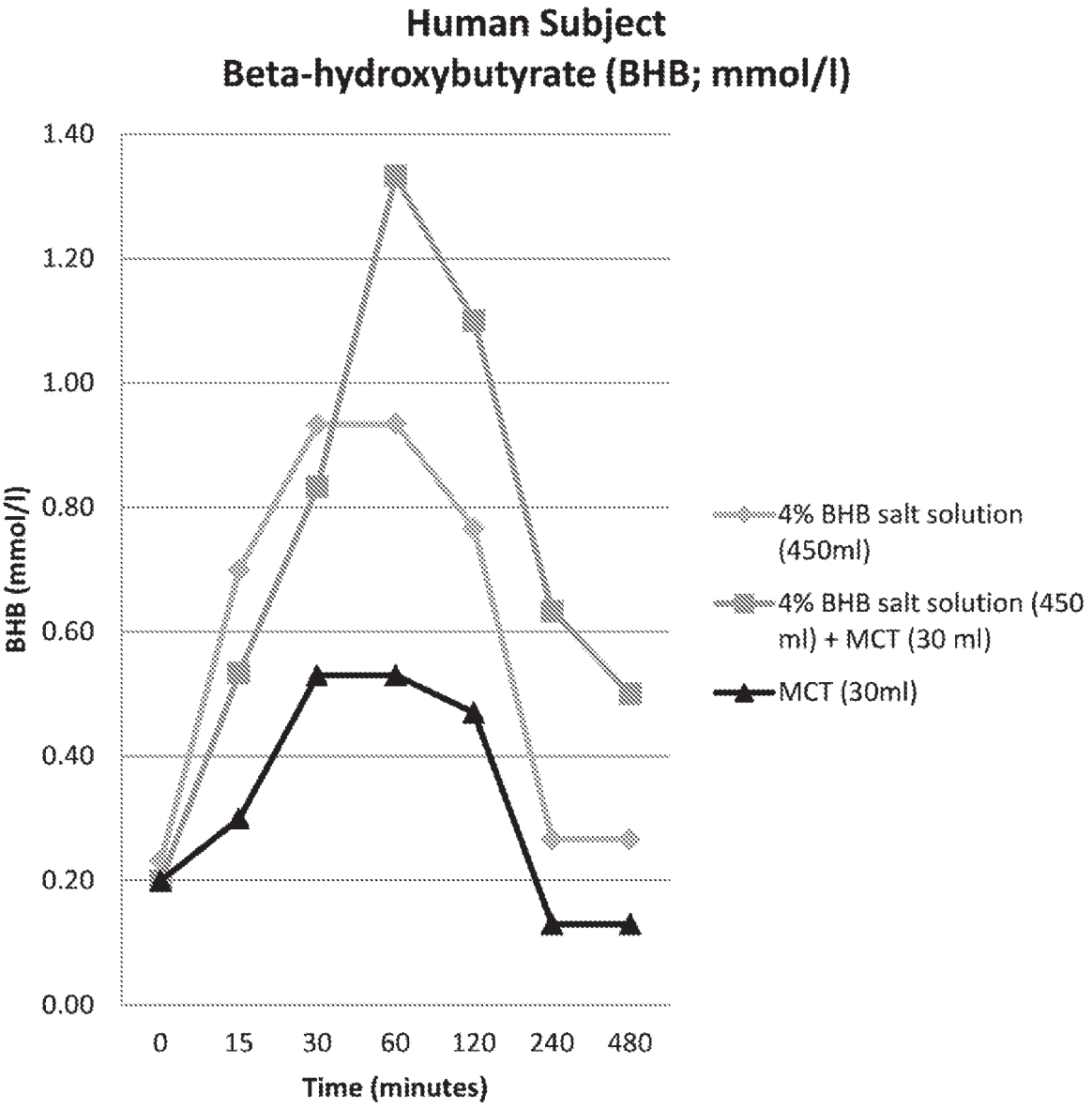

Human Subject
Beta-hydroxybutyrate (BHB; mmol/l)
BHB (mmol/l)
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
0
15
30
60
120
240
480
Time (minutes)
4% BHB salt solution (450ml)
4% BHB salt solution (450 ml) + MCT (30 ml)
MCT (30ml)

Figure 1.

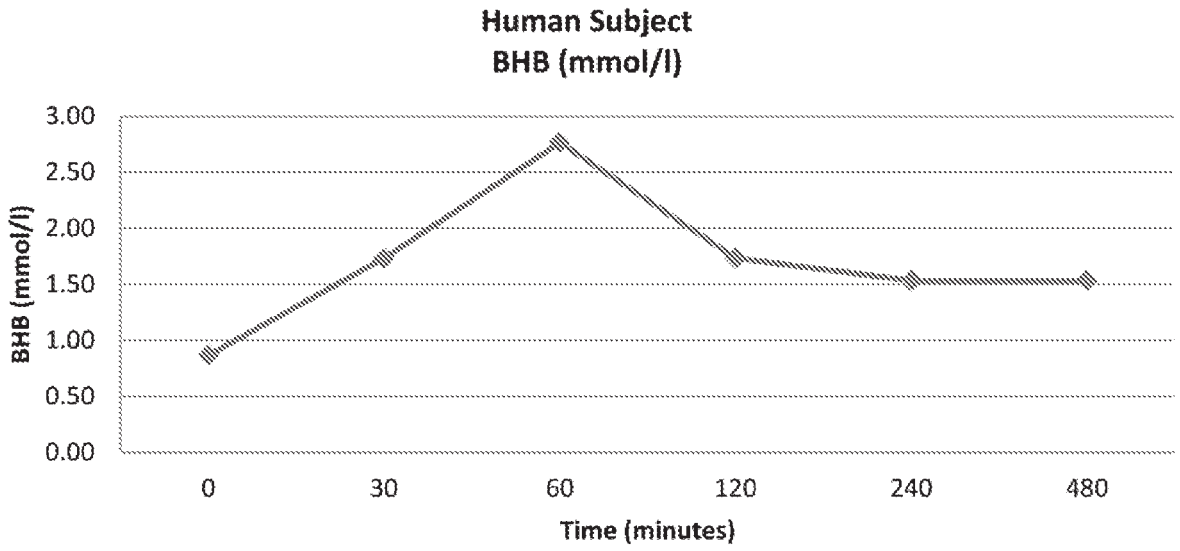


Figure 2.

