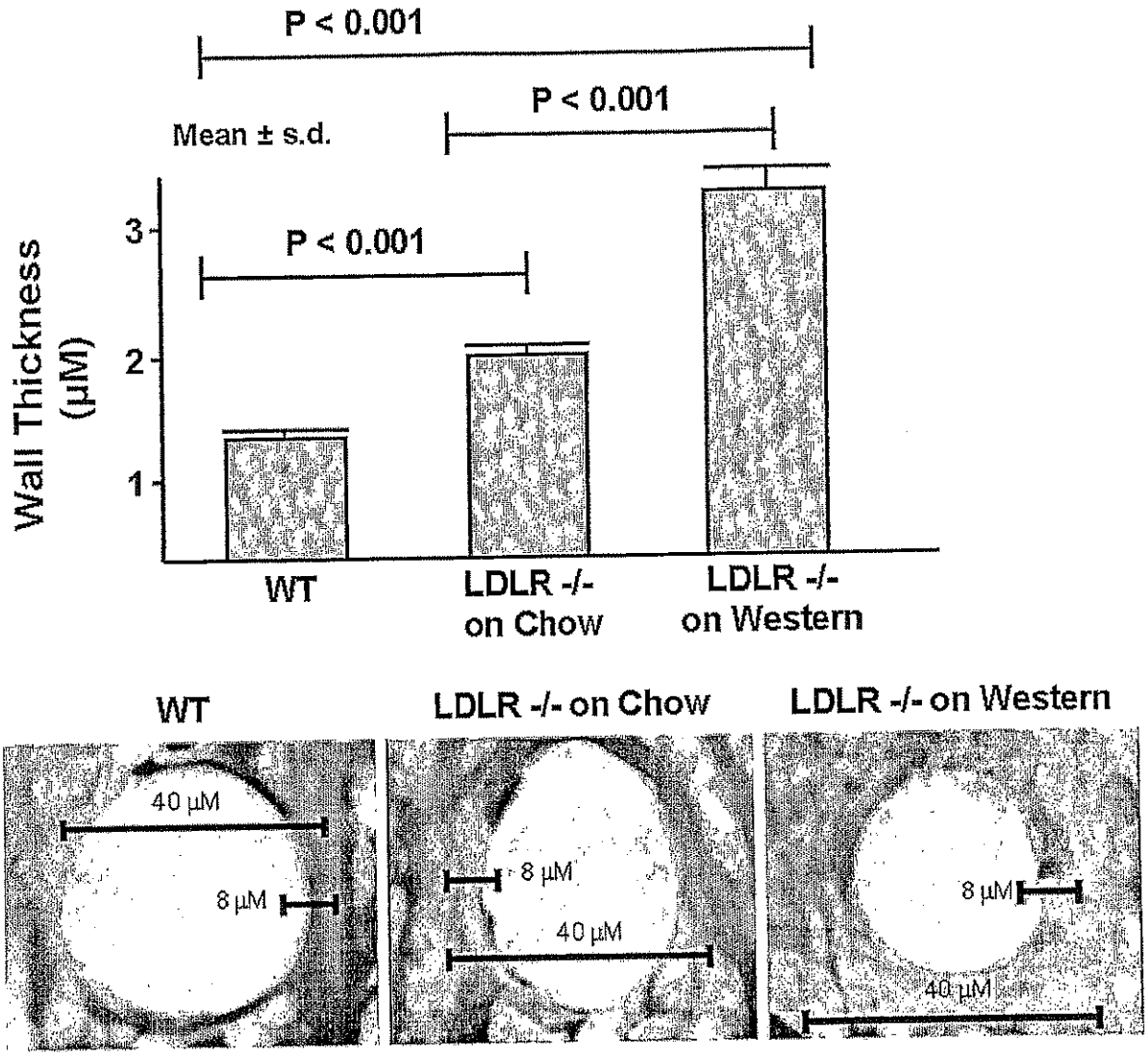

P < 0.001
P < 0.001
Mean ± s.d.
P < 0.001
Wall Thickness (μM)
3
2
1
WT
LDLR -/- on Chow
LDLR -/- on Western
WT
LDLR -/- on Chow
LDLR -/- on Western
40 μM
8 μM
8 μM
40 μM
8 μM
40 μM

Fig. 1A

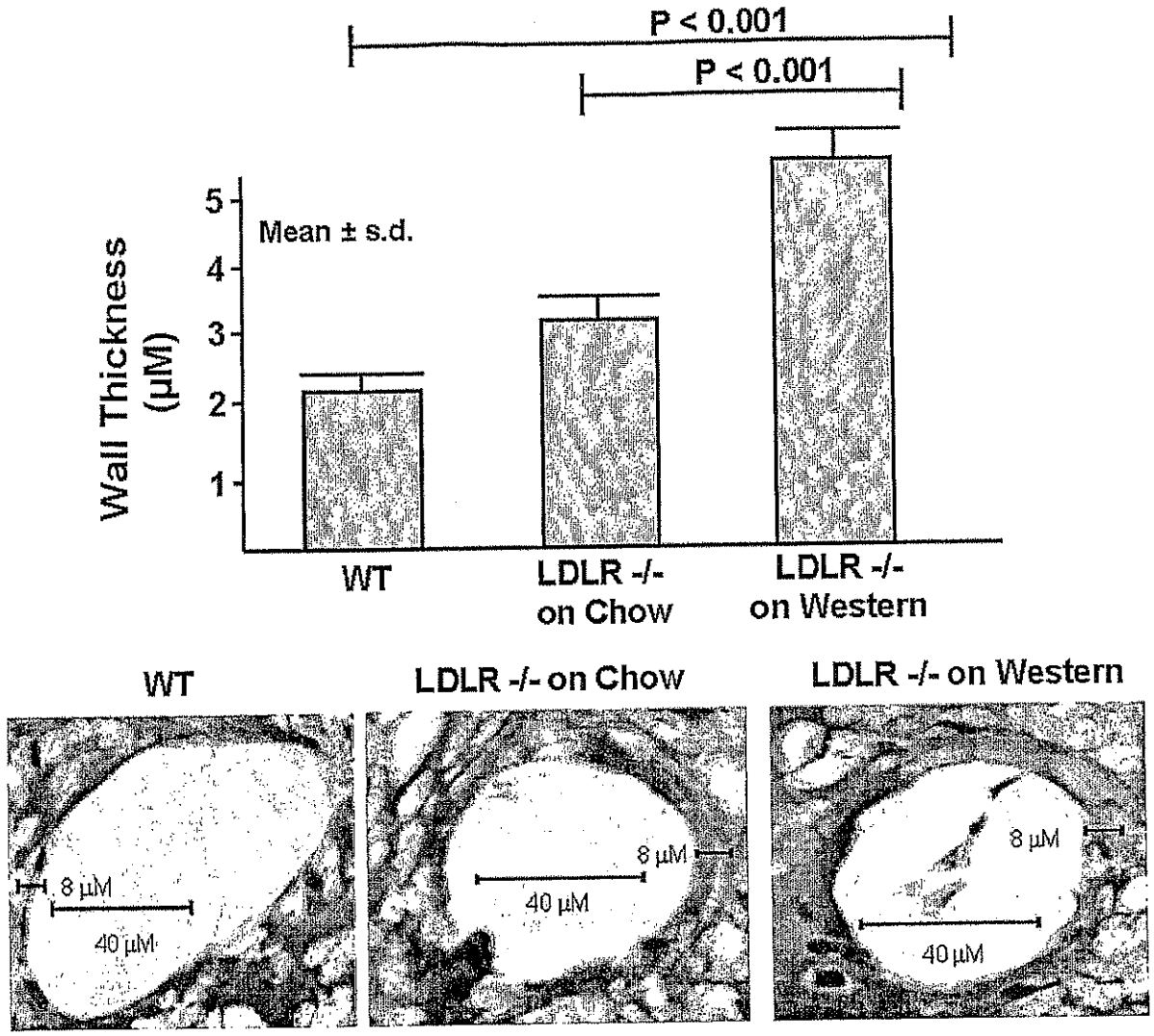

P < 0.001
P < 0.001
Wall Thickness (μM)
Mean ± s.d.
5
4
3
2
1
WT
LDLR -/- on Chow
LDLR -/- on Western
WT
LDLR -/- on Chow
LDLR -/- on Western
8 μM
40 μM
8 μM
40 μM
8 μM
40 μM

