



LOW-SUGAR SOLUTIONS FOR SAUCES AND RUBS

HOW TO REDUCE SUGAR
AND IMPROVE FLAVOR



THE SUNSWEET ADVANTAGE

Sunsweet® Ingredients are functional ingredients made out of real food. Derived from prune plums, they are naturally sweet yet low in sugar. When used in sauces, marinades, and seasoning rubs, these ingredients can reduce total sugar without sacrificing taste. They also can drive down pH, enhance color, and increase yields.

This is possible because of the unique chemical composition of prune plums, which are high in sorbitol, fiber, acids, and antioxidants. Made with GMO-free plums, Sunsweet® Ingredients not only yield sauces that taste cleaner and more balanced but also support a clean-label declaration.

Sunsweet® Ingredients come in a variety of forms—from pastes and concentrates to powder—helping to turn dried plums into functional and versatile ingredients that belong in every R&D tool kit.



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I. SUNSWEET INGREDIENTS AT WORK

Developing new sauces and rubs or reformulating existing products is more of an art than a science, yet there are a number of places where Sunsweet Ingredients can be applied. Use these ingredients to:

- Enhance existing natural flavors, allowing for lower salt and sugar levels
- Enhance browning in place of caramel coloring
- Improve yield
- Smooth out off flavors (such as the metallic taste of canned tomatoes)
- Take the place of citric acid and drive down pH
- Retain or enhance sauce viscosity
- Extend the flavors of herbs and spices

In rubs, they can:

- Allow for lower salt and sugar levels
- Improve adhesion of spices to protein

SUNSWEET INGREDIENT ATTRIBUTES FOR SAUCES

INGREDIENT	SUGAR/ SALT REDUCTION	FLAVOR ENHANCING	COLOR/ BROWNING	IMPROVED YIELD	TASTES LIKE
Fresh Plum Concentrate	●	●	●	●	Tart cherry, pomegranate molasses
Dried Plum Puree	●	●	●	●	Tamarind, plums
Prune Juice Concentrate	●	●	●	●	Molasses
Dried Plum Powder	●		●		Toffee

SUNSWEET INGREDIENT ATTRIBUTIONS FOR RUBS

INGREDIENT	SUGAR/ SALT REDUCTION	FLAVOR ENHANCING	COLOR/ BROWNING	ADHESION
Dried Plum Powder	●	●	●	●

II. NO-ADDED-SUGAR SAUCES

These sauce recipes offer examples of how to use Sunsweet Ingredients in no-sugar-added sauces. Compared with sucrose, which has a relative sweetness rating of 100, Prune Juice Concentrate has a relative sweetness of 46.95. Yet in blind tastings, most people prefer these no-added-sugar sauces to comparable sauces with added sugar.

Since Sunsweet Ingredients are flavor enhancers, these recipes have lower quantities of spices and salt than comparable recipes. Meanwhile, water levels have been increased to compensate for the concentrated flavors of Fresh Plum Concentrate, Prune Juice Concentrate, and Dried Plum Puree and to boost yield.

SUNSWEEP INGREDIENT FLAVOR AFFINITIES IN SAUCES AND RUBS

American classics: barbecue sauce, hot sauce, ketchup, Yankee pot roast starter sauces, chili starter sauces, honey mustard sauces

Italian / Spanish / French sauces: tomato sauce, pizza sauce, Marsala, romesco, red-wine braising sauces

Asian sauces and condiments: gochujang, teriyaki, sriracha, hoisin, miso, tamarind ginger chutney, sambal, peanut sauce, pad thai noodle sauce, sweet chili sauce, Madras curry, stir-fry sauce

Latin American sauces and condiments: chimichurri, enchilada sauces, mole, salsas

African / North African sauces and condiments: chermoula, harissa, piri piri

Peppers: ancho, cayenne, chipotle, paprika, pasilla, pimentón, poblano

Other vegetables and aromatics: mushrooms, garlic, sun-dried tomatoes, onions, shallots

Other pantry basics: honey, cider, mustard, molasses, pomegranate molasses, tamarind concentrate and paste, balsamic vinegar, soy sauce, tamari

Spices and spice blends: cardamom, chutney spice, coriander, cinnamon, chile, clove, ginger, nutmeg, peppercorns, paprika, shichimi togarashi, star anise



PLUM GOOD TOMATO SAUCE

This premium tomato sauce has no added sugar or citric acid. Fresh Plum Concentrate rounds out flavors and drives down acidity, enhancing the impact of the tomatoes and herbs.

METHOD:

Grind tomatoes until smooth. Combine all ingredients and heat at 240°F until the temperature reaches 210°F. Add additional water to make up for evaporation so the weight remains 100%. Cook for 10 minutes at 210°F. Pack as desired.

