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MINERAL OIL EMULSION

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The invention relates to mineral oils and more particularly to emulsions of highly refined mineral oils for internal use.

An object of the invention is to provide such a composition which is palatable and pleasant, one that has great powers of internal lubrication, and one in which the consistency of the mineral oil is not affected.

A further object is to provide a composition which is readily miscible with the intestinal contents and assists in the formation of a soft fecal mass, and which contains no sugar.

It has been discovered that mineral oils and more particularly the highly refined mineral oils in common use at the present time for internal administration as lubricants may be emulsified by a jelly made from psyllium seed, agar agar and gelatin by intimate mixture therewith and by passing through a colloid mill. The intimate mixture of the psyllium seed jelly and mineral oil may be accomplished by shaking, mixing and grinding or homogenization and thereby eliminate the use of such emulsifying agents as Acacia or tragacanth which are ordinarily used in forming emulsion of mineral oils in aqueous vehicles.

The psyllium seed jelly and agar agar act to greatly enhance the lubricating value of the emulsion and the gelatin acts to increase the stability of the composition.

In the emulsion the mineral oil may be present in varying proportions. In practice it has been found that an emulsion containing 70% of mineral oil by volume is very satisfactory for internal use. The proportion of the elements forming the jelly may also be varied and other materials having similar properties to those mentioned may be used to form the jelly. The following proportions of the above named materials in conjunction with a 70% volume content of mineral oil have been found to form a suitable colloid emulsion: \( \frac{1}{8} \) of 1% of psyllium seed jelly, \( \frac{3}{4} \) of 1% of agar agar, \( \frac{7}{100} \) of 1% of gelatine, 5% of glycerine, and a water quantity of 100% with sodium benzoate as a preservative. Such a colloid emulsion provides a homogeneous mass which is both palatable and pleasant. Moreover, the agar agar ingredient in conjunction with the mineral oil serves an additional function of being a laxative.

As heretofore stated the emulsion may be readily formed by mixing the mineral oil with the psyllium seed jelly base and then passing the mixture through a colloid mill which causes complete dispersion of the oil and presents a finished product in a colloidal form. Emulsions formed in accordance with this invention are cream-like in appearance and taste, are palatable and effective in internal use as a mechanical lubricant and remedy for constipation. The mineral oil used is preferably one which has been highly refined for internal use.

The mineral oil emulsion may be made as heretofore stated, or the ingredients may be varied. For somewhat obstinate cases of constipation with gastro-intestinal hyperacidity, a mechanical lubricant which is mildly laxative is desirable and one which contains no sugar. An emulsion containing the following ingredients has been found to work out well in practice: mineral oil 50%; milk of magnesia 8%; glycerin 5%; and 20% of jelly containing psyllium seed, agar agar and sodium benzoate. This emulsion is colloidal in form and pleasant to take. It normalizes peristalsis by modifying the intestinal bulk and consistency so that the feces are easily expelled.

In cases of chronic constipation or intestinal stasis, more pronounced laxative action is often required in addition to lubrication. The following is another way of mixing the ingredients to accomplish this result: mineral oil 70%, carmine 21/2%, and a jelly made from psyllium seed \( \frac{1}{8} \) of 1%, agar agar \( \frac{3}{4} \) of 1%, gelatine 7/100 of 1%, glycerine 5% and water quantity sufficient ad 100% with sodium benzoate as a preservative, phenolphthalein a laxative and any suitable flavoring substance.

It is to be noted that the emulsion of your applicant is an oil-in-water type of colloidal emulsion with a homogeneous and fine dispersion.

In the preparation of the colloidal oil-in-water emulsion, use is made as above mentioned of the colloid mill which intimately mixes the highly refined mineral oil together with the jelly of the ingredients and proportions thereof, as before set forth, into a homogeneous colloidal emulsion wherein the dispersed phase, namely oil, is both uniform and fine in size.

I claim:
1. A laxative comprising a colloidal oil-in-water type mineral oil emulsion comprising a homogeneous and fine dispersion of substantially 70% by volume of a highly refined mineral oil in a jelly comprising substantially \( \frac{1}{8} \) of 1% of psyllium seed, substantially \( \frac{3}{4} \) of 1% agar agar and substantially 7/100 of 1% gelatine.

2. A colloidal oil-in-water type mineral oil emulsion comprising a homogeneous and fine dis-
persion of substantially 70% by volume of a highly refined mineral oil in a jelly comprising substantially 1/8 of 1% of psyllium seed, substantially 1/8 of 1% agar agar and substantially 7/100 of 1% gelatine, the above said proportions being adapted to form an emulsion of a homogeneous and fine dispersion.

3. A colloidal oil-in-water type mineral oil emulsion comprising a homogeneous and fine dispersion of a highly refined mineral oil and a jelly comprising psyllium seed, agar agar and gelatine, the above said ingredients having proportions adapted to form an emulsion of a homogeneous and fine dispersion.

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