

**CA Grain Campaign
Whole-Grain Calculator**

RED FIFE SOURDOUGH BREAD FORMULA

	25% Whole-Grain			50% Whole-Grain			100% Whole-Grain		
	%	grams	Cost	%	grams	Cost	%	grams	Cost
Stiff starter:									
Bread flour	100%	430	\$0.60	100%	430	\$0.60	100%	430	\$0.60
Water	50%	215	\$0.00	50%	215	\$0.00	50%	215	\$0.00
Total	150%	645	\$0.60	150%	645	\$0.60	150%	645	\$0.60
Levain:									
Bread flour	100%	807	\$1.12	100%	807	\$1.12	100%	807	\$1.12
Water	50%	403	\$0.00	50%	403	\$0.00	50%	403	\$0.00
Stiff Starter	80%	645	\$0.00	80%	645	\$0.00	80%	645	\$0.00
Total	230%	1,856	\$1.12	230%	1,856	\$1.12	230%	1,856	\$1.12
Final Dough:									
Total flour	100%	4,640		100%	4,640		100%	4,640	
Bread flour	75%	3,480	\$4.85	50%	2,320	\$3.23	0%	0	\$0.00
Whole-grain red fife flour	25%	1,160	\$5.18	50%	2,320	\$10.36	100%	4,640	\$20.71
Water	73%	3,387	\$0.00	75%	3,387	\$0.00	75%	3,387	\$0.00
Salt	2.50%	116	\$1.28	2.50%	116	\$1.28	2.50%	116	\$1.28
Levain	40%	1,856		40%	1,856		40%	1,856	
Total	215%	10 kg	\$13.03	215%	10 kg	\$16.60	215%	10 kg	\$23.72

SONORA WHEAT CROISSANT DOUGH FORMULA

	10% Whole-Grain			25% Whole-Grain		
	%	grams	Cost	%	grams	Cost
Total flour	100	2,496		100	2,496	
Bread flour	90%	2246.4	\$3.13	75%	1872	\$2.61
Whole-grain sonora flour	10%	249.6	\$1.27	25%	624	\$3.19
Water	38%	949	\$0.00	38%	949	\$0.00
Milk	23%	574	\$20.09	23%	574	\$20.09
Sugar	13%	325	\$5.22	13%	325	\$5.22
Salt	2%	50	\$0.55	2%	50	\$0.55
Yeast	1.20%	30	\$0.24	1.20%	30	\$0.24
Malt	0.50%	120	\$3.59	0.50%	120	\$3.59
Unsalted Butter, Plugra	44%	2,095	\$19.08	44%	2,095	\$19.08
Total	221.2	6,531	\$53.18	221.2	6,531	\$54.57

APPLE PIE

Yield: 5 Double-crust pies

	25% Whole-Grain			50% Whole-Grain			100% Whole-Grain		
	%	grams	Cost	%	grams	Cost	%	grams	Cost
Pie Dough									
Total flour	100%	1,524		100%	1,524		100%	1,524	
Pastry flour	75%	1143	\$1.63	50%	762	\$1.09	0%	0	\$0.00
Whole-grain red fife flour	25%	381	\$1.70	50%	762	\$3.40	100%	1,524	\$6.80
Unsalted butter	50%	762	\$31.57	50%	762	\$31.57	50%	762	\$31.57
Water	12%	183	\$0.00	12%	183	\$0.00	12%	183	\$0.00
Salt	2%	30	\$0.33	2%	30	\$0.33	2%	30	\$0.33
Total	167%	2,499	\$35.23	167%	2,499	\$36.39	167%	2,499	\$38.70
Apple Filling									
			Cost						
Apples	100%	3,578	\$11.88						
Lemon juice	1.46%	52	\$0.42						
Sugar	20%	716	\$11.51						
Cornstarch	2.40%	86	\$0.18						
Salt	0.15%	5	\$0.06						
Cinnamon, ground	0.15%	5	\$0.05						
Nutmeg	0.05%	2	\$0.07						
Raisins	6.10%	218	\$1.36						
Unsalted butter	2.44%	87	\$3.60						
Total	132.75%	4,750	\$29.14						