INGREDIENTS	AMT (GR)	%
Tomato, whole	5697.12	66.9
Water	1340.08	15.8
Tomato paste, 28%	510.29	5.9
Onions, diced	340.19	3.9
Fresh Plum Concentrate	170.1	2
Balsamic vinegar	170.1	2
Olive oil	85.05	1
Basil, fresh	85.05	1
Garlic, puree	70.87	.81
Salt	42.52	.5
Oregano, dried	9.92	.11
Crushed red pepper, dried	7.09	.08
Total pH: 3.97	8528.38	100

PLUM GOOD PIZZA SAUCE

Using Fresh Plum Concentrate in pizza sauce helps eliminate sugar and citric acid, reduce salt, and enhance tomato flavor.

METHOD:

Grind tomatoes until smooth. Combine all ingredients except aquaresins and heat at 240°F until the temperature reaches 210°F. Cook 8 minutes. Stir in aquaresins. Pack as desired.

INGREDIENTS	AMT (GR)	%
Tomato, whole	8490	64
Water	2643	20
Tomato paste, 28%	1019	7.6
Fresh Plum Concentrate	849	6.39
Olive oil	141	1
Salt	42	.31
Onion, granulated	31	.22
Garlic, granulated	18	.13
Oregano, Turkish	20	.14
Oregano, Egyptian	14	.1
Black pepper, ground	15	.11
Basil aquaresin	2 drops	-
Origanum aquaresin	2 drops	-
Total pH: 3.97	13282	100

PLUM GOOD SALSA FRESCA

For topping quesadillas and tacos or serving as a dip with tortilla chips, salsa fresca is always the most popular salsa at the table. To replicate the freshness of a hand-chopped salsa, Fresh Plum Concentrate brightens the flavors of the tomato and jalapeño.

METHOD:

Place tomatoes in a pot and cook at 240°F for 10 minutes until the temperature reaches 210°F. Add remaining ingredients and cook at the same temperature for 5 more minutes. Puree and cook again at 240°F for 10 minutes. Pack as desired.

INGREDIENTS	AMT (GR)	%
Tomato, fresh, cored, quartered	6310.9	83.59
Fresh Plum Concentrate	693.35	9.18
Cilantro, paste	187	2.48
Lime juice	153	2.03
Garlic, chopped	60	.79
Chipotles in adobo, chopped	50	.66
Salt	50	.66
Jalapeno, fresh, chopped	40	.53
Cumin, ground	4	.05
Caramelized onion acquiresin	2	.03
Total pH: 4.19	7550.25	100

PLUM GOOD RESTAURANT-STYLE SALSA

Cooked salsas run the risk of becoming too acidic, with vinegar or citric acid overpowering the tomato flavor. Here, the addition of Fresh Plum Concentrate gives the salsa a smoother, fresher taste with no added sugar.

METHOD:

Combine all ingredients and heat at 240°F until the temperature reaches 210°F. Add additional water to make up for evaporation so the weight remains 100%. Cook for 10 minutes at 210°F. Pack as desired.

INGREDIENTS	AMT (GR)	%
Tomato, fresh, cored, quartered	672	39.94
Crushed tomato	273.6	16.26
Fresh Plum Concentrate	270	16.05
Green bell pepper, fresh, chopped	168	10
Onions, diced	84	5
Jalapeno, fresh	84	5
Cilantro, fresh	50	2.97
Salt	36	2.1
Lime juice	28	1.65
Garlic, granulated	8	.5
Red onion, dried	6	.36
Cumin, ground	2	.11
Black pepper, ground	1	.06
Total pH: 4.13	1682.6	100

PLUM GOOD RED ENCHILADA SAUCE

This innovative enchilada sauce drives the flavors of cumin, chili powder, and cilantro forward in a balanced sauce that tastes good enough to do double-duty as a salsa.

METHOD:

Combine all ingredients and heat at 240°F until the temperature reaches 210°F. Add additional water to make up for evaporation so the weight remains 100%. Cook for 10 minutes at 210°F. Pack as desired.

INGREDIENTS	AMT (GR)	%
Tomato, fresh, cored, quartered	4655.4	54.28
Hot sauce	1811.2	21.12
Tomato paste, 28%	1018.8	11.87
Fresh Plum Concentrate	424.5	4.94
Green chili, fresh, chopped	410.35	4.78
Onion, granulated	80	.93
Cilantro, puree	60	.69
Cumin	48	.59
Garlic, puree	40	.5
Salt	10	.11
Lime juice	10	.11
Cracked black pepper	5 g	.05
Chili powder	2.5 g	.02
Oregano	1 g	.01
Total pH: 3.83	8576.95	100



PLUM GOOD CLASSIC BARBECUE SAUCE

Dried Plum Puree and Fresh Plum Concentrate give this barbecue sauce the texture and taste of classic barbecue sauce without added sugar. You can experiment with salt levels by holding back half of the salt initially and then adjusting the salt as desired later.

