

TABLE 3-continued

Fatty Acid	Dilution Rate	Released Histamine Value = V.S. Control (% ± S.E., n = 3)		
		Fatty Acid	Water-Soluble Silicate Polymer	Fatty acid + Water-Soluble Silicate Polymer
16-Methyl-heptadecanoic acid (Branched chain, 18:0)	1/50	106.4 ± 1.68	63.4 ± 1.68	45.9 ± 1.33
The same as above	1/100	111.5 ± 1.13	80.1 ± 1.80	66.8 ± 3.41

As apparent from the results of the above pharmacological tests, saturated fatty acids show nearly no suppressive action to histamine release from mast cells. As shown in Table 1, a water-soluble silicate polymer had a suppressive action to histamine release dose-dependently and, when it was combined with a saturated fatty acid, the action was very much increased. A mast cell contains histamine-containing granules and its degranulation is induced by anaphylatoxins such as complement component C3a and C5a or by a chemical compound such as Compound 48/80 in addition to a cross-linking reaction of IgE receptors. In consequence, histamine is released outside from the cell and allergic reaction is induced. Thus, a structural change takes place in the cell membrane of the mast cell by such inducing substances whereupon histamine is released and it is believed that the composition of the present invention has a protective action against such changes in the cell membrane. The cell is a fundamental unit of a living body and damage to the cell by external and internal stimulation or stress induces allergy and inflammation. The composition of the present invention has an excellent organism maintaining function for preventing cell damage. Accordingly, the composition of the present invention is useful as a therapeutic or preventive agent in treating diseases in which histamine participates such as allergy and inflammation.

What is claimed is:

1. A pharmaceutical composition comprising:
 - a saturated fatty acid, and
 - a pharmaceutically effective amount of a water-soluble silicate polymer, wherein said water-soluble silicate polymer has a molecular weight distribution in the range of about 4,800 to about 2,000,000, as determined by gel-filtration chromatography, and has a degree of polymerization in the range of about 75 to about 33,000, and
 - wherein the saturated fatty acid is present in a weight ratio of from about 1:20 to about 50:1 times the amount of the water-soluble silicate polymer, calculated as silicon.
2. A pharmaceutical composition according to claim 1 which is effective as an anti-allergy agent or as an anti-inflammatory agent.
3. A pharmaceutical composition according to claim 1 which further comprises a saccharide carrier or diluent.
4. A pharmaceutical composition according to claim 1 wherein the saturated fatty acid comprises a straight or branched saturated fatty acid having about 8 to about 26 carbons.
5. A pharmaceutical composition according to claim 1 which is in a form for parenteral administration selected from the group consisting of subcutaneous, intravenous, intramuscular, rectal and nasal administration, or which is in a form for oral administration selected from the group consisting of tablets, capsules, powders and liquids.

6. A pharmaceutical composition according to claim 1 which is effective to suppress histamine release from mast cells.

7. A pharmaceutical composition according to claim 1 wherein the degree of polymerization of said silicate polymer is in the range of about 210 to about 16,500.

8. A pharmaceutical composition according to claim 1 which is in an injectable form comprising a solution, suspension or emulsion in an aqueous solvent or in a nonaqueous solvent.

9. A method for enhancing the pharmacological activity of a water-soluble silicate polymer comprising mixing a pharmaceutically effective amount of a water-soluble silicate polymer with a saturated fatty acid,

wherein said water-soluble silicate polymer has a molecular weight distribution in the range of about 4,800 to about 2,000,000, as determined by gel-filtration chromatography, and has a degree of polymerization in the range of about 75 to about 33,000, and

wherein the saturated fatty acid is mixed with the water-soluble silicate polymer in a weight ratio of from about 1:20 to about 50:1 times the amount of the water-soluble silicate polymer, calculated as silicon.

10. A method for enhancing the pharmacological activity of a water-soluble silicate polymer according to claim 9 wherein said water-soluble silicate polymer is in the form of a storage stable powder.

11. A method for enhancing the pharmacological activity of a water-soluble silicate polymer according to claim 9 wherein the pharmacological activity enhanced is anti-allergy activity or anti-inflammatory activity.

12. A method for enhancing the pharmacological activity of a water-soluble silicate polymer according to claim 10 wherein said storage stable powder is obtained by providing an aqueous solution containing a water-soluble silicate polymer and a saccharide carrier or diluent, and the aqueous solution is dried to a storage stable powder.

13. A method for enhancing the pharmacological activity of a water-soluble silicate polymer according to claim 9, wherein the saturated fatty acid comprises an aqueous solution of a fatty acid salt or an aqueous dispersion of a free fatty acid.

14. A method for enhancing the pharmacological activity of a water-soluble silicate polymer according to claim 10, wherein the saturated fatty acid comprises an aqueous solution of a fatty acid salt or an aqueous dispersion of a free fatty acid.

15. A method for enhancing the pharmacological activity of a water-soluble silicate polymer according to claim 9 wherein the saturated fatty acid comprises a straight chain or branched chain saturated fatty acid having about 8 carbon atoms to about 26 carbon atoms.

16. A method for enhancing the pharmacological activity of a water-soluble silicate polymer according to claim 9