Fig. 1B

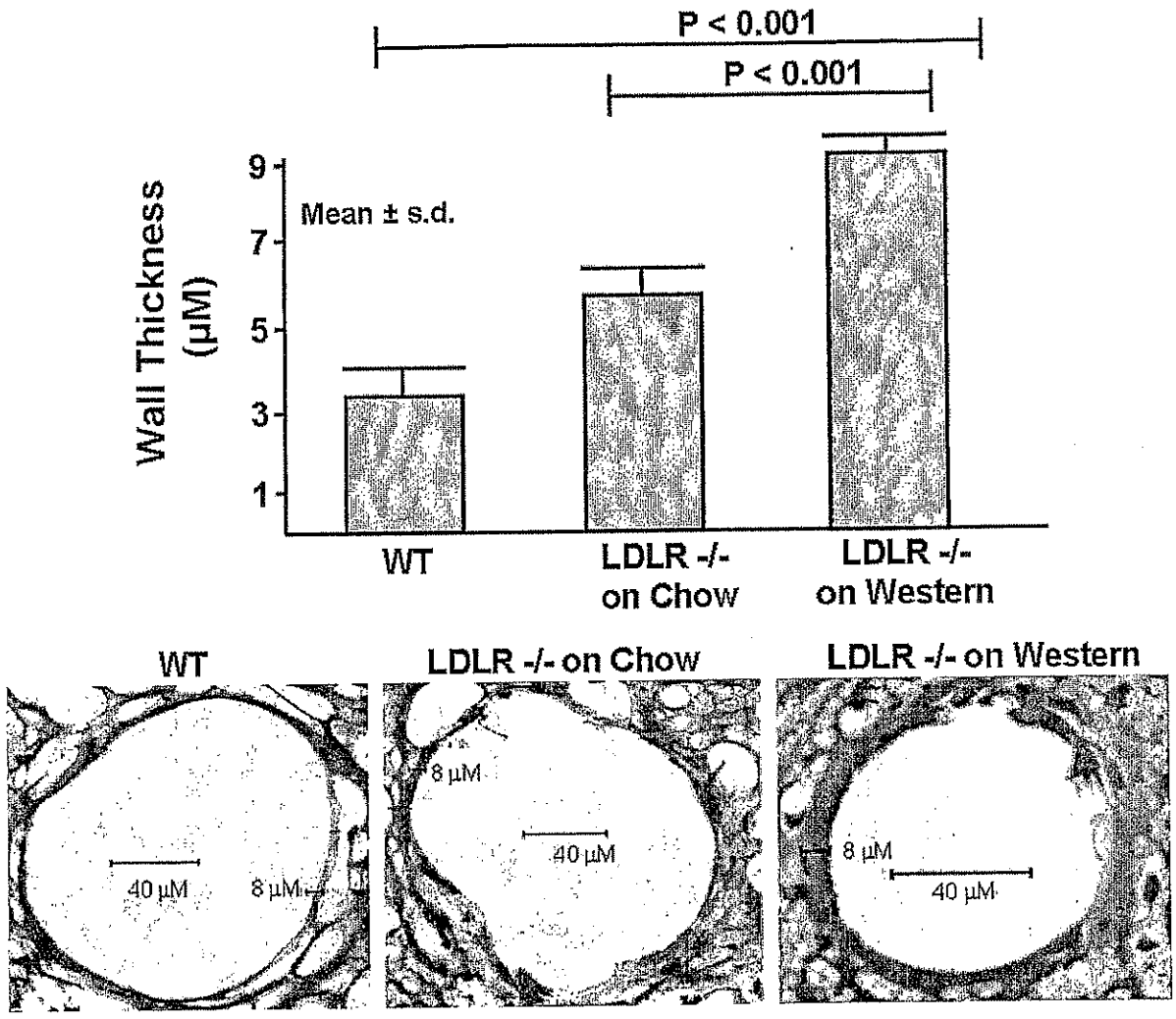

P < 0.001
P < 0.001
Wall Thickness (μM)
9
7
5
3
1
Mean ± s.d.
WT
LDLR -/- on Chow
LDLR -/- on Western
WT
LDLR -/- on Chow
LDLR -/- on Western
40 μM
8 μM
8 μM
40 μM
8 μM
40 μM

Fig. 1C

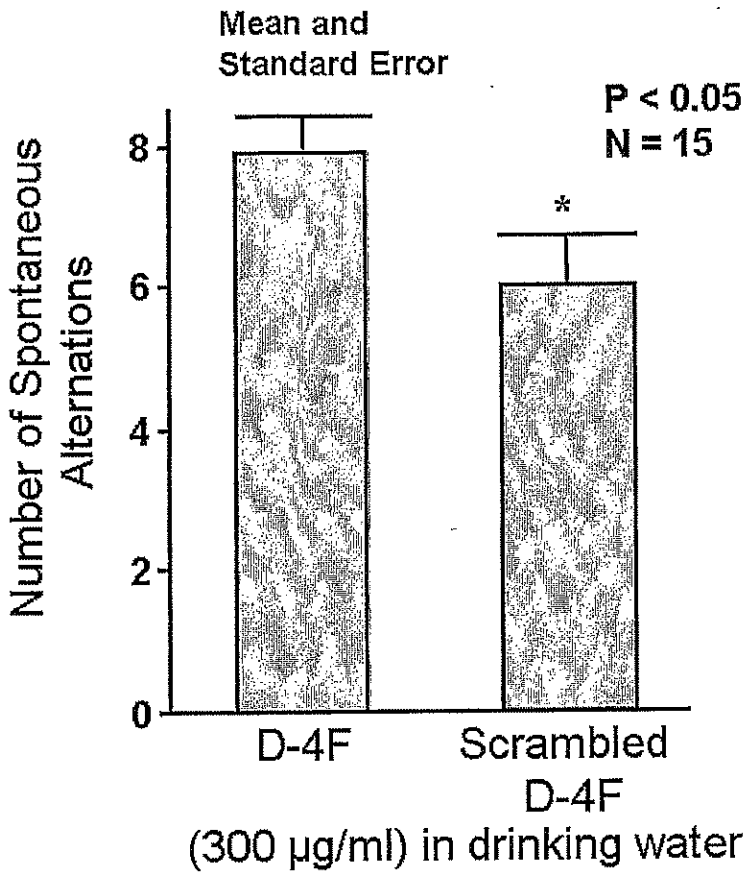

Mean and
Standard Error
P < 0.05
N = 15
*
Number of Spontaneous Alternations
0
2
4
6
8
D-4F
Scrambled D-4F
(300 µg/ml) in drinking water

Fig. 2

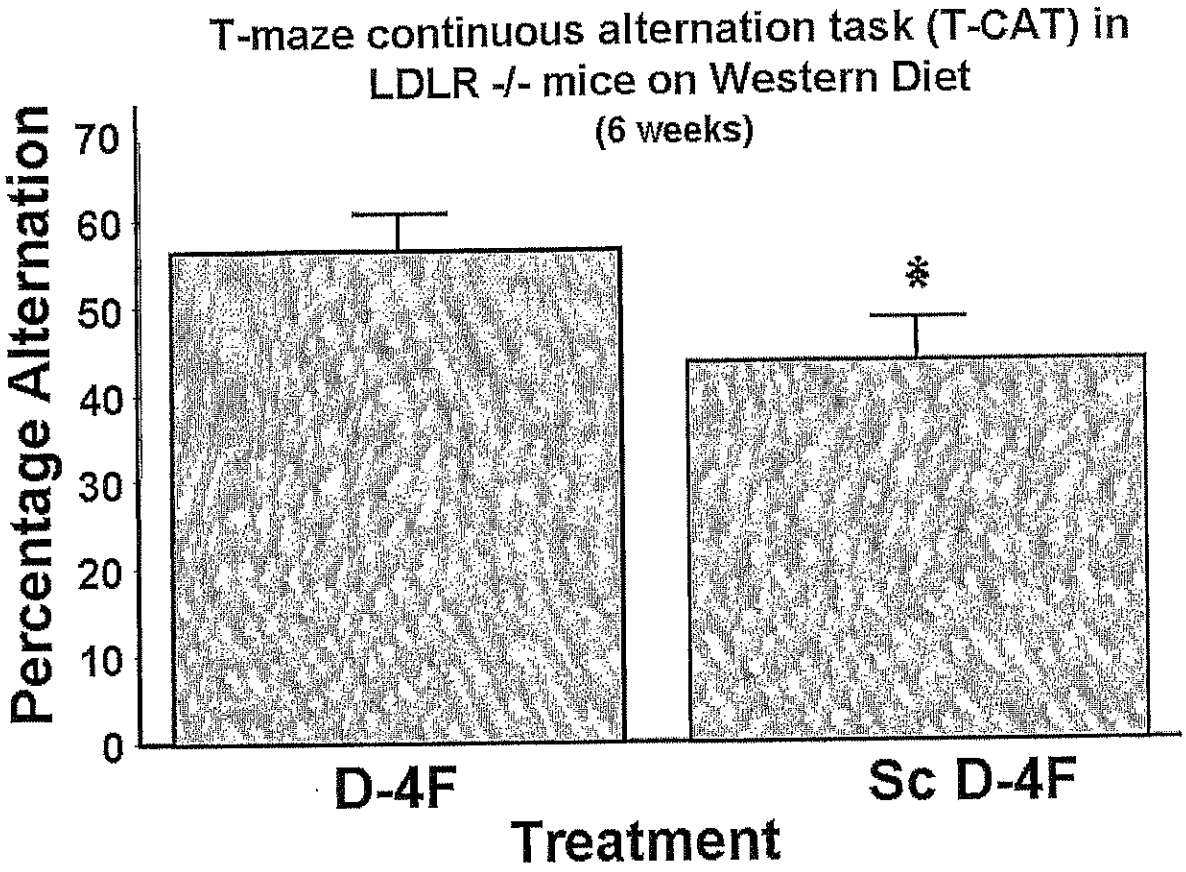

T-maze continuous alternation task (T-CAT) in
LDLR -/- mice on Western Diet
(6 weeks)
Percentage Alternation
70
60
50
40
30
20
10
0
*
D-4F
Sc D-4F
Treatment