METHOD:

Combine all ingredients and heat at 240°F until the temperature reaches 210°F. Add additional water to make up for evaporation so the weight remains 100%. Cook for 10 minutes at 210°F. Pack as desired.

INGREDIENTS	AMT (GR)	%
Tomato puree	4535.92	38.44
Water	3628.74	30.75
Tomato paste, 28%	1360.78	11.53
Apple cider vinegar	850.99	7.21
Dried Plum Puree	680.39	5.78
Fresh Plum Concentrate	453.59	3.84
Worcestershire sauce	85.05	.72
Lemon juice	85.05	.72
Salt	84	.71
Chili powder	14	.12
Smoked paprika	8	.07
Onion powder	7	.06
Black pepper	3.5	.03
Crushed red pepper	2.5	.02
Total pH: 3.91	11799.51	100

PLUM GOOD SPICY BARBECUE SAUCE

The flavors of chiles and smoked paprika come to the forefront in this tomato-based barbecue sauce while Dried Plum Puree and Fresh Plum Concentrate add a mild, sweet backdrop of flavor to complement the vinegar and Worcestershire. You can experiment with salt levels by holding back half of the salt initially and then adjusting the salt as desired later.

METHOD:

Combine all ingredients and heat at 240°F until the temperature reaches 210°F. Add additional water to make up for evaporation so the weight remains 100%. Cook for 10 minutes at 210°F. Pack as desired.

INGREDIENTS	AMT (GR)	%
Water	3622.40	44.77
Tomato paste, 28%	1273.5	15.74
Diced tomato	820.7	10.14
Tomato puree	679.2	8.4
Dried Plum Puree	679.2	5.59
Fresh Plum Concentrate	452.8	8.4
Apple cider vinegar	283	3.5
Worcestershire sauce	84.9	1.05
Lemon juice	84.9	1.05
Salt	56.6	.7
Smoked paprika	21.9	.27
Chili pepper	14.15	.17
Onion powder	8	.1
Crushed red pepper	7	.08
Black pepper, ground	3.5	.04
Total pH: 3.96	8091.75	100

PLUM GOOD ASIAN BARBECUE SAUCE

Asian barbecue sauces typically contain a lot of sugar to balance the salty and spicy ingredients. In this recipe, Fresh Plum Concentrate and Dried Plum Puree round out flavors, giving the sauce a tangy sweetness without sugar.

METHOD:

Combine all ingredients and heat at 240°F until the temperature reaches 210°F. Add additional water to make up for evaporation so the weight remains 100%. Cook for 10 minutes at 210°F. Pack as desired.

INGREDIENTS	AMT (GR)	%
Water	7244.8	49.52
Fresh Plum Concentrate	3622.4	24.76
Tamari, low sodium	2264	15.47
Corn starch	566	3.87
Dried Plum Puree	452.8	3.1
Red chili paste	112	.77
Lemongrass, puree	110	.75
Ginger, minced	110	.75
Garlic, puree	80	.55
Sesame seeds, toasted	56	.38
Sesame oil	6	.04
Crushed red pepper	6	.04
Total pH: 4.03	14630	100

III. LOWER-SUGAR RUBS

Rubs and dry marinades are another place where sugar and salt levels can creep up. Sunsweet Dried Plum Powder helps rubs to adhere better to meat and poultry, allowing for lower overall salt, sugar, and spices in each blend. The powder also acts as a flavor enhancer. In addition, these rubs can help lock in moisture in proteins.

To modify a rub to include Dried Plum Powder, start by:

- reducing added salt by 10 to 20%
- reducing added spices and herbs by 15 to 20%
- adding 15 to 40% Dried Plum Powder

ANCHO PLUM CHILI RUB

In this rub, reducing sugar by two-thirds and salt by half helps amplify the flavors of the paprika and ancho chiles.

METHOD:

Blend well and sift. Store in a sealed container.

INGREDIENTS	AMT (GR)	%
Dried Plum Powder	225	15.67
Paprika	225	15.67
Garlic, granulated	225	15.67
Onion powder	225	15.67
Brown sugar	225	15.67
Ancho chili powder	170	11.84
Salt	113	7.87
Cumin	28	1.94
	1436	100

ASIAN PLUM RUB

Dried Plum Powder draws out the aromatics of Star Anise and Sichuan Peppercorns in this Chinese-inspired rub.

METHOD:

Blend well in a grinder until fine. Sift to remove any large particles. Store in a sealed container.