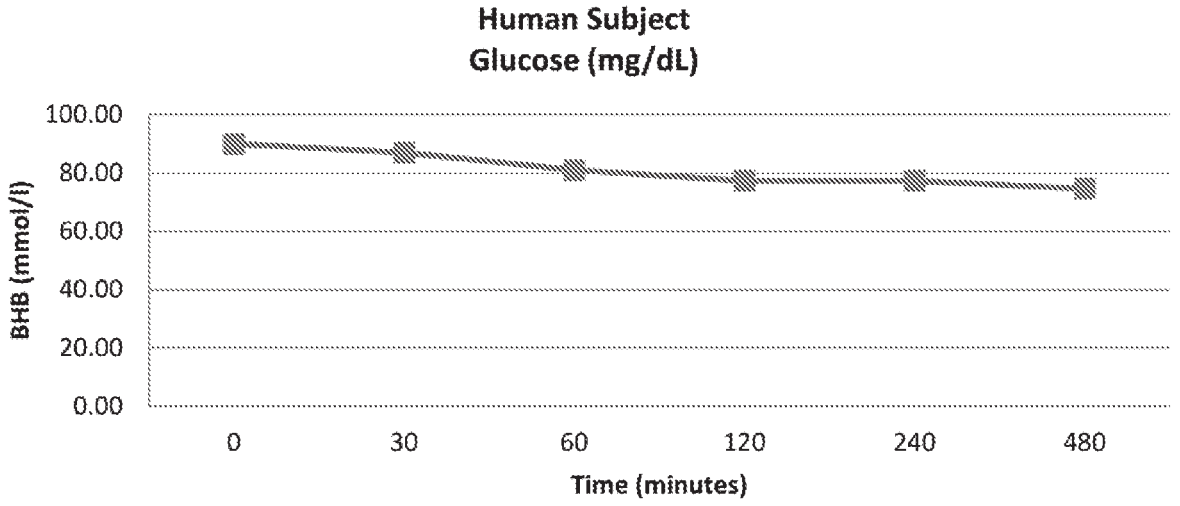


Figure 3.

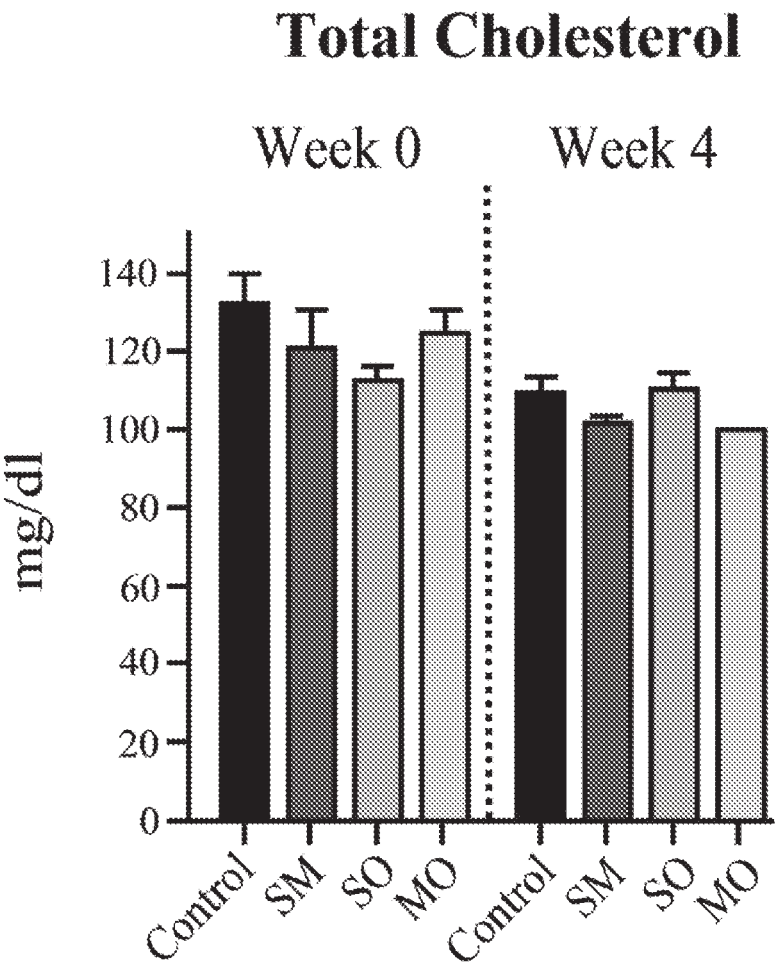

Total Cholesterol
Week 0
Week 4
mg/dl
140
120
100
80
60
40
20
0
Control
SM
SO
MO
Control
SM
SO
MO

Figure 4.

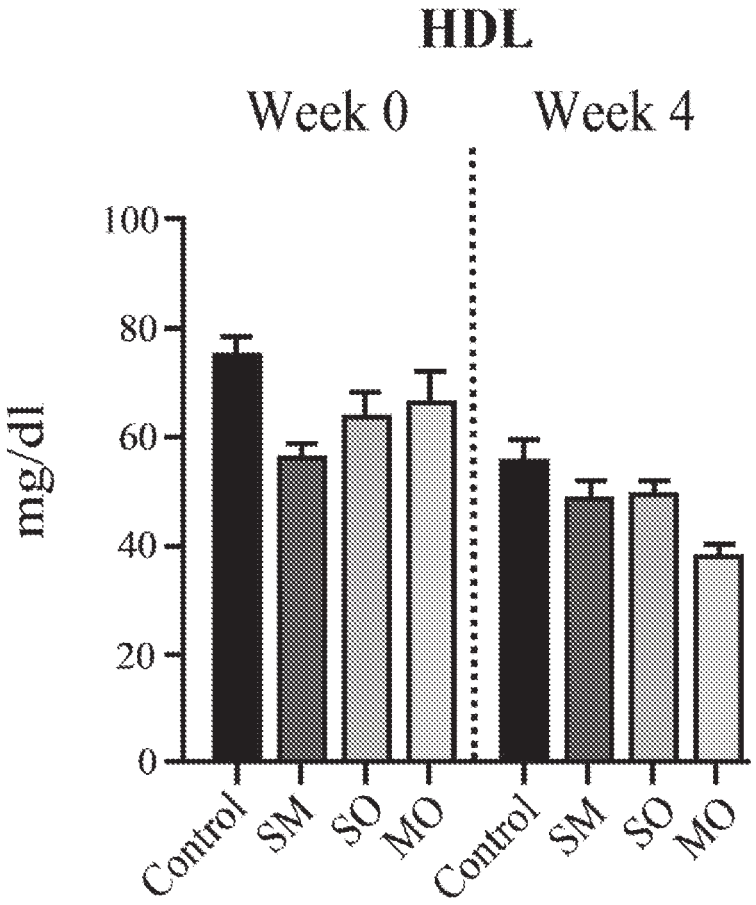

HDL
Week 0
Week 4
mg/dl
100
80
60
40
20
0
Control
SM
SO
MO
Control
SM
SO
MO

Figure 5.