*Fig. 3*

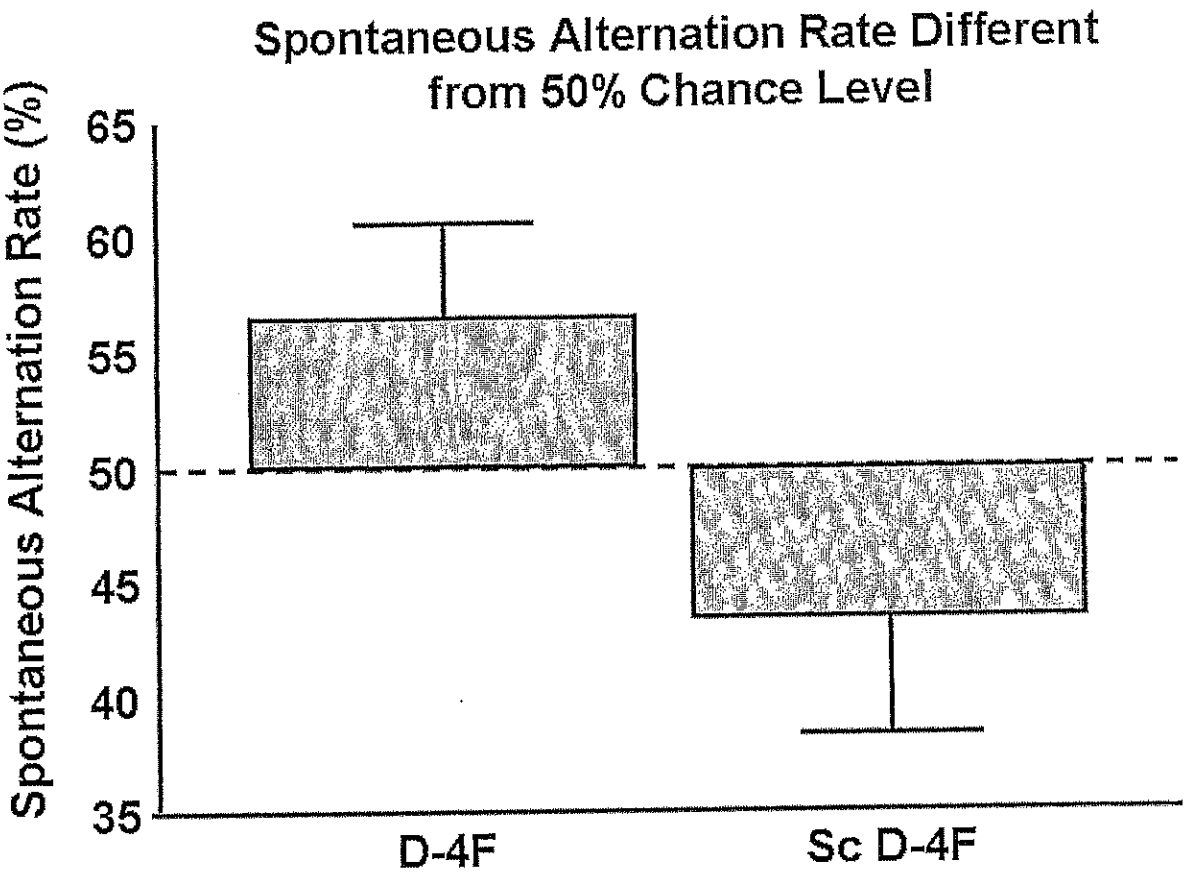
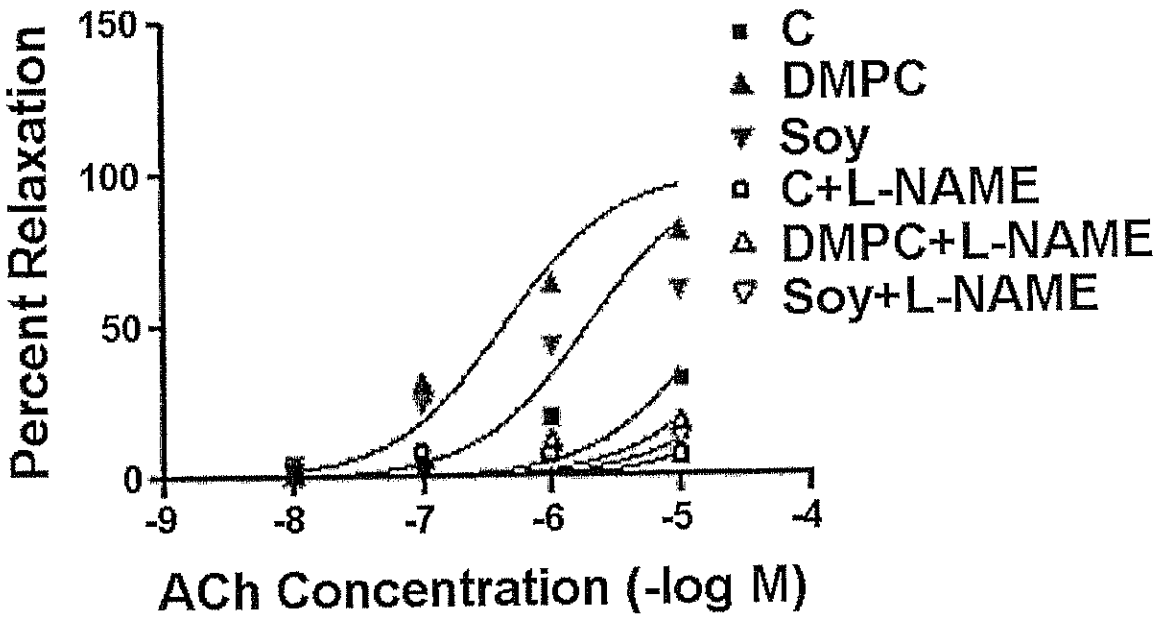

Spontaneous Alternation Rate Different
from 50% Chance Level
Spontaneous Alternation Rate (%)
65
60
55
50
45
40
35
D-4F
Sc D-4F

*Fig. 4*




| Best Fit Values | C | DMPC | Soy | C+ L-name | DMPC+ L-name | Soy+ L-name |
|---|---|---|---|---|---|---|
| Log EC50 | 0.473 | 0.006 | 0.057 | 3.887 | 0.439 | 0.415 |

*Fig. 5*

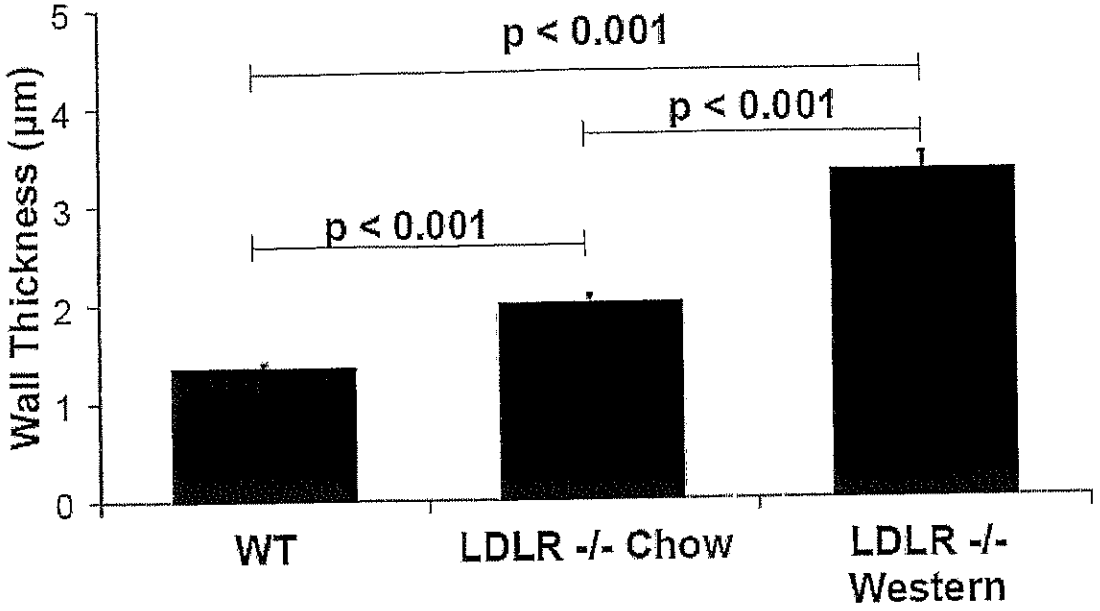

p < 0.001
p < 0.001
p < 0.001
Wall Thickness (µm)
0
1
2
3
4
5
WT
LDLR -/- Chow
LDLR -/- Western

Fig. 6A

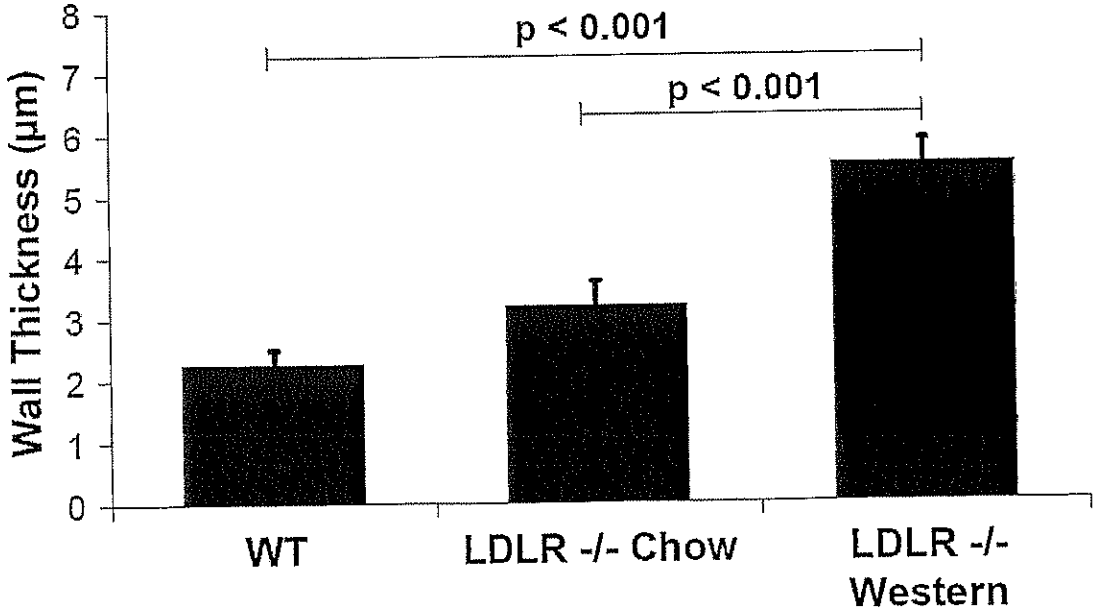

p < 0.001
p < 0.001
Wall Thickness (µm)
0
1
2
3
4
5
6
7
8
WT
LDLR -/- Chow
LDLR -/- Western

