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Low FODMAP Dietary Food Lists Are Often Discordant

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To the Editor

A low fermentable oligosaccharides, disaccharides, monosaccharides, and polyols (FODMAP) diet ameliorates gastrointestinal symptoms in adults and children with irritable bowel syndrome (IBS).[1, 2] In order to follow a low FODMAP diet, dietary education is required as subjects are often asked to restrict fermentable substrates for several weeks with gradual re-introduction challenges.[3, 4] The most ideal way to educate subjects regarding the low FODMAP diet is still being actively studied.[5] Currently the education process often includes providing FODMAP food lists which both recommend foods (and amounts) which may be consumed and those that should be restricted. The education process is made more difficult by the fact the FODMAP content of foods may differ according to the country of origin and may require tailoring recommendations to the patient's cultural dietary preferences.[6] Whether readily available United States based low FODMAP diet food lists provide consistent guidance is unknown.

We evaluated three low FODMAP dietary guidance food lists from sources affiliated with United States academic institutions. These lists were readily available (all obtained from the internet in May 2015), contained more than one hundred fifty specific food items, and provided specific recommendations regarding each listed food. Dietary recommendations for each listed food item was classified into one of three categories: full restriction (food not allowed to be consumed at all); partial restriction (small amount allowed to be consumed), or no restriction. Where two or more lists provided information on the same food, agreement was assessed. General agreement was defined as two or more lists either agreeing to allow the food in some capacity (no restriction or partial restriction) or agreeing to fully restrict the food. Disagreement was defined as one list fully restricting a food while another list recommended only partial restriction or no restriction.

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Combined together the three lists provided recommendations for 332 unique foods. List A provided guidance on 207 foods, recommending full restriction of 71 (34.3%), partial restriction of 24 (11.6%), and no restriction of 112 (54.1%). List B provided guidance on 203 foods, recommending full restriction of 85 (41.7%), partial restriction of 8 (2.2%), and no restriction on 110 (53.9%). List C provided guidance on 156 foods, recommending full restriction of 62 (39.7%), partial restriction of 20 (12.8%), and no restriction of 74 (47.4%).

With respect to overlap amongst lists we found 170 (50.9%) foods were only listed on one of the lists: List A had 67 unique foods; List B had 83 unique foods; and List C had 20 unique foods. With respect to the 162 foods contained on more than one list in which agreement could be assessed, 54 (32.7%) of foods had general agreement among all 3 lists, 73 (45.7%) foods had general agreement on two lists (without a recommendation from a third list), and 35 (21.3%) foods had disagreement amongst the lists (Table 1).

In summary we found that three readily available United States based low FODMAP food lists are often discordant with respect to the foods which are listed (lack of overlap in >50%). When the same foods are listed on more than one list there is generally good agreement, though there are a sizable number of foods (>20%) with recommendations that are in disagreement. It should be noted that none of the lists provide guidance on how to combine foods of varying FODMAP content. Further evaluation of low FODMAP food lists (in conjunction with efforts to build global FODMAP content databases from which these lists may derive) are needed to identify those which are most accurate and effective within an educational program.

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Table 1

Food Items (by Category) with Disagreement Amongst Three Low Fermentable Oligosaccharides Disaccharides Monosaccharides and Polyols Food Lists

Food Category	Food Items
Fruits	Cherries, Dried fruit, Grapefruit, Pomegranate, Raspberries
Vegetables	Asparagus, Beets, Green bell pepper, Broccoli, Brussel sprouts, Butternut squash, Cabbage, Celery, Corn, Fennel bulb, Okra, Pumpkin, Snow peas, Sweet potato
Dairy and Alternatives	Soy milk, Cottage cheese, Sherbet, Whipping cream, Yogurt
Nuts, Seeds, and Legumes	Macadamia nuts, Peanuts, Walnuts, Pine nuts, Chickpeas, Lentils, Pumpkin seed, Sesame seed, Sunflower seed, Pecans
Sweeteners	Sucralose