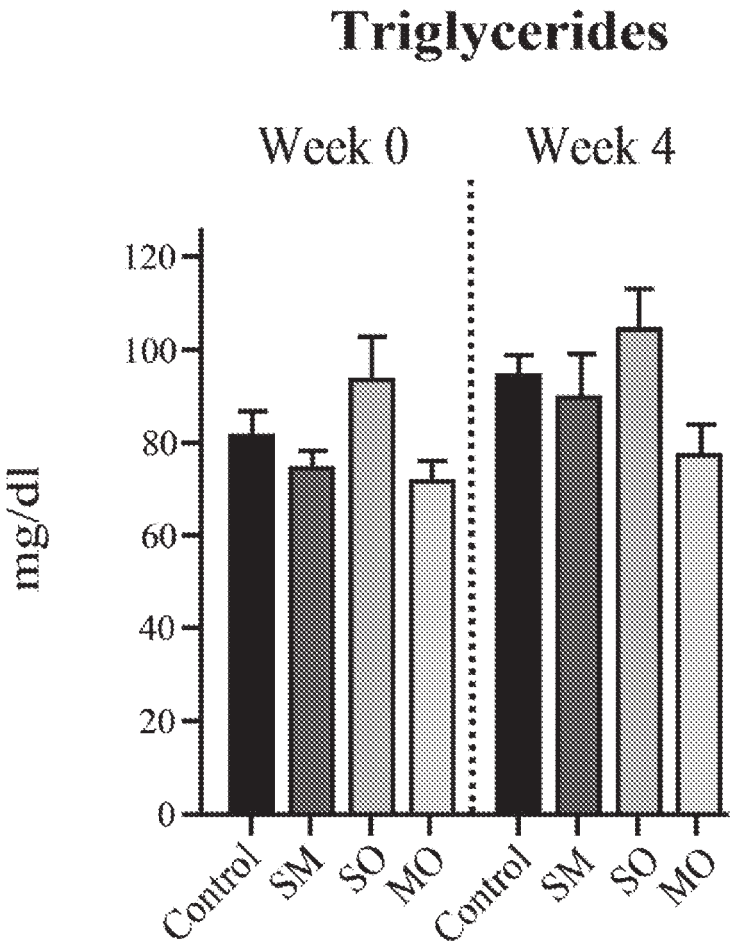
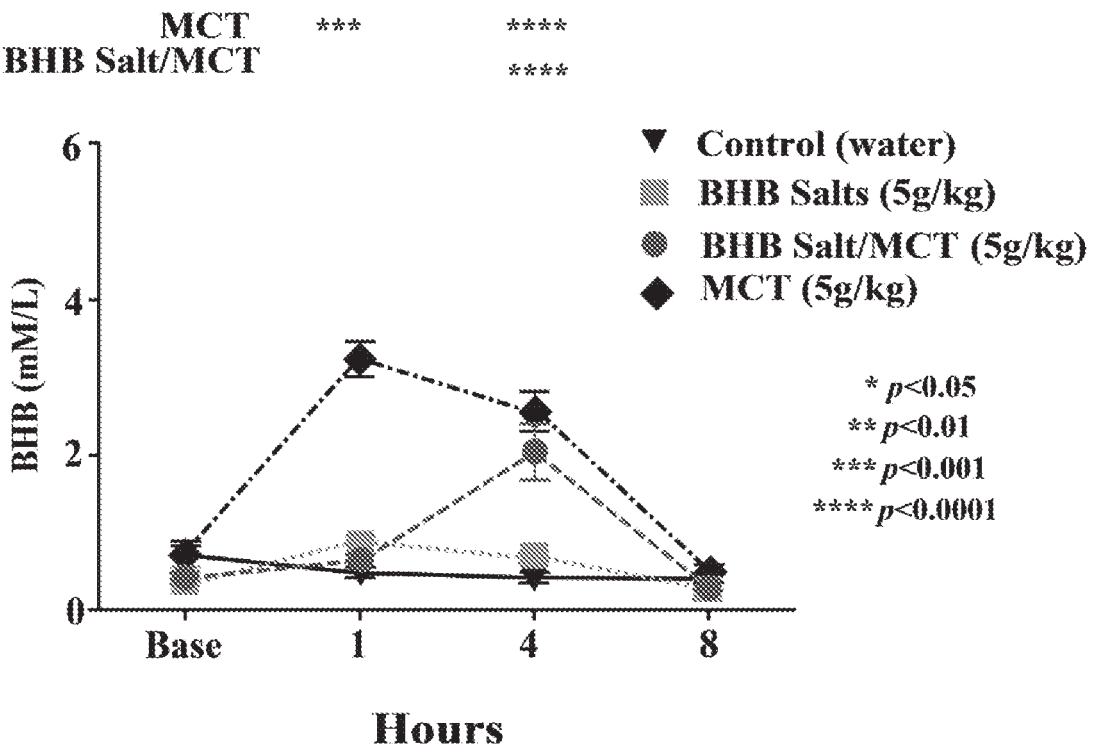

Triglycerides
Week 0
Week 4
mg/dl
120
100
80
60
40
20
0
Control
SM
SO
MO
Control
SM
SO
MO

Figure 6.

A.


MCT *** ****
BHB Salt/MCT ****
Control (water)
BHB Salts (5g/kg)
BHB Salt/MCT (5g/kg)
MCT (5g/kg)
* p<0.05
** p<0.01
*** p<0.001
**** p<0.0001
BHB (mM/L)
0
2
4
6
Base
1
4
8
Hours

B.

