WHAT IS CLAIMED IS:

1. A nutritional supplement comprising:

a composition comprising: a source of methyl salicylate selected from an oil from a *Gaultheria sp.*, *Betula sp.*, *Spiraea sp.* or a *Polygala sp.* plant, an acetyl donor selected from d,l-alpha-Tocopherol Acetate, or an acetylated vitamin, and L-Arginine, wherein the composition is effective to produce aspirin-triggered resolvins in the subject without the deleterious effect of aspirin in the stomach.

2. The supplement of claim 1, wherein the source of methyl salicylate is wintergreen oil or eastern teaberry oil.

3. The supplement of claim 1, wherein at least one of: the methyl salicylate is provided in an amount between 10 mg and 60 mg, the acetyl donor is provided in an amount between 30 mg and 300 mg, or the L-Arginine is provided in an amount between 3 mg and 40 mg.

4. The supplement of claim 1, wherein the composition is provided in a gelcap, tablet, powder, cream, lotion, liquid, softgel, poultice, suppository, or serum.

5. The supplement of claim 1, wherein composition is formulated for oral, sublingual, subcutaneous, percutaneous, intramuscular, nasal, intradermal, pulmonary, intraalveolar, intravaginal, intrarectal, intraperitoneal or intravenous administration.

6. The supplement of claim 1, wherein composition further comprises at least one of: an Omega-3 dietary supplement, an eicosapentaenoic acid (EPA), an docosahexaenoic acid (DHA), or one or more buffering agents.

7. The supplement of claim 1, wherein the composition comprises an emulsifier selected from beeswax, ammonium lauryl sulfate, sodium laureth sulfate, sodium oleyl succinate, ammonium lauryl sulfosuccinate, sodium dodecylbenzenesulfonate, ammonium laureth sulfate, sodium N-lauryl sarcosinate, sodium lauryl sulfate, and combinations thereof.

8. A nutritional supplement comprising: methyl salicylate, d,l-alpha-Tocopherol Acetate, or an acetylated vitamin, L-Arginine, eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), wherein the supplement is effective to produce aspirin-triggered resolvins in a subject without a deleterious effect of the aspirin in the stomach of the subject.

9. A nutritional supplement consisting essentially of: methyl salicylate, d,l-alpha-Tocopherol Acetate, or an acetylated vitamin, L-Arginine, eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), wherein the supplement is effective to produce aspirin-triggered resolvins in a subject without a deleterious effect of the aspirin in the stomach of the subject.