



FODMAP Re-Challenges

HOW TO LEARN NEW TOLERANCES
WITH FODZYME

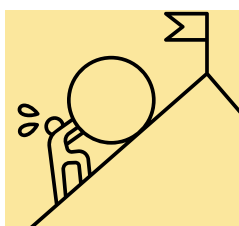
Summer, 2024

Why Should I Re-challenge?



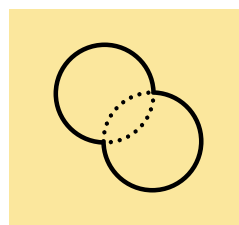
LEARN TOLERANCES

Like other aspects of health, FODMAP tolerances change over time



NUTRITIONAL DIVERSITY

Avoid nutrient deficiencies and increase fiber in diet to support gut health (microbiome)



FOOD PLEASURE

Open up social eating and reduce anxiety and concerns around food



PROCESSES

Plan
Challenge

Prepare

Test
Food

Reflect,
Relax





Set Your Expectations

FODMAP tolerances, thresholds and symptoms change over time. Even if a food is not tolerated right a way, it may be at a later point.

Monash University recommends re-testing foods as soon as 3 months after an initial challenge and within at least 12 months.

Remember that while FODMAPs may cause digestive distress, they do not cause permanent damage to the digestive tract.

Embrace the learning process.

<https://www.monashfodmap.com/blog/just-2-6-weeks-it-is-not-diet-for-life> 8/





Choose Where to Start...

- Dishes or ingredients you miss most
- Categories with biggest nutritional gap (eg. fiber, calcium)
- Foods that feel the safest (least likely to trigger symptoms)
- Foods that are important to you, like a family recipe or cultural dish

Be
flexible!



Meals & Snacks to Try

FRUCTAN	GOS	LACTOSE
Spaghetti squash sauteed in olive oil with 1/4 clove garlic & fresh basil	Chickpea salad (1/2 cup chickpeas, diced zucchini & red pepper, olives)	Puffed rice cereal with strawberries & 1/4 cup cow's milk
Western omelette (1/8 onion, ham, red or green pepper)	Smoothie made with 1/4 cup silken tofu, spinach, pineapple & ginger	Carrots & tzatziki (3 oz plain yogurt, shredded cucumber, dill)
Quinoa pilaf with chicken, carrots, 3 brussels sprouts and cumin	Frittata made with 1/8 cup green peas, kale & fresh herbs	Sourdough toast with 2 oz ricotta, smoked salmon & capers
Wheat bread with peanut butter	Salted popcorn & 15 almonds	1/2 cup pineapple & 1 kiwi with 3 oz plain yogurt & cinnamon

FODZYME helps with all of these

BONUS

FRUCTAN

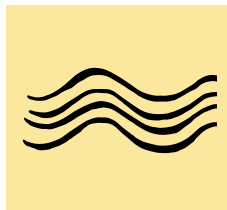


Challenge categories	Foods (choose one from each)	SMALL	MEDIUM	FULL SERVING
GARLIC		1/4 clove	1/2 clove	1 clove
ONION		1/8 onion (0.5 oz)	1/4 onion (1 oz)	1/2 onion (2 oz)
GRAIN	Wheat wheat pasta Cous cous White wheat bread	2/3 c (3 oz) 1/4 c (1 oz) 1 slice (1 oz)	1 c (5 oz) 1/2 c (3 oz) 1 1/2 slice (1.5 oz)	1 1/2 c (8 oz) 1 c (5 oz) 2 slice (2 oz)
VEGETABLES & FRUIT	Fresh beet Brussels sprouts Savoy cabbage Grapefruit Raisins	3 slices (1 oz) 3 sprouts (2 oz) 3/4 c (2 oz) 1/2 medium (4 oz) 1 1/2 tbsp (1 oz)	4 slices (1.5 oz) 4 sprouts (3 oz) 1 c (2 oz) 1 medium (7 oz) 2 tbsp (1.5 oz)	6 slices (2 oz) 5 sprouts (3.5 oz) 1/2 c (4 oz) 1 large (10 oz) 3 tbsp (2 oz)
GOS & FRUCTAN	Pearl barley Cashew nuts Pistachio nuts Red kidney beans Wholegrain wheat bread	1/4 c (2 oz) 10 nuts (1 oz) 15 nuts (0.5 oz) 1/8 c (1 oz) 1 1/2 slices (1 oz)	1/2 c (4 oz) 20 nuts (1.5 oz) 30 nuts (1 oz) 1/4 c 21 oz) 2 slices (2 oz)	1 c (8 oz) 30 nuts (3 oz) 40 nuts (1.5 oz) 1/2 c (3 oz) 3 slices (3 oz)



