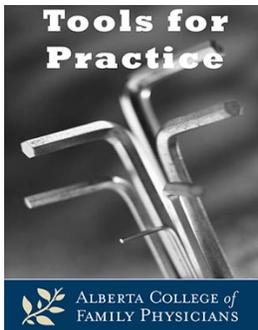


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## The Low FODMAP Diet: Food for thought or just an irritable idea?

**Clinical Question: Does the low FODMAP diet improve symptoms for patients with irritable bowel syndrome?**

**Bottom-line: A low FODMAP diet may improve symptoms for patients with primarily diarrhea subtype irritable bowel syndrome (IBS). However, most studies were low quality (small numbers and short duration), and therefore more high quality studies are needed.**

### Evidence:

- Four randomized controlled trials (RCTs), mainly young females, comparing low FODMAP diet (LFD) to normal diet (ND):
  - Largest, high-quality, 6-week, open-label RCT of 123 Danish IBS patients, under specialist care.<sup>1</sup>
    - 500-point symptom scale (minimal clinically important difference=50):<sup>2</sup>
      - LFD improved ~150 points, probiotic ~80, ND ~30 points.
    - Sub-group analysis: Only diarrhea patients improved.
    - Limitations:
      - Pre-enrollment investigations: Colonoscopy, genetic lactase deficiency testing.
      - Per-protocol analysis.
  - Australia: Blinded, cross-over trial of LFD versus ND (each for three weeks, with three week wash-out) of 30 IBS patients + 8 controls in primary/secondary care:<sup>3</sup>
    - Global gastrointestinal symptoms: 70% LFD had >10 point improvement on 100-point scale.
      - ND results not reported.
    - Limitations:
      - High fibre diet included in LFD arm.
      - Authors have financial conflict of interest.
  - United Kingdom: Three week, non-blinded RCT in 41 diarrhea-predominant IBS patients or with significant bloating, under specialist care.<sup>4</sup>
    - "Adequate symptom control": 68% LFD, 23% ND, Number Needed to Treat=3.
    - Limitations:
      - Adequate symptom control at baseline appears different (but non-statistically significant): 37% LFD, 58% ND.

- Symptoms actually worsened in ND arm: 58% (baseline) to 23% (end).
  - Fourth RCT: Too short (two days) to draw conclusions.<sup>5</sup>
- Two recent systematic reviews had conflicting conclusions:<sup>6,7</sup>
  - More research required to establish long-term efficacy<sup>6</sup> or LFD is efficacious in treating functional gastrointestinal symptoms.<sup>7</sup>

**Context:**

- Cohort studies demonstrate LFD benefit<sup>6-7</sup> but IBS patients have high placebo response rate<sup>8</sup> (even when told getting placebo).<sup>9</sup>
- Patients who initially improve on LFD, worsen with reintroduction of fructose or fructans.<sup>10</sup>
- Low FODMAP diet is restrictive, limiting many fruits, dairy products, wheat, legumes, and artificial sweeteners.<sup>11</sup> Examples available online.<sup>11</sup>

**Authors:**

Cian Hackett BSc, Michael R Kolber BSc MD CCFP MSc

**Disclosure:**

Neither author has any conflicts of interest to declare, except MRK really likes chocolate, apples, and mushrooms (all high FODMAP foods).

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