GUIDELINE RECIPE

CHOCOLATE CAKE - 50% COCOA POWDER REDUCTION

with PrimaFi Cocoa

- **Cost reduction**
- **PrimaFi Cocoa is a micronized cocoa bean shell powder – upcycled ingredient**
- **Using PrimaFi Cocoa allows for the overall cocoa powder in the recipe to be reduced**

With rising cocoa prices and ongoing supply challenges, PrimaFi Cocoa presents a simple solution for food manufacturers. This natural, finely milled cocoa bean shell powder is a cost-effective alternative to cocoa powder as demonstrated in this recipe. We have replaced 50% of the cocoa powder in a chocolate sponge cake with PrimaFi Cocoa, maintaining rich flavour and quality while optimising costs.

Recipe	Control	PrimaFi Cocoa - 50% Reduction
Ingredients / Raw Materials	%	%
White Sugar	28.68	28.68
Wheat Flour	17.28	17.28
Semi Skimmed Milk	16.30	16.30
Boiled Water	16.30	16.30
Whole Liquid Egg	8.47	8.47
Rapeseed Oil	7.50	7.50
Cocoa Powder	3.59	1.79
PrimaFi Cocoa		1.79
Vanilla Extract	0.59	0.59
Bicarbonate of soda	0.46	0.46
Baking Powder	0.46	0.46
Salt	0.39	0.39
TOTAL	100.00	100.00

Processing Steps:

1. Preheat oven to 180°C.
2. Grease 2 x 22cm/9" cake pans with butter, then line the base.
3. Sift in the dry powders and whisk briefly.
4. Add eggs, milk, and vanilla. Whisk until incorporated.
5. Add the slightly cooled boiled water and whisk to incorporate.
6. Pour batter into cake pans.
7. Bake for 35 minutes or until cooked throughout.
8. Cool for 10 minutes and then turn out onto wire racks to cool completely.

Benefits and Characteristics:

PrimaFi cocoa

PrimaFi Cocoa is produced from cocoa bean shells which are usually discarded, making it a sustainable ingredient. The shell is rich in fibre and has a rich and sweet flavour.

As a sustainable cocoa powder replacement from upcycled cocoa bean shells, PrimaFi Cocoa is approved as a food ingredient and can be labelled as 'Cocoa Fibre' or 'Dietary Cocoa Fibre'

Application Photo:



Replacement of cocoa powder with PrimaFi Cocoa shown from left to right:

No Replacement, 50% (*this recipe*), 75%, 100%

Email: info@healy-group.com

This recipe is for development use only. Due to difference in materials and processing, we recommend testing in your own setting following consultation with our team.

V3.20250321
Checked By: PJS / GFD / RN
Mar 2025

GUIDELINE RECIPE

HEALY GROUP

Indicative Ingredient Declaration:

Ingredient Declaration - Control / Standard:

Sugar, Wheat Flour (**Wheat** Flour, Calcium Carbonate, Iron, Niacin, Thiamin), Semi Skimmed **Milk**, Water, Whole **Egg**, Rapeseed Oil, Cocoa Powder, Natural Vanilla Extract, Baking Powder: (Diphosphate (E450), Potassium Hydrogen Carbonate (E501)), Sodium Carbonate (E500), Salt

Ingredient Declaration - Development 50% Cocoa Powder Replacement:

Sugar, Wheat Flour (**Wheat** Flour, Calcium Carbonate, Iron, Niacin, Thiamin), Semi Skimmed **Milk**, Water, Whole **Egg**, Rapeseed Oil, Cocoa Powder, Cocoa Fibre, Natural Vanilla Extract, Baking Powder: (Diphosphate (E450), Potassium Hydrogen Carbonate (E501)), Sodium Carbonate (E500), Salt

Nutrition:

*Nutritional Data: /100g (Calculated)**	Control	50% Cocoa Powder Replacement
Energy kJ	1,289	1,285
Energy k Cal	306	305
Fat	10.7	10.3
Of which saturates	1.6	1.4
Carbohydrates	48.9	48.8
Of which Sugar	33.0	33.0
Fibre	0.8	1.9
Protein	4.3	4.3
Sodium	0.414	0.414
Equivalent as Salt	1.062	1.062
UK HFSS Score	15	14

* 10% Bake Loss

NUTRI-SCORE A B C D E

Notes:

Email: info@healy-group.com

This recipe is for development use only. Due to difference in materials and processing, we recommend testing in your own setting following consultation with our team.

V3.20250321
Checked By: PJS / GFD / RN
Mar 2025