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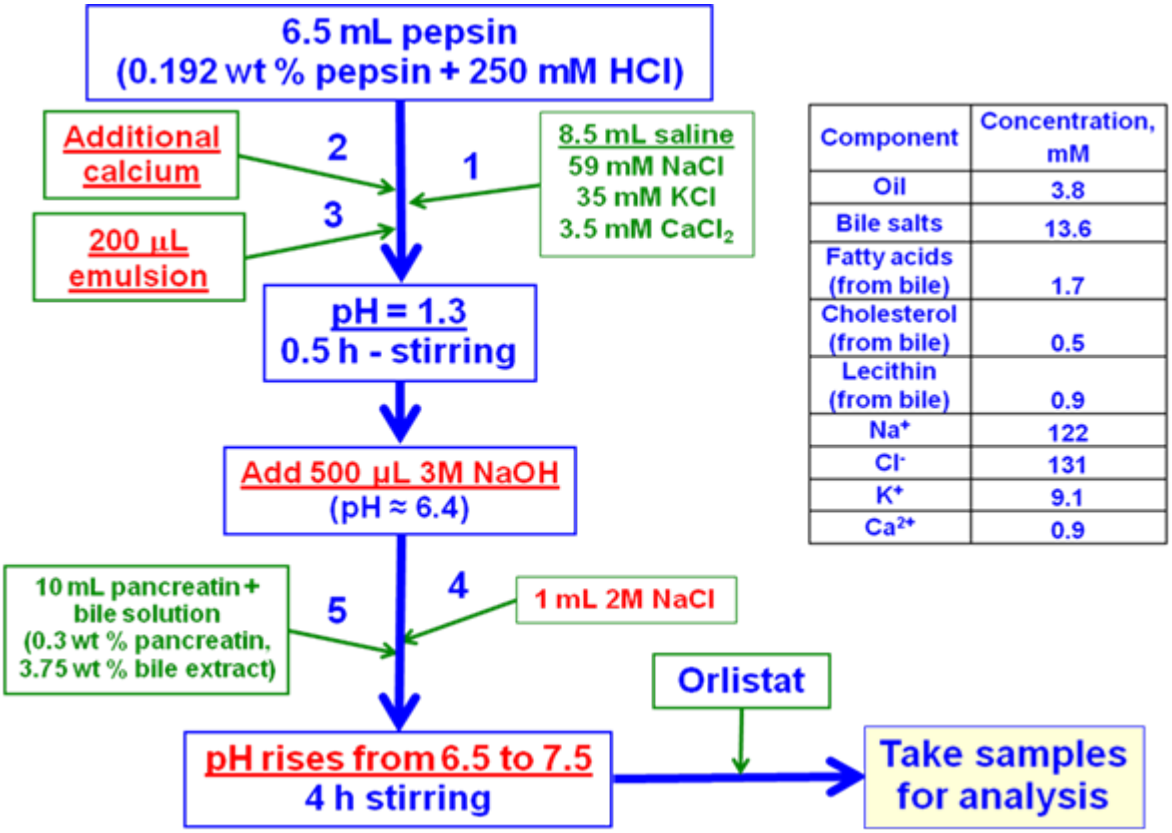

Component	Concentration, mM
Oil	3.8
Bile salts	13.6
Fatty acids (from bile)	1.7
Cholesterol (from bile)	0.5
Lecithin (from bile)	0.9
Na^+	122
Cl^-	131
K^+	9.1
Ca^{2+}	0.9

Figure S1. Schematic presentation of the procedure for mixing the solutions and performing the lipolysis reaction in the in-vitro test, performed in the absence of carbonate buffer (called pH-dynamic method in the paper). The inserted table shows the molar concentrations of the main components in the complete reaction mixture.