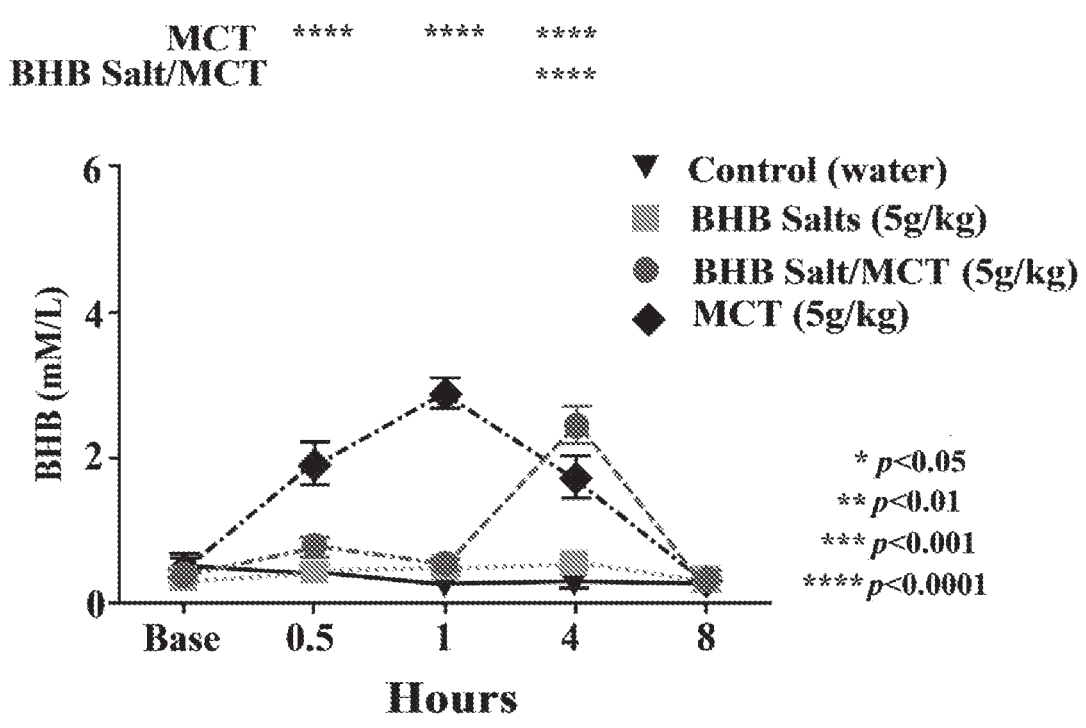
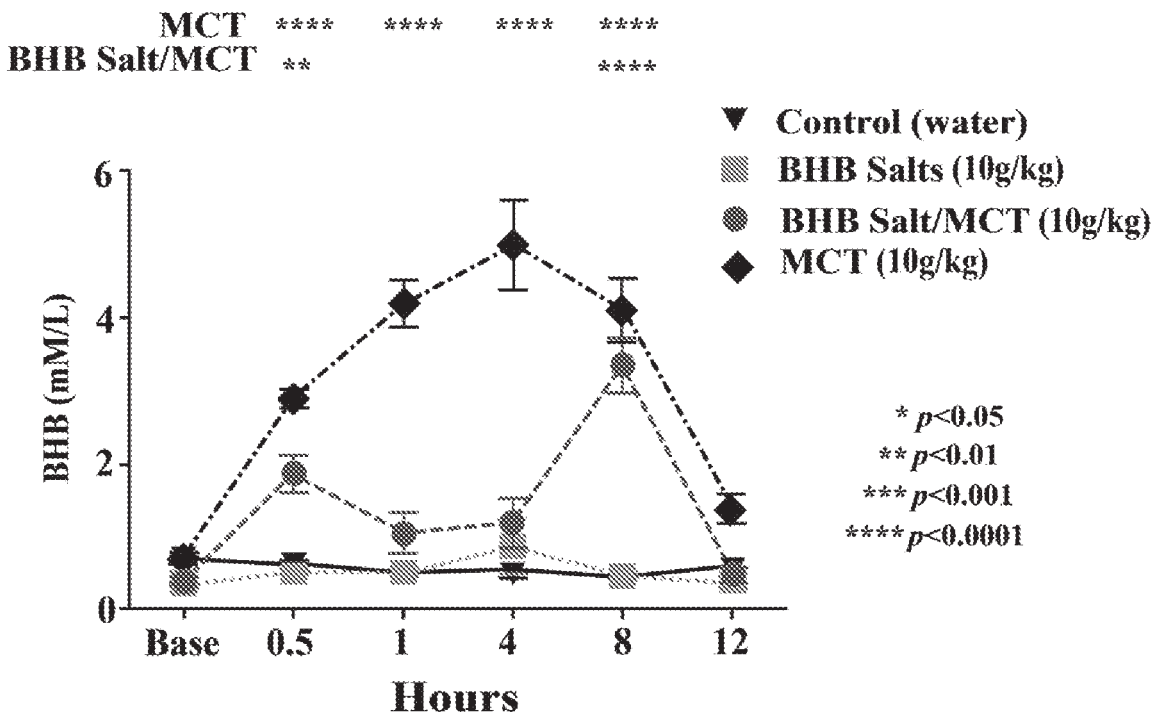

MCT **** **** ****
BHB Salt/MCT ****
Control (water)
BHB Salts (5g/kg)
BHB Salt/MCT (5g/kg)
MCT (5g/kg)
* p<0.05
** p<0.01
*** p<0.001
**** p<0.0001
BHB (mM/L)
0
2
4
6
Base
0.5
1
4
8
Hours

Figure 7.

A.


MCT **** **** **** ****
BHB Salt/MCT ** ****
Control (water)
BHB Salts (10g/kg)
BHB Salt/MCT (10g/kg)
MCT (10g/kg)
BHB (mM/L)
0
2
4
6
Base 0.5 1 4 8 12
Hours
* p<0.05
** p<0.01
*** p<0.001
**** p<0.0001

B.

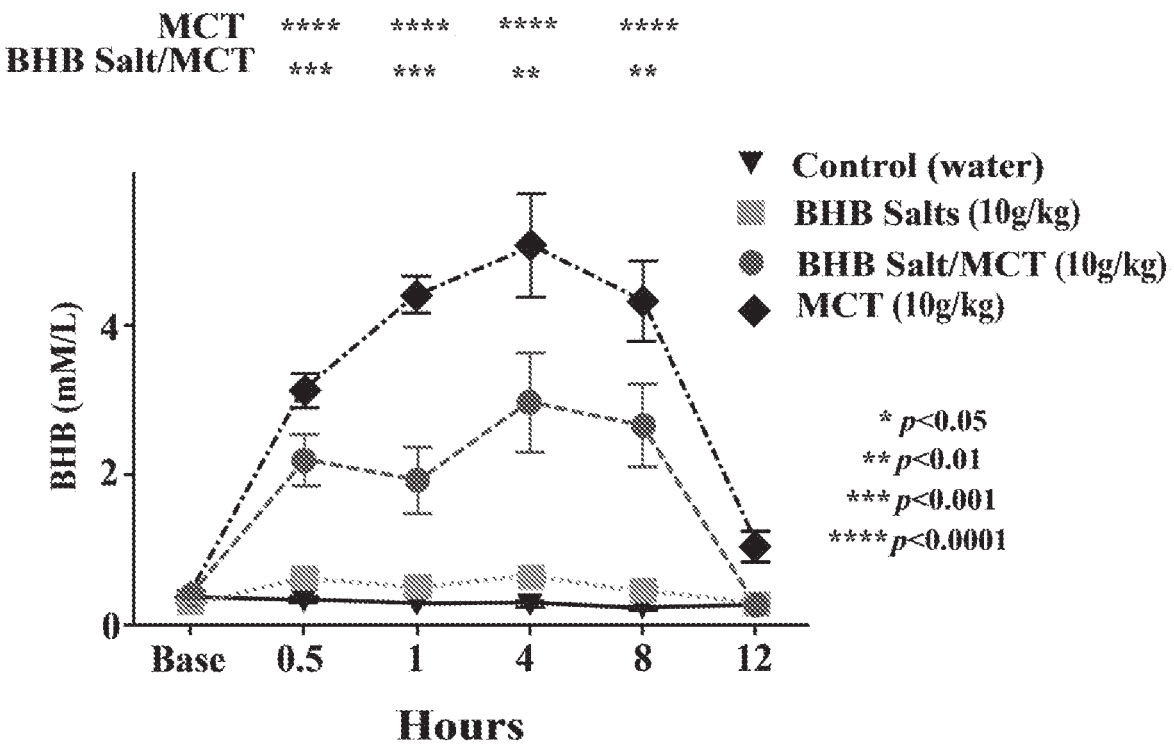

MCT **** **** **** ****
BHB Salt/MCT *** *** ** **
Control (water)
BHB Salts (10g/kg)
BHB Salt/MCT (10g/kg)
MCT (10g/kg)
BHB (mM/L)
0
2
4
Base 0.5 1 4 8 12
Hours
* p<0.05
** p<0.01
*** p<0.001
**** p<0.0001

Figure 8.

