

**Table S3. Scotopic b-wave implicit time data.**

**Scotopic b-wave implicit times**

Intensity	-3.7			-3.0			-2.0			-1.0		
	Lean	ZDF	ZDF-i	Lean	ZDF	ZDF-i	Lean	ZDF	ZDF-i	Lean	ZDF	ZDF-i
<b>Age</b>												
8	88.7±3.5	89.4±3.9		84.7±2.5	85.1±3.0		68.6±1.9	70.1±3.3		50.7±1.1	51.3±1.3	
10	88.3±3.0	88.7±3.1		82.2±2.9	84.5±2.8		69.5±2.3	70.1±2.9		50.9±1.1	50.9±1.5	
12	88.4±4.5	<b>92.9±3.9 *</b>		85.9±2.3	86.2±3.0		70.7±3.7	71.4±2.9		51.6±1.9	51.4±1.2	
14	85.5±2.9	<b>91.3±2.8 *</b>		83.5±2.8	<b>86.4±3.2 *</b>		67.9±5.4	69.0±2.7		51.7±3.6	51.1±1.7	
16	86.6±5.3	<b>94.4±4.4 *</b>	<b>89.5±1.6 #</b>	82.8±3.9	<b>87.2±5.0 *</b>	<b>87.0±1.4 †</b>	67.7±4.4	68.7±5.2	69.9±2.6	48.3±1.3	<b>51.6±1.7 *</b>	<b>51.3±1.8 †</b>
19	83.7±3.1	<b>92.2±4.3 *</b>	<b>89.0±4.4 †</b>	83.0±2.8	86.0±3.7	<b>86.3±4.3 †</b>	66.4±3.4	69.4±2.4	69.6±2.8	48.8±1.6	50.4±0.9	49.2±3.5
22	86.2±2.3	<b>93.9±2.7 *</b>	<b>88.5±3.5 #</b>	82.3±2.7	<b>89.9±3.9 *</b>	<b>82.1±7.2 #</b>	67.8±2.0	72.4±3.0	68.7±2.9	49.4±1.7	<b>52.7±2.0 *</b>	<b>50.6±1.1 #</b>
	0.0			0.5			1.0					
	Lean	ZDF	ZDF-i	Lean	ZDF	ZDF-i	Lean	ZDF	ZDF-i			
8	51.4±2.1	51.6±2.1		50.6±1.9	50.8±1.5		51.0±1.8	51.4±1.4				
10	53.1±2.6	<b>50.9±1.5 *</b>		51.3±2.4	51.1±1.9		51.5±2.4	51.5±1.5				
12	52.8±1.4	50.9±1.5		51.8±1.4	50.7±1.8		52.9±1.7	51.5±1.6				
14	54.0±2.1	<b>50.8±1.7 *</b>		51.8±2.2	50.9±1.7		51.2±2.0	51.9±1.6				
16	50.0±4.3	50.9±2.7	52.0±1.9	49.8±5.0	50.7±3.0	51.5±1.3	48.6±3.6	<b>52.1±3.2 *</b>	<b>52.6±1.2 †</b>			
19	48.0±1.6	<b>50.4±1.0 *</b>	<b>52.2±2.5 †</b>	47.5±1.7	<b>50.4±1.3 *</b>	<b>52.8±2.9 †#</b>	48.1±1.8	<b>51.7±1.5 *</b>	<b>52.9±2.4 †</b>			
22	50.2±3.1	<b>52.8±2.2 *</b>	<b>53.9±2.1 †</b>	49.1±2.0	<b>53.1±2.4 *</b>	<b>52.6±1.3 †</b>	49.5±2.0	50.5±6.0	<b>53.2±1.6 †</b>			

Units for intensity denoted as log cd\*s/m<sup>2</sup>; Data presented are group mean ±SD (see Table 1 for number of animals in each group at various ages); Implicit times denoted in ms; Age denoted in weeks.

ZDF, Zucker Diabetic Fatty rats; Lean, congenic control rats; ZDF-i, insulin treated ZDF

\* p<0.05 between Lean and ZDF

† p<0.05 between Lean and ZDF-i

# p<0.05 between ZDF and ZDF-i