Fig. 6B

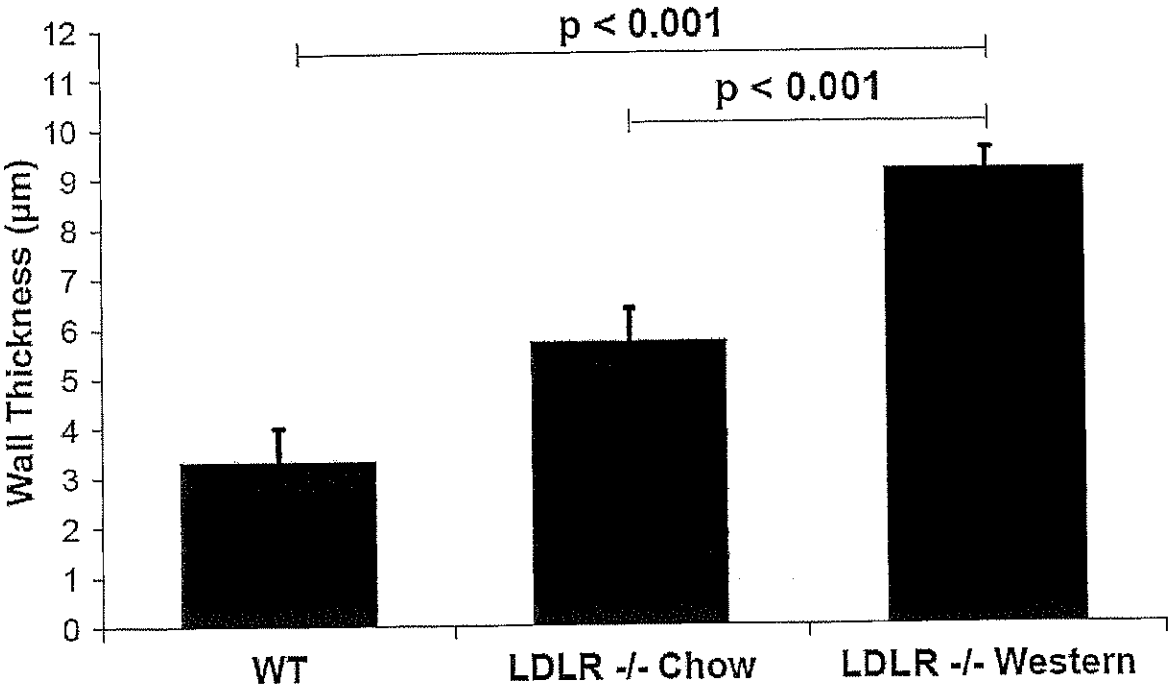

p < 0.001
p < 0.001
Wall Thickness (µm)
12
11
10
9
8
7
6
5
4
3
2
1
0
WT
LDLR -/- Chow
LDLR -/- Western