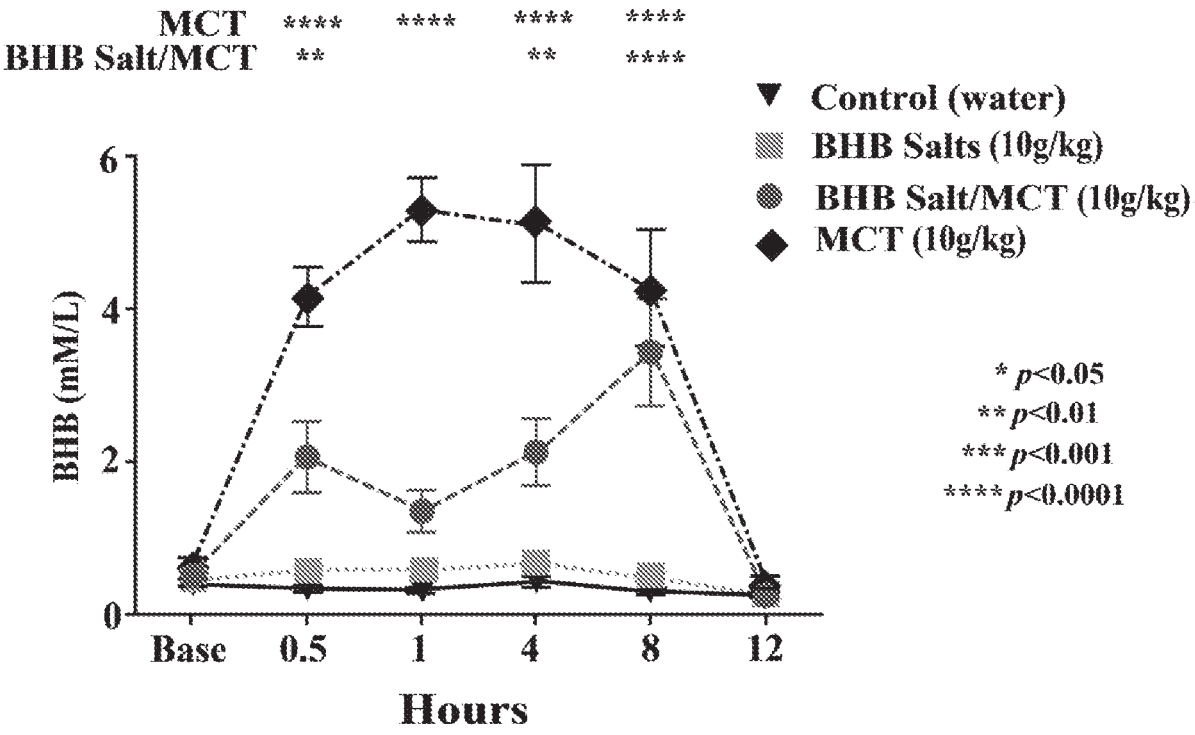
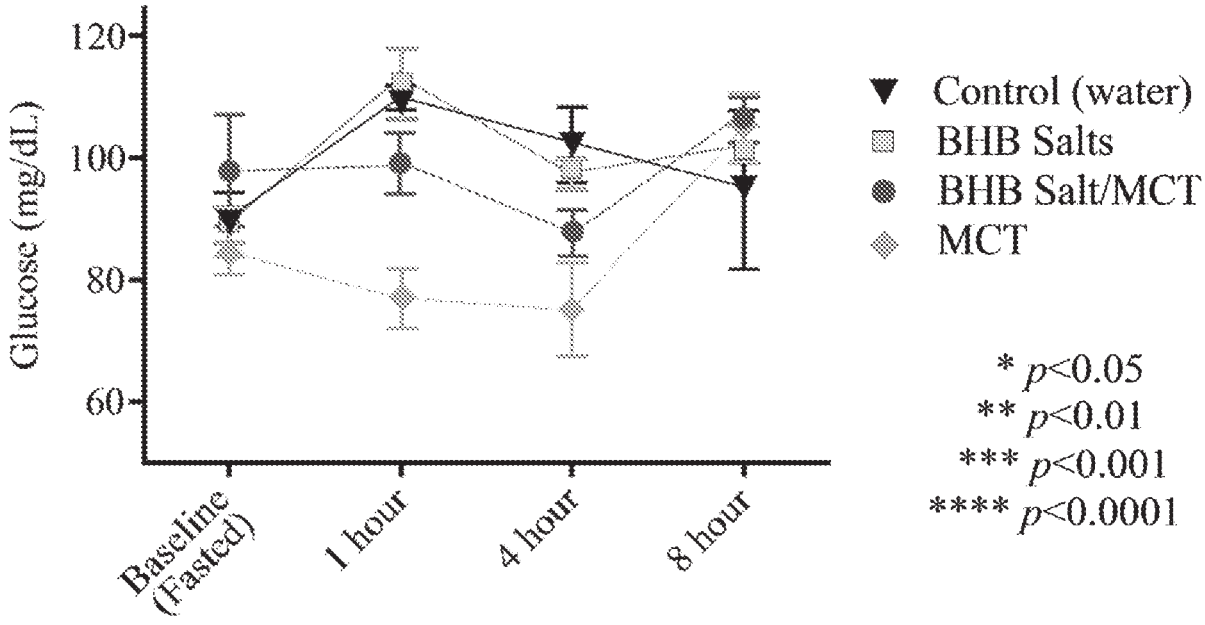

MCT **** **** **** ****
BHB Salt/MCT ** ** ****
Control (water)
BHB Salts (10g/kg)
BHB Salt/MCT (10g/kg)
MCT (10g/kg)
* p<0.05
** p<0.01
*** p<0.001
**** p<0.0001
BHB (mM/L)
6
4
2
0
Base
0.5
1
4
8
12
Hours

Figure 9.

A.