INGREDIENTS	AMT (GR)	%
Dried Plum Powder	57	39.31
Salt	28	19.31
Star anise	16	11.03
Sichuan peppercorns	16	11.03
Cinnamon	7	4.83
Fennel seeds	7	4.83
Orange zest	7	4.83
Cloves	7	4.83
	145	100

BARBECUE PLUM RUB

Dried Plum Powder mixed with mesquite and smoked paprika adds outdoor barbecue flavor to meat and poultry.

METHOD:

Blend well in a grinder until fine. Sift to remove any large particles. Store in a sealed container.

INGREDIENTS	AMT (GR)	%
Mesquite seasoning	255	48.62
Pepper seasoning	127.5	24.31
Seasoned salt	57	10.87
Dried Plum Powder	57	10.87
Paprika, smoked	28	5.33
	524.5	100

SRIRACHA PLUM RUB

Plum powder blended with apple powder increases adhesion for meat and poultry rubs while showcasing the signature ingredient—sriracha.

METHOD:

Blend well in a grinder until fine. Sift to remove any large particles. Store in a sealed container.

INGREDIENTS	AMT (GR)	%
Dried Plum Powder	255	36.02
Sriracha seasoning	170	24.01
Seasoned salt	170	24.01
Apple powder	113	15.96
	708	100

SUNSWEEP INGREDIENT PRODUCT DESCRIPTIONS

FRESH PLUM CONCENTRATE

Made from the juice of fresh prune plums, this product is the most versatile Sunsweet Ingredient for making sauces. Fresh Plum Concentrate blends easily with water, adding subtle sweetness and enhancing flavor with bright acidity. Alone, the plum-red liquid has the consistency of maple syrup and carries a pleasant, tart-cherry flavor that resembles pomegranate molasses.

Applications: Fresh Plum Concentrate can be used in tomato sauces and pizza sauces to replace sugar and enhance tomato flavor while driving down acidity. In braising sauces, it helps smooth out the flavors of wine or tomatoes. It is also easy to adapt this sauce to Asian sauces, such as sambal or peanut sauce, adding subtle sweetness to balance the flavors of the spices.

Sorbitol: 14.46%
Fiber: 1.54% soluble; .23% insoluble
Titratable acidity: 1.5 to 2.2%
Brix: 70-74°
pH: 3.4-4.2



DRIED PLUM PUREE

Made from a blend of dried plums and prune juice concentrate, this puree is high in sorbitol, a natural humectant. Alone, the dark purple paste has a tangy flavor similar to molasses or tamarind.

Applications: Used in sauces, it adds body, tart sweetness, and depth. It is especially good in dark tangy sauces, such as hoisin sauce, tamarind chutney, or in any number of barbecue sauces. It also accentuates flavor, allowing for reductions in seasonings and salt. Because it is the texture of a paste, Dried Plum Puree can add body to a sauce that is too thin.

Sorbitol: 14.7%
Fiber: 4.35% soluble; 1.15% insoluble
Titratable acidity: 1.5 to 2.2%
Brix: 70-74°
pH: 3.4-4.2
Insoluble solids: 18-22% at 18.5 Brix



PRUNE JUICE CONCENTRATE

Made by extracting juice from dried plums and then concentrating it to a sugar level of 70° Brix, prune juice concentrate is a sweet and tangy syrup the color of molasses. It is stable at room temperature.

Applications: Prune Juice Concentrate is a perfect pairing with soy sauce and other Asian condiments used in stir-fry sauces. When used in small concentrations, it can take the place of some of the soy sauce, allowing for lower overall sodium levels. In dark sauces, it can also be used to replace from 20% to 50% of the honey, brown rice syrup, agave syrup, corn syrup, or invert sugar in a recipe. Because it also imparts sweetness, it allows for lower overall sugar levels. It also brings a natural caramel color to products (when used in small quantities—a little goes a long way).

Sorbitol: 16.96
Fiber: 5.14% soluble, .53% insoluble
Titratable acidity: 1.5-2.2
Brix: 70°
pH: 3.5-4.2



DRIED PLUM POWDER

Ground from whole prunes, this reddish-brown plum powder is extremely hygroscopic, containing more sorbitol than any other Sunsweet Ingredient. Dried Plum Powder is slightly tacky, with mild, subtle toffee flavor.

Applications: Dried Plum Powder can enhance adhesion while lowering sugar and salt levels in rubs. It can also take the place of caramel color when added in small amounts (less than 1%) to light sauces, such as cheese or cream sauces.

Sorbitol: 25%

Fiber: 5% soluble; 4.9% insoluble

Trace amounts of acids



NOTES

NOTES



THE
Amazing[™]
PLUM

SUNSWEEET[™]
INGREDIENTS

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