Why I Was Against Low Carb Bread and Why I Changed My Mind Joy Y. Kiddie, MSc, RD (Registered Dietitian)

I have been supporting people in following a low-carb and keto lifestyle for the past five years, but until recently, I was not in favor of low-carb bread. The reason was that there were only a few low-carb or keto bread options, and each had its drawbacks.

Most low-carb bread is made from nut flours such as almond flour and coconut flour, with or without adding different types of cheese (such as so-called "fathead" pizza).



While these breads work well for some people, the extra energy intake provided by the nuts and cheese often made weight loss more difficult, especially for periand post-menopausal women.

While bread made from whipped egg white provides a high protein, low-fat, low-carb bread option, the texture of this protein-sparing bread is often disliked.



The lack of acceptable low-carb bread options posed a problem for me as a Dietitian. While some people are fine using lettuce to wrap a burger in, lettuce wraps do not address the needs of people from bread-centric cultures. People of South Asian (Indian) descent have approximately 6x higher rates of type 2 diabetes than the general population and I came to realize that it was essential for them to have culturally appropriate low-carb bread such as chapati/roti, paratha, and naan.

With rates of type 2 diabetes being almost double in the Hispanic population, low-carb corn-style and flour-style tortillas were also important. While these could be made using nut flours and gums such as xanthan gum, guar gum, or psyllium to make them flexible, these ingredients often cause digestive issues.

In addition to people's cultural needs, there was also the fact that many people have nut allergies which makes most low-carb bread options made with almond flour unavailable. A similar issue exists for those allergic to eggs -- making egg-white-based bread such as 'cloud bread' or protein-sparing bread unavailable as low-carb options.



In late October 2021, I saw a protein bread imported from German that was like the classic Vollkornbrot bread but made from some unique ingredients.

This bread had more than three times the protein of this company's whole-meal rye bread and more than 80% fewer carbohydrates, so I bought it to try. It was heavy and dense and tasted good, but at almost 50 cents per slice, I thought, "this can't be that hard to make."

I ordered some of the ingredients online and began experimenting with making low carbohydrate, yeast-risen, high-protein bread that contained no beaten egg white, no nut flours, and no cheese. It took quite a few attempts until I made a successful bread, but I persisted, and on December 14, 2021, I posted the recipe

for Low Carb High Protein Yeast Bread. This bread turned out to be a "game-changer." It was "real bread that happened to be low carb."



Most impressive were the macros! Each slice of Low Carb High Protein Yeast Bread had only 1.6 g net carbs and 11.4 g protein.

Amount Per Serv	ring	% Daily Value
Calories	112.7 kcal	6 %
Total Fat	5.6 g	9.%
Saturated Fat	2.5 g	13 %
Trans Fat	0.2 g	1 5
Cholesterol	10.2 mg	3.9
Sodium	78 mg	3 %
Total Carbohydra	ite 5.2 g	2 %
Dietary Fiber	3.6 g	14 %
Sugars	0.2 g	1
Protein	11.4 g	23 %
Vitamin A	2 % • Vitamin C	0 %
Calcium	2 % • Iron	5 %

Even with ordering all the ingredients online from Canada, compared to commercial Carbonaught® Multigrain Bread that weighed the same (544 g), it cost 35% less.

Most ingredients are available in regular supermarkets in the US, and no matter where in the world people live, like me, they could order these ingredients online and bake these low-carb bread themselves. I knew I was onto something.

The ingredient that made this first 'real bread' possible was 'vital wheat gluten,' which is not wheat flour but one of several types of wheat protein isolate. Wheat protein isolate is to wheat, what whey protein isolate is to dairy, and both are proteins that have been used in food production and as a protein supplement. I

later found out that there are several different types of wheat isolates. Vital wheat gluten is a protein isolate of gliadin and glutenin separated from the wheat starch (where all the carbs are) and other grain components. Gliadin and glutenin give bread its distinct "pully" texture and make bread different from cake or pastry. Just as adding vital wheat gluten gives bread its characteristic texture, the inclusion of whey protein gives low carb bread its crisp, brown crust.

Discovering these low-carb ingredients resulted in me re-visiting my old hobby of bread baking – something I did over the previous 35 years before adopting a low-carb diet in March 2017. Most of my low-carb breads began as recipes for regular high-carb bread that are hand-written on recipe cards and fill one of the multiple recipe boxes.

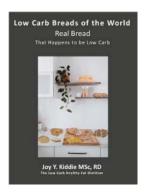


It was vital wheat gluten that made other breads possible – from crusty sandwich loaves, brioche, buns and rolls to culturally acceptable low-carb versions of chapati/roti, paratha, naan, and corn-style and flour-style tortillas.



As Dietitian it was finally possible to offer those from a South Asian or Hispanic background culturally appropriate low-carb breads they could make at home, enabling them to adopt a low-carb diet to help improve their health. In addition, these ingredients meant that those with nut allergies could have low-carb bread without having to resort to egg-white bread and since many of these breads do not contain eggs, there are low-carb bread alternatives for those with egg allergies.

After posting photos of some of these early breads on social media, people kept asking me for the recipes. Some wanted to commission me to make these breads and courier them to them regularly, but I am a Dietitian in full-time clinical practice with no desire to open a baking business. When someone suggested I write a book, I was initially resistant to the idea; however, it was evident that there was both an interest and a need.



In January 2021, I decided to write Low Carb Bread of the World because it provided a much-needed dietary option to many people. The breads contain no nut flours. They have no psyllium, xanthan gum, guar gum, or inulin, as these ingredients cause many people digestive issues, and many of the breads in the book are made without eggs or dairy.

These breads are not perfect replicas of the original but are as close as possible using low-carb ingredients that are readily available and with minimal priority allergens. They are real breads that happen to be low carb.

Low Carb Breads of the World is not just a cookbook or a collection of recipes. Instead, it introduces low-carb ingredients and explains how to use them for baking several different types of low-carb bread. The recipes in the book provide an opportunity to utilize the ingredients and the methods to produce a variety of breads of the world. By understanding the science behind using these ingredients, people will begin to be able to adapt their traditional bread recipes to be low-carb, and that is ultimately the goal of this book.

Like the expression "give a man a fish, you feed him for a day, teach a many to fish, you feed him for a lifetime," this book is intended to teach people what is needed so they can apply that knowledge to make the breads they grew up on and love, low carb.

For those who can eat and enjoy nut-flour and egg-based low carb bread, these are an excellent option, but for those for whom they are not suitable, there is another choice.

To your good health!

Joy Y. Kiddie, MSc, RD

Joy Kiddie is a Registered Dietitian with a master's degree in human nutrition from the University of British Columbia (Canada). She has been providing low-carb and keto services since 2015 through her long-standing dietetic practice BetterByDesign Nutrition (www.bbdnutrition.com) and since 2017 has been supporting people through her dedicated low-carb division, The Low Carb Healthy Fat Dietitian (www.lchf-rd.com). Joy helps people reduce their hunger and food cravings to achieve their weight loss goals and improve their metabolic health. She is also the author of the upcoming book, Low Carb Breads of the World (www.lowcarb-bread.com).