Fig. 6C

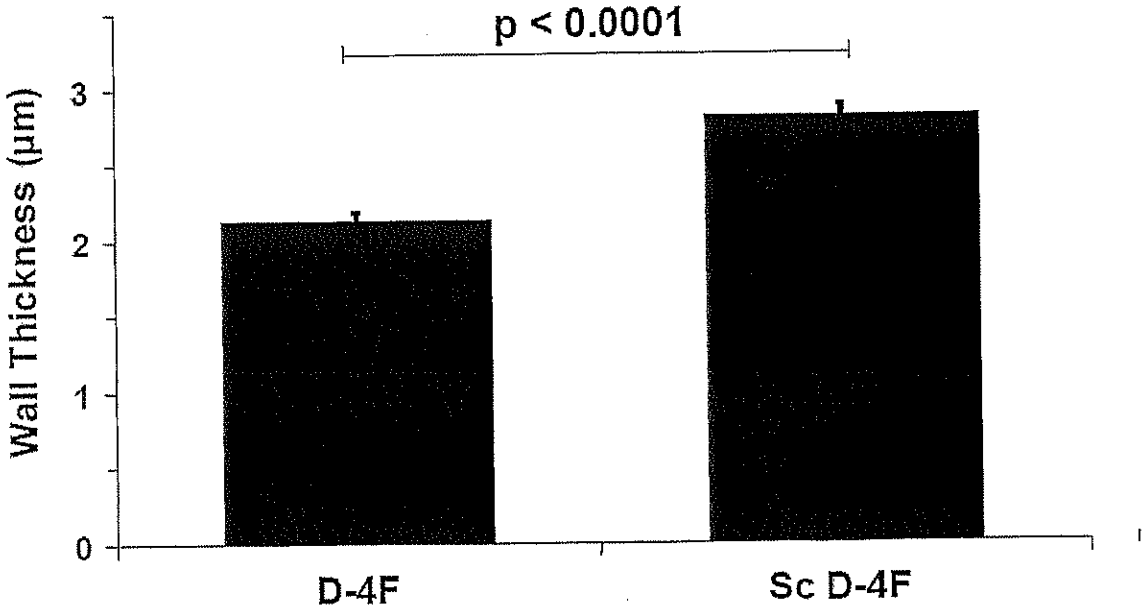

p < 0.0001
Wall Thickness (µm)
3
2
1
0
D-4F
Sc D-4F

Fig. 7A

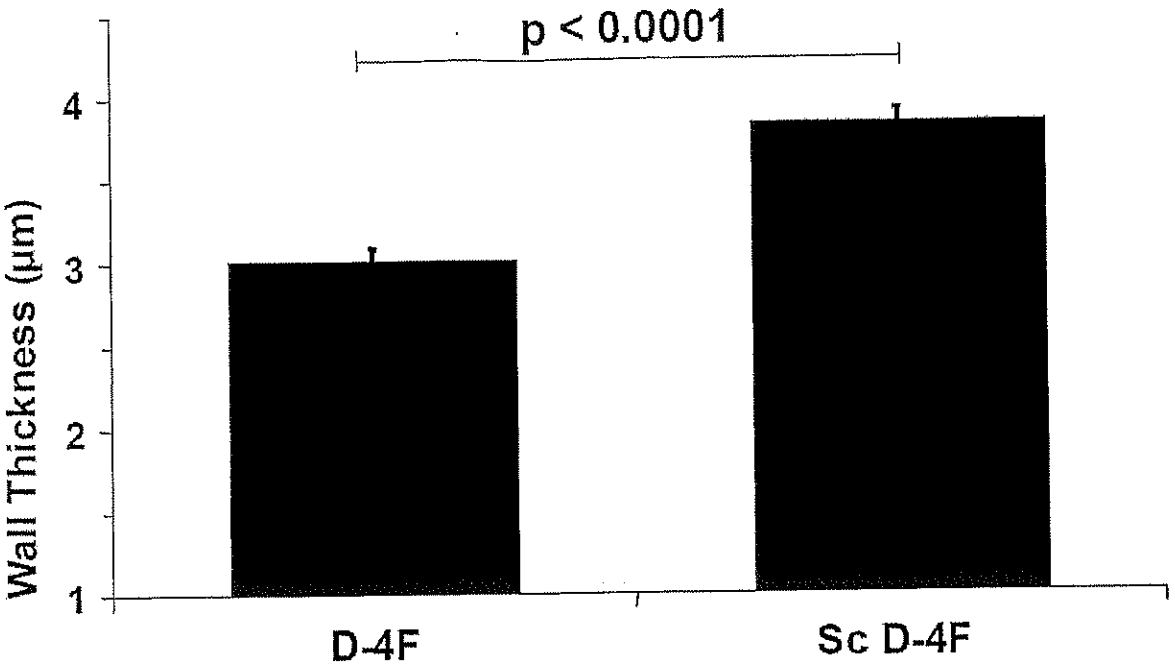

p < 0.0001
Wall Thickness (µm)
4
3
2
1
D-4F
Sc D-4F

Fig. 7B

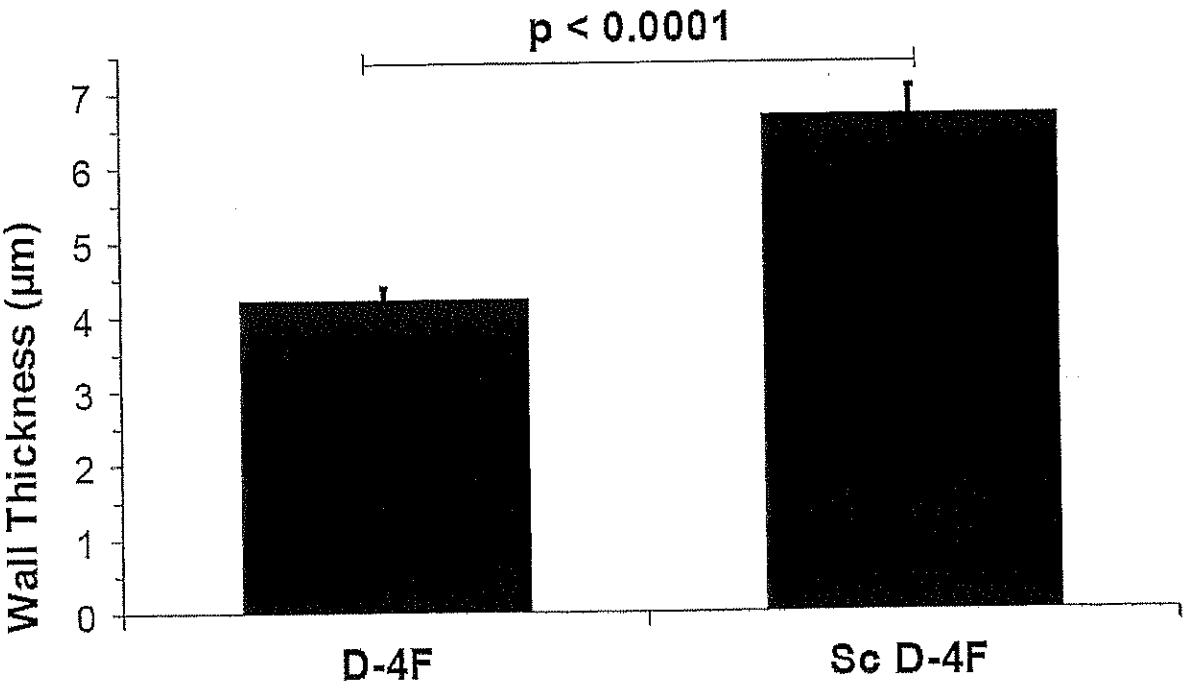

p < 0.0001
Wall Thickness (µm)
7
6
5
4
3
2
1
0
D-4F
Sc D-4F

Fig. 7C

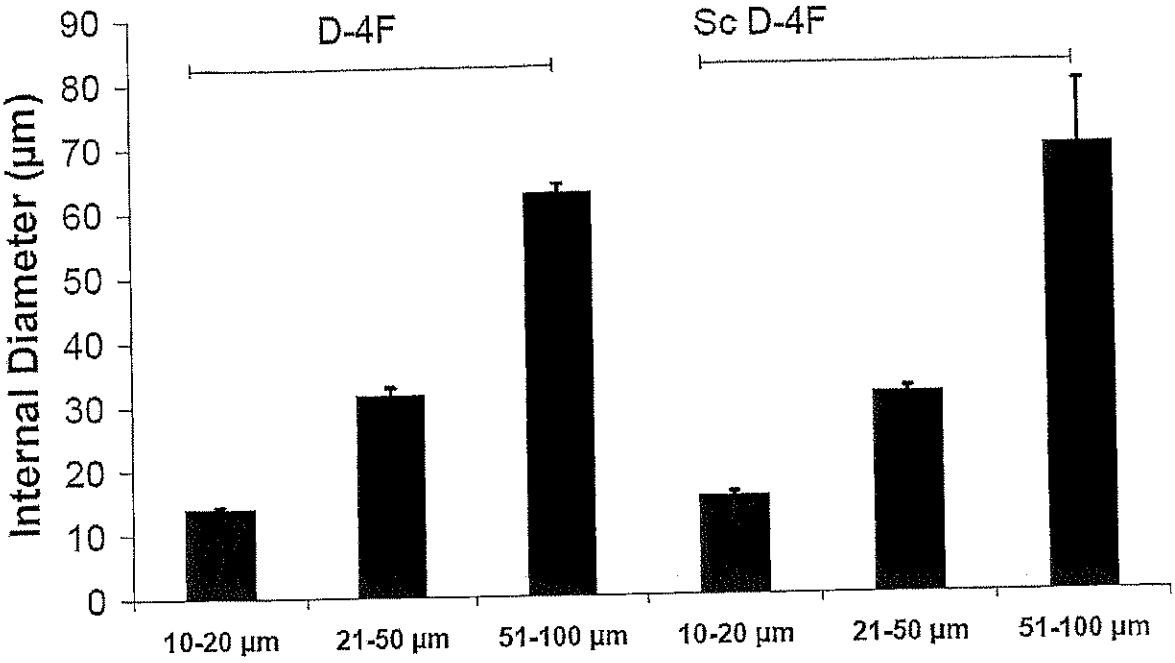

D-4F
Sc D-4F
Internal Diameter (μm)
90
80
70
60
50
40
30
20
10
0
10-20 μm
21-50 μm
51-100 μm
10-20 μm
21-50 μm
51-100 μm

Fig. 7D

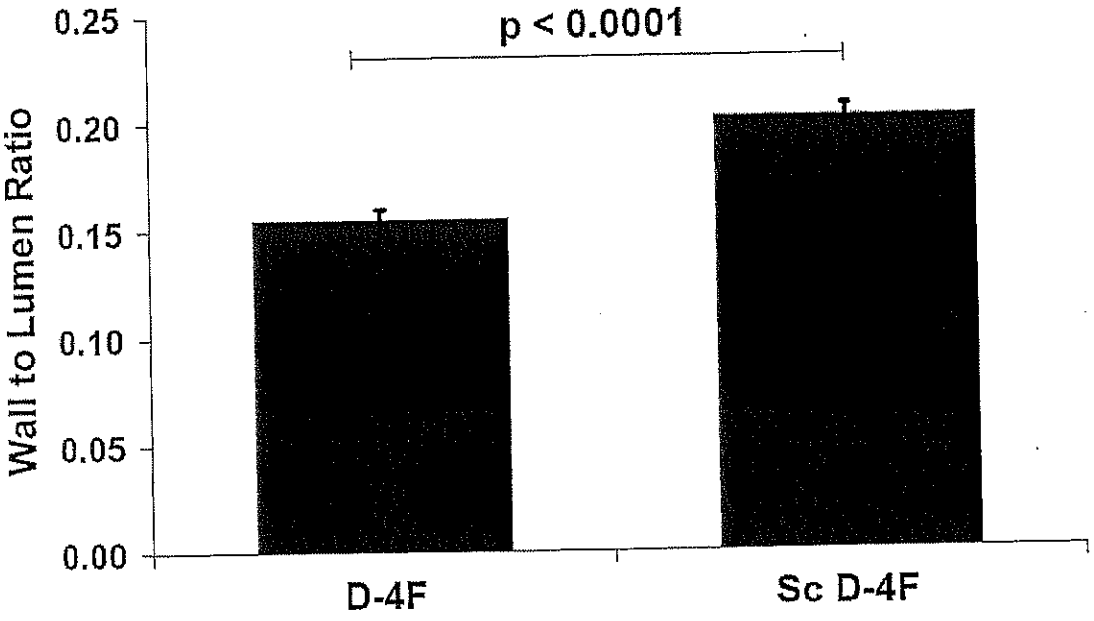

p < 0.0001
Wall to Lumen Ratio
0.25
0.20
0.15
0.10
0.05
0.00
D-4F
Sc D-4F

Fig. 7E

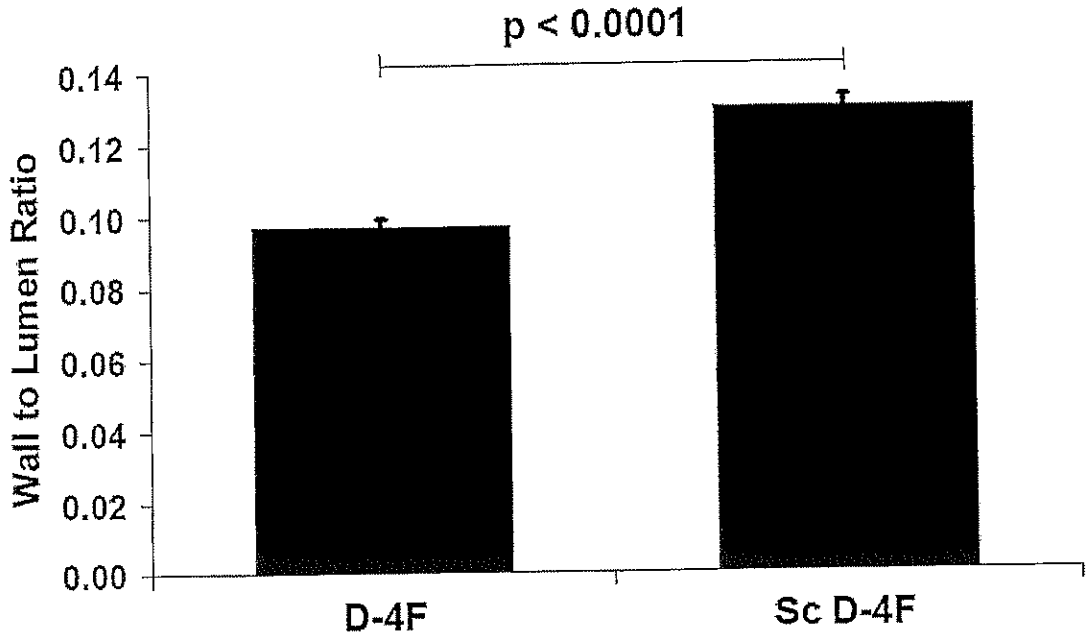

p < 0.0001
Wall to Lumen Ratio
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
D-4F
Sc D-4F

