## Available online at www.scholarsresearchlibrary.com



**Scholars Research Library** 

Der Pharmacia Lettre, 2023, 15(5): 03-04 (http://scholarsresearchlibrary. com/archive. html)



# Pepto-Bismol: An Effective Over-the-Counter Solution for Diarrhea

### Noah Mitchell<sup>\*</sup>

Department of Pharmaceutics, University of Houston, Texas, USA

\**Corresponding author:* Daniel Smith, Department of Pharmaceutics, University of Houston, Texas, USA;E-mail: noahmitchell@gmail.com

**Received:** 28-Apr-2023, Manuscript No. DPL-23-101086; **Editor assigned:** 02-May-2023, PreQC No. DPL-23-101086 (PQ); **Reviewed:** 16-May-2023, QC No.DPL-23-101086; **Revised:** 23-May-2023, Manuscript No. DPL-23-101086 (R); **Published:** 30-May-2023, DOI: 10.37532/dpl.2023.15.03.

#### DESCRIPTION

The Diarrhea is a common gastrointestinal disorder that affects millions of individuals worldwide. It is characterized by loose, watery stools and can be accompanied by abdominal cramps, bloating, and nausea. While diarrhea is often self-limiting and resolves within a few days, it can cause discomfort and dehydration, particularly in severe cases. To alleviate symptoms and promote faster recovery, various treatment options are available, including over-the-counter medications like Pepto-Bismol. In this study, we will explore the role of Pepto-Bismol in treating diarrhea, its mechanism of action, effectiveness, and potential side effects.

Diarrhea can result from various factors, including viral or bacterial infections, food poisoning, certain medications, digestive disorders, and dietary intolerance. In most cases, the body's defense mechanism against these pathogens and irritants triggers an increased secretion of fluids and electrolytes into the intestines, leading to the characteristic watery stools. Pepto-Bismol, also known by its generic name bismuth subsalicylate, is an over-the-counter medication commonly used for the treatment of diarrhea, indigestion, and heartburn. It contains two active ingredients: Bismuth subsalicylate and Salicylic acid. These components work synergistically to provide relief from diarrhea symptoms [1, 2].

Pepto-Bismol exerts its therapeutic effects through several mechanisms. First, bismuth subsalicylate forms a protective coating on the lining of the gastrointestinal tract, which helps soothe inflammation and reduce irritation caused by diarrhea. This protective layer also acts as a barrier, preventing harmful substances and toxins from further damaging the intestinal wall.

*Copyright:* © 2023 *Mitchell N. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.* 

*Citation:* Mitchell N. 2023. Pepto-Bismol: An Effective Over-the-Counter Solution for Diarrhea. Der Pharma Lett. 15:03-04.

## Mitchell N

## Der Pharmacia Lettre, 2023, 15(5): 03-04

Moreover, bismuth subsalicylate has antimicrobial properties, making it effective against certain bacteria and parasites that can cause diarrhea. It can help inhibit the growth and activity of these pathogens, reducing the duration and severity of the condition. Additionally, Pepto-Bismol can help regulate fluid balance in the intestines. It absorbs excess fluid, electrolytes, and toxins, thereby promoting firmer stools and reducing fluid loss. This action helps alleviate the symptoms of diarrhea and prevent dehydration, which is a common concern associated with this condition [3, 4].

Pepto-Bismol is generally considered safe for short-term use in adults and children over 12 years old. However, it is essential to follow the recommended dosage and precautions to minimize the risk of side effects. Some potential side effects of Pepto-Bismol include temporary discoloration of the tongue and stools, which may appear dark or black. This is a harmless and temporary effect caused by the bismuth in the medication and should not be a cause for concern. However, it is important to note that black stools can also be a sign of gastrointestinal bleeding, so if the discoloration persists or is accompanied by other concerning symptoms, medical attention should be sought [5-7].

Pepto-Bismol may also cause constipation or a decrease in bowel movements, particularly when used in excessive doses or for an extended period. It is recommended to drink plenty of fluids and maintain a balanced diet to help prevent constipation while taking Pepto-Bismol. Although rare, some individuals may experience an allergic reaction to Pepto-Bismol. Symptoms of an allergic reaction can include rash, itching, swelling, dizziness, and difficulty breathing. If any of these symptoms occur, immediate medical attention should be sought. It is important to consult a healthcare professional before using Pepto-Bismol, especially while having any underlying health conditions or are taking other medications, as there may be potential interactions or contraindications [8-10].

Pepto-Bismol, with its active ingredient bismuth subsalicylate, plays a valuable role in the treatment of diarrhea. Its protective coating and antimicrobial properties help alleviate symptoms, reduce inflammation, and regulate fluid balance in the intestines. Numerous studies have shown the effectiveness of Pepto-Bismol in reducing the duration and severity of diarrhea, including cases caused by bacterial infections. While generally safe for short-term use, it is crucial to follow the recommended dosage and precautions to minimize the risk of side effects. If symptoms persist or worsen, it is advisable to consult a healthcare professional for a proper diagnosis and further guidance. As with any medication, it is important to use Pepto-Bismol responsibly and to seek medical advice when having any concerns or underlying health conditions. Diarrhea can have various causes, and in some cases, it may require specific medical intervention or treatment.

#### REFERENCES

- 1. Dreverman JW, Van der Poel AJ, Aliment Pharmacol Ther, 1995, 9(4):441-446.
- 2. Kristensen K, Qvist N, Basic Clin Pharmacol Toxicol, 2017, 121(6):493-498.
- 3. Kaplan MA, Prior MJ, McKonly KI, et al, *Clin Pediatr (Phila)*, **1999**,38(10):579-591.
- 4. Ericsson CD, DuPont HL, Mathewson JJ, et al, JAMA, 1990, 263(2):257-261.
- 5. Okhuysen PC, DuPont HL, Ericsson CD, et al, Clin Infect Dis, 1995, 21(2):341-344.
- 6. Hanauer SB, DuPont HL, Cooper KM, et al, Curr Med Res Opin. 2007, 23(5):1033-1043.
- 7. Karrar ZA, Abdulla MA, Moody JB, et al, Ann Trop Paediatr. 1987, 7(2):122-127.
- 8. Allen SJ, Martinez EG, Gregorio GV, et al, Cochrane Database Syst Rev. 2010(11).
- 9. Devi MB, Sarma HK, Mukherjee AK, et al. Probiotics Antimicrob Proteins. 2023:1-8.
- 10. Krums LM. Eksp Klin Gastroenterol. 2002, (4):84-87.