120
100
80
60
Glucose (mg/dL)
Baseline (Fasted)
1 hour
4 hour
8 hour
Control (water)
BHB Salts
BHB Salt/MCT
MCT
* p<0.05
** p<0.01
*** p<0.001
**** p<0.0001

B.

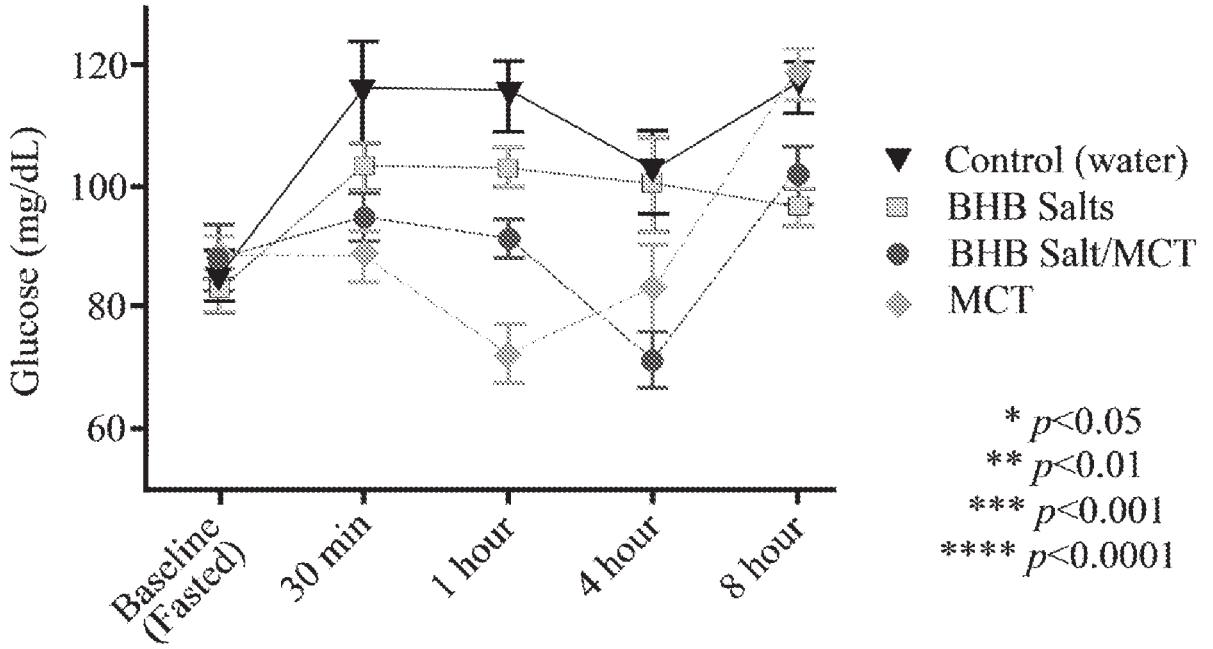
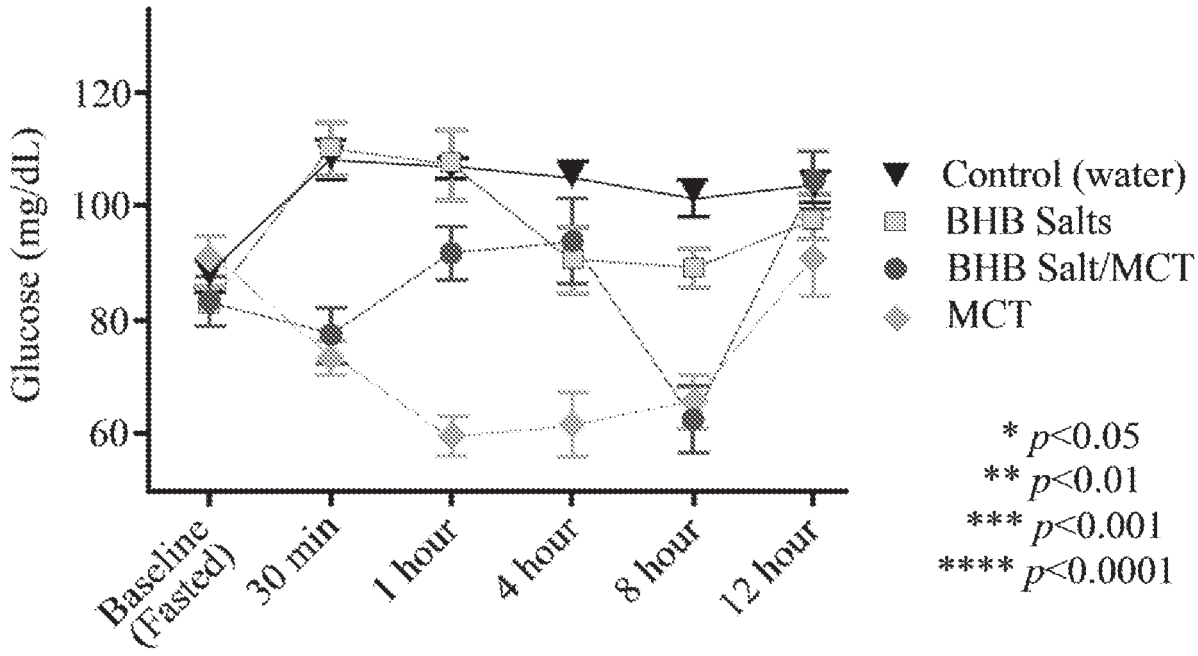

120
100
80
60
Glucose (mg/dL)
Baseline (Fasted)
30 min
1 hour
4 hour
8 hour
Control (water)
BHB Salts
BHB Salt/MCT
MCT
* p<0.05
** p<0.01
*** p<0.001
**** p<0.0001

Figure 10.

A.


Glucose (mg/dL)
120
100
80
60
Baseline (Fasted)
30 min
1 hour
4 hour
8 hour
12 hour
Control (water)
BHB Salts
BHB Salt/MCT
MCT
* p<0.05
** p<0.01
*** p<0.001
**** p<0.0001

B.