Fig. 7F

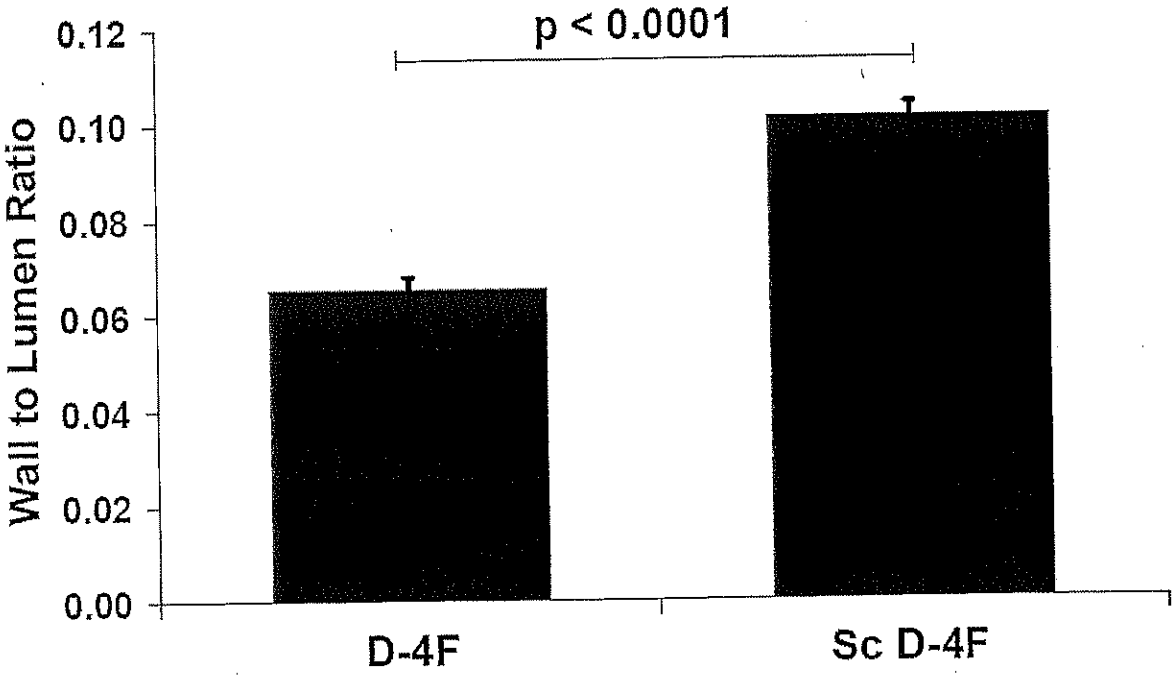

p < 0.0001
Wall to Lumen Ratio
0.12
0.10
0.08
0.06
0.04
0.02
0.00
D-4F
Sc D-4F

Fig. 7G

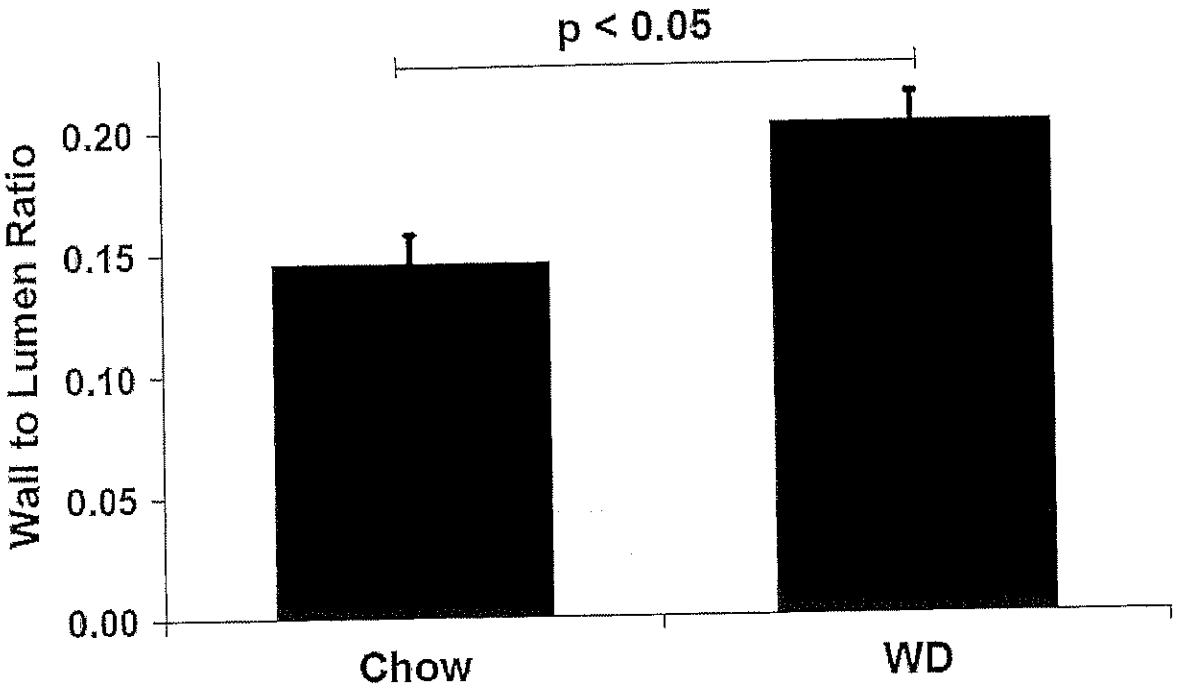

p < 0.05
Wall to Lumen Ratio
0.20
0.15
0.10
0.05
0.00
Chow
WD

Fig. 8A

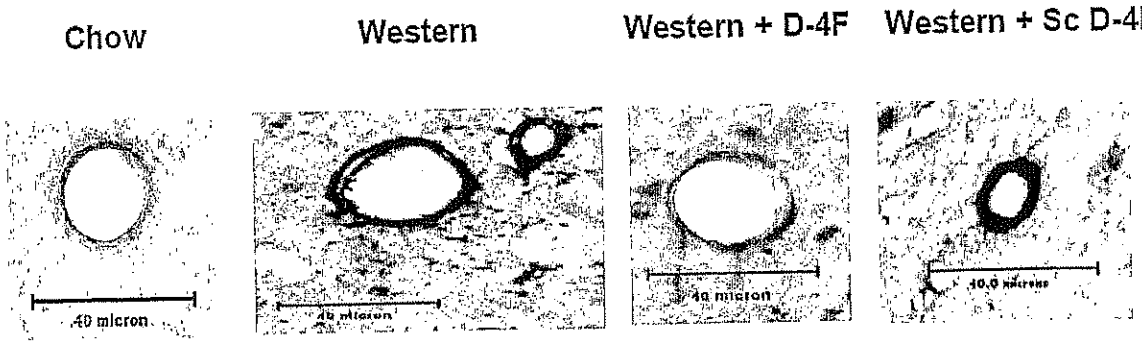

Chow
Western
Western + D-4F
Western + Sc D-4F
40 micron

Fig. 8B

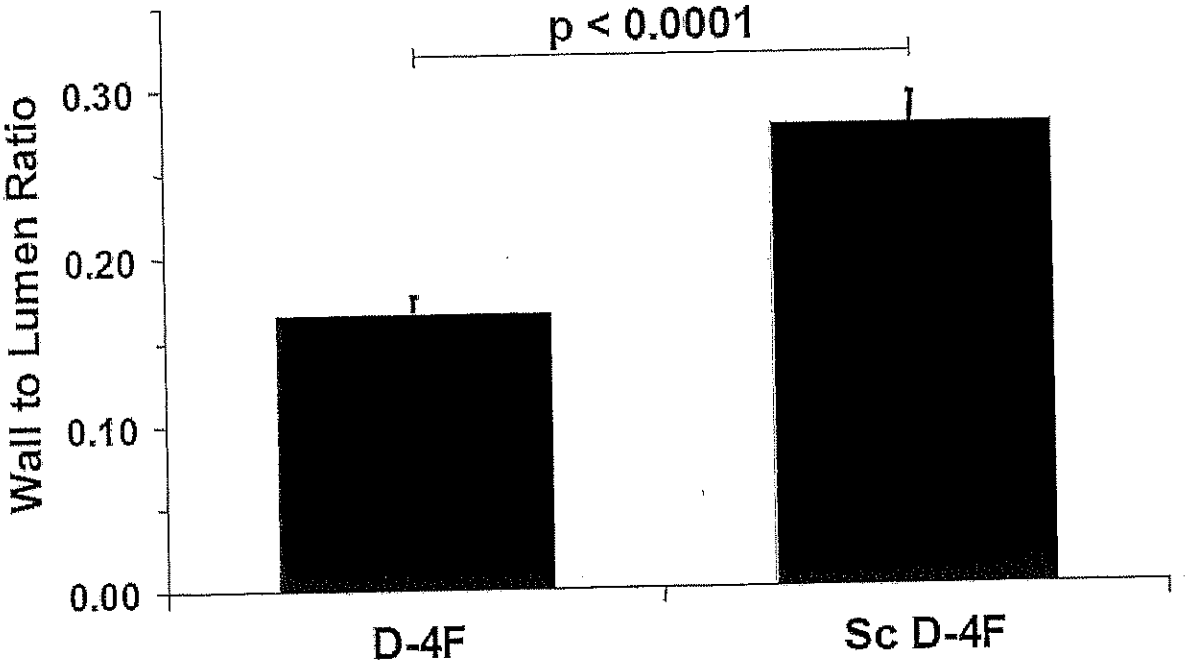

p < 0.0001
Wall to Lumen Ratio
0.30
0.20
0.10
0.00
D-4F
Sc D-4F

Fig. 8C

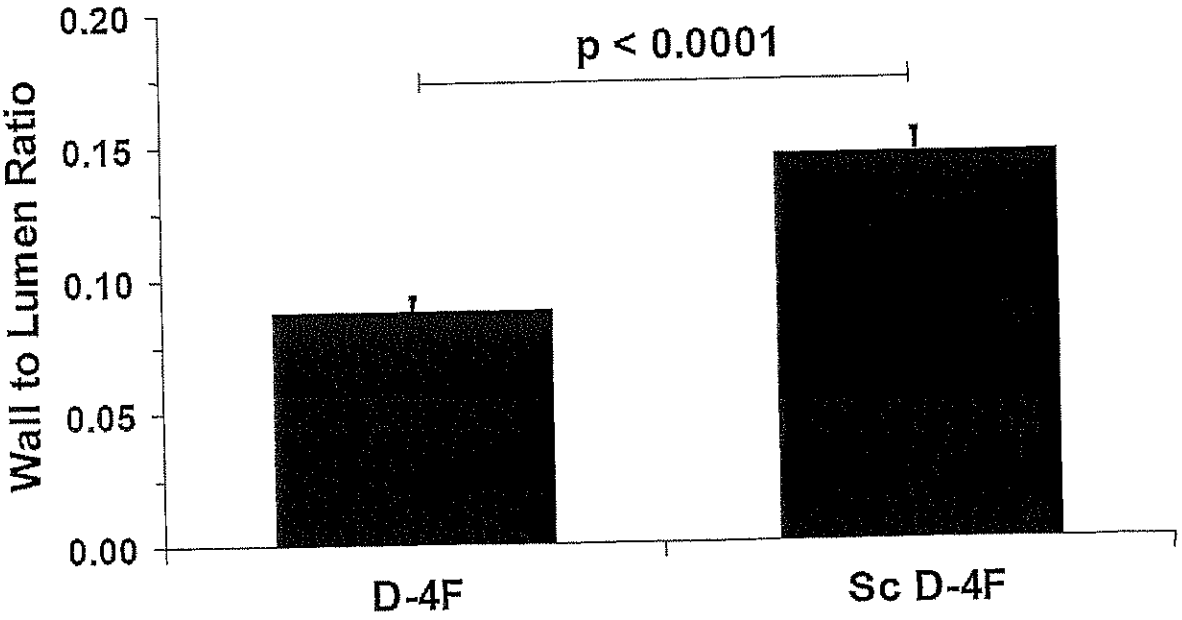