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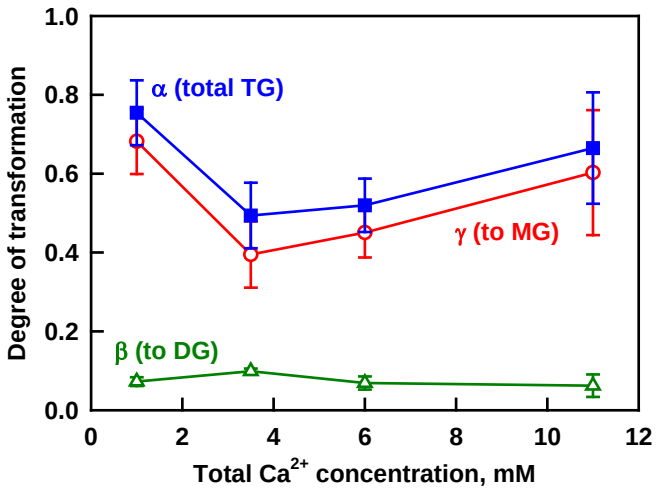

Figure S2. Degree of TG transformation as a function of Ca^{2+} for solutions where pH reaches 6.8. Total TG transformation (blue squares), TG transformation to MG (red circles) and TG transformation to DG (green triangles). All experimental points are average of at least three independent experiments.

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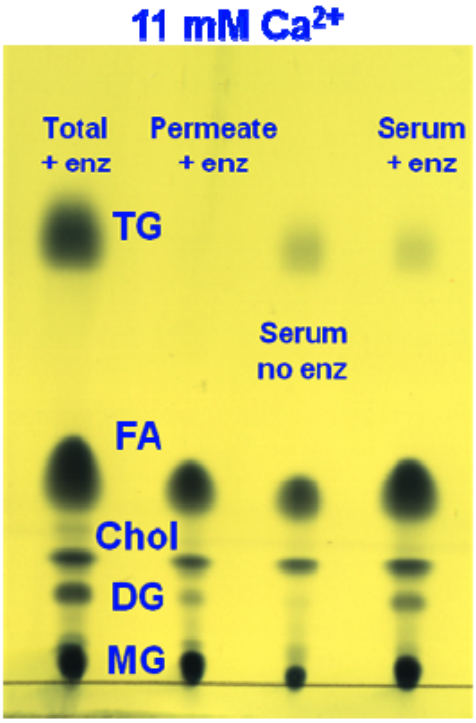

Figure S3. TLC chromatogram from experiments performed in the presence of 11 mM Ca^{2+}. From left to right: First lane is from experiment for determination of the total degree of TG transformation - the whole sample is extracted with chloroform and analyzed without filtration or centrifugation. Second lane is from analysis of the permeate, obtained after filtration of the reaction mixture through 200 nm filter. Third lane is from analysis of the serum, separated after centrifugation, in experiment without added enzyme. Fourth lane is from analysis of the serum in an experiment with added enzyme.

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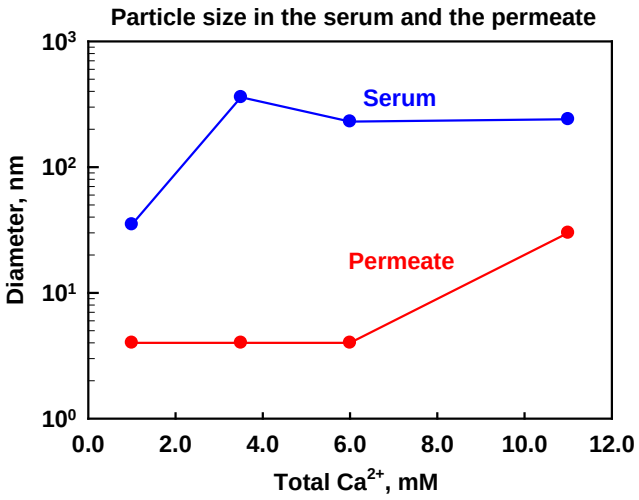

Figure S4. Particle hydrodynamic diameter vs. total Ca^{2+} concentration in the serum after centrifugation (circles) and in the permeate after filtration (squares). The measurements were performed by DLS, at 37 ºC.