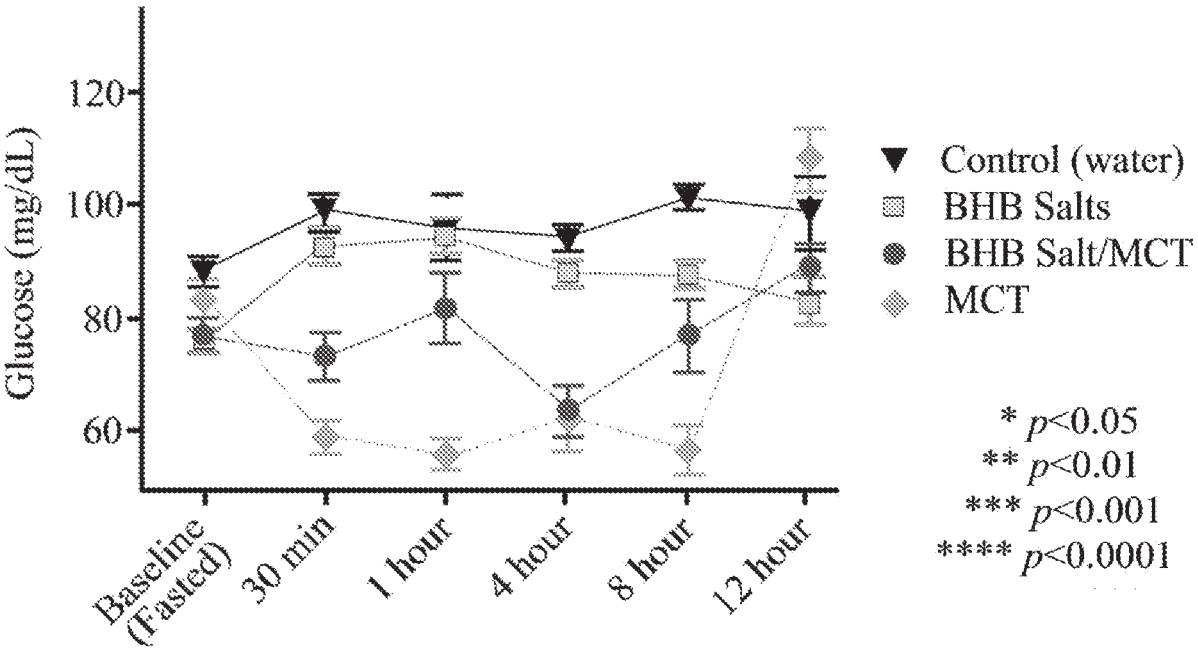

Glucose (mg/dL)
120
100
80
60
Baseline (Fasted)
30 min
1 hour
4 hour
8 hour
12 hour
Control (water)
BHB Salts
BHB Salt/MCT
MCT
* p<0.05
** p<0.01
*** p<0.001
**** p<0.0001

Figure 11.

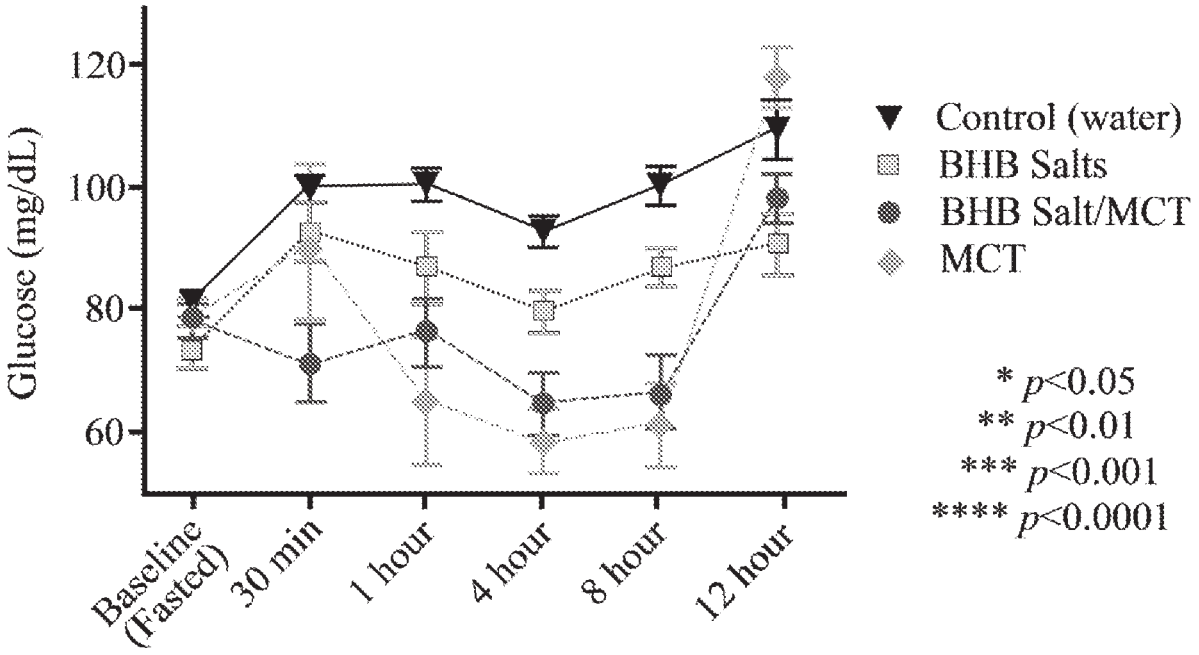
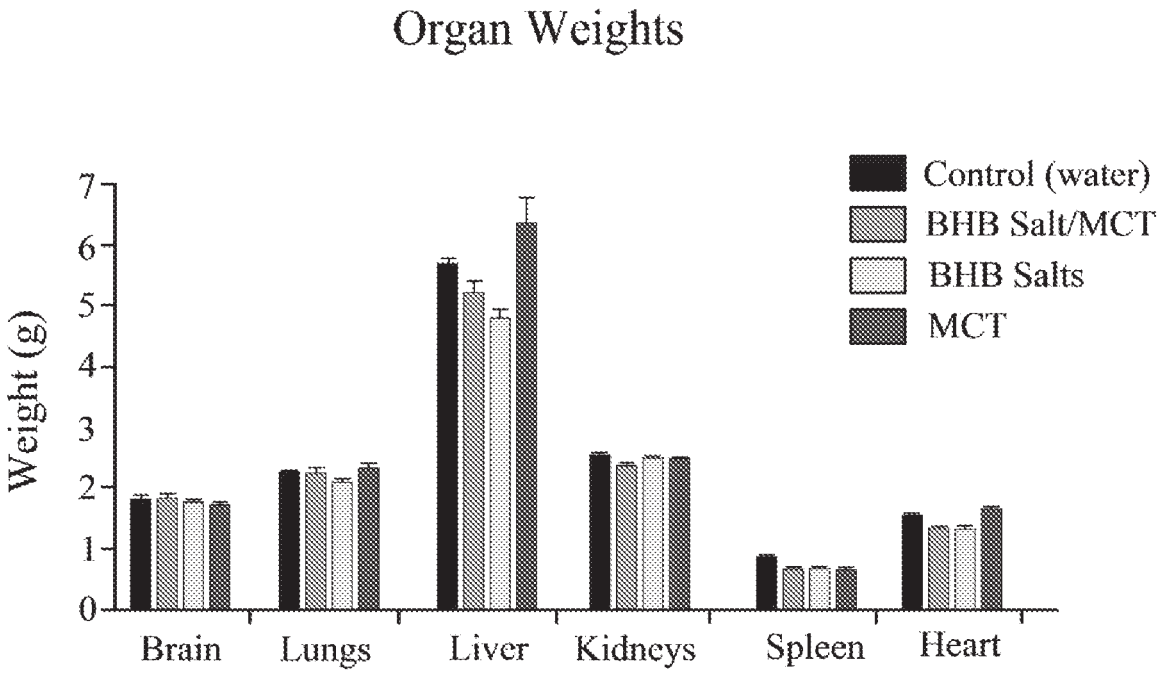

Glucose (mg/dL)
120
100
80
60
Baseline (Fasted)
30 min
1 hour
4 hour
8 hour
12 hour
Control (water)
BHB Salts
BHB Salt/MCT
MCT
* p<0.05
** p<0.01
*** p<0.001
**** p<0.0001

Figure 12.

