What is Claimed Is:

1. A composition comprising isolated 5’ methylselenoadenosine and a pharmaceutically acceptable carrier.

2. The composition of claim 1, wherein the composition is a powder, granule, or capsule.

3. The composition of any one of claims 1-2, further comprising methylselenocysteine, seleno-adenosyl homocysteine, or a combination thereof.

4. The composition of any one of claims 1-3, wherein the composition comprises an excipient.

5. The composition of claim 1, further comprising an isolated compound selected from the group consisting of seleno(hydroxyl)-selenophene-(3'-dooxy-adenosine), N-acetylcysteine-selenohomocysteine, allylselenoadenosyl homocysteine, seleno-adenosyl homocysteine, seleno-hydroxy adenosyl homocysteine, seleno adenosine, seleno-adenosyl-Se(methyl)selenoxide, adenosyl-hydroxy selenoxide, ethyl selenoadenosine, seleno-(hydroxy) selenophene-(3'-desoxy-adenosine), adenosyl-hydroxy selenoxide, seleno-adenosyl-Se(methyl)-selenoxide, leucyl-valyl-selenomethionyl-arginine (LVSe-MR), and combinations thereof.

6. The composition of claim 5, wherein the composition further comprises isolated leucyl-valyl-selenomethionyl-arginine (LVSe-MR), and selenoadenosyl homocysteine.

7. The composition of any preceding claim, containing the isolated 5’ methylselenoadenosine in a concentration ranging from 500 ppb to 1 ppm.