

Nutritional aids and herbal remedies will prevent and eliminate constipation

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Literature Review

### **ABSTRACT**

CAM is a growing industry because more individuals are finding out that eating healing foods are a better choice than medications because of the harsh side effects. However with the millions of dollars paid to the laxative business some individuals have not found CAM remedies. Therefore, specific address the need for identifying nutritional and herbal treatments that prevent and eliminate constipation. Using articles that described that constipation is more prevalent with women, children and elderly population, understanding that constipation is a symptom and not a disease and identifying the nutritional aids and herbal remedies that best relieve constipation and why. I have found that these nutritional aids and herbal remedies have healing effects because they work directly with the colonic cells to create lasting effects. Going forward this article will address the some of the specific chemical mechanism that the gut undergoes to relieve constipation.

## INTRODUCTION

### **Purpose and background**

Constipation presents as a perpetual problem in health-care with painful and debilitating consequences, however it is preventable. Constipation is a big problem that no one likes to talk about to which individuals can self-medicate with over the counter laxatives which creates a damaging cycle. Constipation is considered unimportant, until it interferes with the patient's quality of life. The objective of this literature review is to identify that poorly treated constipation will result in decreased quality of life. Therefore, treating and preventing with nutritional aids and herbal remedies to maintain a healthy bowel is beneficial to those diagnosed with chronic or functional constipation.

The prevalence of constipation is significant in that the risk for developing functional or chronic constipation is high with women experiencing the condition more frequently than men. Constipation manages to find its way into the lives of the young as well affecting about 0.3%-29.6% of children and old 2%-28% of adults (Sparber, M., 1998). Constipation is a symptom not a disease and it manifest with infrequent defecation, hard stools and less than three bowel movements weekly. It isn't medically understood why functional constipation develops but some idea exist around a mechanism break down like slow-transit constipation, dysynergic defecation, or failed toilet training (Khan, S., et, al 2007 and Andrews, N., C., & Storr, M., (2011).

At least a bowel movement a day is the prevailing idea of colon health. With a large number of the population seeking medical care to rid the symptoms that sometimes leads to decreased productivity of 2.4 days of absence in a month per student or employee (Sparber, M.

1998). Constipation relief is sold over the counter so self treating becomes the vicious cycle with 96% who have used these medications and 72% continuously using (Sparber, M. 1998). All of the literatures explain the same themes about diagnosed with functional or chronic constipation are in fear of relapse of symptoms and the lack of effective therapy.

Now that constipation is reaching disease status because of the sure abundance of individuals young and old complaining of these symptoms more attention is being paid. However, the lack of efficacy with traditional treatment options have left a significance amount dissatisfied and left with a costly burden on life and society. The economic cost alone for doctor visits, emergency room visits and OTC drugs is costing patients and society several hundred million dollars per year (Berkcik, P., & Sanchez, P., I., M., 2011). Total cost was dollar 235 million per year, with 55% incurred from inpatient care and 23%, 16%, and 6% from ED, outpatient physician, and outpatient hospital settings, respectively. Constipation is treated primarily in ambulatory settings, but the costs of inpatient care exceed those of ambulatory care.

## METHODS

Using keywords like: constipation, herbal bioactivity, mucilage, polysaccharide, oligosaccharides, functional constipation, chronic constipation I searched databases for scholarly reviewed articles and I used renowned written books looking for information that would support the use of CAM modalities nutrition and medicinal teas to prevent and eliminate constipation. Such databases like LIRN, pub med, natural databases, and google scholar. I also used books written about natural food remedies and medicinal herbalism. I selected the articles and books that described in detail the effects the nutrition and herb has on the GI tract.

## RESULTS

Using these databases as previously mentioned I searched 25-30 articles written about nutritional and herbal effects on the colon. I selected the article that highlighted evidence that explained in detail how these remedies are in fact healing foods and herbs. Also other articles were selected based on the chemical experiment. For instance, excluding experiments that focused exclusively on none-human reactions. Therefore, finding articles that focused on human trials showed better results because they show how the GI tract functions with the addition of herbal remedies and healing foods.