SCHEDULE TIME

Aim to conduct the challenge when you have few obligations within the following 24 hours. Also plan time for a walk following the meal to support digestion



LOW-STRESS SETTING

Ideally conduct your test at home during a low-stress time. Try some deep breathing exercises before and after to help manage potential stress or anxiety you may feel



FLARE-UP SUPPORT

Have a heating pad, soothing tea, or other palliative tools on hand in case symptoms do arise. Wear comfortable clothing, too

A vibrant background image of fresh green vegetables, including leafy greens, broccoli, green beans, and asparagus, arranged on a white surface.

**Set
Yourself
Up for
Success**

Recruit Social Support

Engage and communicate openly with someone who can support you, like:

SIGNIFICANT OTHER OR FAMILY MEMBER

HEALTHCARE PROVIDER

CLOSE FRIEND OR COLLEAGUE

PATIENT SUPPORT GROUP OR PEER

“

I have been avoiding garlic for the past five years but really want to learn if I might be able to tolerate it in small amounts. Trying it is really scary for me (in the past it has caused a lot of GI distress) but I finally feel ready to test it out.

”



JACKIE

aka Ms. I miss fructans

Set Your Pace

1

RICE CRACKERS

2

PANCAKES MADE WITH RICE FLOUR

3

ZUCCHINI PANCAKES MADE WITH RICE FLOUR

4

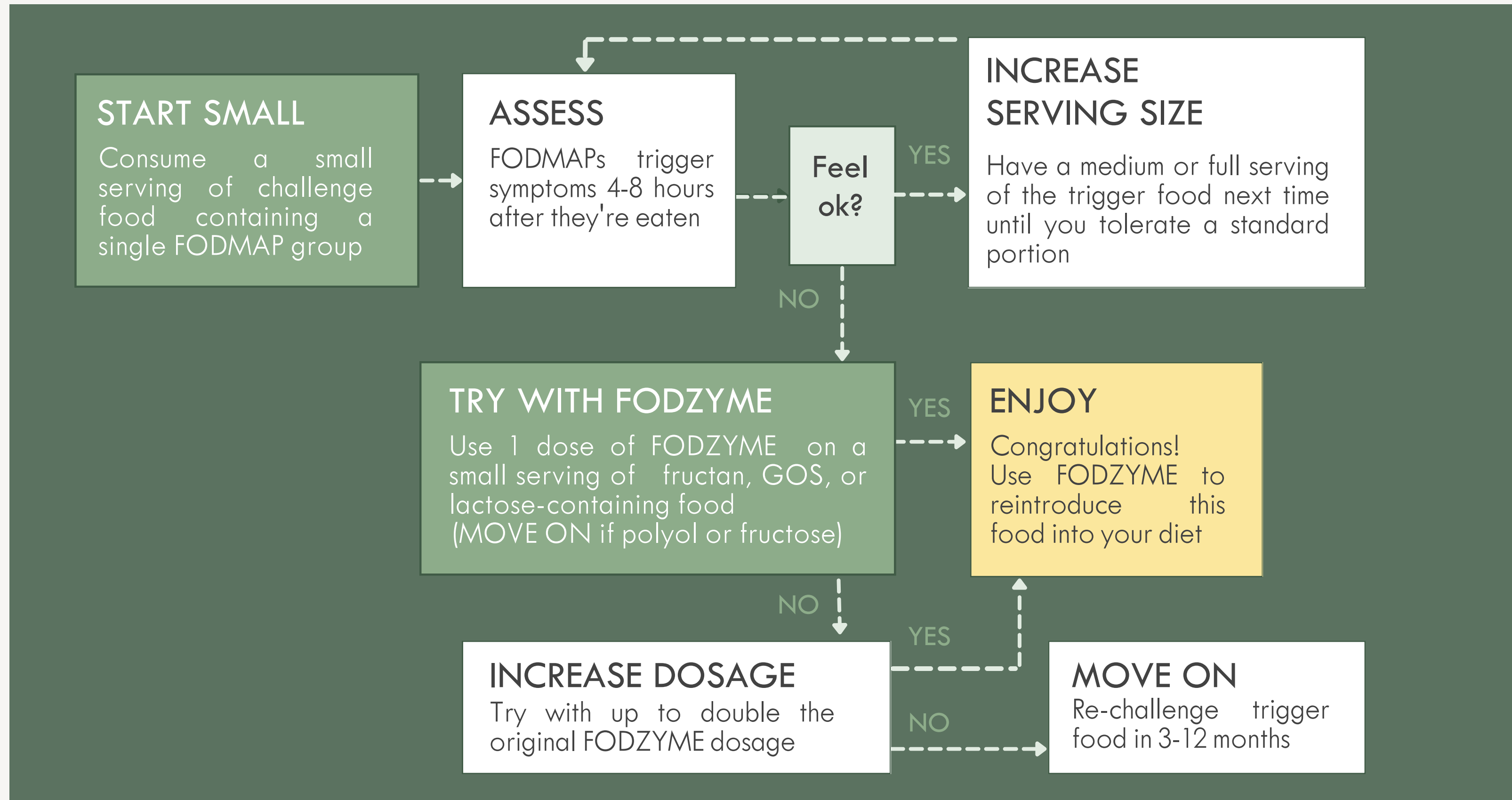
ZUCCHINI PANCAKES

REMEMBER

**FODMAPs may cause discomfort
but they are not dangerous**

focus on the potential benefits of learning a new tolerance,
and that you know the worst case scenario (a temporary flare-up)

TEST



Peeled, well-cooked & soft or blended foods are best tolerated

TOP TIP



Afterwards: Reflect, Relax & Reset

