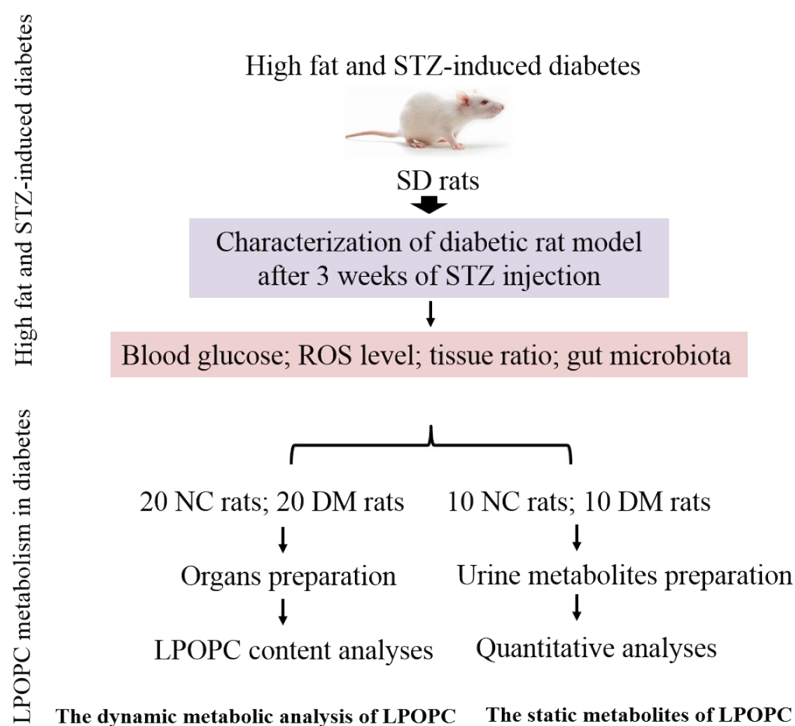


Supplementary Table S1. Composition of the normal chow diet and high-fat diet

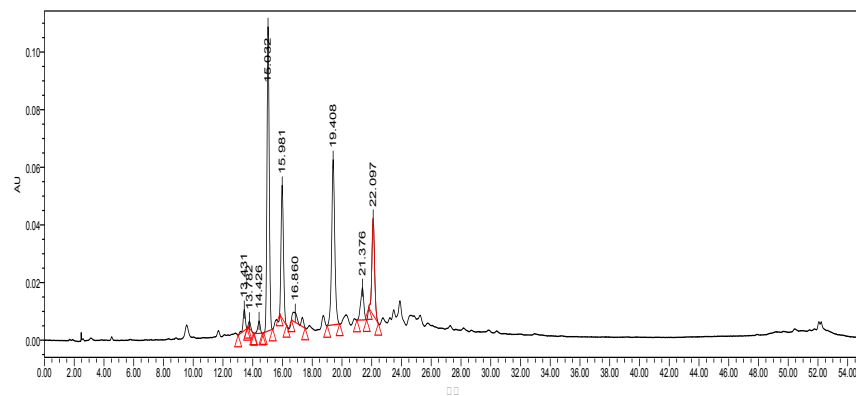
|                    | High fat diet<br>(TP23000) | Normal chow diet<br>(TP23302) |
|--------------------|----------------------------|-------------------------------|
| Casein             | 240                        | 191.2                         |
| Corn starch        | 73                         | 496.7                         |
| Maltodextrin       | 120                        | 112.3                         |
| Sucrose            | 203                        | 63.8                          |
| Soybean oil        | 30                         | 23.9                          |
| Lard               | 196                        | 16.1                          |
| Cellulose          | 60                         | 47.8                          |
| Mineral mix M1020  | 59                         | 35.7                          |
| Vitamin V1010      | 12                         | 7.3                           |
| L-cystine          | 4                          | 2.87                          |
| Choline Bitartrate | 3                          | 2.39                          |
| TBHQ               | 0.045                      | 0.008                         |
| Total content      | 1000                       | 1000                          |
| Protein            | 19.4%                      | 19%                           |
| Fat                | 45%                        | 10%                           |
| Carbohydrate       | 35.6%                      | 71%                           |
| Total energy       | 4.5 kCal/g                 | 3.6 kCal/g                    |



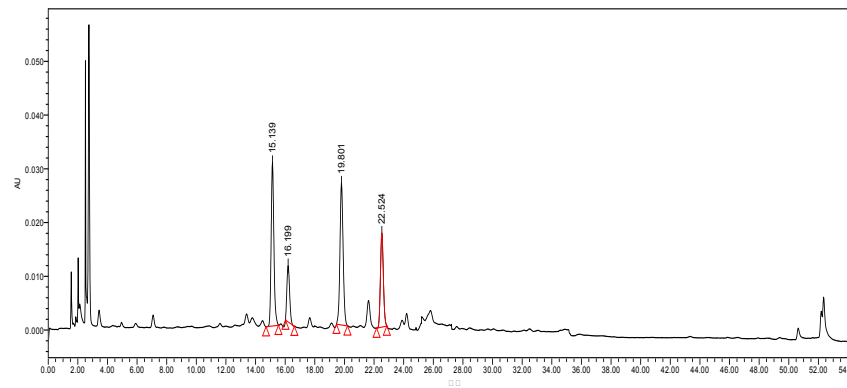
Supplementary Figure 1 Animal experiments in our study.

