

AVENA BEST INGREDIENT FORMULATIONS

OAT & LENTIL MUFFINS (MAX PDCAAS)

GLUTEN-FREE, EGG-FREE, VEGAN



PRODUCT DESCRIPTION

Combining cereal flours with pulse flours allows for optimization of the quality of protein, as well as quantity, in the final product. For example, oat and pulse flours are often referred to as complementary proteins. When combined at an ideal ratio, these blends provide a better balance of essential amino acids, improving the quality of the protein, leading to a protein claim.

Avena Best Pulse Visco-Enhancer (NB) ©, **Decorticated Yellow Lentil Flour R** and **Purity Protocol Fine Grind Oat Flour** are combined to maximize PDCAAS in this gluten-free, vegan muffin formulation.



FORMULATION

INGREDIENTS	WEIGHT (g)	PERCENT (%)
Avena Best Decorticated Yellow Lentil Flour R	99	12.3
Avena Purity Protocol Fine Grind Oat Flour	126	15.6
Sugar, white granulated	113	14
Baking Powder	14	1.7
Salt	3	0.4
Avena Best Pulse Visco-Enhancer (NB) ©	26	3.2
Water	63	7.8
Dairy-Free milk alternative	229	28.4
Pure Vanilla Extract	6	0.7
Vegan Butter, unsalted, melted	18	2.2
Canola Oil	108	13.4
Xanthan Gum	2	0.2
TOTAL	807	100
	WEIGHT (g)	PERCENT (%)
Lemon Poppy Seed Muffin with Icing		
Vegan Butter, unsalted	115	22.2
Lemon Juice, fresh	30	5.8
Pure Vanilla Extract	2.5	0.5
Confectioner's Sugar	370	71.5
TOTAL	517.5	100

Processing steps continue on next page.

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PROCESSING INSTRUCTIONS

Plain Muffins, Optimized PDCAAS Oat-Pulse Ratio

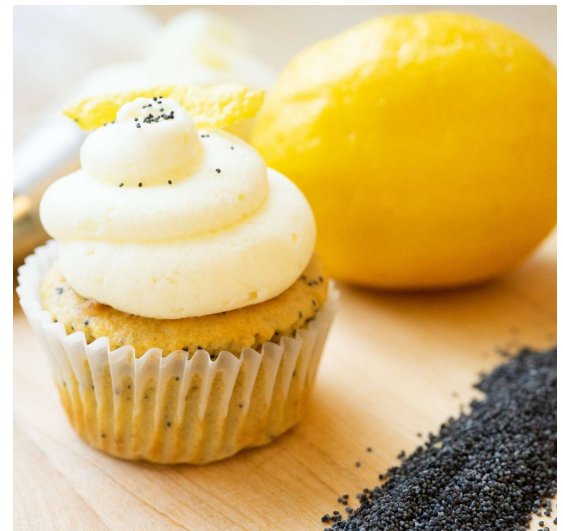
1. Pre-heat oven to 350 °F/180 °C. Line muffin tin with paper muffin liners.
2. Sift together **Avena Best Decorticated Yellow Lentil Flour R**, **Avena Purity Protocol Fine Grind Oat Flour**, sugar, baking powder and salt.
3. In a separate bowl, mix together milk, water, vanilla and melted butter.
4. Using a mixer with whisk attachment, combine **Avena Best Pulse Visco-Enhancer (NB) ©** and water. Mix on high for 20-30 sec until mixture is fully combined and has an egg-like 'goopy' appearance.
5. Add milk, butter, vanilla mixture to whipped egg-replacer. Mix on med-high for 30 sec until combined.
6. Switch mixer to paddle attachment, add combined dry ingredients to wet mixture. Mix on medium-low until fully combined, 30-60 sec.
7. Scoop 55g of batter into each lined muffin cup.
8. Bake for 14-15 min or until toothpick comes out clean.

Variation: Lemon Poppy Seed Cupcakes with Lemon Icing

1. Follow recipe above. To wet ingredients, substitute vanilla extract for pure lemon extract.
2. During step 6, add 15g of whole poppy seeds to dry mixture.
3. Follow remaining steps as indicated. Cool to room temperature before icing.

Lemon Icing Production Method:

1. In a mixer fitted with whisk attachment, whip butter on high until light and fluffy, about 3-4 min.
2. Add lemon juice and vanilla extract. Whip for another 1 min, scraping down sides as necessary.
3. Add icing sugar gradually to prevent spilling over, whip on med-low speed.
4. Once all sugar has been added, whip for 1 min, scraping down sides as needed.
5. Add icing to piping bag fitted with a large round tip and pipe 40g swirls onto each cooled lemon poppy seed cupcake.



Nutrition Facts	
Valeur nutritive	
Per (64 g)	
pour (64 g)	
Calories 210	% Daily Value*
	% valeur quotidienne*
Fat / Lipides 10 g	13 %
Saturated / saturés 1 g	5 %
+ Trans / trans 0 g	
Carbohydrate / Glucides 25 g	
Fibre / Fibres 3 g	11 %
Sugars / Sucres 11 g	11 %
Protein / Protéines 5 g	
Cholesterol / Cholestérol 0 mg	
Sodium 120 mg	5 %
Potassium 150 mg	3 %
Calcium 250 mg	19 %
Iron / Fer 1 mg	6 %
*5% or less is a little, 15% or more is a lot	
*5% ou moins c'est peu, 15% ou plus c'est beaucoup	

Canadian Nutrition Label.
Typical nutritional information taken from Genesis