

The Ketogenic Diet

How to Calculate a Recipe to Your Child's Ketogenic Diet Meal Plan

All of the recipes listed on our website are calculated to a sample meal plan.

Here is a common example used: 60 gm heavy cream 3.7 exchanges protein 6 exchanges fat 1.3 exchanges carbohydrate

Of course every child has a different meal plan, therefore you will need to adapt this recipe to your child's personalized meal plan prescribed by the KD team. -----But how?

Adapting the recipes to your child's meal plan can be tricky because the recipe may not turn out the same once the numbers are changed. The goal when adapting is to keep the proportion between each ingredient as similar to the original recipe as possible. For example, if the original recipe requires half of the protein exchanges to be egg, you should also use half of your child's protein exchanges as egg. If you used any more or any less, the recipe could turn out differently.

However, not every recipe is as simple as that example. Sometimes there are multiple proteins and you need to figure out how much of each to use. The best way to do this is figuring out the percentage of protein exchanges used for each ingredient.

Example Recipe:

| Ingredients | <u>Protein Exchanges</u> |
|-----------------------------|--------------------------|
| 15 gm raw egg | 1 |
| 10.6 gm almond flour | 2 |
| 3.2 gm smooth peanut butter | 0.7 |

The total protein used in this recipe is 3.7 exchanges (1 + 2 + 0.7 = 3.7)

To find out the percentage of protein exchanges used for an ingredient, divide the number of exchanges used for that ingredient by the total protein exchanges.

To find the percent of protein exchanges used for egg: 1/3.7 = 0.27This means 27% of the total protein exchanges were used as egg.

To find the percent of protein exchanges used for almond flour: 2/3.7 = 0.54Which means 54% of total protein exchanges were used for almond flour.

To find the percent of protein exchanges used for peanut butter: 0.7 / 3.7 = 0.19 19% of the total protein exchanges were used for peanut butter.



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Therefore- 27% is egg, 54% is almond flour, and 19% is peanut butter.

Now that the percent of protein exchanges is known, you can begin adapting this recipe to your child's meal plan.

Suppose your child's meal plan has 5.5 exchanges of protein-27% of the protein exchanges would be egg, 54% would be almond flour, and 19% peanut butter.

Multiply the percent (in decimal form) by your child's total protein exchanges.

For egg- $(0.27 \times 5.5 = 1.5)$ they would need 1.5 exchanges of egg. For almond flour- $(0.54 \times 5.5 = 3)$ they would need 3 exchanges of almond flour. For peanut butter- $(0.19 \times 5.5 = 1)$ they would need 1 exchange of peanut butter.

Since the recipes also contain fat and carbohydrates, you would need to calculate the percentages for the rest of the ingredients as well.

When adapting the fat exchanges, notice some recipes require fat to be served "on the side". The reason for this is because the recipe can not cook properly with too much fat, therefore a portion must be served separately.

Example:

| Ingredients | Fat Exchanges |
|--------------------------------|---------------|
| 10 gm butter (in batter) | 2 |
| 16 gm oil (served on the side) | 4 |

The total fat exchanges used in this recipe is 6 exchanges (2 + 4 = 6).

To find out the percentage of fat exchanges used for an ingredient, divide the number of exchanges used for that ingredient by the total fat exchanges.

Butter (in batter): 2/6 = 0.33This means 33% of the total fat exchanges were used as butter and added to the batter.

Oil (served on the side): 4/6 = 0.67This recipe requires 67% of the total fat exchanges to be served on the side.

Suppose your child's meal plan has 8 exchanges of fat-



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33% of the fat exchanges would be butter and 67% of the fat exchanges would be served on the side.

For butter- $(0.33 \times 8 = 2.6)$ your child would need 2.6 exchanges of butter. For oil- $(0.67 \times 8 = 5.4)$ your child would need 5.4 exchanges of fat served on the side.

Now that the proteins and fats are adapted to your child's personal meal plan, the last macronutrient to calculate is the carbohydrate. Adapting the carbohydrate to your child's meal plan is fairly easy as it is usually very forgiving. If a recipe requires specific instructions on adapting carbohydrate ingredients, they will be listed in the "variations" section on the recipe.