A.


Organ Weights
Control (water)
BHB Salt/MCT
BHB Salts
MCT
Weight (g)
0
1
2
3
4
5
6
7
Brain
Lungs
Liver
Kidneys
Spleen
Heart

B.

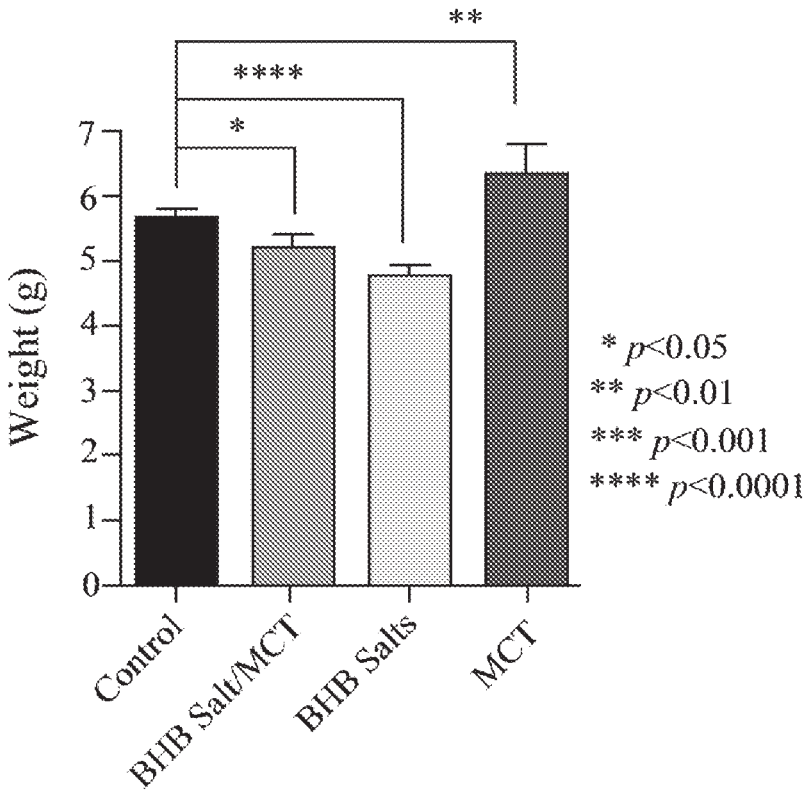

**
****
*
Weight (g)
0
1
2
3
4
5
6
7
Control
BHB Salt/MCT
BHB Salts
MCT
* p<0.05
** p<0.01
*** p<0.001
**** p<0.0001

Figure 13.

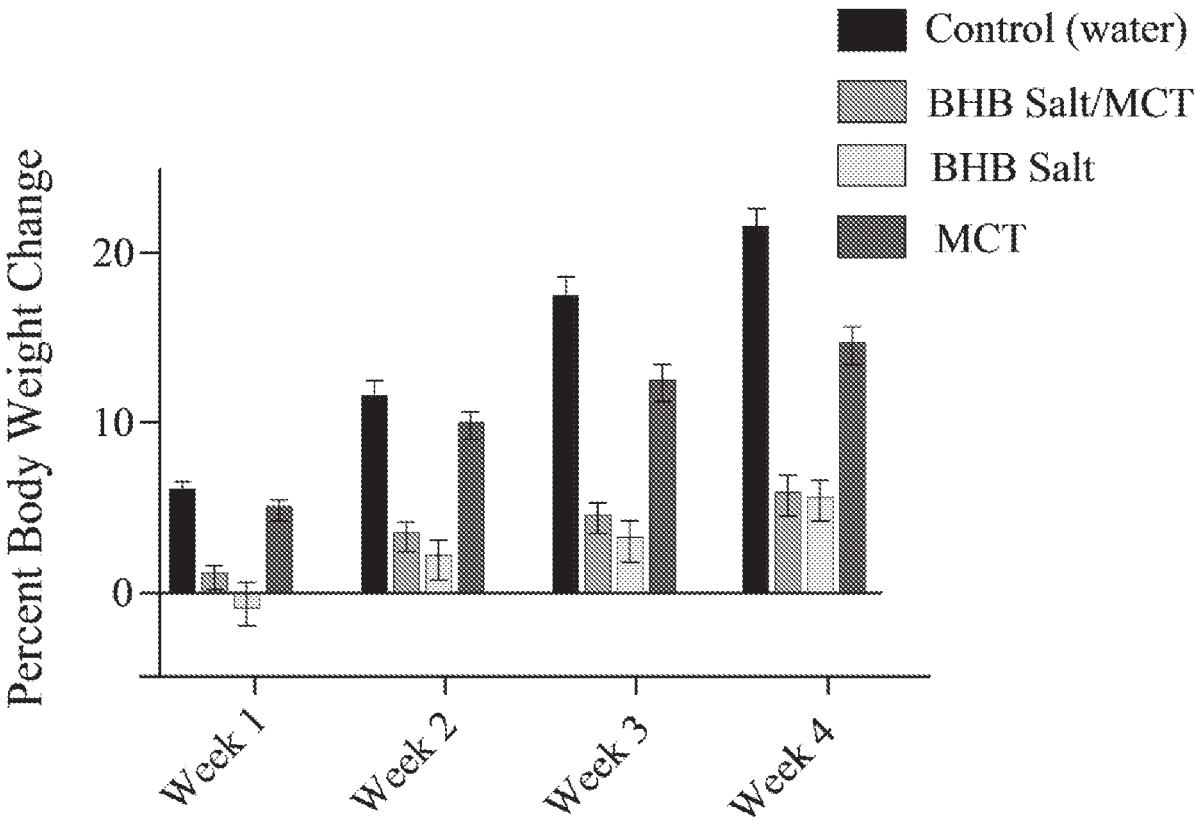

Control (water)
BHB Salt/MCT
BHB Salt
MCT
Percent Body Weight Change
20
10
0
Week 1
Week 2
Week 3
Week 4

Figure 14.