



Gluten free diet:
Is there any benefit for us? Is it a new marketing strategy? Pasta, pizza and burger. Does adding

the fabulous words “GF – Gluten Free” to them make those dishes better, healthier or more profitable? Where did this “gluten free” trend come from? Now you can see the letters “GF” in supermarkets, restaurants, tuckshops and even bakeries. I wonder if people know what exactly “gluten” is. Gluten is a protein that creates elastic consistency, existing in all kinds of grains such as wheat, corn and rice. No, not only in wheat!! There is a lot of misleading information out there. (Especially from money making processed foods’ companies!) There are quite a few varieties. For

Hidden wheat (gluten)

1. Sausages
2. Teriyaki sauce
3. BBQ sauce
3. Dressing
4. Mustard
5. Meat paté / rissoles
6. Custard cream
7. Chicken nuggets
8. Frozen products
9. Soy sauce
10. Chinese appetizers (spring roll or dim sim)

example, the main gluten in wheat is called ‘gliadin’. Also, some people have symptoms and others don’t after consuming gluten. However, one of the serious problems about gliadin for all of us is to activate “Zonulin”^{*1} which is a protein that regulates our gut permeability. Our small intestinal wall is made up with one cell lining and separates ourselves and foreign matter (i.e. food). When “Zonulin” is activated, the gaps between the intestinal cells are opened, resulting in increasing permeability, aka “leaky gut”.^{*2} Many research show that leaky gut is a major risk factor in many chronic conditions^{*3} such as obesity, autoimmune diseases and allergies. To avoid gluten is not a trendy diet nor in fashion. We should pay more attention to what we put in our body. Why don’t you stay away from gluten and/or packaged foods for a few weeks? You may resolve some issues you have had for ages while you enjoy new cuisines!

Bread free burger Equipment: ramekin with a lid (about 10cm diameter)& microwave (optional: sandwich press)

Ingredients: (Serve 1)

(For buns) 2 eggs, salt, pepper and 1 teaspoon ghee or butter

(For burger paté) *choice of mince (lamb, pork, chicken, goat, kangaroo etc.)^{*see note}

* $\frac{1}{3}$ finely chopped onion (= 2 tablespoons) * $\frac{1}{2}$ teaspoon chopped garlic * $\frac{1}{2}$ teaspoon chia seeds

*1 small mushroom chopped finely *salt & pepper to taste *vegetables e.g. tomato, lettuce, avocado etc.

Direction for buns:

- 1) Crack one egg in a ramekin and whisk lightly. Put butter and season it with salt and pepper.
- 2) Microwave 1) with a lid on for 1.5 minutes for medium strength. Check the egg. If it’s still runny, microwave 10 seconds at a time.
- 3) Take the egg out with knife and do 1) and 2) to make other bun.

Direction for paté:

- 1) In the same ramekin, knead mince & salt with a spoon for a minute then add other burger ingredients and mix well.
- 2) Microwave 1) with a lid on for 1 minute (total 2-3 minutes) at a time. (check each time if the meat is cooked. = browned)
- 3) Place the paté (and egg buns) onto the sandwich press, bake for a minute or so. (to make buns and paté crunchy & it’s optional.)
- 4) Make a burger by arranging paté & vegetables between egg buns. *note: A mix of 2 kinds (e.g. pork + kangaroo) tastes better.



^{*1} Fasano A. et al (2006) Gliadin, zonulin and gut permeability: Effects on celiac and non-celiac intestinal mucosa and intestinal cell lines. *Scandinavian Journal of Gastroenterology*. 2006 Apr;41(4):408-19

^{*2} Fasano A. et al. (2015) Effect of gliadin on permeability of intestinal biopsy explants from celiac disease patients and patients with non-celiac gluten sensitivity. *Nutrients*. 2015 Feb 27;7(3):1565-76. doi: 10.3390/nu7031565.

^{*3} Morris G. et al (2016) The Role of Microbiota and Intestinal Permeability in the Pathophysiology of Autoimmune and Neuroimmune Processes with an Emphasis on Inflammatory Bowel Disease Type 1 Diabetes and Chronic Fatigue Syndrome. *Current Pharmaceutical Design*. 2016;22(40):6058-6075.