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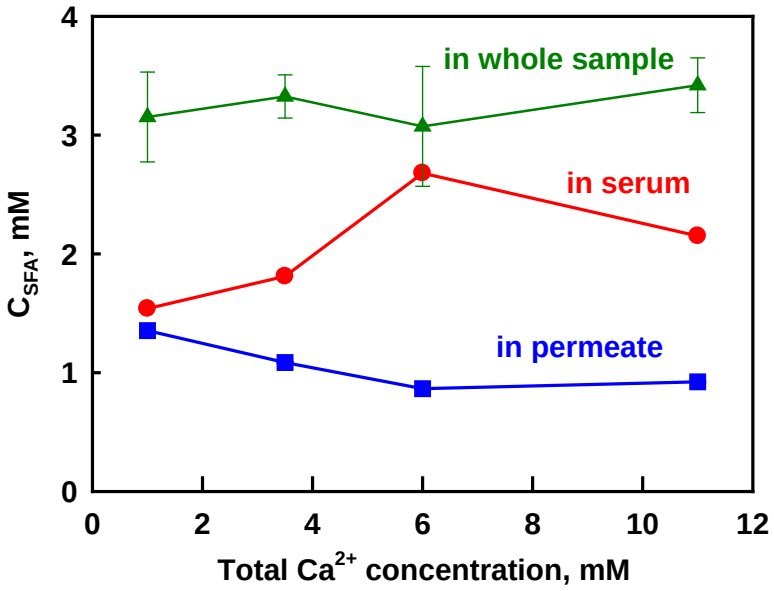

Figure S5. Concentration of the saturated FFA vs. total Ca^{2+} concentration in the whole sample (green triangles), in the serum after centrifugation (red circles), and in the permeate after filtration (blue squares).

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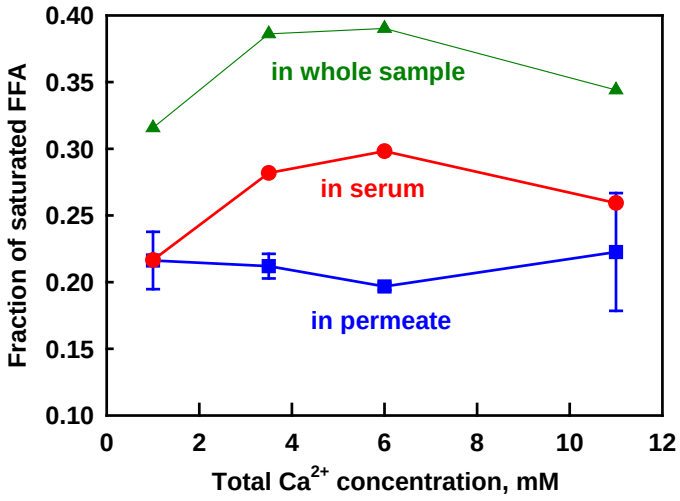

Figure S6. Fraction of saturated FFA vs. total Ca^{2+} concentration in the whole sample (triangles), in the serum after centrifugation (circles), and in the permeate after filtration (squares).

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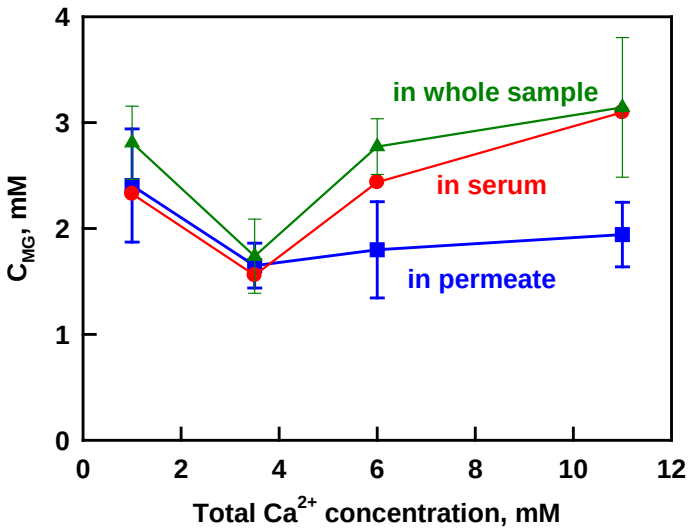

Figure S7. Concentration of monoglycerides vs. total Ca^{2+} concentration in the whole sample (triangles), in the serum after centrifugation (circles), and in the permeate after filtration (squares).