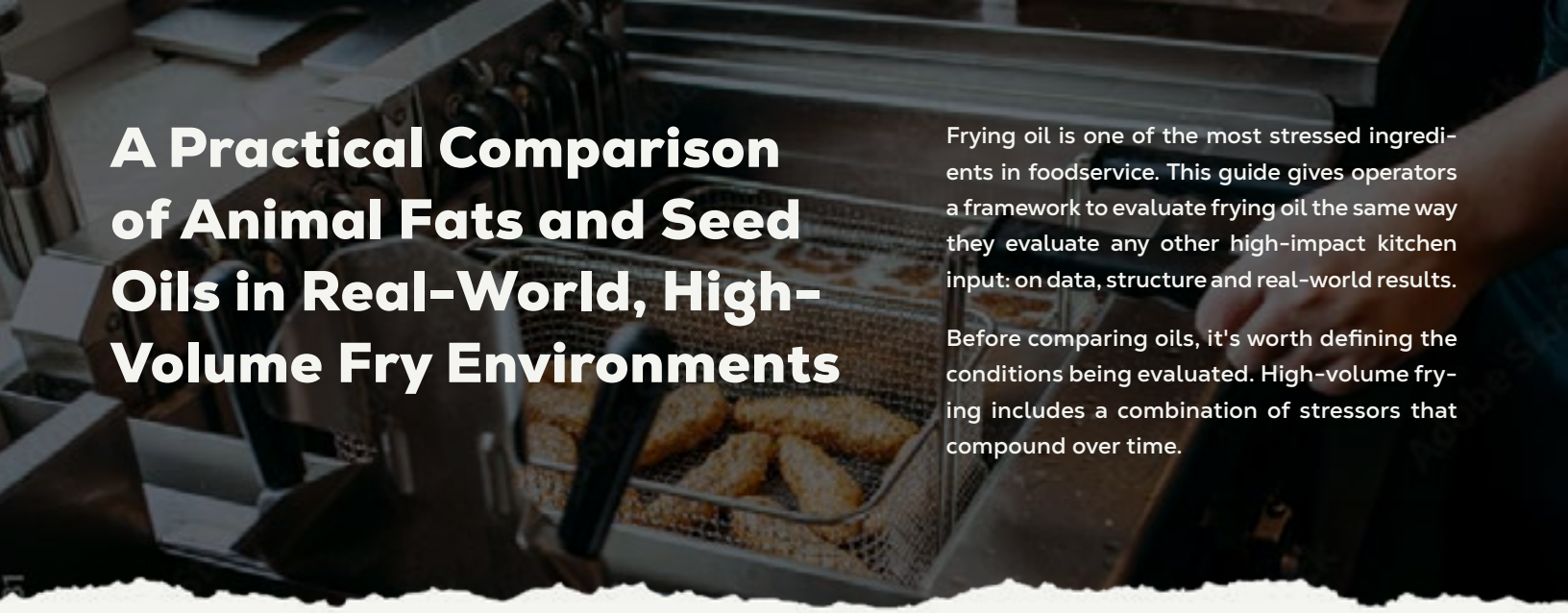
SOUTH CHICAGO PACKING

Comparison GUIDE

HOW TALLOW PERFORMS *Under Pressure*

100% PURE ANIMAL FAT



A Practical Comparison of Animal Fats and Seed Oils in Real-World, High-Volume Fry Environments

Frying oil is one of the most stressed ingredients in foodservice. This guide gives operators a framework to evaluate frying oil the same way they evaluate any other high-impact kitchen input: on data, structure and real-world results.

Before comparing oils, it's worth defining the conditions being evaluated. High-volume frying includes a combination of stressors that compound over time.