Supplementary Figure 2. HPLC chromatograph of LPOPC (A) and their components in stomach (B, 1 h), jejunum/ileum (C, 3 h) and colon (D, 6 h) after administration in normal SD rats

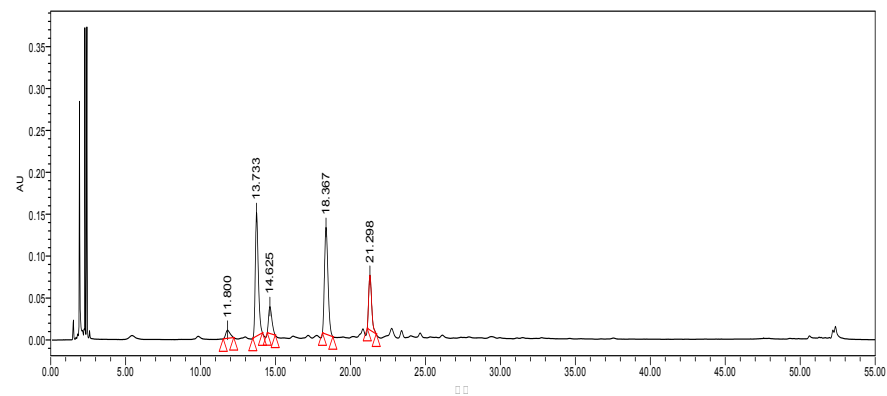
A



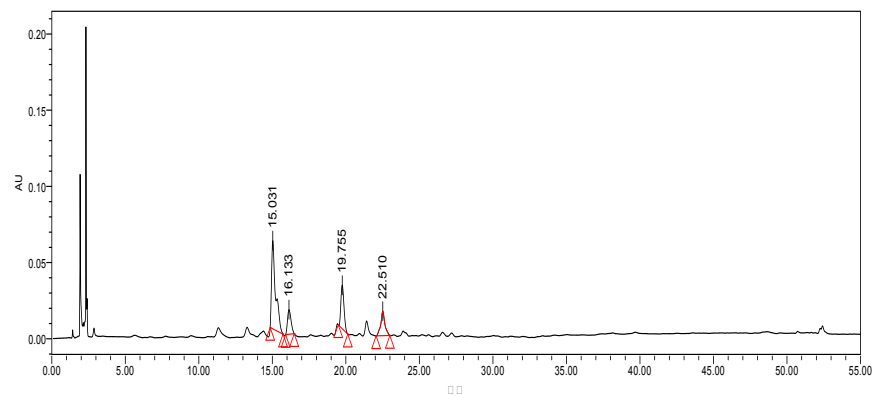
B



C

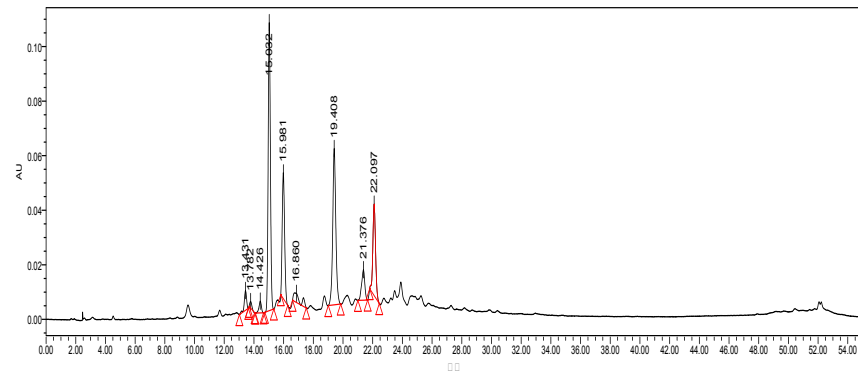


D

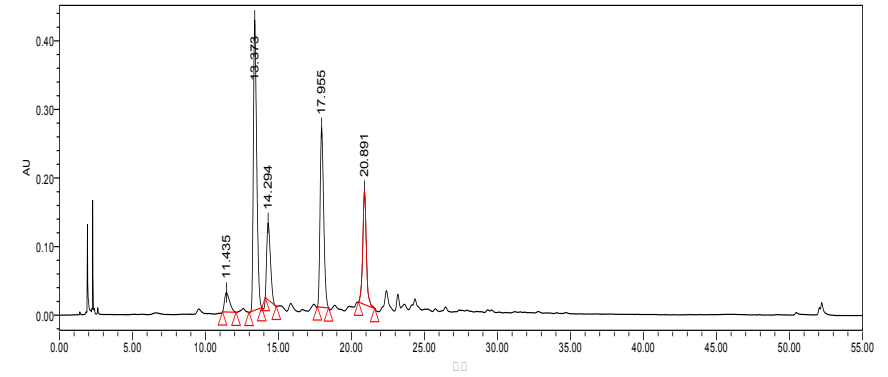


Supplementary Figure 3. HPLC chromatograph of LPOPC (A) and their components in stomach (B,1 h), jejunum/ileum (C, 3 h) and colon (D, 6 h) after administration in diabetic SD rat

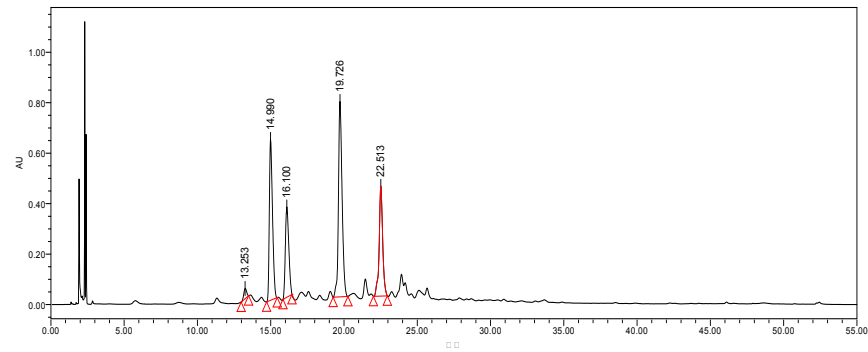
A



B



C



D