Challenging trigger foods takes courage, commitment and trust. Celebrate both big and small steps in the journey.

CELEBRATE TRIAL

Regardless of the outcome, celebrate your accomplishments and that you re-challenged a food

LEARN FROM FAILURES

Even if a food re-challenge results in a "failure" to tolerate the food, think about what you might have learned. How could you better plan your next challenge?

PORTION, PORTION

FODMAP tolerances depend on the portion. While the amount you tolerate today may feel small, remember this can change over time

SHARE YOUR SUCCESS

Let a friend, family member and your care team know how you feel. Don't be shy... reach out to the team at FODZYME to let us know how it went, too!

Bonus: Use a Re-Challenge Journal

FODMAP	TIME OF DAY	EATING PACE	FOODS, DRINKS & PORTIONS	FODZYME DOSE AND METHOD (OR OTHER TOOLS USED)	SYMPTOMS EXPERIENCED
Fructan	12PM	fast medium slow	2 oz spaghetti with olive oil	1/4 tsp mixed in	None
		fast medium slow			
		fast medium slow			
		fast medium slow			
		fast medium slow			

About the authors

Kiwi Biosciences is a human-centered biotechnology company based in Cambridge, MA devoted to developing elegant scientific solutions for extraordinary gut relief.

Kiwi Bio is led by Harvard-trained founders Anjie Liu and David Hachuel who understand firsthand how much the IBS community needs FODZYME.

Anjie is a patient herself, who developed FODZYME to be able to comfortably eat high-fructan foods; David previously founded auggi.ai, a stool recognition AI technology and digital gut health coach for IBS patients.

FODZYME is Kiwi Bio's first product; in development still are novel enzymes to tackle additional FODMAP groups like mannitol and sorbitol.



DAVID HACHUEL & ANJIE LIU

Co-founders of Kiwi Biosciences