p < 0.0001
Wall to Lumen Ratio
0.20
0.15
0.10
0.05
0.00
D-4F
Sc D-4F

Fig. 8D

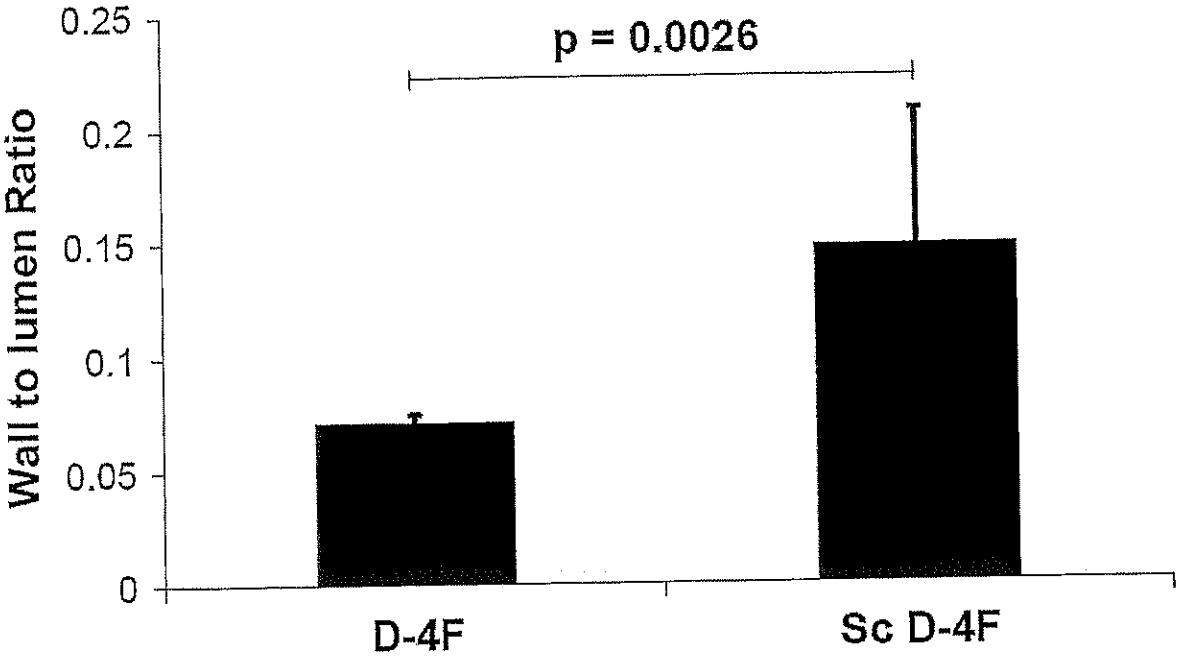

p = 0.0026
Wall to lumen Ratio
0.25
0.2
0.15
0.1
0.05
0
D-4F
Sc D-4F

Fig. 8E

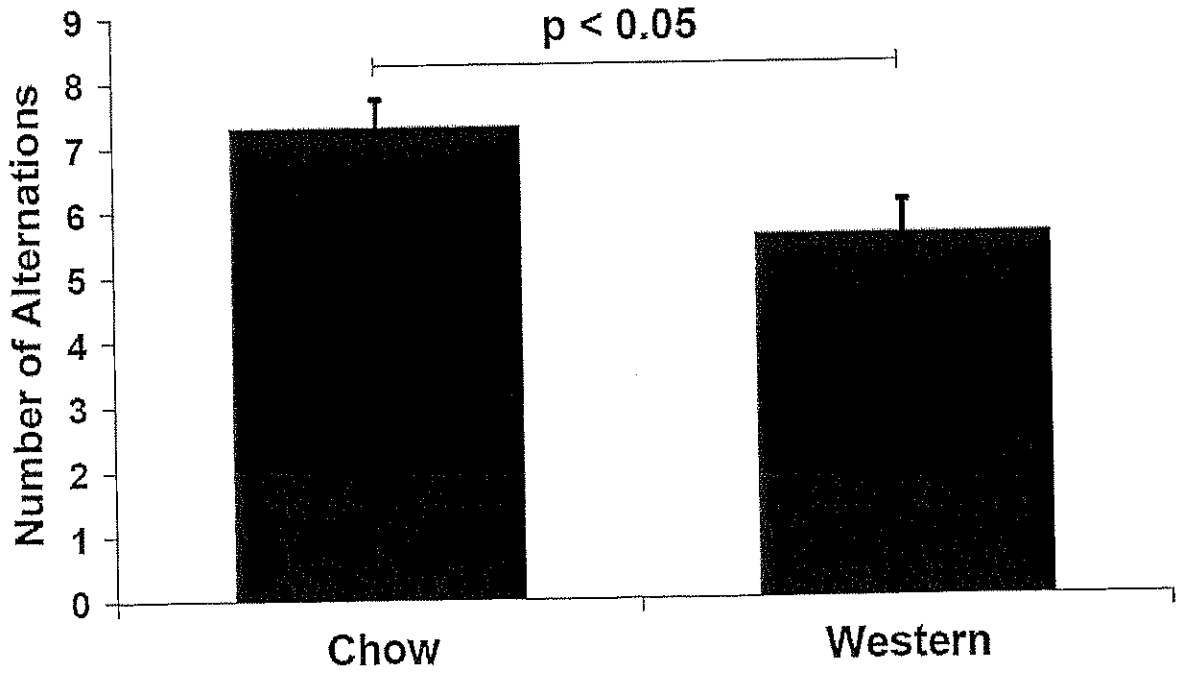

p < 0.05
Number of Alternations
9
8
7
6
5
4
3
2
1
0
Chow
Western

Fig. 9A

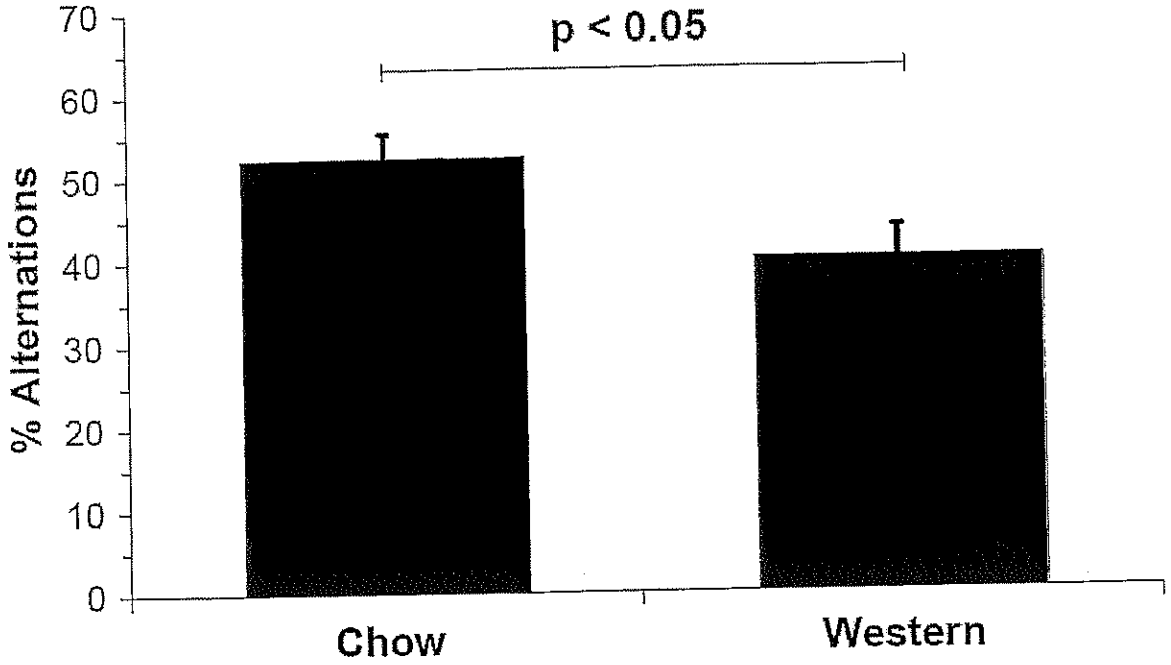

p < 0.05
% Alternations
70
60
50
40
30
20
10
0
Chow
Western

Fig. 9B

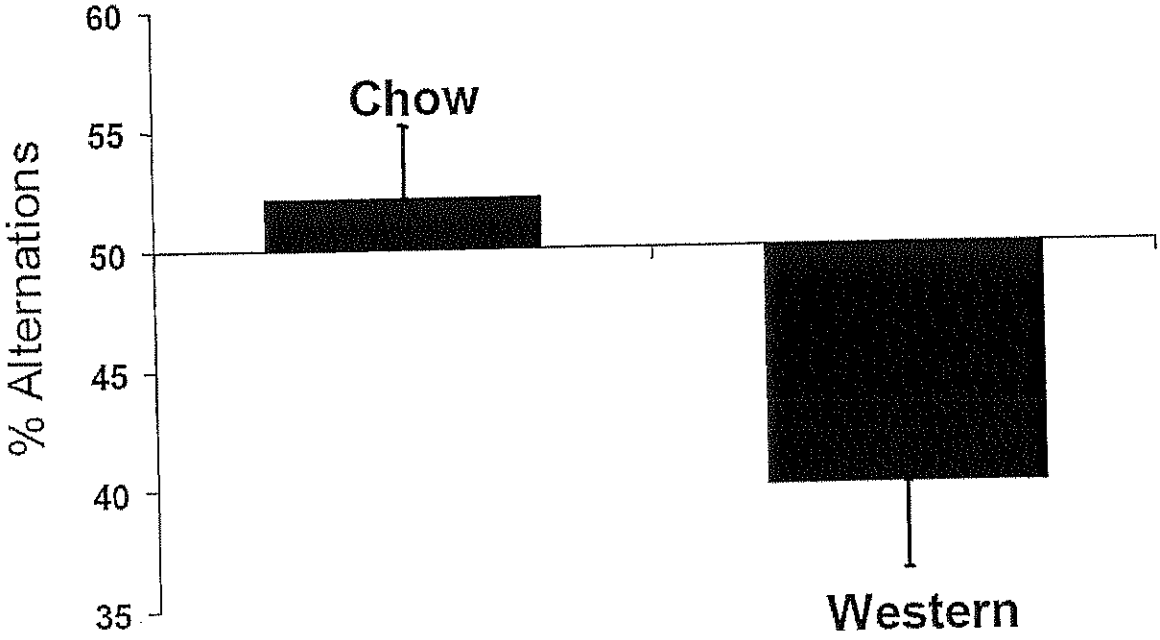

% Alternations
60
55
