We claim:

1. A botanical extract providing at least 1 x 10^4 Insulin Equivalent units per milliliter, wherein the extract is derived from an aqueous extract of a plant of a plant family selected from the group consisting of Apiaceae, Asteraceae, Brassicaceae, Cucurbitaceae, Fabaceae, Lamiaceae, Liliaceae, Poaceae, Polygonaceae and Solanaceae, and wherein one Insulin Equivalent unit per milliliter is defined as a 1% increase in growth of Insulin Receptor Substrate 2 (IRS2) overproducing test cells achieved by 1 milliliter of the extract over 50 nM insulin.

2. The extract of claim 1, wherein the extract provides at least 3.6 x 10^4 Insulin Equivalent units per milliliter.

3. The extract of claim 1, wherein the extract provides from 1 x 10^4 to 1 x 10^5 Insulin Equivalent units per milliliter.

4. The extract of any one of claims 1 - 3, which is derived from Cichorium Endivia var. latifolium.

5. The extract of any one of claims 1 - 3, which is derived from Lactuca sativa var. crispa.

6. The extract of any one of claims 1 - 3, which is derived from Lactuca sativa var. longifolia.

7. A method of detecting IRS2 stimulatory activity in a botanical extract comprising:

contacting a test cell that expresses an IRS2 isoform with a botanical extract and

detecting an increase of cell proliferation relative to a control cell that does not express the IRS2 isoform, thereby indicating IRS2 stimulatory activity in the extract.

8. The method of claim 7, wherein the test cells are 32D cells that overexpress IRS2.