

Chronic constipation is a common condition that is characterized by infrequent stools, sensation of incomplete defecation, and straining to have a bowel movement. National statistics indicate that approximately 63 million individuals suffer from constipation in North America (US Dept. of Health and Human Services, 2013). However, the majority of individuals who experience constipation do not seek medical advice. Additionally, chronic constipation is most notably higher in women than men. It is theorized that women are more prone to constipation due to pregnancy, complications from vaginal delivery, exposure to more stress, increased hormonal modulations, and societal pressures/expectations in public restrooms (Choung, 2007).

The etiology of constipation can include poor nutrition, lack of physical activity, inadequate sleep, anxiety, stress, gender, and certain diseases (Nelms, 2014).

Nutritional treatment for constipation has historically centered on insuring adequate fiber intake. Currently, no data available to determine an Estimate Average Requirement (EAR) to a Recommended Dietary Allowance (RDA) for total fiber. The Adequate Intake (AI) for total fiber has been based on the observed median fiber intake level to achieve the lowest level of observed risk of coronary heart disease (CHD). Thus, the fiber recommendation of 14g/1000kcal/day may help decrease constipation and diverticular disease. However, the benefit of decreasing constipation was not used as the basis for the AI recommendation (Position of the American Dietetic Association: Health Implications of Dietary Fiber, 2008).

Fluid intake is equally important to gastrointestinal health. Fluid helps with increasing motility and absorption of nutrients. There is limited evidence that constipation can be successfully be treated by increasing fluid intake, unless there is evidence of severe dehydration (Muller-Lissner, Kamm, S2 (ke) 0.2 (, u2 (s) -0.2 (ve) 0.2 (re) (ooh8) 0.2 (ui) 0.2 (d (s) -0.2 (ne) 0.-.2 (ne) 0.-.2 (ne) (t) 0.2(i) 0.2 (on c) 0.2 (a) 0.2 (n(vi)0898 -25.5 Tm /TT1 10)0 28(d (s) -0.2 (ne 1003.888 cm BT 25.5 0 0 25.5 29mm)887Tm /TT1 1 Tf [(F) -0.2 (l) 0.2 (ui) 0.2 (d heW

decreased due to over farming of soil. Magnesium declined an average of 21% in the U.S. since the 1950s across fruits and(46.888 cm BT 25.5 0 0 25.5 0 -25.5 T6.888 cm BT 25.5 0 0 25.5 0 -25.5 T6.8 TJ ET Q q 1 0 0 1 880.6119 227.263cm BT 26 0 0 26 0 -26 Tm /TT1 1 Tf [(m) 0.2 (a) 0.2 (gne) 0.2 (s) -0.2 (i)0.2 (um) 0.2 (i) 0.2 (nt) 0.2 (a) 0.2 (ke) 0.2 (a) 0.