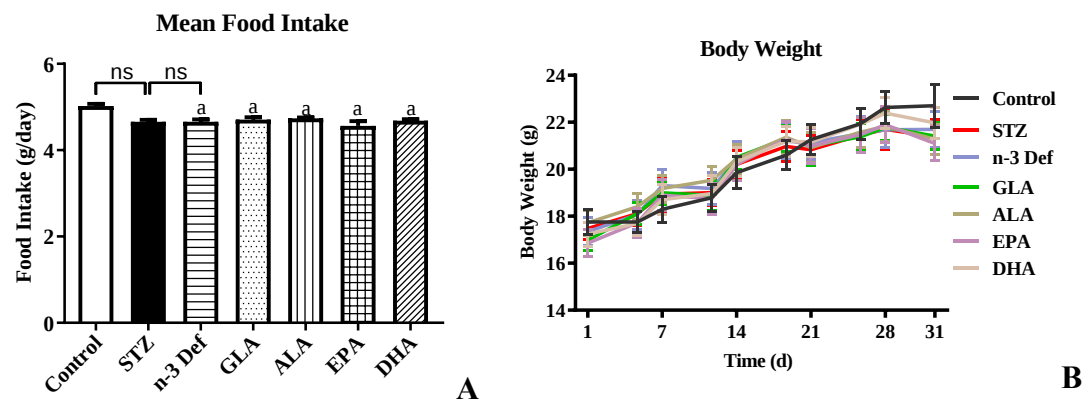




**Figure S1.** Effects of pre-intervention with different types of PUFA on body weights and food intakes in mice. Results were presented as Mean  $\pm$  SEM (n=8) for each group. (A) Mean food intake of mice during experiments. (B) Body weight of mice during experiments.

**Table S1.** Ingredients of experimental diets of different kinds of PUFAs

| Ingredients (g/kg)       | CONTROL | STZ    | N-3 Def | GLA    | ALA    | EPA    | DHA    |
|--------------------------|---------|--------|---------|--------|--------|--------|--------|
| Potato starch            | 397.49  | 397.49 | 397.49  | 397.49 | 397.49 | 397.49 | 397.49 |
| Casein                   | 200     | 200    | 200     | 200    | 200    | 200    | 200    |
| Sucrose                  | 100     | 100    | 100     | 100    | 100    | 100    | 100    |
| Maltodextrin             | 132     | 132    | 132     | 132    | 132    | 132    | 132    |
| Cellulose                | 50      | 50     | 50      | 50     | 50     | 50     | 50     |
| Mineral mix <sup>a</sup> | 35      | 35     | 35      | 35     | 35     | 35     | 35     |
| Vitamin mix <sup>b</sup> | 10      | 10     | 10      | 10     | 10     | 10     | 10     |
| L-methionine             | 3       | 3      | 3       | 3      | 3      | 3      | 3      |
| Choline bitartrate       | 2.5     | 2.5    | 2.5     | 2.5    | 2.5    | 2.5    | 2.5    |
| Hydrogenated coconut oil | 52.56   | 52.56  | 56.7    | 45.37  | 43.2   | 45.39  | 45.33  |
| Safflower oil            | 12.33   | 12.33  | 13.3    | 10.64  | 10.13  | 10.65  | 10.63  |
| Linseed oil              | 5.11    | 5.11   | --      | --     | 16.67  | --     | --     |
| Gamma-linolenic acid     | --      | --     | --      | 13.99  | --     | --     | --     |
| DHA fish oil             | --      | --     | --      | --     | --     | 13.96  | --     |
| EPA fish oil             | --      | --     | --      | --     | --     | --     | 14.04  |

<sup>a</sup> AIN-93 M mineral mix. <sup>b</sup> AIN-93 M vitamin mix. Note: "--", not added

**Table S2.** Primers used in this study

| Gene           | Forward primer            | Reverse primer            |
|----------------|---------------------------|---------------------------|
| $\beta$ -actin | GCAGATGTGGATCAGCAAGC      | GTCAAAGAAAGGGTGTAACG      |
| TNF- $\alpha$  | GGCAGGTCTACTTTGGAGTCATTGC | ACATTCGAGGCTCCAGTGAATTCGG |
| IL-1 $\beta$   | GTGTGTGACGTTCCCATAGAC     | GTCGTTGCTTGGTTCTCCTT      |
| Bcl-2          | CGGGAGAACAGGGTATGATA      | CCACCGAACTCAAAGAAGG       |
| Bax            | TGCAGAGGATGATTGCTGAC      | GATCAGCTCGGGCACTTTAG      |
| Caspase-3      | TGACTGGAAAGCCGAAACT       | CTGGATGAACACGACCC         |
| Ins1           | GAAGCGTGGCATTGTGGAT       | TGGGCCTTAGTTGCAGTAGTTCT   |
| Ins2           | AGCCCTAAGTGATCCGCTACAA    | CATGTTGAAACAATAACCTGGAAGA |
| Sod2           | CACATTAACGCGCAGATCATG     | CCAGAGCCTCGTGGTACTTCTC    |
| Sod3           | GCGTGTGCGCTATCTTCTCAA     | AATGTCGCGTCTCTCTGAGG      |
| CAT            | GAACGAGGAGGAGAGGAAAC      | TGAAATTCTTGACCGCTTTC      |
| Gpx3           | CCATTTGGCTTGGTCATTCTGGG   | CACCTGGTCGAACATACTTGAGAC  |