50
45
40
35
Chow
Western

Fig. 9C

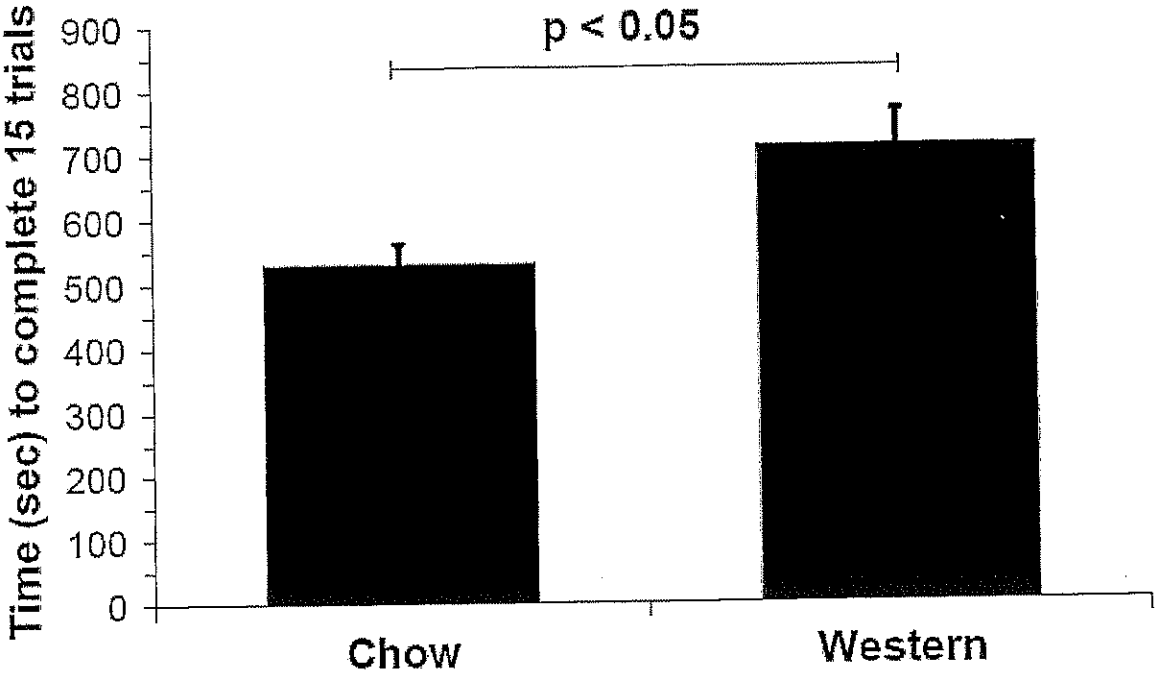

p < 0.05
Time (sec) to complete 15 trials
900
800
700
600
500
400
300
200
100
0
Chow
Western

Fig. 9D

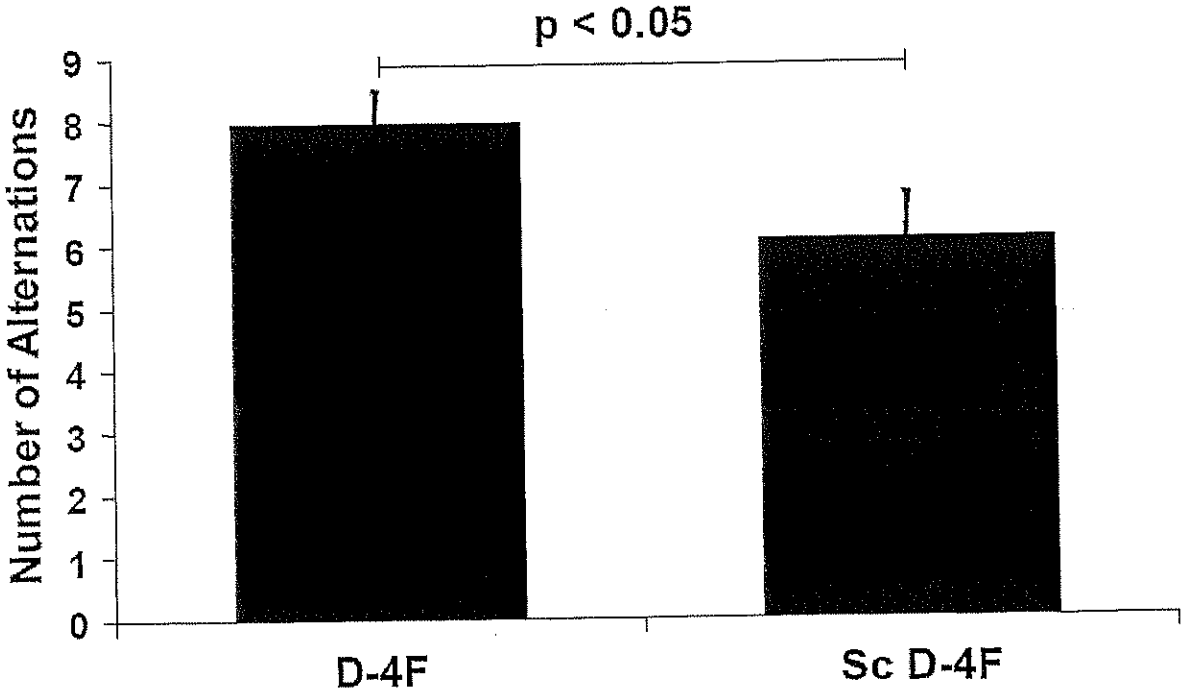

p < 0.05
Number of Alternations
9
8
7
6
5
4
3
2
1
0
D-4F
Sc D-4F

Fig. 9E

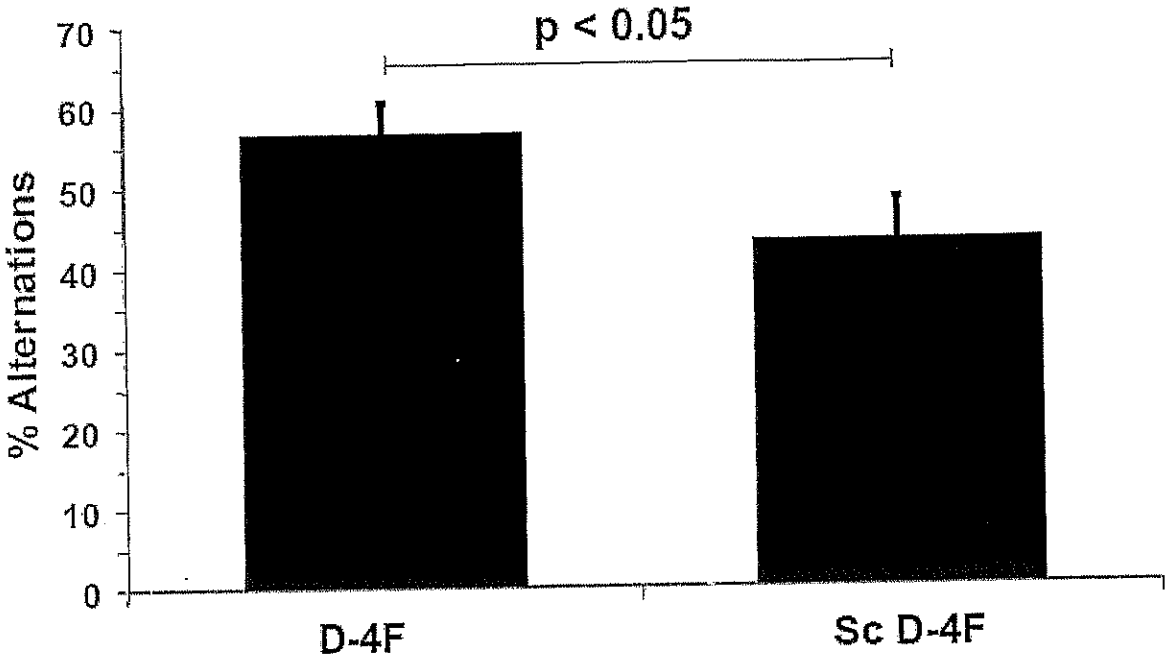

p < 0.05
% Alternations
70
60
50
40
30
20
10
0
D-4F
Sc D-4F

Fig. 9F

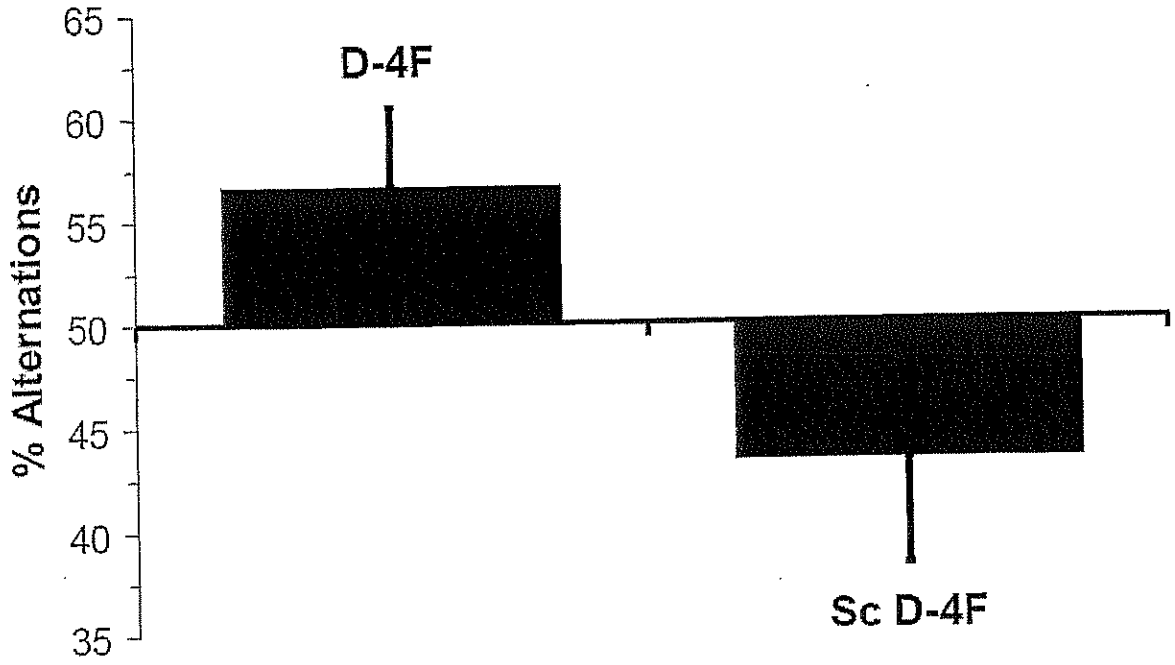

% Alternations
65
60
55
50
45
40
35
D-4F
Sc D-4F

Fig. 9G