## DISCUSSION

### Types of Constipation

Pathophysiology of constipation is categorized as chronic or functional with subtypes outlining the cause of each. The primary or idiopathic causes of constipation are slow-transit constipation (colonic inertia), normal constipation, outlet delay constipation (i.e. obstructive defecation, dyssnergia pelvic floor, defecatory dysfunction, pelvic floor dysfunction, anismus). Secondary or chronic constipation etiology is due to a medical condition (i.e. GI disease, endocrine/metabolic/neurologic disorders, or medication). Slow transit constipation can be is not very well understood because of debates about the actual mechanism hindering the high-amplitude propagated contractions responsible for colonic mass migration. All of the research point to the use of biofeedback therapy for individuals with outlet delay constipation and they stated it is very beneficial; it just needs to become main-stream. Normal constipation is described by someone who is experiencing hard stools or difficulty evacuating and do not suffer any other condition and response well to added dietary fiber alone or osmotic laxative.

Colonic transit time can be tested with conventional method such as radiopaque markers in a gelatin capsule or natural methods like the charcoal test which helps along with a diary to learn your colonic transit time. The optimum colonic transit time is between 12-24 hours after ingesting and anything sooner is a sign of malabsorption and later is a sign of slow transit

### **Management of Constipation with fiber**

It always goes back to a high-fiber diet to encourage bowel movements. Proper functioning of the colon requires fiber because the colon is home to beneficial flora that ferment on fiber producing fuel for the colonic cells (Slavin, J., 2013 & Banares-Fernandez, F., 2005). The research supports a diet higher in fiber than your normal range will trigger bowel movements. According to the National Academy of Sciences expert panel dietary fiber is defined as nondigestible carbohydrates and lignin that are intrinsic and intact in plants. Foods high in dietary fiber are vegetables, fruits, legumes, and whole grains. Also defined are functional fiber which is processed non-digestible carbohydrate extracted from foods that have a beneficial physiological effects in human. Dietary fiber or non-starch polysaccharide (NSP) consists of cellulose, non-cellulose, polysaccharide and lignin. NSP is a naturally occurring starch that will bulk stools, water dispensability, and effective viscosity

Non-digestible carbohydrates are fiber and prebiotics that ferment selectively targeted microbiota flora that stimulate growth on bacteria that confer benefits to the human host. Oligosaccharides a non-digestible carbohydrate that exhibit an affinity for bifidobacteria however lactobacilli also lives in the colon producing health benefits (Banares-Fernandez, F., 2005 & Slavin, J., 2013). Prebiotics are described as resistant to gastric acidity, hydrolysis by mammalian enzymes and absorption in the upper gastrointestinal tract, fermented by the

intestinal microflora and selectively stimulates growth and /or activity of the intestinal bacteria (Shen, Q., Zhao, L., & Tuohy, K., M., (2011). Probiotics on the other hand are living micro-organisms that benefit the colon by maintaining gut and immune function.

### **Beneficial green food products**

An increased diet in beneficial super green foods will also aid in the prevention of constipation such products like chlorella, spirulina and wheatgrass. They are packed with polysaccharides, oligosaccharides, pigments, fibers, B-vitamins and minerals making them vital and refreshing to human life (Arun, N., Gupta, S., and Singh, D., P., 2012, Rana, S., Kamnoj, J., K., and Gandhi, V., 2011). The pigments are extremely beneficial working in synergy with chlorophyll which is similar to the structure of red blood cells (Pitchford, P. 2001).

### **Medicinal herbs**

Just as green foods, herbal remedies are uniquely suited for treatment of constipation. Through direct actions upon the tissues of the gut herbs protect, heal and tone a damaged GI tract. As well as vitamins, minerals and phytochemicals herbs exhibit specific actions such as laxative or bulk-forming to stimulate a bowel movement. A yellow crystalline ketone known as anthraquinone laxative are senna, cascara sagrada and rhubarb and aloe the presence of this chemical induce defecation within hours (Hoffman, D., 2003). Bulking and swelling are also laxatives but more gentle than the previous mentioned chemical, produced by the mucilaginous agent creating a heavier stool thus shortening colonic transit time. Mucilaginous polysaccharides are resistant to gastric acid however the gut microflora hydrolyzed thus producing SCFA, making them highly productive in the gut healing process (Agarwal, V. K., 2012). More research required however, once hydrolyzed the released monosaccharides

## CONCLUSION

Constipation is a silent problem that is growing among the masses at a fast rate. With women, children and the elderly suffering more and by the looks of it, they are going to suffer quietly without an end in sight. Thus with easy access to OTC medication the need to turn to CAM remedies is unknown. However, one goal of this paper is to get the word out about a healthy way to care for one's gut. Fiber and fiber products are a great biological resource for combating constipation. They come in various forms and from many types of food products. The bioavailability of fiber and fiber products enhance gut flora, provide prebiotics and short-chain fatty acids. As beneficial nutrition aids and herbal remedies they work to provide your gut with a healthy use.



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