The Performance Metrics We're Measuring:

METRIC	WHAT IT MEASURES
Oxidative Stability	How well the oil resists breaking down under heat and oxygen exposure
Smoke Point Stability	Whether the fat maintains its smoke point over time or degrades
Fry Life	How many days the oil performs before requiring replacement
Flavor Profile	How the oil affects the flavors of food cooked in it
Flavor Stability	Whether the oil maintains neutral or positive flavor contribution over time
Label Makeup	What ingredients are listed on the frying oil

THE *Stress* FACTORS

Continuous temperature exposure:

350–375°F, sustained across full service periods

Filtration frequency:

How often the oil is filtered directly impacts its useful life

Repeated food drops:

Each drop lowers oil temperature and introduces moisture, and recovery speed matters

Carbonization:

Food particles left in the oil accelerate breakdown

Peak service demand:

Extended high-volume periods push oil harder and faster

Extended holds:

Oil sitting at temperature without active frying still degrades

Tallow vs. Seed Oils: Side-By-Side Performance Comparison

The structural difference between tallow and seed oils determines their performance under pressure. Tallow's fat composition of approximately 50% saturated fat and 40% monounsaturated gives it structural resistance to oxidation. Seed oils like soybean run 60% or more polyunsaturated, and canola runs roughly 30%. The higher the polyunsaturated fat content, the more susceptible the oil is to oxidation and breakdown under sustained high heat.

That structural difference shows up across every meaningful performance metric.

PERFORMANCE FACTOR	TALLOW	SEED OIL
Oxidative Stability	Naturally stable saturated fat structure	Higher polyunsaturated fat content accelerates oxidation
Smoke Point Stability	Maintains consistent performance at ~400°F	Initial smoke points vary by oil; consistency decreases over time
Fry Life	Operators report up to 2 weeks at moderate volume	Breaks down faster, lasting a few days under sustained high heat
Flavor Profile	Subtle, rich flavor with more robust options available	Neutral, but becomes inconsistent with age
Flavor Stability	Maintains flavor over time	Introduces bitterness as breakdown progresses
Label Makeup	100% Beef Tallow	Minimally processed

Source: SCP Fry Life Study, Conducted by Colorado State University Animal Sciences Dept.

WHAT ABOUT THE *Cost?*

Frying oil isn't just a line item, it's a usage equation. And when you factor in tallow's extended fry life, the cost picture looks considerably different.

South Chicago Packing's Savings Calculator gives you a direct view of what that equation looks like for your specific volume and usage pattern.

WHAT TALLOW'S EXTENDED FRY LIFE AFFECTS:

Oil change frequency: Fewer changes means less product purchased over time

Labor hours: Every oil change requires staff time to drain, filter, refill and dispose

Disposal costs: Less frequent changes mean lower disposal volume and associated costs

Filter maintenance: Stable oil requires less aggressive filtration to maintain performance

Rejected batches: Consistent oil means consistent fry color and texture, with fewer batches scrapped for quality issues

Flavor and Product Quality Under Load

As seed oil breaks down across a service, it introduces off-flavors and bitterness that transfer to everything cooked in it. Color shifts. Texture softens. The food coming out of the fryer at 9pm tastes different from the food coming out at 11am. Tallow's stable structure reduces that degradation. The fat maintains its performance characteristics across a full service, which means:

- ✓ Consistent fry color from first basket to last
- ✓ Texture retention under peak load, crispiness that holds up through the rush
- ✓ Less off-flavor transfer as tallow's stable structure doesn't break down like seed oils

When The Fat Breaks Down, Guests Taste It

The culinary outcome is visibly and vocally different. Operators using tallow report more consistent food quality across dayparts, and guests are giving higher satisfaction scores on tallow-cooked dishes, according to Technomic.

DAY	TALLOW	SEED OIL
Day 1	Golden, consistent	Golden, consistent
Day 2	Maintained	Slightly darker
Day 3	Maintained	Noticeably darker, flavor shift

You May Be A Strong Candidate For Tallow If:

- ✓ You operate a high-volume fry program with chicken, seafood, fries or similar
- ✓ You're changing your oil more than twice per week
- ✓ You filter daily or more frequently
- ✓ You've noticed flavor inconsistency between early and late service periods
- ✓ You want to differentiate through ingredient quality or menu transparency
- ✓ You're evaluating BOH efficiency improvements alongside food cost management

THE *Bottom* LINE

Choosing tallow isn't a simple trend. It's a well-researched decision. When the fryer is pushed to its limits, your oil choice either works harder or breaks down faster.

The operators who've made the switch to tallow didn't do it on instinct. They tested it in their fryers, watched the numbers and let the results make the case.

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