RYE CHOCOLATE CHIP COOKIES

	25% Whole-Grain			50% Whole-Grain			100% Whole-Grain		
	%	grams	Cost	%	grams	Cost	%	grams	Cost
Total flour	100%	1,095		100%	1,095		100%	1,095	
All-purpose flour	75%	821.25	\$1.06	50%	547.5	\$0.70	0%	0	\$0.00
Whole-grain rye flour	25%	273.75	\$1.12	50%	547.5	\$2.25	100%	1,095	\$4.50
Unsalted butter	71%	775	\$32.11	71%	775	\$32.11	71%	775	\$32.11
Sugar	44%	484	\$7.78	44%	484	\$7.78	44%	484	\$7.78
Brown sugar	53%	576	\$9.05	53%	576	\$9.05	53%	576	\$9.05
Eggs	32%	346	\$1.38	32%	346	\$1.38	32%	346	\$1.38
Vanilla extract	2%	17	\$0.62	2%	17	\$0.62	2%	17	\$0.62
Baking soda	1%	12	\$0.28	1%	12	\$0.28	1%	12	\$0.28
Salt	2%	18	\$0.20	2%	18	\$0.20	2%	18	\$0.20
Chocolate chips	111%	1,211	\$14.23	111%	1,211	\$14.23	111%	1,211	\$14.23
Total	414%	4,536	\$67.83	414%	4,536	\$68.60	414%	4,536	\$70.15

PIZZA DOUGH FORMULA

Yield: one 10-inch pizza

	25% Whole-Grain			50% Whole-Grain		
	%	grams	cost	%	grams	cost
Total flour	100%	143		100%	143	
All purpose flour	75%	107.25	\$0.14	50%	71.5	\$0.09
Whole grain Khorasan flour	25%	35.75	\$0.89	50%	71.5	\$1.79
Water	60%	86.2	\$0.00	60%	86.2	\$0.00
Olive oil	3%	4.3	\$0.03	3%	4.3	\$0.03
Sugar	2%	2.9	\$0.05	2%	2.9	\$0.05
Salt	2%	2.5	\$0.03	2%	2.5	\$0.03
Yeast	1%	0.5	\$0.00	1%	0.5	\$0.00
Total	167%	239	\$1.14	167%	239	\$1.98

INGREDIENT PRICE LIST

	Price	Unit	Unit
Bread flour, Central Milling ABC plus	0.039	oz	0.001392857 g
All purpose flour, Central Milling Beehive	0.036	oz	0.001285714 g
Pastry flour, Central Milling	0.04	oz	0.001428571 g
Red fife flour, Grist & Toll	0.125	oz	0.004464286 g
Sonora flour, Grist & Toll	0.143	oz	0.005107143 g
Khorasan, Central Milling	0.7	oz	0.025 g
Rye, Grist & Toll	0.115	oz	0.004107143 g
Sea salt	0.31	oz	0.011071429 g
Sugar	0.45	oz	0.016071429 g
Brown Sugar	0.44	oz	0.015714286 g
Yeast	0.223	oz	0.007964286 g
Malt, diastic	0.838	oz	0.029928571 g
Cornstarch	0.06	oz	0.002142857 g
Cinnamon	0.305	oz	0.010892857 g
Nutmeg	0.973	oz	0.03475 g
Baking soda	0.66	oz	0.023571429 g
Vanilla extract	1.02	oz	0.036428571 g
Chocolate chips	0.329	oz	0.01175 g
Unsalted butter	1.16	oz	0.041428571 g
Butter, Plugra	0.255	oz	0.009107143 g
Milk	0.98	oz	0.035 g
Eggs	0.112	oz	0.004 g
Apples	0.093	oz	0.003321429 g
Lemon juice	0.226	oz	0.008071429 g
Raisins, golden	0.175	oz	0.00625 g
Olive Oil	0.171	oz	0.006107143 g